

Medtecs International Corporation Limited

Task Force on Climate-related Financial Disclosures (TCFD)

2022 Report

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Introduction

Climate change is increasingly affecting human lifestyles and beginning to impact the operating environment of many businesses. Globally, there is an increased awareness of and a search for ways to address this issue. In 2021, the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26) emphasized the urgency of greenhouse gas reduction. Governments worldwide must take more proactive measures to control the rise in temperatures. Simultaneously, the financial industry's support for climate action and promotion of low-carbon transitions are receiving increased attention. The impact of climate change on business operations and financial performance is multifaceted. Companies should closely monitor these risks and opportunities and formulate corresponding strategies and measures to address the challenges posed by climate change, ultimately achieving sustainable economic growth and long-term financial performance.

The Financial Stability Board established the Task Force on Climate-related Financial Disclosures (TCFD), and after 18 months of soliciting input from numerous business and financial leaders, it released the Recommendations of the Task Force on Climate-related Financial Disclosures in June 2017. These recommendations provide a comprehensive framework for disclosing how to address the risks and opportunities associated with climate change, offering businesses and investors a clear and comprehensive set of guidelines that can be reflected in financial reports.

In response to global trends, the Group adopted the TCFD framework and incorporated climate change issues into the core of its corporate governance and operations strategies. Beyond disclosing the risks and opportunities associated with climate change, we formulated corresponding plans and strategies. This involves integrating climate risks into our existing risk management framework to allocate resources in a more rational and effective manner. The ultimate goal is to achieve sustainable development and enhance financial performance. The Group is committed to making every effort possible to contribute to a sustainable future for the next generation.

1 Governance

1.1 About Medtecs

Medtecs International Corporation Limited (the “**Company**” or “**Medtecs**”) and its subsidiaries (collectively, the “**Group**”) commenced operations in 1989 and is a leading global manufacturer and distributor of personal protective equipment (“**PPE**”), providing a full range of protective solutions for government agencies, corporations, and individuals worldwide, to ensure the adequacy and effectiveness of protective equipment.

The Group's headquarters is located in Taipei, Taiwan, and has offices and facilities spanning across Taiwan, Singapore, Cambodia, the Philippines, China, and the United States. The Group has 11 factories and mainly engages in the manufacturing and sales of PPE, medical textiles, medical consumables, and workwear, as well as providing integrated hospital services of hospital consumables and laundry services. The Group’s monthly production capacity reaches 500,000 pieces of workwear, 2 million pieces of protective coveralls, 3 million pieces of AAMI Level 2 isolation gowns, 3 million pieces of isolation gowns, 5 million pieces of PE isolation gowns, 90 million pieces of medical face masks, and other products, which are sold to 22 countries.

Medtecs International Corporation Limited		
Year of establishment 1989	Capital (USD) 27,471,000	Operating locations Taiwan Singapore Cambodia Philippines China United States of America
Dual-Listed Listed on the Singapore Exchange Securities Trading Limited in 1999. The Group’s Taiwan Depository Receipts have been listed on the Taiwan Stock Exchange since 2002.	Number of employees (2022) 3,601	
	Group revenue (2022) US\$56.24 million	



The Group’s main businesses include the manufacturing and distribution of PPE and hospital logistics services.

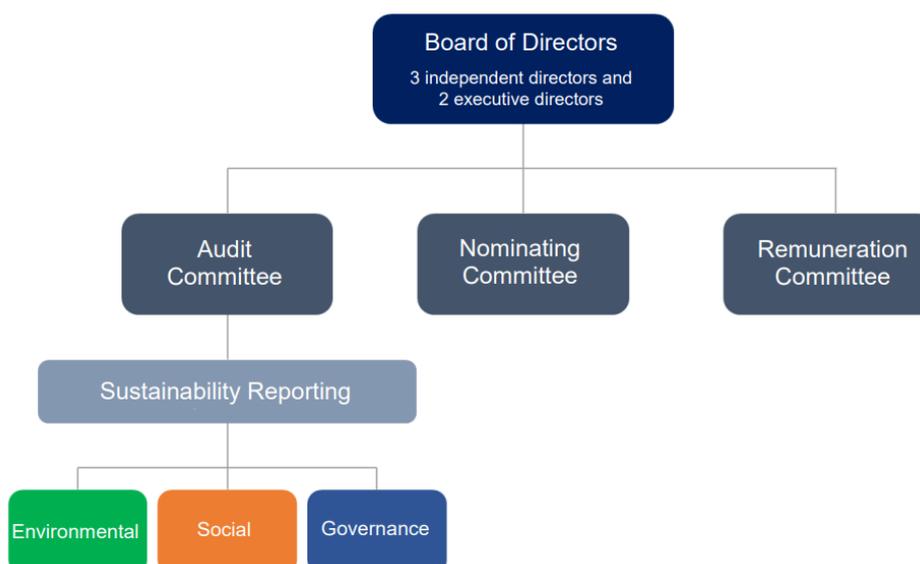
- **Manufacturing services:** The Group is an original product manufacturer (“**OPM**”) of PPE, medical textiles and workwear. Its production bases are located in the Philippines, and Cambodia, and its products are mainly exported to the EU, the Asia Pacific region, and the United States (accounting for 25%, 57%, and 17% respectively).
- **Hospital logistics services:** The Group provides leasing, laundry, logistics (referred to as “**3L services**”), and trading of medical consumables for hospitals in Taiwan and the Philippines. In terms of revenue, Taiwan accounts for 91%, while the Philippines accounts for 9%.

As a leading provider of comprehensive solutions for medical institutions in Taiwan, we have signed service contracts with 19 major hospitals, including the E-Da Healthcare Group, Tri-Service General Hospital, and Tungs' Taichung Metroharbor Hospital. Over the past few years, the Group has successfully expanded these comprehensive hospital logistics services to 31 hospitals and medical service institutions in the Philippines.

1.2 Scope of Organisation

Scope of Medtecs Group
Taipei (Headquarters): 11F., No.9 SongGao Rd., Xinyi Dist., Taipei City, Taiwan (R.O.C.)
Xiangshan factory in Miaoli: No. 1-2, Kougongguan, Zhunan Township, Miaoli County, Taiwan (R.O.C.)
Longde factory in Yilan: No. 18, Dexing 4th Rd., Dongshan Township, Yilan County, Taiwan (R.O.C.)
Cambodia factory: No 1T, Street 291, Village 8, Sangkat Boeung Kok 1, Khan Toul Kork, Phnom Penh, Cambodia
Philippine factory: 7th Street, Phase II, Freeport Area of Bataan, Mariveles, Bataan, Philippines

1.3 Organisation and Responsibilities



Medtecs places great emphasis on the sustainable development of the Group, and the Board of Directors is responsible for formulating strategies and regularly monitoring environmental, social and governance (ESG)

issues that may affect sustainable development. The Board of Directors discusses ESG issues at least once a year, including issues related to climate change. In 2022, each director obtained four hours of continuing education credits and gained a deeper understanding of the importance of ESG issues during the course.

To continuously improve the management principles of sustainable governance, the Group established the Sustainability Reporting Council in 2017 as a cross-departmental task force responsible for sustainability initiatives. The Council is chaired by the CEO of the Group, with the Chief Financial Officer and the General Counsel as executive members, and department heads as members. Through regular senior management meetings, the council identifies the Group's risks and opportunities related to the ESG issues and their impacts on operational activities. It formulates response measures and sustainability strategies, and coordinates the sustainability reporting work of various units. The council is also responsible for supervising the progress and achievement of various carbon reduction and water conservation plans.

The Board of Directors serves as the highest governing body for the Company's climate governance. The Audit Committee, comprising three (3) members, all of whom are Independent Directors, oversees climate risk management and strategy formulation. The Sustainability Reporting Council engages in cross-departmental discussions on climate-related issues in accordance with the guidelines of the Audit Committee.

The Company's Sustainability Reporting Council regularly reports and submits potential challenges and response plans with regards to the environment to the Audit Committee for review. When setting annual goals, relevant personnel in each department are also required to propose measures to address and improve issues related to climate change risks, which must be included as important work objectives and part of their annual performance evaluation. The Audit Committee also provides detailed advice on the suitability and effectiveness of the Group's risk management and internal control mechanisms.

2 Climate-related Risks and Opportunities Management

2.1 Identification and Assessment of Climate-related Risks and Opportunities

In addition to identifying potential risks and corresponding measures related to operations and governance, the Group, adhering to the TCFD framework in 2022, has also identified the risks and opportunities facing the Company in terms of climate-related financial aspects. Through setting relevant measures and response strategies, the Group aims to mitigate the potential financial losses caused by risks and even turn crises into opportunities, creating greater benefits for the Company.

To mitigate the impact of climate change, the Group has established a cross-department task force, comprising senior executives across the Company, under the Sustainability Reporting Council. The task force periodically meets and focuses on climate-related issues while referencing to the TCFD framework, to identify relevant risks and opportunities and formulate response strategies and risk management plans. A climate-related risk matrix is first identified and assessed based on the process below, and categorizes the risks into 3 categories: High, medium, and low. The results are then reviewed and approved by the Sustainability Reporting Council. The process adopted by the Group to identify climate-related risks and opportunities is as follows:

Identification and Assessment Process of Climate-related Risks and Opportunities

A. Background Information Collection: The Group refers to the recommendations of TCFD reports and seeks guidance from external professionals on relevant issues and processes. After understanding the implication represented by each risk and opportunity, relevant information is collected, and scenarios are set for identification.

B. Risk and Operation Evaluation Scope: The Group determines the scope for risk evaluation, which covers Medtecs' headquarters and factories in Taiwan, as well as subsidiaries in Cambodia, and the Philippines.

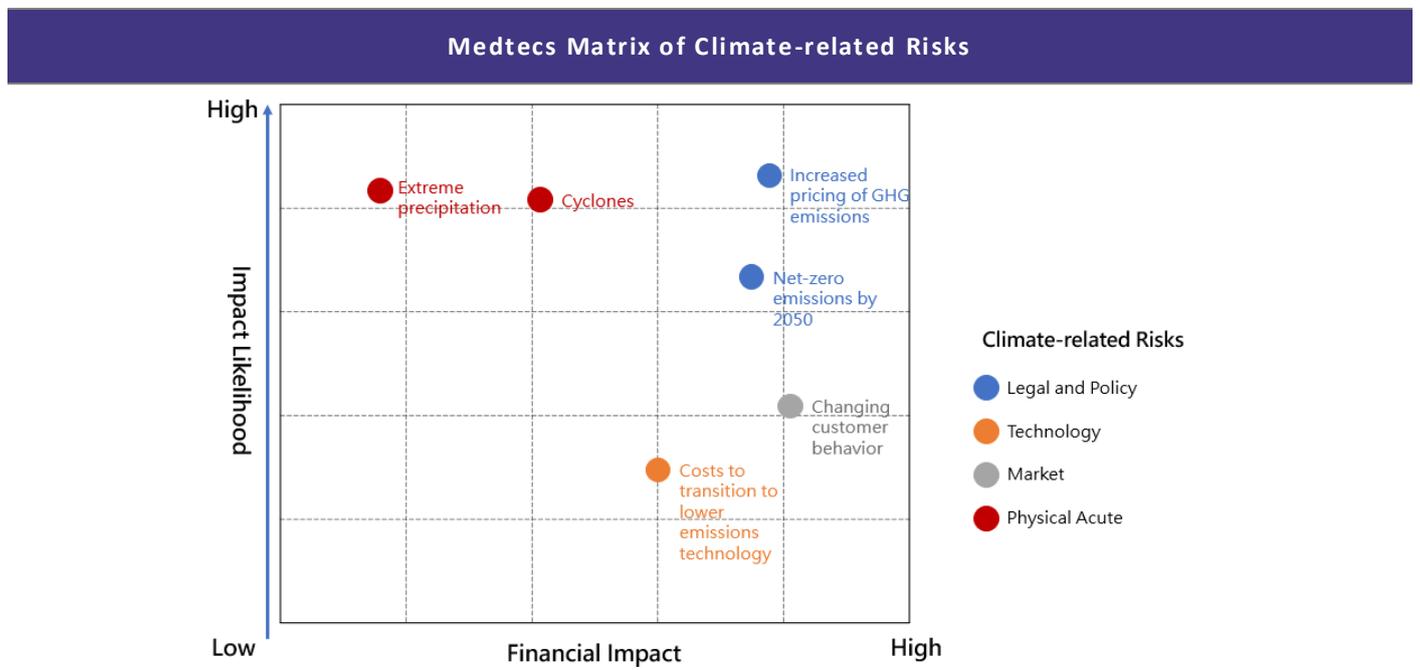
C. Risk and Operation Impact Analysis: Using a financial impact and likelihood rating system, the Group evaluates each risk and opportunity, and then discusses and reviews the ratings with senior management and external advisors. In the end, 1 physical risk, 4 transition risks, and 3 opportunities were identified.

D. Management Measures and Target Settings: After identifying the risks and opportunities, the Group discusses potential measures to mitigate the economic impact of risks and sets targets to achieve them. The Group also explores ways to pursue the identified opportunities and plans to gather information and implement strategies in the near future.

<p>Time Horizons</p> <ul style="list-style-type: none"> • Short-term : 1-3 years • Medium-term : 3-10 years • Long-term : 10+ years 	<p>Risk and Opportunity Scale</p> <ul style="list-style-type: none"> • Impact Likelihood • Financial Impact Magnitude 	<p>Operational Risk Matrix</p> <ul style="list-style-type: none"> • High risk • Medium risk • Low risk
<p>Scenarios Considered</p> <ul style="list-style-type: none"> • RCP 8.5 scenario • The NDC scenario • SSP1-2.6 and SSP5 baseline scenarios from Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report on Climate Change 	<p align="center">Medtecs Identification and Assessment of Climate-related Risks and Opportunities</p>	
	<p>Risk and Opportunity Categories</p> <ul style="list-style-type: none"> • Transition Risks: Policy and legal, Technology, Market, Reputation • Physical Risks: Acute, Chronic • Opportunities: Resource Efficiency, Energy Source, Products and Services, Markets, Resilience 	

2.2 Climate-related Risks and Opportunities Identification

The Company held a meeting to identify and assess climate-related risks and opportunities based on the TCFD recommendations. In the end, we have identified 5 climate-related risks and 3 climate-related opportunities.



Major Climate-related Risks				
Type	Risk Description	Time Horizon	Likelihood	Financial Impact
Transition risks	【Policy and Legal Risk】 Increased pricing of GHG emissions	Medium-term	Frequent	Moderate
Transition risks	【Policy and Legal Risk】 Net-zero emissions by 2050	Medium-term	Frequent	Moderate
Transition risks	【Technology Risk】 Costs to transition to lower emissions technology	Medium-term	Unlikely	Moderate
Transition risks	【Market Risk】 Changing customer behavior	Medium-term	Possible	Major
Physical risks	【Acute Risk】 Cyclones	Short-term	Frequent	Minor

Major Climate-related Opportunities			
Opportunity Description	Time Horizon	Likelihood	Impact Magnitude
【Resource Efficiency】 Use of more efficient modes of transport	Medium-term	Likely	Minor
【Resource Efficiency】 Use of recycling	Medium-term	Likely	Minor
【Energy Source】 Use of lower-emission sources of energy	Medium-term	Likely	Minor

2.3 Summary Table of the Impact of Risks and Opportunities on the Company

After identifying climate-related risks and opportunities, a risk index is assessed based on the likelihood of occurrence and potential financial impact. Once the ratings of risks and opportunities are confirmed, we hold discussions to formulate response strategies and establish relevant short, medium, and long-term goals.

Medtecs conducted a comprehensive assessment on global sustainability trends and the operational development goals of the Group, and analyzed key issues in governance, economy, environment, and society. The climate-related risks and opportunities with greater financial impact and our proposed approach are disclosed below:

Risk category	Climate risk	Risk description	Our approach
Transition Risk	Policy Risk - Increased pricing of GHG emissions	The Group produces medical products such as coveralls and face masks, and actively promotes GHG reduction to comply with national policies. Countries around the world have also introduced carbon taxes or carbon pricing systems, and significantly raised carbon tax standards in stages. As a result, this will significantly increase production costs for high-carbon-emission industries or small	<ul style="list-style-type: none"> The Group will actively respond to international GHG regulations in the future. Emissions will be calculated according to each country's reporting format and cycle, verified by third-party verification agencies, and reported to the government (the third-party verification cost for carbon inventory is approximately US\$ 10,000/year). The Group plans a phased introduction of ISO 14001 environmental management system,

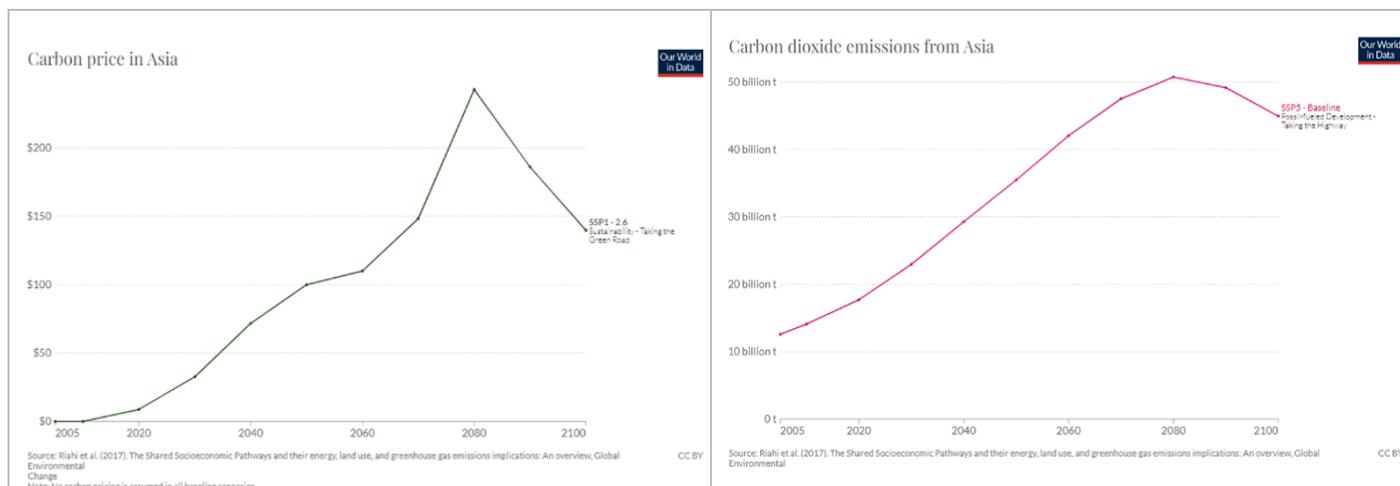
		and medium-sized enterprises with high electricity consumption, reducing their competitiveness.	ISO 14064-1 GHG inventory (already implemented), and ISO 50001 energy management system to establish control over GHG emissions. The one-time system introduction cost is expected to be US\$20,000, and the regular verification cost for ISO systems is US\$ 30,000 per year.
Transition Risk	Policy Risk - Net-zero emissions by 2050	In April 2022, the Taiwan government renamed the draft amendment of the "GHG Reduction and Management Act" to the "Climate Change Response Act" and formulated a policy of achieving net-zero emissions by 2050. The government also did not rule out expanding the scope of taxation to other industries in the future as an economic means of achieving net-zero emissions.	<ul style="list-style-type: none"> In order to meet the GHG reduction and net-zero emissions targets by 2050, the Group plans to purchase renewable energy certificates (priced at approximately US\$67 per 1000 kWh of electricity) to reduce its carbon footprint from electricity usage (based on Taiwan's INDC goals with a base year of 2005) of a 20% emissions reduction by 2030 and a 55% reduction by 2050. The estimated expenditure on renewable energy certificates is US\$888,500 in 2030 and US\$ 3,092,000 in 2050.
Transition Risk	Technology Risk - Costs to transition to lower emissions technology	In numerous production processes, fossil fuels continue to play a significant role as an energy source. However, it is anticipated that there will be a significant increase in legislation related to climate change, which will have an impact on the use of fossil fuels.	<ul style="list-style-type: none"> Currently, both the Taiwan and overseas business units maintain good production efficiency for their machinery, and there are new factory equipment installations that can further improve production efficiency and energy savings. There is a plan of developing green energy businesses overseas. However, regulations differ from country to country; therefore, only green energy generation of 5 MW is currently planned for the short term. The Group's factory in Yilan is updating its drum-type 39 washing machine as well as the heat exchange equipment for its drying machines to improve energy efficiency.
Transition Risk	Market Risk - Changing customer behavior	Customers request to monitor and reduce carbon emissions. If it is related to the main and auxiliary materials, it can be addressed by replacing qualified suppliers. Although the processing operation uses less/simple energy, there may be a risk of order transfer if customers suddenly request such improvements.	<ul style="list-style-type: none"> The Group plans to improve process energy efficiency and use low-carbon or composite low-carbon materials, with an estimated investment of approximately US\$ 5 million. A list of main and auxiliary material replacements is being prepared. Additionally, we are actively engaging with our suppliers to stay informed about market developments, enabling us to make proactive preparations
Physical Risk	Acute Risk - Cyclones	Every year during typhoon season, there are several days where work is disrupted due to heavy rain and typhoons, such as damage to power facilities and interruptions to public transportation, which prevent workers from coming to work.	<ul style="list-style-type: none"> The factory in the Philippines is protected by comprehensive insurance coverage provided by major insurance companies. This coverage includes the main assets such as buildings, improvements, machinery and equipment, as well as inventory. The total insured amount for the period from 2022 to 2023 is PHP 1 billion. The total premium paid by the Company for this year's renewal is PHP 2.48 million.

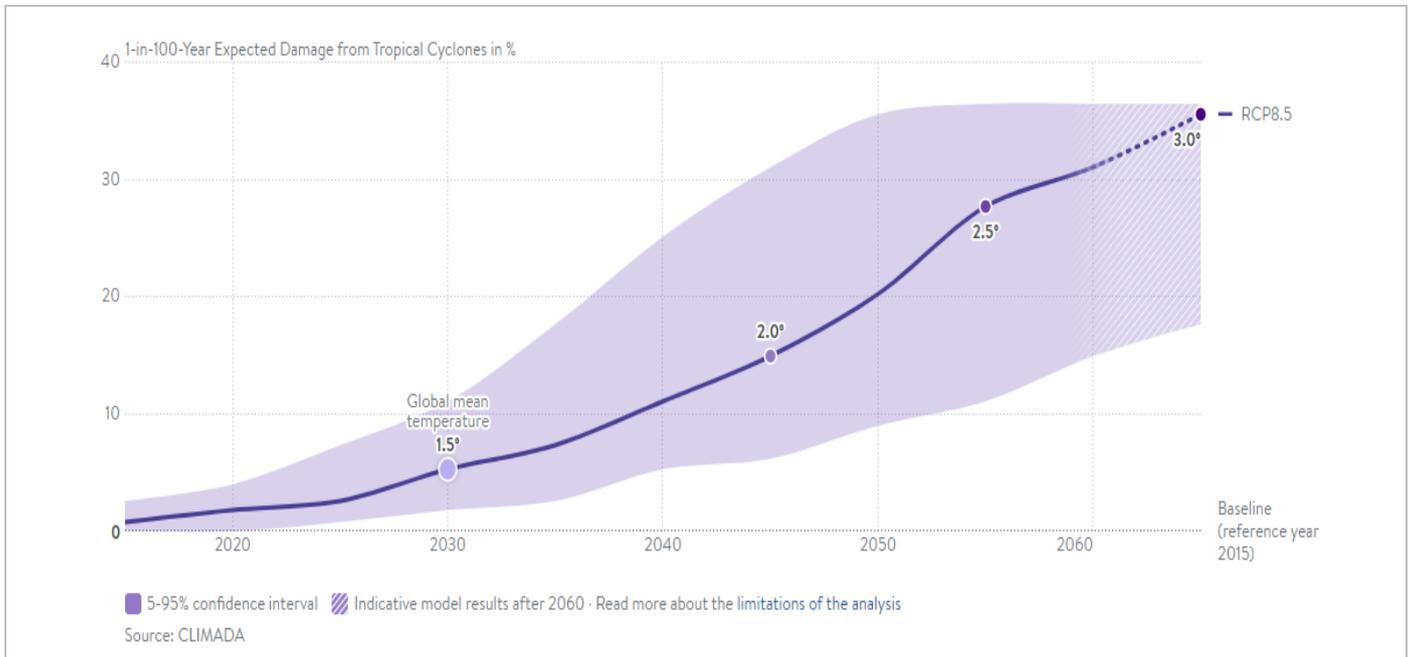
Opportunity category	Climate opportunities	Opportunity description	Our approach
Resource Efficiency	Use of more efficient modes of transport	<ul style="list-style-type: none"> The service area of Xiangshan factory in Miaoli extends north to Jinshan in New Taipei City, and south to Taichung. It dispatches 12 diesel trucks (expected to be replaced in the near future) multiple times a day to meet the daily needs of hospitals, consuming approximately 750 liters of diesel per day. The Longde factory in Yilan is responsible for nearly 85% of the medical uniforms and scrubs washing and processing services in the greater Yilan area, with the task completed by 4 3-ton trucks (Phase 6), consuming approximately 40 liters of diesel per day. The Xiangshan factory may increase its fuel consumption due to poor performance of old vehicles, and the Group can check and replace old trucks while reviewing driver habits to reduce fuel consumption. 	<ul style="list-style-type: none"> Currently, one 11-ton and one 5-ton truck at the Xiangshan factory have been replaced with new Phase 6 environmentally friendly diesel vehicles. It is expected that starting from 2030, 6 diesel trucks will be replaced every 10 years, with a replacement cost of NT\$ 1 million per truck, for a total of 12 diesel truck replacements.
Resource Efficiency	Use of recycling	<ul style="list-style-type: none"> The Xiangshan factory in Miaoli and the Longde factory in Yilan plant are currently making efforts in water recycling. The recycled water is mainly used for steam generation and washing operations depending on the water usage in the factory. For the steam heating operation, in addition to using the excess steam heat to preheat cold water and reduce energy consumption during the washing process, the condensed water is also recycled for washing, accounting for about 5% to 8% of the daily washing water volume. For the washing operation, the Xiangshan factory uses a tunnel washer with a washing water filtration and recycling system, which saves up to 70% of water compared to traditional washing machines. 	<ul style="list-style-type: none"> With the current installation of condensate recovery equipment at the Longde factory, it is estimated that 5% (4,800 m³) of annual water consumption can be saved, reducing water costs by NT\$ 57,600. The Longde factory plans to install new condensate recovery equipment for NT\$ 110,000 in 2025, and expects to replace it every 15 years.
Energy Source	Use of lower-emission sources of energy	<ul style="list-style-type: none"> The rooftop of the Xiangshan factory is rented out to a renewable energy company. In the future, the Group can purchase green energy from the renewable energy company to meet the Group's green energy demand. The installed capacity of this project is approximately 200 kW, which can be gradually increased based on the Group's development strategy. The natural gas in the laundry factories of Medtecs acts as the energy source for generating steam and drying clothes. Currently, electric energy is used to convert to heat for later use, but the efficiency is only about 50%. The main consideration for equipment replacement will be based on efficiency improvement for the current operation. 	<ul style="list-style-type: none"> The factory in Cambodia is expected to build a 500-kW solar power generation system in 2025, with a cost (including maintenance) of about NT\$ 30,000 per kW. Subsequent evaluations for installation of solar power generation system in other factories will depend on future improvements in electricity efficiency.

2.4 Climate Scenario Analysis

Medtecs referenced the TCFD recommendations and conducted scenario analysis for one physical risk, two transition risks, and three climate-related opportunities. Given that climate-related risks and opportunities will impact future strategies and financial planning, we adopted the most severe scenario (the worst-case scenario) to analyze and assess the resiliency of climate strategies.

Risk Category	Scenarios used to evaluate risk and strategy	Scenario description
Transition Risk	<ul style="list-style-type: none"> 1.5°C Scenario Taiwan's 2050 Net Zero Emission Pathway and Strategies Taiwan's 2030 National Determined Contributions (NDC) Carbon dioxide emissions growth rate under IPCC's SSP5 baseline scenario Carbon price under IPCC's SSP1-2.6 baseline scenario 	<p>In the global shift towards Net Zero Emissions by 2050 and the 2050 Net Zero Emission Pathway and Strategies released by the Taiwan government in March 2022, greenhouse gas emissions are being carefully monitored by four transformations (Energy, Industry, Lifestyle, and Society) and 2 governance foundations (Technological Research and Development, Climate Legislation). Taiwan's National Development Council further announced the interim goals and key strategies for the 2050 net-zero emissions in December 2022. It set the target to reduce emissions by 24% in 2030 NDC, which may have impact on the Company's operations and its value chain.</p>
Physical Risk	<ul style="list-style-type: none"> Expected Damage from Tropical Cyclones in Philippines under the RCP 8.5 scenario 	<p>In a high-emissions scenario, climate change intensifies the changes in future average temperature, extreme heat, annual total rainfall, annual maximum 1-day rainfall intensity, annual maximum consecutive dry days, and the proportion of strong typhoons. These changes may have impact on the Company's operations and its value chain.</p>





3 Strategy

3.1 Financial Assessment of Climate-related Risks

After identifying climate-related risks and opportunities, a risk index is assessed based on the likelihood of occurrence and potential financial impact. Once the ratings of risks and opportunities are confirmed, we hold discussions to formulate response strategies and establish relevant short, medium, and long-term goals.

Transition Risk: Policy Risk - Increased pricing of GHG emissions			
Risk and Strategy Explanation	<ul style="list-style-type: none"> Several countries are progressively introducing carbon taxation or carbon fee systems, with incremental hikes in carbon tax rates. Consequently, industries with substantial carbon emissions and small to medium-sized enterprises with substantial electricity consumption will experience notable rises in production expenses, potentially diminishing corporate competitiveness. In light of this, the Group intends to introduce new products, boost production volume, and increase revenue. However, this expansion is expected to result in elevated carbon emissions and heightened pressure on carbon-related expenses in the future. Based on IPCC’s SSP5 baseline scenario for Asia: The annual growth rate of greenhouse gas emissions (linear) from 2020 to 2030 is 2.95%; The annual growth rate of greenhouse gas emissions (linear) from 2030 to 2040 is 2.76%; The annual growth rate of greenhouse gas emissions (linear) from 2040 to 2050 is 2.11%. The Group will actively respond to international greenhouse gas regulations in the future. The emissions will be calculated in accordance with each country's reporting format and cycle, and reported to the government after verification by a third-party verification body. Continuously promote the implementation of ISO 14001 environmental management system, ISO 14064-1 greenhouse gas inventory (already introduced) and ISO 50001 energy management system to establish the Group's management and control of greenhouse gas emissions. In 2021, the estimated carbon emissions for the Group were 20,000 metric tons (please refer to the actual GHG inventory results). 		
Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Financial Risk Impact	Short-term	-\$750,924	<ul style="list-style-type: none"> 【 Increased costs 】 The estimated carbon fee per ton is \$32.72 by 2030. 【 Increased costs 】 Third-Party Verification Cost for Carbon Inventory: Approximately \$10,000 per year. 【 Increased costs 】 The estimated one-time ISO implementation cost is \$20,000, the annual ISO certification cost is \$30,000.
	Medium-term	-\$1,966,631	<ul style="list-style-type: none"> 【 Increased costs 】 The estimated carbon fee per ton is \$71.76 by 2050. 【 Increased costs 】 Third-Party Verification Cost for Carbon Inventory: Approximately \$10,000 per year. 【 Increased costs 】 The estimated one-time ISO implementation cost is \$20,000, the annual ISO certification cost is \$30,000.
	Long-term	-\$3,968,037	<ul style="list-style-type: none"> 【 Increased costs 】 The estimated carbon fee per ton is \$99.97 by 2050. 【 Increased costs 】 Third-Party Verification Cost for Carbon

			<p>Inventory: Approximately \$10,000 per year.</p> <ul style="list-style-type: none"> 【Increased costs】The estimated one-time ISO implementation cost is \$20,000, the annual ISO certification cost is \$30,000.
Transition Risk: Policy Risk - Net-zero emissions by 2050			
Risk and Strategy Explanation	<ul style="list-style-type: none"> In April 2022, the Taiwan government amended and renamed the "Greenhouse Gas Reduction and Management Act" to "Climate Change Response Act" to codify the 2050 Net Zero Emission Policy into law. The Group's main operations are located in Cambodia and the Philippines, and the carbon emissions of overseas subsidiaries will also be included in the Group's quota. Taiwan has set a 2050 Net Zero Emission policy, and it is not ruled out that the government will gradually expand the tax scope to other enterprises in the future to achieve net-zero emissions through economic means. In 2021, the estimated carbon emissions for the Group were 20,000 metric tons (please refer to the actual GHG inventory results). If we use IPCC's SSP5 baseline scenario to estimate the carbon emission growth rate, the Group's carbon emissions are projected to be 25,310 metric tons in 2030 and 35,050 metric tons in 2050. According to Taiwan's NDC target (base year: 2005), a reduction of 25% in emissions is required by 2030 (linear annual reduction of 1% from 2005 to 2030), and 100% reduction is required by 2050 (linear annual reduction of 3.75% from 2030 to 2050). Therefore, our carbon emissions will exceed the standard by 7,110 metric tons in 2030 and 31,850 metric tons in 2050. Based on IPCC's SSP5 baseline scenario for Asia: The annual growth rate of greenhouse gas emissions (linear) from 2020 to 2030 is 2.95%; The annual growth rate of greenhouse gas emissions (linear) from 2030 to 2040 is 2.76%; The annual growth rate of greenhouse gas emissions (linear) from 2040 to 2050 is 2.11%. 		
Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Financial Risk Impact	Short-term	-\$129,244	<ul style="list-style-type: none"> 【Baseline】The estimated total carbon emissions for Medtecs Group in 2021 were 20,000 metric tons. 【Baseline】 The annual growth rate of greenhouse gas emissions (linear) from 2020 to 2030 is 2.95%. 【Baseline】 A linear annual reduction of 1% from 2005 to 2030.
	Medium-term	-\$790,508	<ul style="list-style-type: none"> 【Baseline】The estimated total carbon emissions for Medtecs Group in 2021 were 20,000 metric tons. 【Baseline】 The annual growth rate of greenhouse gas emissions (linear) from 2030 to 2040 is 2.76%. 【Baseline】 A linear annual reduction of 3.75% from 2030 to 2050.
	Long-term	-\$3,184,045	<ul style="list-style-type: none"> 【Baseline】 The estimated total carbon emissions for Medtecs Group in 2021 were 20,000 metric tons. 【Baseline】 The annual growth rate of greenhouse gas emissions (linear) from 2040 to 2050 is 2.11%. 【Baseline】 A linear annual reduction of 3.75% from 2030 to 2050.
Transition Risk: Technology Risk - Costs to transition to lower emissions technology			
Risk and Strategy Explanation	<ul style="list-style-type: none"> Fossil fuels remain an important source of energy in many production processes and climate-related legislation is expected to increase significantly. Regarding energy initiatives, Medtecs Group has already transitioned to cleaner energy sources including natural gas and steam in Taiwan, and has also started proactively deploying renewable 		

	<p>biomass fuels overseas.</p> <ul style="list-style-type: none"> Miaoli laundry factory completed the installation of natural gas boilers and Yilan laundry factory uses Formosa Plastics' gas-electric cogeneration steam system to enhance drying efficiency. These initiatives are part of the Company's ambitious efforts to take a leadership role in reducing climate impact. If these investments fail to improve customer loyalty or enable premium pricing, we could face a competitive disadvantage versus rivals who did not make similar investments. In the future, in addition to continuing to reduce carbon emissions in the Group's value chain, we expect there will be some short-term increases in production costs during while in transition to lower emission technology. These costs are mainly associated with the higher costs of sustainable fuels and the cost of procuring new machinery and processes compared to conventional alternatives. 		
Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Financial Risk Impact	Short-term	-\$200,000	<ul style="list-style-type: none"> 【Increased Costs】 All else equal, a rise in cost of sales would add \$200,000 per year to expenses from 2023 to 2030.
	Medium-term	-\$500,000	<ul style="list-style-type: none"> 【Increased Costs】 All else equal, a rise in cost of sales would add \$500,000 in costs per year from 2031 to 2050.
	Long-term	-\$500,000	<ul style="list-style-type: none"> 【Increased Costs】 All else equal, a rise in cost of sales would add \$500,000 in costs per year from 2031 to 2050.
Transition Risk: Market Risk – Changing customer behavior			
Risk and Strategy Explanation	<ul style="list-style-type: none"> Since the European and American markets account for nearly half of the Company's revenue, future changes in consumer behavior will have a major impact on the Company's overall revenue. The estimated impact rate is 5% to 10%. We estimate operating net profit could fall in 2027 as customers transition to meet carbon reduction mandates. Plan in advance and calculate the time required to start implementation, and prepare the budget and plans required to complete the initiative in a quarter, a year, and 3-5 years. Currently, for both disposable and non-disposable product customers, most of them provide the materials for processing or already have specified qualified suppliers. If they are required start reducing carbon emissions, the customers will inform us first and lead the execution. Therefore, it will have less impact on us. We only need to confirm processing materials and recycling to significantly reduce risks. Medium-sized customers do not have designated suppliers, so they need to prepare a list for substitution of main and auxiliary materials. In addition, they need to keep the lines of communication open with suppliers so they can stay informed about market trends and make preparations in advance. 		
Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Financial Risk Impact	Short-term	-	-
	Medium-term	-\$2,000,000	<ul style="list-style-type: none"> 【Expense Reduction】 In 2027, in response to the EU CBAM and US CCA requirements, customers in various countries will increase their demand for low-carbon products. This may lead to a decrease in operating net profit of US\$2 million due to customer's transition to meet carbon reduction mandates.

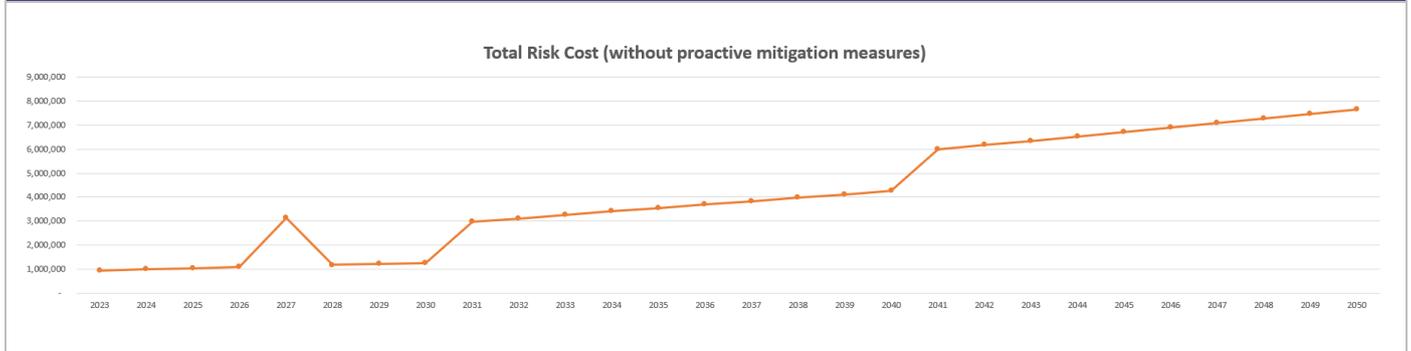
	Long-term	-	-
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Physical Risk : Acute – cyclones

Risk and Strategy Explanation	<ul style="list-style-type: none"> During the typhoon season each year, there may be several days where the factory shuts down due to heavy rain and typhoons, including damages to power facilities and disruptions in public transportation, that prevent workers from commuting to work. If there is only a power outage, some emergency generators can be deployed.
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Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Financial Risk Impact	Short-term	-\$720	<ul style="list-style-type: none"> 【Maintenance Cost】 The annual maintenance cost for repairing small motors damaged by cyclones is approximately 40,000 Philippine Pesos (equivalent to USD 720 at an exchange rate of 0.018).
	Medium-term	-\$720	<ul style="list-style-type: none"> 【Maintenance Cost】 The annual maintenance cost for repairing small motors damaged by cyclones is approximately 40,000 Philippine Pesos (equivalent to USD 720 at an exchange rate of 0.018).
	Long-term	-\$720	<ul style="list-style-type: none"> 【Maintenance Cost】 The annual maintenance cost for repairing small motors damaged by cyclones is approximately 40,000 Philippine Pesos (equivalent to USD 720 at an exchange rate of 0.018).

Physical Risk and Transition Risk : Financial Impact Profit and Loss Chart by Year



Total Profit and Loss of Physical Risk and Transition Risk from 2023-2050: -\$115,139,715 (Undiscounted Nominal Value)

Note: Under Financial Impact (USD/year), "-" indicates a decrease in operating profit, and "+" indicates an increase in operating profit.

3.2 Climate-related Opportunities and Strategic Financial Assessment

Low Carbon Transformation Opportunity : 【 Resource Efficiency 】 Use of more efficient modes of transport			
Opportunity and Strategy Explanation	<ul style="list-style-type: none"> The service scope of the Miaoli Xiangshan factory extends to Jinshan, New Taipei City in the north and to Taichung in the south. Under normal circumstances, 12 large diesel trucks (scheduled for replacement) are deployed several times a day to meet the daily linen needs of various hospitals, consuming approximately 750 liters of diesel fuel per day. The Longde factory in Yilan undertakes nearly 85% of the washing and processing of medical linen in the Greater Yilan area. This service is operated by four 3-ton (Phase 6) small trucks, consuming approximately 40 liters of diesel fuel per day. Due to the poor fuel efficiency of the old vehicles, fuel consumption may increase. The Group can conduct an inventory of its old trucks for early replacement while also reviewing drivers' driving habits to reduce fuel consumption. Currently, the National Development Council has announced that out of the 900 billion budget allocated for achieving net-zero transformation by 2030, 168.3 billion NT dollars will be used for electrification of transportation. However, the current focus is on the electrification of city buses, and the promotion of electric trucks is encouraged through a reduction in goods tax (accounting for about 15% of the vehicle price). In practice, the development of electric trucks is still in its adolescent stage. The price of electric trucks is about 1.5 to 3 times that of diesel trucks, and the full battery life is about 100~250km. As electric truck technologies and infrastructure mature, we plan to be ready to adopt them. Currently, we are focused on optimizing transportation routes and schedules to improve efficiency in both time and fuel use. Currently, one 11-ton and one 5-ton truck at the Xiangshan Factory have been replaced with new Phase 6 environmentally friendly diesel vehicles. Starting from 2030, 6 diesel vehicles are expected to be replaced every 10 years, with a replacement cost of 1 million NTD each, and a total of 12 diesel vehicles are to be replaced. 		
Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Response Strategies	Short-term	-	-
	Medium-term	+\$28,768	<ul style="list-style-type: none"> 【 Capital Expenditure 】 Replace 6 diesel vehicles in 2030, with a replacement cost of NT\$1 million each. 【 Expense Reduction 】 Currently, each vehicle consumes approximately 22,812.5 liters of fuel per year. Replacing with new vehicles can save 15% of fuel consumption. Diesel is priced at 35 NTD per liter (with annual oil price growth of 3%), and emits 2.78 kilograms of carbon per liter.
	Long-term	+\$80,924	<ul style="list-style-type: none"> 【 Capital Expenditure 】 Replace 6 diesel vehicles in 2040, with a replacement cost of NT\$1 million each. 【 Expense Reduction 】 Currently, each vehicle consumes approximately 22,812.5 liters of fuel per year. Replacing with new vehicles can save 15% of fuel consumption. Diesel is priced at 35 NTD per liter (with price increase by 3% per year), and emits 2.78 kilograms of carbon per liter.
Low Carbon Transformation Opportunity : 【 Resource Efficiency 】 Use of recycling			

Opportunity and Strategy Explanation	<ul style="list-style-type: none"> The Xiangshan factory in Miaoli and Longde factory in Yilan are currently making efforts in water resource recovery. Depending on the water usage within factory operations, it is mainly utilized for steam heating and washing. In steam heating, besides utilizing the excess heat from steam to preheat cold water and reduce energy consumption in the washing process, the condensed water is also recycled and used for washing, accounting for approximately 5% to 8% of the daily washing water consumption. The Xiangshan factory's tunnel washer filters and recycles water, cutting usage by about 70% versus traditional washers. The Longde Factory plans to install condensate recovery equipment in 2025, with an estimated cost of NT\$110,000. Resetting is expected every 15 years.
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Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Response Strategies	Short-term	+\$1,920	<ul style="list-style-type: none"> 【 Capital Expenditure 】 Purchasing condensate recovery equipment in 2025 will cost NT\$110,000. 【 Expense Reduction 】 Installing condensate recovery equipment in Longde factory is estimated to reduce annual water consumption by 5%, thereby reducing water expenses by NT\$57,600 (equivalent to USD 1,920 at an exchange rate of 30). *assuming there is no increase in water rates
	Medium-term	+\$1,920	<ul style="list-style-type: none"> 【 Expense Reduction 】 Installing condensate recovery equipment in Longde factory is estimated to reduce annual water consumption by 5%, thereby reducing water expenses by NT\$57,600 (equivalent to USD 1,920 at an exchange rate of 30). *assuming there is no increase in water rates
	Long-term	+\$1,920	<ul style="list-style-type: none"> 【 Capital Expenditure 】 Purchasing condensate recovery equipment in 2040 will cost NT\$110,000. 【 Expense Reduction 】 Installing condensate recovery equipment in Longde factory is estimated to reduce annual water consumption by 5% (4,800 kWh), thereby reducing water expenses by NT\$57,600 (equivalent to USD 1,920 at an exchange rate of 30). *assuming there is no increase in water rates

Low Carbon Transformation Opportunity : 【 Energy Source 】 Use of lower-emission sources of energy

Opportunity and Strategy Explanation	<ul style="list-style-type: none"> In order for companies to prove that the electricity they produce or use comes from renewable sources, the government has launched "Renewable Energy Certificate." This certificate serves as a form of production history proof, certifying that the electricity is sourced from renewable energy, hence classified as "green energy." Currently, Taiwan adopts the "power bundled" system, where purchasing a green energy certificate requires simultaneous acquisition of an equivalent amount of green electricity. In addition to purchasing green power directly from renewable energy power generators or Taipower, there is also the option to use the "Green Energy Certificate Trading Platform" led by the Inspection Bureau of the Ministry of Economic Affairs in 2020 for matchmaking or participating in bidding transactions. The roof of the Group's Xiangshan factory is leased to a renewable energy company. In the future, green power can be purchased from renewable energy companies based on the Group's green power needs. The project has a construction capacity of approximately 200KW. Subsequently, depending on the Group's development direction, it can be gradually increased, with an annual electricity generation of 500KW as a benchmark. This is because the minimum limit for the scale of each individual site in Taiwan cannot exceed 500KW. If the Group builds its own rooftop solar power in the future, it will temporarily adhere to this scale.
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	<ul style="list-style-type: none"> At Medtecs' laundry factories, natural gas is used for steam generation and drying functions. Currently, the efficiency of converting electrical energy into thermal energy for heating is only about 50%. The main consideration for equipment replacement evaluation will be based on improving the current efficiency. As our largest electricity consumer, our Cambodia production base plans to install 500KW of solar generation capacity by 2025. With costs around NT\$30,000 per 1KW including maintenance, we will assess expanding solar to other factories once efficiency improves.
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Financial Impact Type	Time Horizon	Financial Impact (USD/year)	Explanation
Response Strategies	Short-term	+\$133,022	<ul style="list-style-type: none"> 【 Capital Expenditure 】 The cost for installing solar power generation equipment in 2025 is NT\$15 million. Adding a 500KW power generation equipment in the factory in Cambodia (assuming an average of 5 hours of sunlight per day) can save up to 912,500 kilowatt-hours of electricity annually. Given Cambodia's power emission factor of 0.8795 kg CO2e per kWh in 2018, this can result in a reduction of approximately 802.54 tons of carbon emissions and a cost savings of \$106,762.5 (assuming electricity price does not increase). In the IPCC SSP1-2.6 scenario, the carbon price is estimated to be \$32.72 per ton in 2030, \$71.76 per ton in 2040, and \$99.97 per ton in 2050. For the purposes of this assessment, the carbon pricing scenario from IPCC SSP1-2.6 is adopted as the estimation standard, considering the reasonableness of carbon pricing.
	Medium-term	+\$164,353	<ul style="list-style-type: none"> Adding a 500KW power generation equipment in the factory in Cambodia (assuming an average of 5 hours of sunlight per day) can save up to 912,500 kilowatt-hours of electricity annually. Given Cambodia's power emission factor of 0.8795 kg CO2e per kWh in 2018, this can result in a reduction of approximately 802.54 tons of carbon emissions and a cost savings of \$106,762.5 (assuming electricity price does not increase).
	Long-term	+\$186,993	<ul style="list-style-type: none"> In the IPCC SSP1-2.6 scenario, the carbon price is estimated to be \$32.72 per ton in 2030, \$71.76 per ton in 2040, and \$99.97 per ton in 2050. For the purposes of this assessment, the carbon pricing scenario from IPCC SSP1-2.6 is adopted as the estimation standard, considering the reasonableness of carbon pricing.

Low Carbon Transformation Opportunity : Financial Impact Profit and Loss Chart by Year



Transformation Opportunity Total Profit and Loss from 2030~2050: \$4,414,374 (undiscounted nominal value)

Note: Under Financial Impact (USD/year), "-" indicates a decrease in operating profit, and "+" indicates an increase in operating profit.

4 Metrics and Targets

4.1 Energy and Waste Indicators

In line with Taiwan government's environmental protection policy, the Group completed the installation of natural gas boilers and surrounding pipelines at its Xiangshan laundry factory in Miaoli County on June 30, 2020. Starting from January 1, 2021, the old coal-fired boilers were decommissioned and replaced by new, energy-efficient liquefied natural gas ("LNG") boilers for power generation. In March 2022, the Xiangshan factory installed and started using a brand-new tunnel washer, along with six direct-fired dryers, for improved energy efficiency. The wash load of the Xiangshan factory in 2020, 2021, and 2022 was 12,343 metric tons, 11,801 metric tons, and 12,171 metric tons, respectively. The energy usage was 105,125 GJ, 75,370 GJ, and 71,044 GJ, respectively, and the energy usage per metric ton of wash load was 8.52 GJ, 6.39 GJ, and 5.84 GJ, respectively. After switching to a new natural gas boiler and introducing new tunnel washer, the energy conversion efficiency has been improved, and the energy saving rate for the three years reached 31%.

The relevant energy and waste indicators for each factory are shown in the tables below.

Energy consumption of the Xiangshan factory in Miaoli				
Quantitative indicators	Unit	2020	2021	2022
Electricity consumption	kWh / year	1,828,167	1,920,522	1,753,858
	GJ	6,581	6,914	6,314
Fuel oil consumption	L / year	69,900	20,100	19,200
	GJ	2,808	807	771
Coal consumption	kg	3,365,920	Ceased using coal	
	GJ	85,625		
LNG consumption	m ³	320,071	2,021,048	1,910,807
	GJ	10,111	67,649	63,959
Total energy consumption	GJ	105,125	75,370	71,044

Notes:

- Conversion of electricity calorific value: 1 kWh = 0.0036 GJ.
- The consumption values are calculated based on the conversion coefficients in the Environmental Protection Administration's (EPA) GHG Emission Factor Table 6.0.4, which uses the following fuel calorific values: fuel oil at 9,600 kcal/L, coal at 6,080 kcal/kg, natural gas at 8,000 kcal/m³. 1 kcal is equal to 4.184 kJ.

Energy consumption of the Longde factory in Yilan				
Quantitative indicators	Unit	2020	2021	2022
Electricity consumption	kWh / year	321,480	323,600	303,160
	GJ	1,157	1,165	1,091
Fuel oil consumption	L / year	207,220	68,670	Ceased using fuel oil
	GJ	8,323	2,758	

Steam consumption	ton / year	-	1,299	1,878
	GJ	-	3,644	5,269
Steam calorific value	kcal / kg	670.54	670.54	670.54
Steam emission factor	kgCO ₂ e / ton	323.169	323.169	323.169
Total energy consumption	GJ	9,481	7,568	6,360

Notes:

1. Conversion of electricity calorific value: 1 kWh = 0.0036 GJ.
2. The consumption values are calculated based on the conversion coefficients in the EPA's GHG Emission Factor Table 6.0.4, which uses the following fuel calorific values: coal at 9,600 kcal/L, steam at 670.54 kcal/kg. 1 kcal is equal to 4.184 kJ.

Energy consumption of the subsidiary in Cambodia

Quantitative indicators	Unit	2020	2021	2022
Electricity consumption	kWh / year	4,137,366	3,589,217	2,479,331
	GJ	14,895	12,921	8,926
Gasoline consumption	L / year	697	570	970
	GJ	23	19	32
Diesel oil consumption	L / year	19,747	20,002	22,079
	GJ	694	703	776
Total energy consumption	GJ	15,611	13,644	9,734

Notes:

1. Conversion of electricity calorific value: 1 kWh = 0.0036 GJ.
2. The consumption values are calculated based on the conversion coefficients in the EPA's GHG Emission Factor Table 6.0.4, which uses the following fuel calorific values: gasoline at 7,800 kcal/L, diesel oil at 8,400 kcal/L. 1 kcal is equal to 4.184 kJ.

Energy consumption of the subsidiary in Philippines

Quantitative indicators	Unit	2020	2021	2022
Electricity consumption	kWh / year	2,304,330	1,278,830	1,599,430
	GJ	8,296	4,604	5,758
Coal consumption	Metric ton	616	141	257
	GJ	15,649	3,596	6,545
Total energy consumption	GJ	23,943	8,200	12,303

Notes:

1. Conversion of electricity calorific value: 1 kWh = 0.0036 GJ.
2. The consumption values are calculated based on the conversion coefficients in the EPA's GHG Emission Factor Table 6.0.4, which uses the following fuel calorific values: fuel oil at 9,600 kcal/kg, coal at 6,080 kcal/kg, and natural gas at 8,000 kcal/m³. 1 kcal is equal to 4.184 kJ.

Historical Energy Intensity

The primary driver of higher energy use in the Philippines in 2022 is the partial rebound of the domestic market as pandemic impacts have eased. With textile and dyeing factories resuming operations while PPE output declined, energy-intensive textile production has increased relative to PPE.

	2020	2021	2022
Xiangshan factory in Miaoli	0.2598	0.4706	1.1356
Longde factory in Yilan	0.0237	0.0525	0.1131
Subsidiary in Cambodia	0.0398	0.0946	0.1731
Subsidiary in the Philippines	0.0640	0.0595	0.2311

Note:
The denominator of energy intensity is calculated based on the Group's annual revenue, with data for 2020 at 400,327K USD, 2021 at 144,155K USD, and 2022 at 56,243K USD.

Historical GHG Emissions

In order to gain a better understanding of the greenhouse gas emissions across the company's various facilities and to establish clearer carbon reduction strategies, we conducted an initial assessment in 2022 focusing on six factories in Cambodia. Although the findings were not formally verified, we gained a preliminary understanding of the assessment process and data requirements through guidance from external consultants. We also conducted internal verification training. Building upon this initiative, we plan to expand the assessment scope to include factories in Taiwan, the Philippines, and other locations in 2023. We will pursue external verification and obtain ISO 14064 certification. This will further enable us to develop carbon reduction targets in preparation for net zero emissions by 2050 and continue leading the Group towards sustainability.

Unit : kgCO₂e; the unit of GHG emission intensity is kgCO₂e/annual revenue of each factory (in K USD)

GHG emissions				
Operating base	Item	2020	2021	2022
Xiangshan factory in Miaoli	Scope 1	11,397,879	3,441,838	3,254,722
	Scope 2	918,158	975,142	883,013
	Total emissions	12,316,037	4,416,980	4,137,735
	GHG emission intensity	30.7649	30.6405	73.5689
Longde factory in Yilan	Scope 1	646,762	214,328	N/A
	Scope 2	161,383	584,509	761,220
	Total emissions	808,145	798,837	761,220
	GHG emission intensity	2.0187	5.5415	13.5345
Subsidiary in Cambodia	Scope 1	76,028	53,685	395,802
	Scope 2	2,076,958	1,826,911	1,239,395
	Total emissions	2,152,986	1,880,597	1,635,197
	GHG emission intensity	5.3781	13.0457	29.0738
Subsidiary in the	Scope 1	1,646,573	378,426	688,725

Unit : kgCO₂e; the unit of GHG emission intensity is kgCO₂e/annual revenue of each factory (in K USD)

GHG emissions				
Operating base	Item	2020	2021	2022
Philippines	Scope 2	1,156,774	650,924	814,110
	Total emissions	2,803,347	1,029,351	1,502,835
	GHG emission intensity	7.0026	7.1406	26.7204

Notes:

- Scope 1 refers to emissions directly from sources owned or controlled by the Company, including stationary combustion sources, process emissions, mobile combustion sources from transportation, and fugitive emissions. Emission factors are calculated based on the latest data in the Announcement 6.0.4 (IPCC Sixth Assessment Report) released by the Bureau of Energy, Ministry of Economic Affairs
- Scope 2 refers to energy-related emissions, such as purchased electricity.
- Types of GHG emissions: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O)
- For purchased electricity, emission factors are based on the data announced by the Bureau of Energy. In 2020, the emission factor for electricity was 0.502 kgCO₂e/kWh, and in 2021, it was 0.509 kgCO₂e/kWh. However, the emission factor for 2022 has not yet been announced, so it is calculated based on the 2021 emission factor of 0.509 kgCO₂e/kWh for now.
- The denominator of GHG emission intensity is calculated based on the Group's annual revenue, with data for 2020 at 400,327K USD, 2021 at 144,155K USD, and 2022 at 56,243K USD.

The detailed water usage data is shown in the following table:

Unit : million litre

Water consumption by operating base				
Operating base	Item	2020	2021	2022
Xiangshan factory in Miaoli	Water intake	134	126	126
	Wastewater discharged	94	94	90
	Water consumed	40	32	36
Longde factory in Yilan	Water intake	40	46	44
	Wastewater discharged	32	37	35
	Water consumed	8	9	9
Subsidiary in Cambodia	Water intake	356	402	367
	Wastewater discharged	285	234	183
	Water consumed	28	23	18
Subsidiary in the Philippines	Water intake	195	112	131
	Wastewater discharged	195	112	131
	Water consumed	0	0	0
Total	Water intake	724	686	668

Note:

Water consumption = Water intake - Wastewater discharged

Historical Water Intake Intensity

The increase in water consumption in the Philippines in 2022 was primarily driven by changes in the product structure as the pandemic situation eased. There was a rise in orders for water-jet looms and dyeing factories, which are known for their high water consumption, while orders for PPE decreased.

Unit : million litres/K USD

	2020	2021	2022
Xiangshan factory in Miaoli	0.0003	0.0009	0.0022
Longde factory in Yilan	0.0001	0.0003	0.0008
Subsidiary in Cambodia	0.0009	0.0028	0.0065
Subsidiary in the Philippines	0.0005	0.0008	0.0023

Notes:

1. The denominator of water intake intensity is calculated based on the Group's annual revenue over the years, with data for 2020 at 400,327K USD, 2021 at 144,155K USD, and 2022 at 56,243K USD.

2. The calculation method for water intake intensity is: Water intake (million litres) / Revenue (K USD).

Wastewater Management

Medtecs has installed pollution control equipment at each of its manufacturing facilities or commissioned a specialist to provide proper treatment, in order to reduce the environmental impact of its operations. The wastewater discharged from the Group's two laundry factories in Taiwan is mostly laundry water, which is less polluting and is discharged after treatment by the wastewater treatment facilities.

Unit : million litres

Wastewater discharged by operating base			
Operating base	2020	2021	2022
Xiangshan factory in Miaoli	93.801	93.786	89.621
Longde factory in Yilan	32.261	36.812	35.025
Subsidiary in Cambodia	-	-	-
Subsidiary in the Philippines	155.769	89.200	104.918
Total	281.831	219.798	229.564

Note:

The subsidiary in Cambodia has no wastewater discharge due to the nature of its business. However, previous reports included data on wastewater discharge. This year, the definition has been revised, and historical data has been updated accordingly.

Wastewater discharge standards					
Operating base	Test item	Discharge standard	2020	2021	2022
			Annual average value measured	Annual average value measured	Annual average value measured
Xiangshan factory in Miaoli	Coliform bacteria (CFU/100mL)	200,000	36,570	6,185	830
	Anionic surfactant	10	0.28	0.29	0.185
	Chemical oxygen demand (mg/L)	100	59.4	84.6	56.15
	Suspended solids (mg/L)	50	25.05	43.95	11.1
	Water temperature (°C)	38	29.35	30.05	30.65
	pH value	6~9	7.1	8.25	7.65

Waste Management

In line with the principles of Reduce, Recycle, and Reuse, Medtecs will continue to strengthen the education and training of production line workers and related personnel to reduce production defects at the source and reduce the production of waste and scrap. In addition, we also require all employees to implement waste classification for recycling and reuse, and commission specialized operators to carry out the recycling operation.

After washing and drying the medical scrubs, the laundry factory carries out quality control before shipping the cleaned medical scrubs. The damaged medical scrubs are identified and discarded. Since the discarded medical scrubs are clean, they are not considered medical waste. The laundry factory treats them as general industrial waste and commissioned qualified waste disposal operators to transport them to an incinerator for disposal. The data for other related waste is shown in the following table:

Unit : Metric ton/year

Waste production and disposal						
Operating base	Waste composition	Hazardous/Non-hazardous	Onsite		Offsite	
	Item		Waste generation	Treatment method	Waste generation (tons)	Treatment method
Taiwan	Waste fabric	Non-hazardous	0	-	56	Incineration (including energy recovery)
	Inorganic sludge		0	-	18	Other disposal operation
	Employee household waste		0	-	60	Incineration (excluding energy recovery)
Cambodia	Scrap metal	Non-hazardous	0	-	647	Other disposal operation
	Waste paper		0	-	81	Other disposal operation
	Plastic pellets		0	-	18	Other disposal operation
	Waste plastic pellets		0	-	230	Other disposal operation
	Production waste		0	-	144	Other disposal operation
	Production garbage		0	-	353	Incineration (including energy recovery)
	Household waste		0	-	334	Incineration (including energy recovery)
Philippines	Waste cardboard	Non-hazardous	0	-	65	Preparation for reuse

	boxes					
	Waste yarn from weaving mills	0	-	12		Preparation for reuse
	Waste plastic bags	0	-	12		Preparation for reuse
	Waste paper yarn tubes	0	-	8.5		Preparation for reuse
	Waste paper	0	-	6		Preparation for reuse
	Other non-recyclable garbage	0	-	415		Other disposal operation

Notes:

1. The waste generated by the Company's laundry factory mainly consists of three types: waste fabric, employee household waste, and inorganic sludge from the sewage treatment tank, all of which are non-hazardous substances.
2. The Company's waste is temporarily stored first in appropriate locations within the factory and then handled by qualified waste disposal operators when it reaches a certain amount.
3. The inorganic sludge is handled by qualified waste disposal operators and is treated by thermal method.
4. The reuse of non-hazardous substances referred to by the subsidiary in the Philippines includes a portion that is reused and a portion that is sold to recycling companies for reuse as raw materials.
5. Other disposal operation referred to by the subsidiary in the Philippines, such as non-recyclable waste, are handed over to the waste recycling department of the FAB (Freeport Area of Bataan) for disposal.

4.2 Risk Management Plans and Targets

Medtecs Group complies with Taiwan's Nationally Determined Contribution (NDC) for greenhouse gas reduction and the regulations of the Climate Change Response Act. These serve as references for setting the Company's energy conservation and carbon reduction goals, subject to ongoing adjustments to align with international trends.

Energy Consumption	
Risk Management Plans	Targets
<ul style="list-style-type: none"> The installation of the ASAHI tunnel washing machine at the Xiangshan factory has been successfully completed. After installation, the washing machine saves 20,107 kWh of natural gas (amounting to 17,292 NT dollars) and 21,706 kWh of electricity (equivalent to 81,678 NT dollars) each month. If the energy-saving benefits are significant after operation, there are plans to proceed with the subsequent replacement of the remaining old tunnel washing machines. The Sustainability Reporting Council under its jurisdiction supervises the progress and achievement status of various energy-saving initiatives. It gathers and presents the results of energy conservation and carbon reduction to the Board of Directors. 	<ul style="list-style-type: none"> Short to medium-term (1-10 years) : According to Taiwan's NDC target, a reduction of 25% in emissions is required by 2030 compared to the base year. This translates to an annual reduction rate of 1% from 2006 to 2030. Long term (more than 10 years) : According to Taiwan's NDC target, a reduction of 100% in emissions is required by 2050 compared to the base year. This translates to an annual reduction rate of 3.75% from 2031 to 2050.

Water Consumption

Risk Management Plans	Targets																																																																	
<ul style="list-style-type: none"> The Xiangshan factory serves as the primary area for water-intensive operations and is responsible for the cleaning of hospital linens. The annual average water consumption from 2020 to 2022 is 92,403 cubic meters. In the future, the Group can promote using water-saving faucets to achieve water conservation goals. However, since garment washing must comply with relevant hygiene regulations, we cannot recycle and reuse water to promote water conservation in the long term. The Sustainability Reporting Council under its jurisdiction supervises the progress and achievement status of various water conservation plans and compiles the results for presentation to the Board of Directors. 	<ul style="list-style-type: none"> Short to medium-term (1-10 years) : Based on the water consumption of the Xiangshan factory from 2020 to 2022, the annual water savings rate is estimated to be 1%, starting from 2023. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Year</th> <th>Laundry Output Weight (metric tons)</th> <th>Water Consumed (kWh)</th> <th>Water Consumed per Metric Ton of Laundry (kWh)</th> <th>Increase/Decrease Rate</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>12,343</td> <td>93,801</td> <td>7.5993</td> <td></td> <td></td> </tr> <tr> <td>2021</td> <td>11,801</td> <td>93,786</td> <td>7.9474</td> <td>4.6%</td> <td></td> </tr> <tr> <td>2022</td> <td>12,310</td> <td>89,621</td> <td>7.2801</td> <td>-8.4%</td> <td></td> </tr> <tr> <td>2023</td> <td></td> <td></td> <td>7.2073</td> <td>-1.0%</td> <td rowspan="9">Reduce water usage by 1% annually from 2023 to 2030</td> </tr> <tr> <td>2024</td> <td></td> <td></td> <td>7.1352</td> <td>-1.0%</td> </tr> <tr> <td>2025</td> <td></td> <td></td> <td>7.0639</td> <td>-1.0%</td> </tr> <tr> <td>2026</td> <td></td> <td></td> <td>6.9932</td> <td>-1.0%</td> </tr> <tr> <td>2027</td> <td></td> <td></td> <td>6.9233</td> <td>-1.0%</td> </tr> <tr> <td>2028</td> <td></td> <td></td> <td>6.8541</td> <td>-1.0%</td> </tr> <tr> <td>2029</td> <td></td> <td></td> <td>6.7855</td> <td>-1.0%</td> </tr> <tr> <td>2030</td> <td></td> <td></td> <td>6.7177</td> <td>-1.0%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Long term (more than 10 years) : To comply with health regulations, it is not possible to use recycled water to wash used linens. The short- and medium-term water saving rate will temporarily be set at 1%. 	Year	Laundry Output Weight (metric tons)	Water Consumed (kWh)	Water Consumed per Metric Ton of Laundry (kWh)	Increase/Decrease Rate	Remarks	2020	12,343	93,801	7.5993			2021	11,801	93,786	7.9474	4.6%		2022	12,310	89,621	7.2801	-8.4%		2023			7.2073	-1.0%	Reduce water usage by 1% annually from 2023 to 2030	2024			7.1352	-1.0%	2025			7.0639	-1.0%	2026			6.9932	-1.0%	2027			6.9233	-1.0%	2028			6.8541	-1.0%	2029			6.7855	-1.0%	2030			6.7177	-1.0%
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Renewable Energy	
Risk Management Plans	Targets
<ul style="list-style-type: none"> The Group plans to install 500KW solar power generation equipment in Cambodia in the short term, which is expected to cost approximately NT\$15 million. In the medium term (within 3-10 years), it is projected to cost NT\$45 to install a 1,500 KW solar power generation equipment. In the long term (10 years and beyond), there are plans to upgrade and install a 5,000 KW solar power generation equipment, with an estimated expenditure of NT\$150 million. 	<ul style="list-style-type: none"> Short term (1-3 years): By 2025, achieve a renewable energy usage rate of 1%. Medium-term (3-10 years) : By 2030, achieve a renewable energy usage rate of 3%. Long term (more than 10 years) : Post 2030, achieve a renewable energy usage rate of over 10%.

Replacement of Transportation Vehicle	
Risk Management Plans	Targets
<ul style="list-style-type: none"> As of 2022, Longde factory has completed the replacement of three transport vehicles, and the Xiangshan factory has replaced one. In the future, 1 to 2 vehicles are expected to be replaced every year, and the replacement can be completed within 10 years. Electric vehicles are not suitable for the current transportation operations of the two laundries under the jurisdiction until there are significant improvements in battery life and charging/discharging technology. 	<ul style="list-style-type: none"> Short to medium-term (1-10 years) : In the short term, 40% of vehicles will be environmentally friendly (phase 6 diesel vehicles), and this percentage is expected to increase to 100% in the medium term. If there is a higher environmental standard period, the replacement plan will be based on the latest standard. By 2030, at least 20% of the vehicles will be environmentally friendly diesel vehicles or electric diesel vehicles.

Appendix

Appendix 1: References

- IPCC (2021), Sixth Assessment Report of Intergovernmental Panel on Climate Change 2021: The Physical Science Basis.
- Excerpts of Key Scientific Points from the IPCC Sixth Assessment Report of Intergovernmental Panel on Climate Change and Taiwan's Climate Change Assessment Report.
- Overview of Taiwan's 2050 Net Zero Emission Pathway and Strategies.

Appendix 2: TCFD Index

Governance	a. Describe the board's oversight of climate-related risks and opportunities.	1.3 Organisation and Responsibilities	5
	b. Describe management's role in assessing and managing climate-related risks and opportunities.	1.3 Organisation and Responsibilities	5
Strategy	a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	2.2 Climate-related Risks and Opportunities Identification	8
	b. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	3.1 Financial Assessment of Climate-related Risks	14
		3.2 Climate-related Opportunities and Strategic Financial Assessment	18
c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	2.4 Climate Scenario Analysis	12	
Risk Management	a. Describe the organization's processes for identifying and assessing climate-related risks.	2.1 Identification and Assessment of Climate-related Risks and Opportunities	7
	b. Describe the organization's processes for managing climate-related risks.	2.3 Summary Table of the Impact of Risks and Opportunities on the Company	9
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	2.1 Identification and Assessment of Climate-related Risks and Opportunities	7
Metrics and Targets	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	4.2 Risk Management Plans and Targets	27
	b. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	4.2 Risk Management Plans and Targets	27
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	4.2 Risk Management Plans and Targets	27