

東元電機股份有限公司

TECO Electric & Machinery Co., Ltd.

2022 Sustainability Report

Report Scope and Boundaries

Prior to 2013, the scope of reports was confined to operating areas in Taiwan including company HQ, manufacturing plants and the TECO Technology Foundation. In 2014, the scope was widened to encompass affiliates and TESEN Electronic. As of 2015, overseas affiliates such as TECO-Westinghouse and Taian Technology (Wuxi) were also included. In 2017, important domestic and overseas affiliates such as Wuxi TECO and TECO Electro Devices were likewise included. In 2019 all facilities in China were included in this report. From 2020 affiliates in Vietnam was included, and as in 2021 affiliates in Italy (Motovario) was included in this report. The report primarily presents achievements and performance data in the dimensions of environmental protection, social and corporate governance engagement from January 1 to December 31, 2022

YEAR 2022, THE ANNUAL REPORT INCLUDES 117 ENTITIES AMONG TECO GROUP, AND THE SUSUTAINABILITY REPORT INCLUDES 12 MANUFACTURING FACILITIES WITH 82.7% COVERAGE RATE OF TOTAL TECO GROUP REVENUE.



Reporting Principles

- This report is in accordance with the GRI Standards published by the Global Sustainability Standards Board (GSSB). GRI content index table is attached to this report.
- Environmental and GHG emission data are reported based on Task Force on Climate-Related Financial Disclosures (TCFD) standards The TCFD reference table is attached to this report.
- Sustainability issues with significant financial impacts on the industry are reported based on Sustainability Accounting Standards Board (SASB) standards with reference talbe as well.

Report Assurance

- Internal Assurance: Relevant issues and performance are reviewed and verified in strategy meetings, monthly business meetings of TECO and business divisions, and quarterly KPI review meetings. The data provided are subject to review and approval by department executives. In addition, internal annual audits (coupled with external verification) of the quality management system (ISO 9001), occupational health and safety management system (ISO 45001), environmental management system (ISO 14001), and GHG emissions (ISO 14064-1) are conducted every year to further guarantee the accuracy of provided data. There is no Restatements of information in this report.
- External Assurance: TECO commissions BSI to verify the report which was compiled in accordance
 with the GRI Standards with AA1000 Type 1 Moderate Assurance standards. The assurance statement
 is attached to this report.

Report Presented by

- This report has been compiled by the ESG Office and is available in Chinese and English versions, also
 provided on the corporate website. Reporting cycle: Annual publication, consistant with Annual report.
- Contact person: ESG Office/ Jay LC Huang, Special Assistant
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Sustainability Commitment

Energy Conservation, Emission Reduction, Intelligence, and Automation

The global economy was confronted with multiple challenges in 2022. It was originally expected to enter the post-epidemic period and will usher in the global economic recovery. However, as the outbreak of the Russia-Ukraine war sparked price hikes of energy, food, and raw materials and impact of China's rigorous lockdown in Q2 on the global supply chain and subsequent rampant infections triggered by abrupt lifting of restrictive measures dampened production and consumption, multiple adverse factors which fueled inflation, leading to accelerated interest-rate hike in the U.S. and Europe, sharp currency devaluation against the greenback, global credit tightening, and financial market fluctuation.

As a critical component of the global supply chain, Taiwan was faced with demand decline in Europe, the U.S., and China under the global inflationary pressure, leading to economic downturn in Q4, following growth in the first three quarters. Meanwhile soaring energy prices also sparked investments and demands for energy conservation and green energy in both public and private sectors. With whole-year growth rate reaching 2.43%, Taiwan was still among best performing economies in the world.

TECO focuses on the three major fields of electromechanical system, energy, and air conditioning:

- Green Mechatronics possesses the two core capabilities of energy-conservation renovation and EV's
 powertrain, enabling development of high-performance products and solutions for industrial and electric
 vehicle.
- 2. Intelligence Energy focuses on renewable energy and IDC (Internet Data Center) engineering project.
- 3. Air & Intelligent Life products boasts Internet access, monitoring software, and energy saving.



Implementation of Corporate Governance-Realization of Sustainable Operations

Given the adverse factors of global inflation, slackening demands, and inventory adjustment for the post-pandemic global economy, the Cabinet-level Directorate General of Budget, Accounting, and Statistics predicts that Taiwan's economy will grow 2.12% in 2023. To maintain revenue growth, TECO will take advantage of demands concerning energy conservation and carbon abatement and tap new business opportunities related to energy transformation and electrification.

TECO has been recognized by international sustainability evaluation institutions in three consecutive years and included in DJSI Emerging Markets Index and S&P Global Sustainability Yearbook, thanks to its outstanding performance in innovative management, talent cultivation, and supply chain management, the only enterprise included in the Electrical Components & Equipment category of DJSI Emerging Markets Index.

Under the pledge of "10-year 50% emission reduction," TECO has aimed to halve emission by 2030, according to which it will kick off global production base emission reduction plan this year, including inauguration of expanding PV power devices at its factory premises worldwide, so as to enhance the group's share of renewable-energy consumption, on top of establishment of sustainable supply chain, via assistance for smart and medium enterprises to conduct greenhouse-gas inventory and emission reduction. TECO launches internal carbon price system this year, in the hope of spurring employees to actively carry out carbon abatement plan and imprint net zero emission concept in their minds deeply. In social engagement, to have the concept of energy conservation and emission reduction to take root in our society, TECO holds " Green Brain Creative Competition" for high and elementary school students, in the hope of implanting earth sustainability idea among them. TECO has also organized International Competition for Net Zero Emission Technology" for college students, encouraging engagement in R&D on emission reduction technology and passing on the mission of net zero emission sustainability. Moreover, TECO holds "TECO Award" for outstanding Taiwan figures in science/technology and humanity, for their contribution to build a progressive society with equal emphasis on both fields.

In conclusion, TECO will continue to uphold the concept of sustainable operations and implement corporate governance standards to create a sustainable working environment for employees, provide services in line with ESG value to customers, and bring the best interests to shareholders.

Sophia Chiu, Chairman of TECO

Member of

Dow Jones Sustainability Indices

Powered by the S&P Global CSA

The latest Dow Jones Sustainability Index (DJSI) appraisals and listings in 2022 reveal that TECO Electric & Machinery Co., Ltd. is ahead of its emerging market competitors and is the only newly listed enterprise in the electromechanical industry this year.

The inclusion of TECO in this 2023 S&P Global Sustainability Yearbook

indicates that the Company is ranked in the top 15% among its

worldwide competitors in the field of sustainability performance.

Sustainability Yearbook

Member 2022

S&P Global



FTSE4Good TIP Taiwan ESG Index evaluates investments and performance of listed companies through the adoption of the FTSE Russell ESG rating system. The index is composed companies that have good ESG performance.



According to the latest MSCI rating report in April 2023, TECO was upgraded from A to AA. This indicates that TECO risk management capability is in the top 15% among global peers.



The Company was honored with the Taiwan TOP50 Corporate Sustainability Award in the comprehensive performance category, a Platinum Award in the corporate sustainability reporting category, and a Climate Leadership Award and Social Inclusion Award in the outstanding example category, which bears clear witness to TECO's efforts and achievements in the promotion of sustainable development

Operational Performance and Management Scope

TECO Electric & Machinery Co., Ltd. Bases in Taiwan as a listed company. Products and service includes machinery systems, home appliance products, and engineering services. Number of employees is 2,274 in parent company and 11,936 worldwide. Financial performance as listed as followings:

in TWD K

	2019	2020	2021	2022
Operating revenues TECO Group	47,909,358	45,823,430	51,248,387	58,315,216
Net profits TECO Group	3,518,780	3,811,648	5,502,191	3,992,000

This report includes: TECO 東元電機, TESEN 東勝電氣, TECO-Westinghouse 東元西屋, Taian Technology (Wuxi) 台科無錫, Wuxi TECO 無錫東元, TECO Electro Devices 東元精電, Qingdao TECO Precision 青島東元, Jiangxi TECO A/C 江西東成, Wuxi TECO Precision 無錫精密, Jiangxi TECO 江西東元, TECO Vietnam 越南東元 and Motovario Corp (Italy) which totally covers 82.7% of total group consolidated revenue.



Direct economic value generated and distributed.

in TWD k

Iten	Amount	
Revenue	58,315,216	100.0%
Operating Cost	28,735,132 As (operating costs - employee salaries and benefits), see annual report, Consolidated income statement.	49.2%
Employee employee wages and benefits	11,077,480 Including salary expenses, remuneration, labor health insurance, pension, etc. Please refer to the annual report for additional information on the nature of expenses.	19.0%
Shareholder payments to providers of capital	3,208,195 Dividend NTD\$ 1.5 in 2022	5.5%
Government payments to government	1,429,815 As Income tax expense, see annual report, Consolidated income statement.	2.5%
Community community investments	19,515 As sponsoring and donation to NGOs	0.1%
Economic value retained	13,845,079	23.7%

Sustainability Taxonomy

Taxonomy guides investors locating funds into economic activities that contribute to sustainable development. At present, most sustainable finance classifications adopt the "EU Taxonomy". The EU Taxonomy aims to ensure that investment activities meet the requirements from the "European Green Deal". Which helps Europe becoming the first climate-neutral continent. The six environmental objectives of the EU Sustainability Taxonomies are: (1) climate change mitigation, (2) climate change adaptation, (3) The sustainable use and protection of water and marine resources, (4) The transition to a circular economy, (5) Pollution prevention and control, and (6) The protection and restoration of biodiversity and ecosystems. Company's economic activities must make a significant contribution to at least one of the six major environmental objectives before it can be considered as "Taxonomy-Eligible". In addition, it can be regarded as "Taxonomy-Aligned" if it does not cause significant harm to the other five items.

Before the Taiwanese government has its own Sustainability Taxonomy, TECO adopts EU Sustainability Taxonomy with self-declared TECO GO ECO low-carbon products and services classification and disclose as in the following table:

In 2022, taxonomy eligible revenue accounts for **49.8**% CAPEX accounts for **44.3**% and OPEX accounts for **14.6**%

Aggregate of Taxonomy	Organization and products	EU Taxonomy items	Revenue %	CAPEX %	OPEX %
	Green Mechatronic Solution Business Group (GM) High efficiency motor	3.3 Manufacture of low-carbon technologies for transport 3.6 Manufacture of other low-carbon technologies 8.2 Data-driven solutions for GHG emissions reductions	39.3 %	34.3%	
Taxonomy Eligible	Air & Intelligent Life Business Group (AI) Green Home Appliance	3.5 Manufacture of energy efficiency equipment for buildings	6.5 %	1.1%	14.6%
	Intelligence Energy Business Group (IE) Clean Energy Engineering	4.9 Transmission and distribution of electricity4.10 Storage of electricity	4.0 %	8.9%	
Not Eligible	Other Business Units	none	50.2 %	55.7%	85.4%

- For the first year of reporting, TECO adapts Taxonomy Eligible only in 2022, for details please see Appexdix 5.6.
- Green Mechatronic Solution Business Group (GM): represented by the sales ratio of high efficiency motors.
 - High-voltage motors with efficiency above 95% accounted for 80.6% of the revenue, and low-voltage motors above IE3 accounted for 74.9% of the revenue.
- Air & Intelligent Life Business Group (AI): represented by the sales ratio of green home appliance.
 - Green home appliances accounted for 64.6% of the revenue.
- Intelligence Energy Business Group (IE): The performance of the entire business group is represented by engineering revenue (offshore wind power, grid resilience, green buildings, etc.)
 - Clean Energy Engineering accounted for 23.3% of the revenue.
- TECO's low-carbon products and services refer to the ISO 14020 standards, and in accordance with the principles
 of Type I, II, and III environmental labels and declarations.
- The proportion of CAPEX is determined to be "Taxonomy Eligible" based on the investment in new products, new technologies, new processes, safety and environmental equipment, automation and intelligence that will be compiled and implemented within 2023, general (maintenance/ retirement/ factory repair), expansion of production capacity, efficiency improvement, quality improvement, IT equipment, etc. are identified as "not eligible".
- The proportion of OPEX is composed with R&D, training, environment protection expense from factory sites and donation related to Taxonomy items.

Materiality Analysis and Sustainability Management

Communicate with stakeholders through various stakeholder channels, identify major issues from global trends and make questionnaires, actively conduct interviews with representative figures of various stakeholders, collect and update the degree of concern. Each topic is sorted and analyzed according to the two aspects of external personnel and internal supervisors, so as to identify different opinions and revise the direction of sustainable management, analyze the risk of transformation failure and dual material factors of sustainable actions, and formulate internal management systems to ensure the achievement of goals.

The materiality analysis is performed once every year. From the world mega trends, TECO identify and communicate major risks and material issues with stakeholders. In year 2023, we issue 275 questionnaires to shareholders, employee, industry thought leaders and consultants to collect feedback openly for materiality analysis as following:

	Step1 Understand the organization's context	Based on the industry standards of the GRI Standards, identify risks and issues from world's major trends. Refer to reports from third parties (including the World Bank, DJSI, CDP, MSCI, EcoVadis etc.) Identify TECO's ESG Material topics.
Data c	Step2 Identify actual and potential impacts	Conduct impact assessment on 14 major industrial issues including the economy, environment, and people. List the impact content and management approach.
Data collection	Step3 Assess the significance of the impacts	The ESG Office confirms the content of the topic, analyzes the double-significant impact (financial and ESG), and explains the reasons, areas of impact, evaluation methods, and management indicators that have identified a relatively large negative impact.
	Step4 Prioritize the most significant impacts for reporting	Conduct interviews with key stakeholders, including industry leaders and employees. Consolidate opinions from 275 questionnaires, and classify major issues into three major sustainability actions, which are "to exist", "to operate" and "to profit".
Strategy D	Step5 Risk mitigation and goal setting	Based on the sustainable goals and their target years, find potential transformation risks and mitigation plan. Design KPI and training programs to make sure all employees have necessary capabilities.
Strategy Development	Step6 Disclosure	The "ESG Office" compares the impact of each issue, propose TECO's corresponding actions and communication points to stakeholders. Refer to the GRI/TCFD/SASB standards and formulates the disclosure contents.
Action	Step7 Approval and management	Establish annual strategy and action plans. Report to the "Corporate Governance and Sustainability Committee" under the Board of Directors. Adopt the "internal carbon pricing" to balance financial and ESG indicators for each business groups.



1.1 Identify Material Topics from Mega Trends

To further satisfy the sustainable development, TECO starts from 3 major world mega trends, develops risk and opportunities from them, and make corresponding mitigation plans. TECO defines 14 material issues that fits GRI topics and preform material analysis to rank priorities. In this report, TECO explains the approach of guiding companies to face and grow in new risks and opportunities. Education programs and key performance indicators (KPI) were given to employees. Finally, TECO defines 10 Material Topics and categorize into 3 major area "To Exist", "To Operate" and "To Profit" as next step links with SDG goals and sustainability.



International Relations Deteriorate, Democracy Camp Forms Short Supply Chains

Geopolitics has led to the transformation of the global supply chain, enterprises loss the position to pursue the lowest manufacturing cost under globalization. The communist camp launched a countermeasure to pursue independence and control by increasing domanstic demand and expanding public expenditure.

Impact on operations

TECO's Material Topics

The United States and China are competing for global influence. Countries, led by the United States, jointly put pressure on China and Russia. Markets and companies are forced to choose sides. Long-chains increase the carbon footprint of transportation, and the short-chains lose the scale of economies advantages.

- [Worldwide Supply Chain Configurations] The deterioration of Sino-US-Russian relations is already a long-term inevitable trend, and it is necessary to accelerate the realization of short-chain production capabilities
- In Digital Marketing and Logistics In The epidemic and geopolitical changes have caused freight delays and freight rates to fluctuate.
 TECO should maintain more flexibility by service remotely to maintain customer satisfaction.
- Material Risk Mitigation]Raw material prices fluctuate, TECO needs to be more focused in controlling of raw material inventory.
- [Product Decarbonization] Under the implementation of CBAM, carbon footprint will has to be disclosed. Not only must the energy efficiency of the products be improved, but the product carbon footprint must also be reduced as well.
- Carbon Specification Development] Just like food has nutrition labels, future products will also have carbon labels. customers will be expecting to purchase zero-carbon products.



Electricity costs continue to rise and power generation structure changes.

Power plants will be transformed, new technologies will be put into commercial use, the government encourages the growth of new power industries, and a large number of decentralized microgrids will be built. Fossil fuel is being replacing by electricity power, which causes a decrease in GHG emission scope 1 and an increase in scope 2.

Impact on operations

TECO's Material Topics

Italy's electricity price has quadrupled since the Ukrainian-Russian war broke out, China's mainland requires daytime production to be shift to nighttime, and Taiwan's 2023 average electricity price has risen by 11%.

Demand for electricity increases but electricity costs continue to rise. Enterprises must have independent electricity supply to face future challenges.

- Solar Power Generation I Not only Taiwan, but factories in China and Southeast Asia are also facing pressure to use green electricity. We need to start deploying the power generation capacity for the entire group.
- Supply Chain Decarbonization 1 The government requires listed companies to conduct greenhouse gas inventory inspections, and TECO has to assist SME supply chain partners in this action and help them to reduce emission.
- Clean Technology Engineering I Demand for public infrastructure soared, TECO has to made every effort to build a greener Taiwan and to maintain a leading position in the market
- Low Emission Factory Solution 1 Motor is the source of industrial power and consumes 37% of total electricity. TECO should invest more in research and development of emission reduction and help customers reduce carbon in operations.



The global economy is conservative, and society has higher expectations to ESG.

The monetary easing policy under the epidemic in the past three years, coupled with the effect of the Ukrainian-Russian War, has planted the inevitable result of an economic recession in 2023. At the same time, under the rising tide of ESG, enterprises must find a growth strategy under the goal of zero emission.

Impact on operations

TECO's Material Topics

The economic market, on the one hand, controls the inflation by increasing interests, and on the other hand, raises the threshold for sustainable investment. Enterprises must pay attention to engage with investors and commitment to sustainable development.

- Internalize the New Norm I There are more and more environmental data that need to be tracked, and the market access and tariffs are becoming more and more complicated. We must ensure that TECO people do the right thing.
- 【50% Emission Reduction in 2030】Reaching carbon neutrality by 2050 is the ultimate goal, but 2050 is still far away, what matters is what we do in this decade.
- [Employee Life and Safety] Transparency of internal epidemic situation, work injury information to eliminate employee anxiety. Support flexible working environment and employees' family life.
- [Diversified Environment] Woman's and diversified communities can speak out. TECO takes care of diversified needs.
- 【Biodiversity】 The world has begun to pay attention to the protection of biodiversity. TECO should use deforestation paper and wood and should also assist in the conservation of living species to support earth ecology.

1.2 Stakeholder Identification and Communication

The identification of stakeholders is carried out by the "ESG Office". The identification method refers to the AA1000 Stakeholder Deliberation Standard. The list of stakeholders is divided into shareholders, employees, customers, suppliers, local communities, Civil Organization & NGO, and government units. There are a total of seven groups.

Туре	How to identify	Engageme nt purpose	Engagement Results How to engage			
Shareholders	for holders of publicly issued shares	Maintain investor confidence	Selected as a member of "Dow Jones Sustainability Index" and "Taiwan Sustainability Index".	Quarterly corporate briefings, invited to participate in 9 domestic and foreign investment forums, received 105 visiting investors (including 13 foreign investors); visited securities firms 16 times in total.	Presentation to the Board of Directors by the Center for Corporate Governance	
Employees	For FTEs or contractors	Maintain harmony in company	TECO and union signed the updated group agreement on February 21, 2023	Labor-management meeting, meal meeting, staff quarterly meeting, occupational safety and health committee every quater. Employee satisfaction survey every year.	Report to CEO and chairman from the Human Resources Center	
Customers	For those who had purchasing actions	Maintain brand identity	Distributor discussions are held 1 to 4 times a year, and after-sales service telephone interviews are followed up. Paticipate in 5 international exhibitions	Regularly perform external audits, internal audits, process audits and product audits of the quality control system. Annual customer satisfaction survey	Reported to the chairman by the general manager of each business group	
Supplier	For those who had purchasing actions	Sound supply chain operation	2 external supplier counseling activities in 2022 and 1 in the first quarter of 2023. About 105 suppliers were invited to conduct emission reduction and factory guidance, TECO actually assisted 8 suppliers in conducting a simple greenhouse gas inventory.	Quarterly supplier assessment, risk assessment and on-site assessment for suppliers who do not meet the requirement.	Reported to the chairman by the general manager of each business group and the ESG office	

Туре	How to identify	Engagement purpose	Engagement Results	How to engage	Report to highest authority
Local communities	The authority in charge of the industrial zone at the place of operation	Maintain good environmental and social relations	No violations of air pollution discharge and waste management regulations and incidents affecting the community. A total of 1,154 employees participated in public welfare activities with 1,592 volunteer hours.	Carry out regional joint accident-prevention actions in industrial zones, Deliver electricity-saving education in communities and local schools every quarter.	Reported to the chairman by the general manager of each business group
Civil Organization and NGO	Public associations and cooperative organization s	Maintain good industry relations	Participated in the government's "Air-Conditioning in Classes" program and provided more than 700 schools with first-class energy-saving air-conditioning. Organize the "Green Mind Creative Competition" to inspire students' ability to think actively	Regularly participate in public association activities and conferences and hold green energy and emission reduction related activities every year.	Reported to the chairman by the general manager of each business group
Government agencies	For business- related supervisory units	Maintain good economic and governance performance	Consecutive successes in corporate governance evaluations and the Taiwan Excellence Award	Follow the requirements of the competent authority in accordance with the law and report regularly and cooperate with the supervision from the authority.	Presentation to the Board of Directors by the Center for Corporate Governance

Identify actual and potential impacts to ESG.

Conduct impact assessments on 14 major industrial issues on the economy, environment, and people (including their human rights) and list the content of impacts and Control method.

In 2022, from 275 questionnaires and 14 topics, TECO identify 10 material topics of high concern. ESG Office enriched and assessed ESG impacts and presented in Materiality Matrix.

			Economy		my Environ		Ped	ople	
	Material Topic	Positive (+) and Negative (-) impacts	(+)	(-)	(+)	(+) (-)		(+) (-)	
1	Internalize the New	(+) Improve corporate culture		0		0			
•	Norm	(-) Cause irregular business conduct		0		0			
2	50% Emission	(+) Reduce transformation risk		0					
2	Reduction in 2030	(-) none		0					
3	Employee Life and	(+) Improve employee health					0		
3	Safety	(-) none					0		
4	Diversified Environment	(+) Reduce risk of strategic bias					0		
7	Diversified Environment	(-) none							
5 Biodiversity		(+) Improve environmental health			0				
3	Biodiversity	(-) none			0				
	Warldwida Cupply	(+) Reduce operational risk							
6	6 Worldwide Supply Chain Configurations	(-) Increased management complexity,				0		0	
	Chain Comigurations	adaptation to local humanities regulations							
7	Digital Marketing and	(+) Improve service quality	0						
′	Logistics	(-) none	O						
8	Matarial Dials Mitigation	(+) Reduce operational risk	0						
O	Material Risk Mitigation	(-) none	O						
9	Product	(+) Reduce transformation risk	0	0					
9	Decarbonization	(-) Easy to form green washing behavior (note)	0	0					
10	Carbon Specification	(+) Control product carbon cost	0						
10	Development	(-) none	0						
11	Solar Power Generation	(+) Enhancing Power Resilience			(
	Solar Fower Generation	(-) none			0				
12	Supply Chain	(+) Reduce transformation risk	\bigcirc			0		0	
12	Decarbonization	(-) Impact on SMEs (note)	O			O		0	
	Olaras Tarla	(+) Win new business opportunities							
13	Clean Technology	(-) The engineer project has high potential to			0			0	
	Engineering	cause environment impact (note)							
	Low Emission Footser	(+) Win new business opportunities							
14	Low Emission Factory Solution	(-) Create a burden on the old machine	0	0	0	0			
	Solution	recycling system							

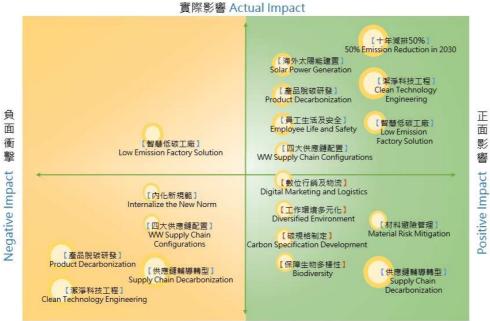
 【 Actual Impact 】
 ● High
 ⊚ Medium
 ○ Low

 【 Potential Impact 】
 ● High
 ⊚ Medium
 ○ Low

[Note] The impact and control metric are disclosed in following table for 3 topics with major concerns: Product Decarbonization, Supply Chain Decarbonization, and Clean Technology Engineering.

	Product	Supply Chain	Clean Technology
	Decarbonization	Decarbonization	Engineering
ESG Impact	Higher Efficient products may use raw materials with a higher carbon footprint	Government Greenhouse Gas Regulations limited to listed companies only, not SME	Environmental impact caused by public infrastructure emgineering
Why it impacts	In order to improve product efficiency, it is necessary to use higher gladed raw materials, such as silicon steel sheets,	The government requires all listed companies to complete GHG inventory by 2027. However, there is no clear control method for SMEs.	TECO participates in the construction of public projects for renewable energy and resilient power grids in Taiwan, as well as the electrification of natural gas pipelines in the United States.
Affecting scope	For the overall environment, companies must consider the overall emissions and carbon footprint of the life cycle when switching to raw materials.	The number of SMEs is huge, accounting for 80% of the total employment and generate 30% of the total export value. SMEs need guidance and requirements from listed counter companies.	The progress of the project will affect the environment or society.
How to evaluate	Collect and evaluate the carbon footprint of materials, calculate the increase or decrease of upstream carbon footprint, and the impact of downstream product use emissions	At this stage, TECO is providing guidance to SME suppliers, and assisting in the establishment of inventory knowledge and tools.	TECO should accept and comply with the relevant construction requirements of "Environmental Impact Assessment" and conduct inspections when undertaking the project site.
Management metrics	 Tracking of direct and indirect greenhouse gas emissions 	 The number of assisting provided to SMEs. Completion rate of GHG inventory 	 The number of social disputes The number of violations and penalties
Positive ESG impacts if manage well	 Ensure the overall emission reduction pathway is followed. 	 GHG inventory coverage. Accelerate energy-saving and low carbon transformation 	 Increase the proportion of renewable energy usage. Reduce the demand for fossil fuels

Top 10 Material Topics



高度衝擊
High Impact
中度衝擊
Middle Impact
低度衝擊
Low Impact
ESG衝擊顯著性

Impact on ESG

潛在衝擊 Potential Impact

10 Material Topics	Impact to Economy [\$] Environment [★] People [♀]	Change from 2021
1 Product Decarbonization	【\$】 Under the implementation of carbon tariffs, not only must the energy efficiency of the products be improved, but the carbon footprint must also be reduced. 【☆】 Potential negative green washing behaviors should be prevented. 【♀】 none.	Rank up 🛦
2 Low Emission Factory Solution	【\$】 Motor is the source of industrial power and consumes 37% of total electricity. TECO should invest more in R&D of emission reduction and help customers reduce carbon in operations. 【☆】 Solve the actual negative pressure on old machine recycling 【♀】 none.	Rank up ▲
3 50% Emission Reduction in 2030	【\$】 Effective emission reduction can directly reduce the carbon footprint of products, but companies must increase the necessary capital investment. 【☆】 Reaching carbon neutrality by 2050 is the ultimate goal, but 2050 is still far away, what matters is what we do in this decade. 【♀】 none.	New Topic New

4 Clean Technology Engineering	【\$】Demand for public infrastructure soared, TECO has to made every effort to build a greener Taiwan and to maintain a leading position in the market 【☆】The project needs to be carried out while preventing potential negative environmental impact. 【♀】If the environment is properly protected, there will be no significant impact to people.	Rank up ▲
5 Internalize the New Norm	【\$】 Mitigate potential negative business risks. 【☆】 here are more and more environmental data that need to be tracked, and the market access and tariffs are becoming more and more complicated. We must ensure that TECO people do the right thing. 【♀】 None.	New Topic New
6 Employee Life and Safety	 【\$】None. 【\$】None. 【\$】Transparency of internal epidemic situation, work injury information to eliminate employee anxiety. Support flexible working environment and employees' family life. 	Rank up ▲
7 Supply Chain Decarbonization	【\$】The government requires listed companies to conduct greenhouse gas inventory inspections, and TECO has to assist SME supply chain partners in this action and help them to reduce emission. 【☆】 Prevent potential negative operational risk to SMEs 【♀】 Prevent the impact of education and training needed on SMEs.	New Topic New
8 Material Risk Mitigation	【\$】Raw material prices fluctuate, TECO needs to be more focused in controlling of raw material inventory. 【☆】None. 【♀】None.	New Topic New
9 Solar Power Generation	 【\$】None. 【☆】Not only Taiwan, but factories in China and Southeast Asia are also facing pressure to use green electricity. We need to start deploying the power generation capacity for the entire group. 【♀】None. 	Rank down ▼
10 Worldwide Supply Chain Configurations	【\$】The deterioration of Sino-US-Russian relations is already a long-term inevitable trend, and it is necessary to accelerate the realization of short-chain production capabilities. 【☆】Carefully select production locations and supply chain manufacturers 【♀】Prevent potential negative impacts on operations caused by local culture and regulations	Rank down ▼

1.3 Material Issue Management Approach

Boundary

Topics	Supplier	Shareholder	Employee	Community	Customers	Civil Org	Government	Management Approach
1 Product Decarbonization	•	•		0				 Paticipate into the supply chain of hydrogen energy equipment with motors and develop electric vehicle equipment. Manage the carbon footprint of the manufacturing process.
2 Low Emission Factory Solution		•		0				 Promote energy-saving transformation solutions for the electronics industry and high energy-consuming industries. Research and development of energy-efficient Heating, Ventilation, Air-conditioning and Cooling (HVAC).
3 50% Emission Reduction in 2030	•			0	•	0	0	 In 2023, all business groups adopted an internal carbon pricing system. Implment emission reduction measures.
4 Clean Technology Engineering	•	•		• ©			•	 Establish energy management capabilities. Layout micro grid to establish power marketing strength.
5 Internalize the New Norm	•	C		С				 In 2023, a new IT system (ESG Management platform) were implemented into all Taiwan and China sites. Course attendance and completion rate.
6 Employee Life and Safety				С				Build a sense of happiness and identity, support a flexible working environment and take care of family life
7 Supply Chain Decarbonization	•	C) @		0			 50% of SME suppliers complete a simple GHG inventory. "Supplier Letter of Commitment to Human Rights and Sustainability" together with "supplier business conduct" signing rate of 99%.
8 Material Risk Mitigation	0	•			0	0	0	 Cost fluctuation control: analyze the demand and quotation trend for 2-6 months, and flexibly control the order cycle according to the price and purchase forecast.
9 Solar Power Generation		•		0				Maintain the renewable energy power generation capacity of more than 10% of total electricity consumption of the whole group
10 Worldwide Supply Chain Configurations	•							 Establish the supply chain of Indo-Pacific and North American production centers to achieve the goal of starting production in India and Mexico in 2023

● Directly linked to the impact ◎ Caused to the impact ○ Impact through business relationships

1.4 Impact Management and Sustainability Goals

Following the Materiality analysis results, TECO sets risk mitigation measures, relevant education and training, and formulates KPI goals. KPIs are assessed on a quarterly basis, and the results are directly linked to the salary system to ensure the effectiveness of the management policy.

Sustainable Existence







Material Topics	 Product Decarbonization 50% Emission Reduction in 2030 Solar Power Generation 		
Sustainability Goal	 50% Emission Reduction in a decade from 2020-2030 Mid term: 2025 to reduce 34%, Long term: 2030 to reduce 50% Achieve 15% of renewable energy power generation capacity by 2025. Mid term: to install 15% of power generation capability. Long term: to keep 15% after new supply chain built in India and America. Compete 100% GHG Inventory of the whole group. Mid term: to complete all manufacture sites and listed subsidiaries. Long term: to complete 100% companies in TECO Group. 		
Potential Risk	Fail to follow emission reduction pathway.		
Mitigation Strategy	ESG office has full responsibility to oversee emission reduction status from all business groups. Implement digital system to shorten the control cycle from yearly to monthly.		
2022 Performance	 TECO announced the goal of "reducing emissions by 50% in ten years" to further reduce emissions, including the introduction of ESG management platform system. In terms of products, the research and development of the highest-level IE5 energy-efficient motors has been completed, and the use of environmentally friendly refrigerants in small air conditioners has been fully implemented. The construction of solar energy in Asia completed in 2022, with a total power generation capacity of 9.6 million kWh, accounting for about 10% of global electricity consumption. In 2023, continue to build facilities in Europe, America, and Australia, and it is expected to achieve 15% of the power generation capacity. 2022 emission is 12% lower compared with 2021. 		
2022 Education and KPIs	 38 training sessions totaled 219 hours, including SDGs, emission reduction sharing sessions, maglev technology, water-based paint, coating leak detection and other courses. KPI (weight %): Carbon emission reduction (2%), waste reduction (2%), research and development of IE4/IE5 motors (4%), development of magnetic levitation centrifuge technology (1%), completion of solar power generation (as investment case). KPI links to CEO's compensation (variable pay) system. 		
2023 Communication Points	 Digital environmental information system, product carbon footprint calculation tool, and establishment of internal carbon pricing system. Each business unit reserves a carbon emission budget and sets KPIs to track emission reduction results on a quarterly basis. The goal is to achieve a 34% emission reduction goal in 2025 first. Commitment to achieve "carbon neutrality" for the entire group by 2050. Increase the proportion of self-owned power generation and storage capacity. 		

Sustainable Operation







	•		
Material Topics	 Internalize the New Norm Supply Chain Decarbonization Worldwide Supply Chain Configurations Employee Life and Safety 		
Sustainability Goal	 In 2024, the American management team and supply chain will be established to achieve 50% localization. In 2025, complete the construction of the American short chain, shorten the delivery time, improve customer satisfaction, and at the same time disperse the impact of climate change entity risks. Lead time shortened by 48%, finished product inventory reduced by 50% (American short chain vs. global long chain) 		
Potential Risk	The pace of transformation is not as expected, and the additional absolute emissions due to business expansion is out of control.		
Mitigation Strategy	 Set the short chain construction KPI into business goup's goals. From 2023, the internal carbon pricing system is fully implemented. The price is NTD1,600 /ton. Business groups were given an allowance for annual emissions and actually prepare a budget to pay for the annual emissions. Deploy the group wide GHG inventory system required by laws and regulations in advance, and conduct supply chain GHG inventory counseling. 		
2022 Performance	In response to changes in the supply chain and physical natural disaster risks, TECO has invested in new factories in different regions, invested more than NTD 800 million in production bases and cultivated supply chains in Vietnam, India, Mexico and other emerging regions, so as to disperse the impact of natural disasters in the future.		
2022 Education and KPIs	 2 external supplier counseling activities in 2022 and 1 in the first quarter of 2023. About 105 suppliers of SMEs were invited and assist 8 suppliers in simple GHG inventory. 8 internal education and training for a total of 34 hours, covering new knowledge of environmental management. KPI (weight %): Construction of a North American short supply chain (1.5%), impplment quotation and order system (2.5%). KPI links to Business Group Heads' compensation (variable pay) system. 		
2023 Communication Points	 Control the additional absolute emissions quantity caused by business expansion after the short new supply chain operations in India and Mexico. Fully implement the internal carbon pricing system to promote self-control in emissions in each production base within the group 		

Sustainable Profits





Material Topics	 Clean Technology Engineering Low Emission Factory Solution Material Risk Mitigation 			
Sustainability Goal	50% EPS growth in 2025 Mid term: clean tech engineering to growth by 9% in revenue. Long term: to growth 34% in 2025			
Potential Risk	Fail to win new market share			
Mitigation Strategy	Set a three-year growth plan, and report to the board of directors by CEO			
2022 Performance	 Develop low-carbon new products, build renewable energy projects, construct offshore wind power onshore substations, and develop private energy storage projects. Provide low-carbon plant solutions for existing customers, such as the introduction of Petrochemical's electrification solution. Established a new business unit to strive for business opportunities in virtual power plants and micro-grids. Business target achieved 194% of its original setting in 2022. 			
2022 Education and KPIs	 41 education and training in total 110 hours, including courses such as energy storage system control technology, smart production system, and offshore wind power engineering practice. KPI (weight %): Promote plant energy-saving solutions (1%), offshore wind power and energy storage systems (10%), promote farmers' association low-temperature transport and energy-saving air conditioner in convenience store (3%) KPI links to CEO's compensation (variable pay) system. 			
2023 Communication Points	Establish market share of new business opportunities, build virtual power plants and micro-grid operating capabilities, provide customers with electrification solutions, and transform from a product sales manufacturer to an energy management service company as a whole.			

Talent Development

Update education and training system. Implement 17,579.7 hours of course learning. Learning hours increased by 31% compared with last year for FTEs.



Green Mind Creative Competition

Participated in the government's "Classes with Air Conditioning" program, provided 700 schools with air conditioners, and held the first "Green Brain Creative Competition". 9 student groups from elementary school, middle school and high school were awarded.



Aboriginal Culture Preservation

In 2022, 44 teams were sponsored for music and dance inheritance. 1,826 students participated the training with 175 teachers joined the program.

Vehicle Electric Power System

T Power+ ranges from 150kW to 250kW and is currently the only power system has obtained the DMIT (Design and Manufacture in Taiwan) certification by government.

Renewable Energy Construction

In 2022, the total power generation was 9.6 million kWh, accounting 10% of the total electricity demand. In 2023, 4.8 million kWh more will be expanded in Italy, Texas, and Australia, accounting for another 5% of the total electricity consumption.



Use Recycled Materials

Recycled silicon steel shavings reach 96.5% of total quantify. The proportion of water-based paint reached 84.4% which reduced volatile organic compound (VOC) emissions by 45.9%.



In 2022, a total of 1,002 T-REC was issued, and 10 were sold in trading platform, marking the first carbon offset transaction.



Eco Friendly Refrigerant

Household air conditioners with R32 refrigerants, accounting for 85% of total sales in 2022. Reduce emissions by 18,116 tonCO2e compared to 2020 (base year).

2023, the Indian and Mexican factories will be



Layout Short Supply Chain

Establish a short-chain production center. In put into production.



Net Zero Pathway

Announced the goal of "50% emission reduction in ten years" by 2030 and expanded the scope of implementation to overseas factories.

Low Carbon Factory

The energy saving rate as followings, the single motor with frequency control can save about 30%, the integrated operation of fan, pump and air compressor can save about 25%, and with software monitoring and management can save another 10%.

Internal Carbon Pricing

Supply Chain Resilience

From 2023, the internal carbon pricing system was implemented. Internal price is NTD 1,600 /ton. Business groups were given a target of annual emissions and actually budgeted to pay for the emissions.

Offshore Wind Power

The construction of onshore substation projects has accumulated about 2GW, accounting for about 35% of offshore wind farms, ranking first among Taiwanese manufacturers.



Hold supply chain forums and guide SMEs to conduct greenhouse gas inventory inspections. 105 suppliers were invited to conduct emission reduction training and assisted 8 suppliers to conduct simple GHG inventory inspections.

High Efficiency Motor

Compared with the traditional motor (IE1), the high-efficiency motor (IE3) reduces 9,104 kg of CO2 emissions in one year, which is equivalent to creating the carbon absorption of 10,000 trees in its 15-year life cycle.

Digital GHG Inventory

In 2023, a new IT system (ESG Management platform) were implemented into all Taiwan and China sites which help to monitor emission data from annual to quarterly.



E: Environmental Actions



TECO's Environmental Protection Commitment:

- Compliance with international regulations: Comply with international environmental protection and sustainable development trends and ISO 14001 specifications; materials containing harmful substances are prohibited in product design and production stages.
- Commitment to energy conservation and environmental protection: Set environmental management goals to improve the efficiency of energy and resource used in operating activities, reduce greenhouse gas emissions, make optimal use of resources, and reduce waste, and continue to improve to promote environmental sustainability.
- Application of green technology: Develop green technology, promote green products, and achieve a win-win situation for ecological sustainability and economic development.
- Improvement of environmental awareness: Strengthen the communication of environmental risk awareness in the value chain, continue to promote internal and external training on sustainable risk and environmental impact management, and actively promote the participation of all employees, suppliers, and contractors to ensure that the commitment to sustainable management of the value chain is achieved.

TECO's Biodiversity Commitment:

- Protection of biodiversity and forest ecology: Encourage the use of environment friendly paper
 products and wood, including the use of recyclable materials and recycled materials, and expand the
 use of raw materials that comply with the original forest protection laws and legally mined raw materials.
- Compliance with the principle of conflict-free minerals: Do not purchase raw materials from conflict-mineral areas
- Reduction of environmental impact pressure: Follow government regulations in site selection, operation, and establishment of office bases, and avoid setting up offices in areas with important global or national biodiversity.

2.1 Net Zero Pathway and Actions

Governance

Board Oversight

TECO has established the "Corporate Governance and Sustainability Committee" to provide guidance on matters related to "corporate governance," "legal compliance and legal affairs," and "sustainability / climate change management." The Committee consists of three directors or more, and a majority of the members are independent directors. The members elect among and from them an independent director to serve as the convener and chairperson of the Committee meeting. Meetings are convened periodically on an annual basis. TECO has established the "ESG Office" to provide periodic reports on the execution and tracking of TECO's corporate social responsibility goal and policy implementation status to the Chairman directly monthly. To integrate TCFD culture into KPI evaluation and risk management processes, The task force consists of the administrative units of "Representatives of each business department/plant site" and "Safety and Health," "Human Resources," and "Financial Department" etc., and the task force is responsible for the promotion of routine affairs. The task force also summarizes TECO's related performance, prepares, and publishes an annual corporate social responsibility report.

Management's Role

The "ESG Office Executive Officer" equivalent to CSO, is the highest responsible rank of the management level. The ESG Office establishes the sustainability management specialist to be a full-time position responsible for the execution of works, and cross-department members also form part of the task force, consisting of the administrative units of "Representative of each business department/plant site" and "Safety and Health," "Human Resource" and "Financial Department" etc. in order to facilitate the promotion of management of works for the entire company synchronously. ESG office reports the work progress to the Chairman and President monthly.

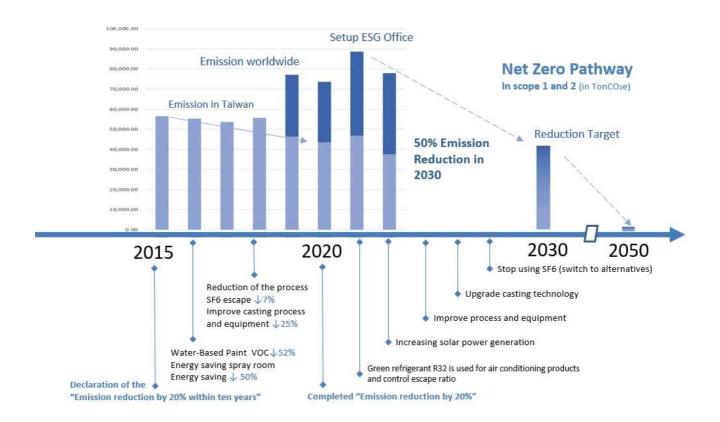
- For the climate related risks and opportunities, after information provided by all members is collected by the "ESG office," it is summarized, reported, and recommended to the management level and board of directors.
- For the risk of TECO internal control, the "Audit team" proposes the audit plan according to the past audit
 centerpiece and the existing organizational structure in order to examine the operating risk control
 implemented by TECO management level, business department of TECO, and to review the effectiveness
 of internal control design and execution, in order to issue an audit report for submission to the "Audit
 Committee" and board of directors.



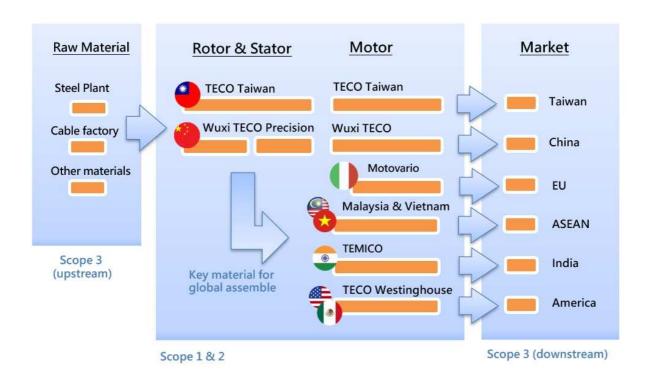
Strategy

Declaration of the "emission reduction by 50% within ten years"

Under the pledge of "10-year 50% emission reduction," TECO has aimed to halve emission by 2030 (base year 2020), including inauguration of expanding PV power devices at its factory premises worldwide, so as to enhance the group's share of renewable-energy consumption, on top of establishment of sustainable supply chain, via assistance for smart and medium enterprises to conduct greenhouse-gas inventory and emission reduction. TECO launched internal carbon price system this year, in the hope of spurring employees to actively carry out carbon abatement plan and imprint net zero emission concept in their minds.



TECO Global Motor Value Chain and its GHG Inventory



	Upsream (Scope3)	Operation (Scope1&2)	Downstream (Scope3)
Short term -2025	Conduct counseling and	34% reduction by 2025 Each factory upgrades process and equipment, builds solar power generation devices, and completely bans R410A refrigerant in small air conditioners.	Carry out the inventory of major category in scope3 and track the trend.
Mid term -2030	Listed company. Completed in accordance with government requirements. SME complete 80% of the inventory according to the purchase amount.	50% reduction by 2030 European and American solar power generation installations, foundry technology upgrades, high-voltage equipment products stop using SF6.	Track the trend scope3 and introduce zero carbon products.
Long term -2050	Fully complete the inventory and set reduction targets.	Achieving TECO Group's overall carbon neutrality.	All products and services in carbon neutral.

In recent years, TECO has been more active in implementing various improvement measures to reduce greenhouse gas carbon emissions in the manufacturing process, including energy-saving design of products, replacement of energy-saving equipment, more efficient production scheduling, development of intelligent production technology, and prevention of refrigerant leakage.

In order to ensure that business partners meet the requirements of quality, environmental protection and safety, and that products comply with green management and control during the merger and acquisition and joint venture procedures of the enterprise, TECO also simultaneously checks for the acquisition of ISO 9001, TS16949 and other international certification requirements, and strengthens the introduction ISO 14001, ISO 45001 or hazardous substance control capabilities.



GHG Inventory classification and statutory schedule

To comply with the schedule for the disclosure of greenhouse gas inventory information of listed companies stipulated by the government. Disclose in stages according to regulations and keep the same scope as the company's consolidated annual report.

Classification		Number of entities	Target year
Α	Major global production sites (same as the management scope of this report) Including: factories in Taiwan, the United States, mainland China, Vietnam, and Italy.	13	2022
В	Listed subsidiaries. ITTS(6697.tw) \ Taiwan Pelican(2642.tw) \ TECOM(2321.tw)	3	2026
С	Mainland China, Southeast Asia, Oceania sales headquarters, system integration and sales service companies affiliated to various business groups. Managed by Taipei parent company.	5	2025
D	Subordinate units of the global sales system, subordinate units of listed subsidiaries, financial investment holding companies, asset development management companies, and restaurants. To be included in final stage.	96	2026

Carbon GHG Inventory Digital System



In order to quickly and effectively track the performance of the reduction and management of emissions in each production site. ESG Management Platform has been implemented in 2023.

Carbon Inventory Management Platform https://tecoesg.push-server.info

Internal Carbon Pricing System

The internal carbon pricing (ICP) system was implemented after approval by the board of directors, as an incentive for emission performance management tool. In the future, carbon fee collected from business groups will be invested in equipment updates and daily work improvements, thereby creating a more friendly ESG environment.

The internal carbon price is set at NTD1,600 /ton. The general manager of the business group is given an allowance for annual emissions and prepares a budget to pay for the annual emissions. If the emissions exceed the target value, it is equivalent to paying more budgetary amounts. Which affect directly to business group performance and bonuses.

Supply Chain Emission Reduction Actions

TECO holds sustainable supply chain forum and guides SMEs to carry out GHG inventory under the condition of limited resources. We expect to master the basic carbon emission data and establish the ability to reduce emissions among the vast number of SMEs in Taiwan. 2 sessions in 2022 and 1 session in the first quarter of 2023 took place. About 105 small and medium-sized suppliers from various business divisions were invited to carry out emission reduction publicity and factory counseling and assisted 8 suppliers in conducting simple GHG inventory. 8 sessions of internal education and training totaled 34 hours, covering new knowledge on basic environmental management and sharing sessions on emission reduction.





Climate Risk Management

RISK TYPE	SCOPE	PERIOD	RISK ASSESSMENT
CURRENT REGULATION	own op	-2023 (S)	Government pushes listed company to conduct GHG inventory including all subsudaries.
	own op	-2025 (M)	Company needs to adopt carbon offset trading among industry and supply chain.
	own op	-2030 (L)	Company needs to adopt Carbon Tax rules for international trading.
EMERGING REGULATION	own op	-2023 (S)	Taiwan is constrained by international politics for carbon credit regonization.
	upstream	-2025 (M)	CBAM and related rules impacts upstream raw material price.
	own op	-2030 (L)	CBAM and related rules impacts own operation and product cost structure.
TECHNOLOGY RISK	own op	-2023 (S)	R&D investment in higher efficiency (IE5 / IE6) technology
	own op	-2025 (M)	Replacement of high emission material (SF6) in Gas-insulated switchgear (GIS) products.
	own op	-2030 (L)	Casting facility upgrade to hydrogen solutions
LEGAL RISK	own op	-2023 (S)	Government regulates the percentage of renewable energy usage.
	downstream	-2025 (M)	Law forces to adopt higher efficiency (IE4) standards for motor.
	own op	-2030 (L)	Government implements total emission quantity control and carbon credits trading.

RISK TYPE	SCOPE	PERIOD	RISK ASSESSMENT
MARKET RISK	downstream	-2025 (M)	Client asks for quotations and delivery on zero carbon products.
	downstream	-2025 (M)	The market expects manufacturer to recycle old motor when replacing higher efficiency ones.
	downstream	-2030 (L)	Large scale of electric vehicle implementation affects rare earth element needs and changes supply chain behavior.
REPUTATIONAL RISK	own op	-2023 (S)	None
NISK	own op	-2025 (M)	TECO needs build up motor recycle economy as one of the leading manufacturers.
	own op	-2030 (L)	Fail to achieve 50% emission reduction and lost creditability.
ACUTE PHYSICAL RISK	downstream	-2030 (S)	Population heatwave exposure +18.6 pp @ temperature +1.5°C [note1]
	downstream	-2050 (M)	Population heatwave exposure +34.5 pp @ temperature +2.0°C [note1]
	downstream	-2075 (L)	Population heatwave exposure +45.7 pp @ temperature +2.5°C [note1]
CHRONIC PHYSICAL RISK	upstream	-2030 (S)	Labour productivity -2.1 pp @ temperature +1.5°C [note2]
	upstream	-2050 (M)	Labour productivity -3.6 pp @ temperature +2.0°C [note2]
	upstream	-2080 (L)	Labour productivity -4.9 pp @ temperature +2.5°C $_{[note2]}$

- [note1] Change in fraction of population annually exposed to heatwaves in Texas (United States) under NGFD current policies scenario.
- [note2] Relative change in labour productivity due to heat stress in Jiangsu (China) under NGFD current policies scenario.

Business Opportunities from Climate Change

Power generation and Storage



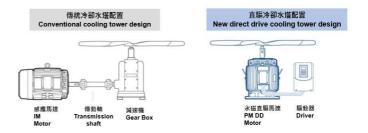
Strengthen the layout planning of offshore wind power onshore substations, strive for and develop private and Taipower energy storage projects, and develop offshore wind power offshore substations.

The Changbin Industrial Zone in Changhua County is offshore wind power with a construction capacity of 1,044 MW. It will then become the largest offshore wind power land-based substation in Taiwan.

The Hailong wind farm is expected to be connected in the first quarter of 2025. After commercial transfer, it will become the next largest single offshore wind power project, providing electricity for more than one million households. TECO has accumulated about 2GW of construction capacity, accounting for about 35% of the current offshore wind farms, ranking first among domestic manufacturers.

TECO obtains Taipower's largest energy storage project (60MW Longtan energy storage system) turnkey project and invest in Taipower's wide-ranging energy storage system in decentralized power grid resilience program. After the liberalization of the electricity industry in Taiwan, TECO will has the capabilities of energy storage, energy management, and power plant operation.

Industrial Efficiency Upgrade



For high energy-consuming industries such as petrochemicals, iron and steel, cement, papermaking and electronics, TECO promotes energy conservation solutions and strive for business opportunities in replacing old equipment with new ones.

The average energy saving rate of the enterprise's emission reduction are: Single motor with frequency conversion control can save about 30% energy, the integrated operation of fan, pump and air compressor can save about 25%, and with the software monitoring can save another 10%.

The most welcome solution is "ultra-high energy efficiency cooling tower intelligent drive control system", which consists of a permanent magnet direct drive motor and a dedicated variable frequency drive for cooling towers, and its efficiency can reach IE5 standards. It saves 18% of operating cost in five-year usage.



Electric vehicle powertrain module

TECO adopts its core technology to develop power-train systems for "electric passenger vehicles", "electric buses" and "electric utility vehicles". Power-train system with range of 8~272kW to replace fossil engines. The products comply with ISO 26262 and ISO 16750 regulations.

It is currently the only power system manufacturer that has obtained DMIT (Design and Manufacture in Taiwan) certifications from the government. TECO helps accelerating the realization of the goal of electric vehicle supply chain localization.

TECO has also launched the latest commercial vehicle with a capacity of 3.49 tons and will cooperate with Taiwan Palian Express to jointly build the first electric logistics fleet in Taiwan.



T Power is a permanent magnet synchronous motor for electric vehicles with modular design. It is 15% lighter than motors of the same level, and the output power is increased by 1.8 times. The physical size is reduced by 25%. T Power is the leading design and wins Taiwan Excellence Award.



High-Efficiency Motor

The motor is classified into five grades: IE1 (lowest), IE2, IE3, IE4, and IE5 (highest) according to the rated efficiency. Each country also formulates industrial standards to regulate domestic energy efficiency. TECO defines products above the IE3 level as high efficiency motors. What is the difference between using traditional (IE1) and high efficiency (IE3) motors? We illustrate it by carbon emissions:

Conventional		High Efficiency
IE1		IE3
3,731	Emission from Production Stage kgCO2e	4,145
379,144	Emission from One-Year Usage <mark>kgCO₂e</mark>	370,040 (+700 trees)
5,687,160	Emission from Lifecycle Usage <mark>kgCO</mark> 2e	5,550,600 (+10 thousand trees)

- Based on IE3 AEHF150hp motor specifications
- 150HP or 115kW output is Equivalent power to drive a 4-wheeler passenger car.

Calculated by operating 250 days per year, 20 hours per day, the high efficiency (IE3) motor can reduce emissions by 9,104 kg of CO_2 per year (64,401 GJ), which is equivalent to the carbon uptake of 700 trees. In the 15 years of the life cycle, it is equal to the carbon absorption of 10,000 trees.

What is the special threshold for manufacturing high efficiency (IE3) motors? The answer lies in the full-in rate of enameled copper wires. The neat and tight the copper wire upgrades motor efficiency. The full-in rate of copper wire inside the high-efficiency motor must be more than 85%. It has been difficult to achieve more than 75% in the past by human hands. TECO invested more than US\$10 million to build a world's first and most complete industrial motor smart line in Asia by using 3D vision robots and AGVs. We commit to build the production capability for high efficiency motors.

Energy-saving from Motors

TECO completed the world's first IE4 high-efficiency induction motor with cast aluminum rotor, the IE4 synchronous reluctance motor with no or less rare earth magnets, and IE5 permanent magnet motor with the highest efficiency level so far.

Total power savings about 840M kWh (3,024,544 GJ)

Total emission reduction about 425k tonCO2e

- Sales record from IE3+IE4 motors with 2, 4, 6 and 8 poles.
- Calculations based on 5,000 operating hours per year, and sales record from IE3+IE4 level motor with 2, 4, 6 and 8 poles in year 2022.
- Data calculated with above data and per public notice of the Bureau of Energy in 2021, the power emission coefficient is 0.509 (kgCO₂e/kWh)
- Comparison of energy saving estimates for low-efficiency motors and high-efficiency motors with the same number of units shipped.



Sales percentage of high efficiency motors (IE3 + IE4+IE5)

In year 2022, the sales volume ratio for (IE3+IE4+IE5) is 49.01%, higher than world-wide average of 27 %. TECO keeps upgrading motor efficiency for global clients.

Energy-saving from Home Appliances

In response to rising electricity prices, TECO provides the "Central air-conditioning energy-saving system" that exceeds the first-level building energy efficiency, and the "full-temperature solution" from refrigeration to cold chain transportation. New household air-conditioning products have increased 12% efficiency, while commercial air conditioners provide owners with active management.

Comparation of Energy-saving home appliances to ordinary products

U	Init:	ton	CO	₂ e

Year	Home A/C	Refrigerator	Total
2020	17,611	4,072	21,683
2021	28,606	5,497	34,103
2022	28,657	5,141	33,798

Emission reduction by 176 M kWh (633,714 GJ) 90 k ton CO2e cumulatively for 3 years.

The sales of green energy-saving home appliances (Note) accounted for 64.6% of the net sales attributed to Home Appliance Division in 2022.

Note: Energy-saving home appliances refer to the models satisfying any of the following circumstances:

- Home A/C and commercial A/C: Class-1 certification under "Energy Efficiency Rating for Non-conducted air conditioner Products" promulgated by Ministry of Economic Affairs (MOEA) via its letter under Bureau of Energy Document No.10504606420 dated December 28, 2016.
- Refrigerator: Class-1 certification under "Energy Efficiency Rating for Refrigerators" promulgated by Ministry of Economic Affairs (MOEA) via its letter under Bureau of Energy Document No. 10604601990 dated May 10, 2017.
- Comparison of energy saving estimates for traditional home appliance and green home appliance with the same number of units shipped.



Scenario Analysis (TCFD)

Transformation Risk Scenario Analysis

According to the scenario analysis results from The Network of Central Banks and Supervisors for Greening the Financial System (NGFS), if the current situation continues, the global temperature will rise by 1.5° C in 2030, 2° C in 2050 and 3° C in 2090.

In the case of global temperature rise of 3° C, about 10% of the labor force will be lost due to high temperature. River flooding doubles in China and triples in India. Typhoons and cyclones increased by 16% in Japan, 12% in the Philippines, and 47% in the United States. On the economic side, due to the impact of natural disasters, the world will lose 2% of GDP in 2040, and the economic development of many countries has stagnated since then. And if the goal of net zero by 2050 can be achieved, although the temperature will still rise by 1.4°C by 2050, the next generation of human beings will have the opportunity to change. The greatest transition risk is our mismanagement of emission reduction pathway and miss last chance to prevent the critical point.

Scenario		TECO's Action
NET ZERO 2050 global temperature rise 1.4°C	Five-fold increase in renewable energy, 50% electrification of residential and commercial buildings (including the production of building materials), Use 40% carbon-neutral fuel (including hydrogen energy, bio diesel, etc.), sequester 5 Gt of carbon per year, improve energy efficiency, reduce energy consumption intensity by 60%, and decarbonize the use of agriculture, forestry and land resources.	 In its industry, TECO has developed high-efficiency motors. The sales ratio by quantity in 2022 is 49%, exceeding the global average of 27%, showing TECO leads the wave of upgrade. At the same time, the development of anti-corrosion and explosion-proof motors required by carbon capture equipment has entered its supply chain. The urban electric bus power module has entered the mass production. 200 sets were shipped in 2022, and another 250 will be delivered to fleet in 2023. TECO has built solar power generation facilities in factory sites, with a total power generation of about 9.6 million kWh in 2022, accounting for about 10% of the total power consumption of the group.
IEA 2DS EU carbon price rises above 100 euros per ton	The EU carbon price has exceeded 100 euros (about 107 US dollars) per ton in early 2023, which is the highest price since the EU launched the carbon emissions trading system (ETS) in 2005.	If TECO does not deploy ahead of schedule, it will lose the competitiveness of international trade due to carbon tax. Taking a 150HP motor as an example, the carbon emission in the manufacturing stage is 375 kgCO₂e and it will be charged during export tradings. TECO implements the "internal carbon price system" to reduce the carbon footprint of products in materials and manufacturing stages.

Scenario		TECO's Action
NDC Power shortage and rising electricity fee in the countries where TECO belong	Italy's electricity price has quadrupled since the start of the Ukrainian-Russian war, China requires production to be shift from daytime to night, and Taiwan's average electricity price in 2023 has risen by 11%. Electricity demand has increased but electricity costs have continued to rise. Enterprises must have their own electricity generation capability to face future challenges.	In 2022, TECO started to build solar power generation facilities in factory sites, including factories in Wuxi Jiangsu, Qingdao Shandong, Vietnam, and Malaysia, with a total capacity of 5MW. Together with the original power generation capacity, the total power generation in 2022 is 9.6 million kWh has accounted for 10% of the total electricity consumption of the group (global base). In 2023, power generation facilities will be expanded in Italy, Texas, and Australia. The target annual power generation will increase by about 4.8 million kWh, which can reach 15% of the total power consumption.



Physical Risk Scenario Analysis

RCP Scenario

Representative Concentration Pathways (RCPs) which utilize the change in radiative forcing from 1750 to 2100 as the main indicator are employed for future temperature and precipitation change analysis. RCP2.6 (increase in radiative forcing by 2.6W/m²) is the scenario of mitigated global warming, while RCP4.5-RCP6.0 and RCP8.5 (and above) are scenarios characterized by limited mitigation or no mitigation, respectively. According to Network for Greening the Financial System (NGFS), RCP results in vastly different outcomes for global TECO manufacture sites:

	RCP 2.6 CO2	e level 421 ppm	RCP 6.0 CO2	2 level 670 ppm
	Temperature	Productivity	Temperature	Productivity
Taiwan	rise by 2.3 $^{\circ}$ C	drop by 2.3 (pp)	rise by 2℃	drop by 2.8 (pp)
China	rise by 1.3℃	drop by 2.5 (pp)	rise by 1.5℃	drop by 3.1 (pp)
USA	rise by 1.4℃	drop by 4.0 (pp)	rise by 1.6℃	drop by 4.9 (pp)
Italy	rise by1.3°C	drop by 1.0 (pp)	rise by 1.6℃	drop by 1.2 (pp)
Vietnam	rise by 1.0° C	drop by 5.6 (pp)	rise by 1.2℃	drop by 6.4 (pp)
Malaysia	rise by 1.0°	drop by 5.8 (pp)	rise by 1.1℃	drop by 6.7 (pp)
Mexico	rise by 1.0℃	drop by 1.9 (pp)	rise by 1.4℃	drop by 2.3 (pp)
India	rise by 1.1℃	drop by 6.1 (pp)	rise by 1.2℃	drop by 7.1 (pp)

Data source for other countries are from Network for Greening the Financial System (NGFS) and is compared with 1986-2006 data.

	RCP 2.6	CO ₂ 421 PPM	RCP 6.0	CO ₂ 670 PPM
2050 WEATHER PHENOMENON	Rainfall incre	erise by 0.92°C eased by 4.36 mm/day, 3% increase in rainfall	Rainfall reduce	rise by 0.93°C ced by 2.56 mm/day, a 42% reduction in rainfall
IMPACTS	to be equipp cooling facilit temperature. Floods: Cauproduction edelivery, institution	ed with ventilation and ties under rising used damage to quipmentdelayed alled water baffles at the uce the impact of	be equipped of facilities under Drought: Lac electric furnace	adition: Factory needs to with ventilation and cooling or rising temperature. On the cooling water, foundry one, baking furnace, and airequipment cannot operate
LOSSES	 the health of The one-day about NT\$30 The recycling tons/day, and 	employees. shutdown of global facto 5.56 million. g water consumption of the	ries resulted in a loss on the cooling water tower ase water source to su	, ,

Data source for Taiwan is from Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP) and is compared to current weather data.



Water Sensitivity Analysis

TECO Motor's flagship Chongli factory is in Taoyuan. Based on the statistical data of the annual hydro logical report released by Taiwan as a reference for drought-prone areas, the water sensitivity analysis of weather phenomena and corresponding measures under RCP2.6 and 6.0 scenarios in 2021 is as follows:

Scenario	Corresponding actions
RCP 2.6 CO2 level 421 ppm Rainfall increases 73%. What If it floods for more than 10 cm high in factory?	 Prior protection: None of the production equipment and materials of Chungli No. 1 Factory will be destroyed if flooded. If it is predicted in advance that there will be heavy rain, the factory may plan the surrounding sandbags in advance to prevent water from flooding into the factory building, and the construction cost of sandbag stacking is estimated at NT\$4 million. Flooded: If there is a sudden heavy rain, the water will flood into the factory on the day of the torrential rain; sandbags cannot be stacked in the factory in advance for waterproofing, and it is necessary to urgently mobilize 30 water pumps to drain the flooded area quickly. The investment amount of 30 water pumps is estimated at NT\$500,000.
RCP 6.0 CO2 level 670 ppm Rainfall decreases 42%. What If water supply stops for 1 week?	 The water used in Chungli Plant is mainly used for casting, dissolving, sand treatment and dip painting (80 tons/day of shared water), and for the circulating water (10 tons/day of shared water) for air conditioning cooling by the integrated factory's electricians and cutting by the mechanics. Water interruption within 4 days: The water storage of the foundry factory (315 tons of capacity) and the water storage of the integrated factory (55 tons of capacity) can be used for support. Water interruption for over 4 days: A 25-ton waterwheel (4 trips/day) can be employed, and the cost is NT\$80,000 for water replenishment each time.

Data source for Taiwan is from Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP) and is compared to current weather data.



Metrics and Targets

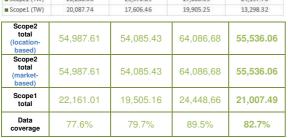
GHG Emissions in SCOPE 1 and 2

TECO conducts GHG emission assessment by third party for sites in Taiwan, China, Vietnam, Italiy and US with ISO 14064-3. In year 2022 the coverage rate reached 82.7% by group revenue ratio.

Remarks: Third-party verification units: BSI in Taiwan, CQC (China Quality Certification Center) in China and Vietnam, SGS in the United States, TUV (Rheinland) in Italy. The power coefficient is mainly based on the annual coefficient announced by the local energy bureau with the global warming potential IPCC AR6.



GHG Emission Intensity (tonCO2e/TWD M)



GHG Emission Quantity $(tonCO_2e)$

GHG inventory in operational control and recognition of all the emissions of the subsidiaries over which TECO has the operating power. The emission coefficients cited are the standards announced by the countries concerned. The "estimated total emission" is the quotient of the "actual inventory" divided by "coverage" to simulate the annual potential total emission within the Group. The "emission intensity" is the quotient of the "estimated total emission" divided by the "consolidated revenue".

A third credible and fair party is appointed to conduct the assessment and certification against the GHG emissions by various plants. 2022 target:

Scope1: 22,004 (tonCO2e); Scope2: 57,679 (tonCO2e)



GHG Emissions in SCOPE 3

TECO initiates Scope3 emission assessment from year 2019. Based on motor business. Calculate its emission from purchased good and service, Upstream Transportation, used of motor products and end of life treatment.

In 2021, TECO obtainedSO 14064-1:2018 certification through third-party verification for Taiwan sites.

Upstream Transportation and distribution: 1,785.7 tonCO2e

Factory in Taiwan	Ton Kilometers	Emission (tCO ₂ e)
HQ in Taipei	3,874,745.5	640.5
Chungli Site	1,786,846	1,048.9
Guanyin Site1	94,184.2	50.7
Guanyin Site2	19,762.5	11.6
Hukou Site	76,329.2	33.9

Data certified by BSI. Coefficient source: Government Data and Ecoinvent 3.0

Purchased goods and services: 349,810.1 tonCO2e (TW+CN)

Fuel-and-energy-related activities: 4,603.8 tonCO2e (TW)

Factory in Taiwan	Purchase quantity (ton)	Emission (tCO ₂ e)
HQ in Taipei	17,594.5	56,727.5
Chungli Site	302,420.6	754.9
Guanyin Site1	1,282.2	19,015.1
Guanyin Site2	537.9	65,333.2
Hukou Site	1490.6	79.8

Data certified by BSI. Coefficient source: Government Data and Ecoinvent 3.0

Raw material in China	Purchase quantity (ton)	Emission (tCO2e)
Silicon steel plates	23,846	77,846.3
Silicon steel parts	957	3,124.6
Thick steel plates	3,675	7,527.5
Steel rods	3,874	9,014.8
Enameled Wire	2,036	8,938.0
Copper wire	1,120	4,793.6
Castings	21,967	96,654.8

Coefficient source: Government Data and Ecoinvent 3.0

End-of-life treatment of sold products: 262.2 tonCO2e

Factory in Taiwan	Waste Type	Emission (tCO ₂ e)
Chungli Site	General, Recycled and Water Waste	215.9
Guanyin Site1	General and Recycled	16.5
Guanyin Site2	General, Recycled and Water Waste	2.9
Hukou Site	General, Recycled and Water Waste	31.9

Data certified by BSI. Coefficient source: Government Data, Waste handling coefficient 340 kgCo2e/ton, and wastewater handling coefficient 0.553kgCO2/m3

Use of sold products: 18,682,092 tonCO2e

Туре	Sales(unit)	Power Consumption (kWh)	Emission (tCO2e)
Standard motors	765,778	25,675,017,375	12,548,800
Customized motors	3,355	10,476,061,593	6,133,292

- According to the actual motor sale volume 2022 and its energy efficiency, the carbon emission associated with the annual power consumption is estimated.
- Motor annual power consumption estimation: For each motor, the number of operating hours of 5,000 hours per year*motor average unit time power consumption is used for the calculation.

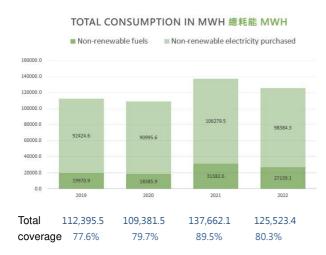
Other Indirect GHG (category 3~6): 19,038,553.8 tonCO2e

Emission (tCO ₂ e)	2019	2020	2021	2022
Scope3 (Category 3~6)	-	-	22,735,295.01	19,038,553.80

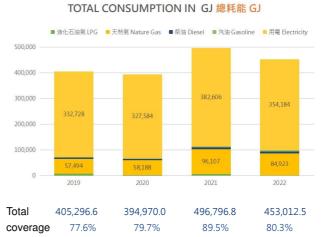
2022 Target: Scope3 21,598,530 (tonCO₂e)

2.2 Resource Consumption

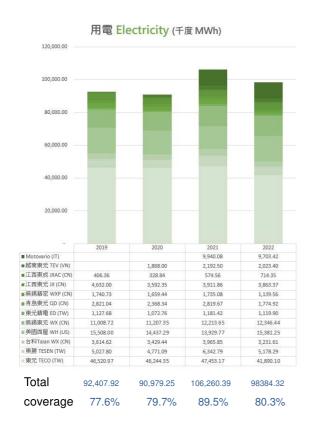
In 2022, the Group's energy consumption data coverage is **80.3%** by revenue ratio.

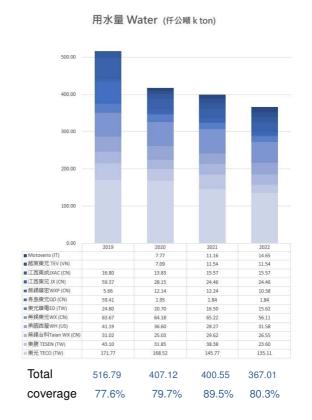


2022 Target for non-renewable consumption: 130,779 MWh



Conversion coefficient: (LPG 6,635 Kcal/L $\,^\circ$ Nature Gas 9,000Kcal/m³ $\,^\circ$ Dissel 8,400Kcal/L $\,^\circ$ Gasoline 7,800Kcal/L $\,^\circ$ Electricity 860Kcal/KWh) $\,^*$ 0.0000041868GJ/Kcal $\,^*$ 1,000 (Source: Energy Bureau)





2022 target: **381** million m³ Note: TESEN (TW) uses groundwater and the others use tap water



Water Recycle performance.

In 2022, the recycled water consumption quantity accounted for 20% of all water consumption. The recycled water consumption quantity is 76 tons/day, and it is used for 250 days per year.

- Casting recycled water basin capacity of 60 tons
- Die casting recycled water basin capacity of 100 tons

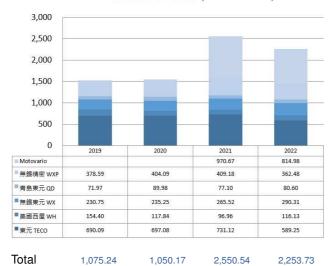
TECO uses tap water throughout its operations, with the sole exception of TESEN, which relies on groundwater. TESEN has a sewage treatment facility although TECO is not located in an industrial zone. Treated sewage is tested to ensure that it meets the relevant standards prior to discharge. TECO constantly implements various water conservation measures including installation of aerators and adoption of water saving toilets. Leaks are prevented through regular inspections.

80.3%

89.5%

Natural Gas Usage Management





79.7%

coverage

77.6%

Natural gas is the main source of non-renewable energy use in the plant. TECO tracks and manages natural gas consumption of the Taiwan plant, TECO-Westinghouse, Wuxi TECO, Qingdao TECO Precision, Wuxi TECO Precision and Motovario in Italy. From natural gas fee receipts to track and manage the use of energy and corresponding carbon emissions.

Air Pollution Management

Air pollutants are mainly generated during motor production in the Chungli plant and consist mainly of Volatile Organic Compounds (VOCs). TECO has implemented improvements at the source by replacing the base coat for motors with VOC-free water-based paint. TECO has also adopted low-voc varnish.



2022 Target: **162** ton

Plant locations that generate air pollutants include TECO Chungli and TESEN in Taiwan. Air pollution control facilities have been established in accordance with the relevant laws and standards and dedicated personnel have been assigned to carry out operations in accordance with environmental protection-related laws. TECO is firmly committed to reducing pollutant concentrations to conform to air pollution standards. TECO and TESEN pollutant categories include SOx, NOx, PM and VOCs

	2020	2021	2022
Sulfur oxide (SO _X)	1.62	1.77	1.02
Nitrogen oxide (NO _X)	1.99	1.53	0.92
Volatile organic compounds (VOCs)	104.2	179.7	136.7

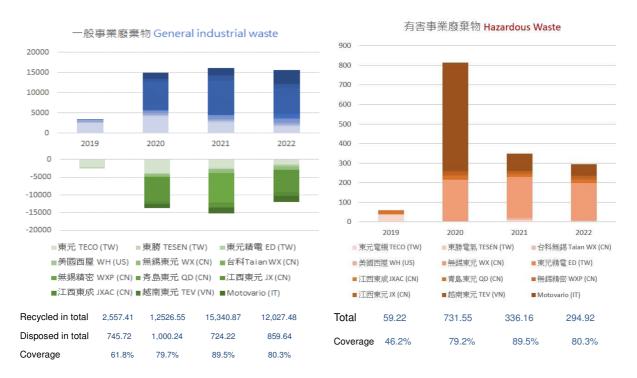
unit: ton coverage: 80.3%

Fuel management





Waste management



2022 Target of waste disposal: 873 ton

2022 Target: 301 ton

Formulate the "Waste Storage and Clearance Management Measures" and environmental management measures related to waste in the factory area, strengthen the tracking of waste removal and disposal, and hold meetings to review from time to time in accordance with laws and regulations. When selecting a waste treatment supplier, TECO conducts on-site evaluation on treatment capacity and the relevant acceptance standards to strengthen the tracking and management of waste removal and treatment.

Household garbage is entrusted to be cleared and transported to regional incinerators for treatment, and waste hardware, wood, paper, etc. are properly disposed of or disposed of by recycling.

Due to the different definitions of hazardous waste in different countries, from 2021 onwards, when expanding the recognition of the Italian factory, the calculation will be based on EU standards, and the data was traced back to 2020 retroactively. This resulted in an increase in the group-wide hazardous waste value. The waste oil, grinding sludge, coolant emulsions, aqueous washing solution, contaminated packaging, contaminated filters and absorbents, and exhausted wheels of the Italian factory are all recognized as hazardous wastes, but such wastes are recognized as non-hazardous general business waste in other countries.

Total waste disposed	General Waste	Hazardous Waste
Recycle	12027.48	599.28
Incinerated	623.32 (342.66 recycled)	237.27
Landfill	192.42	0.129
Otherwise	43.84 (Physical treatment)	10.46 (Physical treatment)

Waste Classification



Total waste in 2022 is 15,437.99 metric tons.

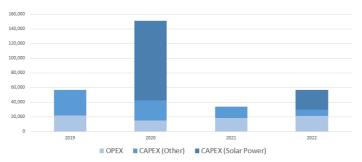
In 2022, the waste reduction target in Taiwan is 2% per year, and overseas sites are 1% per year. The data coverage rate is 80.3%, covering the HQ in Taiwan and 11 affiliated companies in total.



Environmental expenditures

TECO constantly assesses energy conservation and carbon reduction, waste disposal, and pollution control equipment to minimize environmental pollution caused by pollutants generated during plant operations. Relevant expenses have been incorporated into environmental expenditure items. The solar power generation facilities in Chungli Plant were a major investment in 2020. Funds were budgeted for the implementation of the "emission reduction by 50% within ten years" after 2022, including reduction of the process SF6 escape and complete prohibition of R410A refrigerant in small-sized air conditioners.

TECO Group implements the ISO 14001 Environmental Management Systems and GHG inventories on an ongoing basis, and commissions external institutions to check greenhouse gases every year (ISO 14064-1); These implements will be extended to overseas operating bases in 2022.



Unit: NTD k
Data covers all of sites in
Taiwan, the U.S., China,
Vietnam and Italy. Data
coverage rate is 82.7%

CAPEX (solar power)		109,000		27,000
CAPEX (other)	34,660	26,979	15,240	8,260
OPEX	21,930	15,143	18,424	21,438
Coverage	72.95%	77.74%	89.5%	82.7%

- **Definition of capital investment**: For the purchase of equipment, property amount for environmental protection matters, such as the purchase of solar panels, purchase of variable-frequency equipment etc.
- Definition of operating expense: Other investment amounts related to environmental protection, but excluding
 equipment purchase, such as air/water/waste soil/noise regulatory official fees/treatment fees; environmental
 monitoring fees; environmental management system maintenance fees etc.



Renewable Energy



the total power generation in 2022 is 9.6 million kWh has accounted for 10% of the total electricity consumption of the group (global base). In 2023, power generation facilities will be expanded, and annual power generation will increase by another 4.8 million kWh, which can reach 15% of the total power consumption.

2022 power generation

9,600 thousand kWh

Renewable energy consumption 1,158 thousand kWh

Dynamometer is an equipment for testing a motor's torque and power, and it also produces power regeneration during the testing process. TECO has a multiple sets of large dynamometer equipment.

2022 power generation

430 thousand kWh





2.3 Product Stewardship Management

Design Stage

Lightweight large motors (CWP series): After optimized design, the weight is 5% lighter than the original design. It reduces carbon footprint by 1,743 kg. TECO's produce 307,000 CWP lightweight motors in 2022, which reduces carbon footprint by 9,693 tons in total.

Recycled materials usage: silicon steel shavings are melted and reused as motor shells, and the proportion of recycled iron material usage reaches 96.5% by the end of 2022.

Water-based paint: Change the motor exterior paint to water-based paint. By the end of 2022, the proportion of water-based paint implemented has reached 84.4%, and the total emission of volatile organic compounds (VOC) has been reduced by 431,519 kg, which has reduced emissions by 45.9%.

Replacement of environmentally friendly refrigerants: household air conditioners use R32 refrigerants. The number of units accounts for 85% in 2022, which reduces emissions by 18,116 tonCO₂e compared to 2020 (base year).

Manufacturing Stage

Process and equipment optimization: In 2022, the overall Taiwan factory energy saving reaches 1,158 kWh, including smart automated production, equipment energy saving solutions, etc.

Waste recycling: Using silicon steel scrap melting technology to recycle silicon steel scrap waste by 96.5%.

SF6 leakage control: High voltage insulating switch products increase the yield rate and improve the filling equipment. It reduces emissions by 722 tonCO₂e, which is 50% reduction compared to 2020 (base year).

Transportation Stage

Promotion of direct delivery via Taiwan Pelican Express to streamline transportation processes and spare dealers the trouble of dispatching vehicles for pickup. This resulted in an increase of delivery service revenues by NT\$ 431,000 in 2022.

Committed to the research and development of high efficiency motors. In addition to the manufacturing and sale of the existing IE3 motors, TECO has also completed the research and development as well as the planning for IE4 and IE5 related products. In 2021, IE3 & IE4 motors accounted for 74.85% of all motor product sales revenue.

Dedicated in the research and development of energy conservation and water saving home appliance products. For home appliance productions, TECO actively improves the energy use efficiency, and 64.6% of the home appliance products have obtained the energy efficiency or water efficiency label certificates in Taiwan.

TECO developes T-Power (car) and T-Power+ (bus) EV powertrains to provide green transportation experience and reduce environmental damage caused by fuel vehicles. Powertrain systems shipped in 2022 have all been installed on urban buses.

End-of-Life Stage

A motor product assembly is mostly made of recyclable metal materials. By using the motor product of AEHF model series, after the scrap of this product, the recyclable material reaches 88%.

Home appliance products participated in the Recycle Policy (television, washing machine, refrigerator, air conditioner/heater) announced by the Environmental Protection Administration in Taiwan. Up to 2022, the home appliance products complying with the Waste Four Machine Recycle Policy accounted for 66.3% of the annual sales revenue.

TECO and other home appliance manufacturers have engaged in a joint venture to establish the E&E Recycling company and assigned directors for TECO in order to provide waste electrical and electronic equipment recycling and processing services. Revenue from recycle business is NTD 1176.7B in 2022.

Percentage of products sold last year that can be reused or recycled: 79.62% Percentage of products and materials that were reused or recycled: 73.71%

End of Life Cycle Responsibility

Consolidate recycle scenario from motor and home appliance products:

	2019	2020	2021	2022
Percentage of products sold last year that can be reused or recycled	76.40%	75.81%	76.85%	79.62%
Percentage of products and materials that were actually reused or recycled	69.17%	68.20%	69.04%	73.71%
Revenue from recycling (NTD k)	94,088	94,634	116,463	117,670

- 1. Calculation of recyclable ratios for sold products:
 - Estimated total weight of recyclable products (motors + household appliances) sold per year * recyclable material ratio of different product categories (motors 88%, household appliances 51.5%)/Estimated total weight of all products sold per year.
 - Calculation of estimated total weight of products sold: Due to the large number of sold motor and household product models it
 is very difficult to create individual weight statistics. Shipped quantity of different product quantities (number of items) *Weight
 of most frequently sold models is therefore used as the calculation formula for estimated total weight of products sold.
- 2. Calculation of actual recyclable ratios:
 - Denominator: Weight of products sold is substituted for weights in the production process which are impossible to trace due to the substantial number of products.
 - Numerator: Due to different product characteristics, it is difficult to perform actual statistical analysis of recycled quantities. Consequently, the actual recyclable ratio is estimated according to the following scenario, and it is assumed that the products purchased by customers in the respective year are replacements for existing products of the same brand. Assumed recyclable ratios are 100% and 50% for motors and household appliances, respectively.
- 3. TECO and other home appliance manufacturers have engaged in a joint venture to establish the E&E Recycling Company and assigned directors for the company in order to provide waste electrical and electronic equipment recycling and processing services.

 Calculation of benefits derived from recycling: Illustrated by TECO shareholding ratio (13.42%) in E&E Recycling company.
- 4. Motor product life cycles range from 10-15 years. Since motors are mainly made of metal, the recyclable metal material of one single motor can reach 88%. Consequently, scrapped products are disposed of by customers autonomously through the sale and purchase of valuable metals. TECO has not yet received requests for motor recycling service from customers.
- 5. Environmental Protection Administration in Taiwan has established the Waste Four Machine Recycle Policy (refrigerator, air conditioner/heater, washing machine, television), and the distribution units that consumers make their purchase from provide the transportation service to the qualified operator for processing; therefore, product manufacturers have a relatively greater difficulty in the actual statistics of the annual recycle amount.



How does the raw material circulate? There are two cycles in TECO: "In-plant circular" and "Life cycle circular"

In-plant circular (GRI 301-1)

TECO has own foundry in Taiwan, which means we have the ability to melt wastes from production process and re-manufacture it into motor frame bracket housing parts. We have now reached 96.5% of iron reusing rate.

In 2022, the total weight of silicon steel shavings recycled and received: 5,568.8 metric tons. TECO starts to manage recyclable packing materials in one of the factories in Taiwan from 2022, The total weight of non-recyclable materials (plastic, PE, cushioning materials) is 15.95 metric tons; the total weight of recyclable materials (paper, corrugated board, metal) is 7.37 metric tons. Packing recycle management is being expending to all factories in long term.

Lifecycle circular

Industrial motors typically have a design life of 10-15 years, and special designs can extend life up to more than 30 years. At the end of the motor life cycle, the motors are recycled and dismantled by the scrap hardware recycling service companies. 90% of motor total content, including steel, iron, copper and aluminum will be separated and returned to the raw material stage to be remelted and re-manufactured. Steel is usually made into angled steel and other building materials that continue to exist in our lives.



TECO GO ECO

TECO renew "TECO GO ECO" logo to represent low-carbon products and services. Following ISO 14020 standard, and with the definition of Type I, II and III. TECO categorizes motor and home appliance product in following rules:

In 2022, low-carbon products accounted for 65.1% of total sales.

- Type I: motor above IE3 standard and home appliance with first degree energy saving certification or electricity/water saving certificates.
- Type II: from 2020 TECO categorizes customized motor with efficiency level > 95% as TECO GO ECO products.
- Type III: Products wit carbon or water footprint certifications.

Motor Carbon Footprint Analysis

Motors are one of the most important sources of power. According to statistics, 46.2% of energy is consumed by motors worldwide. From household appliances to industrial machinery, motors power every equipment. What kind of material forms a motor? More than 90% is metal. Here shows TECO high efficiency (IE3) 150 hp motor data:



TECO has conducted a carbon footprint analysis of three high-efficiency motor models by "from cradle to gate" approach. Which calculated carbon emissions including raw material, manufacture process, direct manpower and waste generated. We found that 90% of carbon emissions come from the production of raw materials, and only 10% is from motor manufacture stage. This shows that the recycling of raw materials (metal parts) is important to reduce emission.

Model	Emission from Raw Material kgCO ₂ e	Emission from Manufacture kgCO₂e	Total Emission kgCO₂e
AEHF 2HP	152 (92.5%)	12 (7.5%)	164
AEHF 20HP	625 (89.9%)	70 (10.1%)	695
AEHF 150HP	3770 (90.9%)	375 (9.1%)	4145

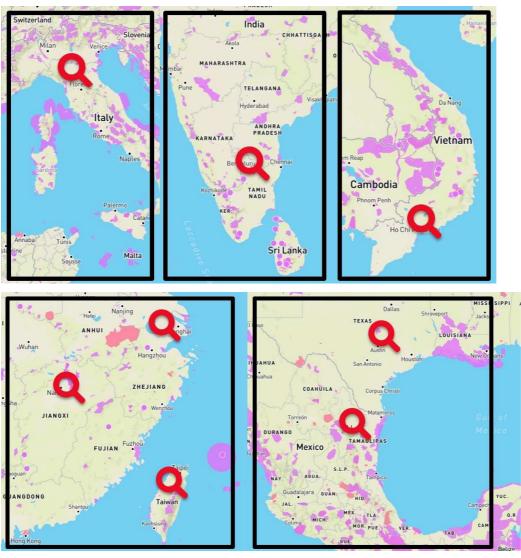
^{*} Data verified by BSI in 2016

The total sales of TECO's motor series of products qualifying the carbon footprint analysis accounted for 35.2% of the overall volume

TECO conducted a carbon footprint assessment of the AEHF, AEHH, and AFHH three-model series motors, accounting for 35.2% of all models sold in 2022.

2.4 Biodiversity

TECO is committed to the compliance of biodiversity. The impact of the local ecological environment has been considered in the initial stage of the group's operation and production area; in order to minimize the impact on the ecological environment; and to ensure that there is no significant negative impact and impact on biodiversity. TECO uses the Integrated Biodiversity Assessment Tool (IBAT) to conduct a discussion on the ecological diversity impact layer of existing operating production areas. The scope covers factories in Taiwan, the United States, China, Vietnam, Italy, India (under construction), and Mexico (under construction). The production bases selected by TECO are all located in industrial areas approved by the governments of various countries, and the harm to biodiversity is limited.



Data source: Sites of Biodiversity Importance, IBAT, UN Environment World Conservation Monitoring Centre

Guiding Principles

Corresponding Practices

Top management oversight of nature-related risks and opportunities

- The highest supervision is the "Corporate Governance and Sustainability Committee". The chairman serves as the top management, and the members of the committee include several members of the board of directors; the ESG office is the executive level unit. Biodiversity promotion plans must be reported to the board of directors (the biodiversity policy is expected to be approved in 2023).
- Process to identify natural risk:
 - 1. Spatial Distribution Maps Preliminary use of land use map data to perform site analysis.
 - 2. Introduce an assessment process to identify overall nature-related risks and opportunities from 2023.

Impact on

Short term risk: Air pollution caused by production process.

 Short term opportunity: Water-based paint reduces VOCs emissions and air pollution.

business strategic and financial

planning

- Mid term risk: Water pollution affects environmental ecosystem.
- Mid term opportunity: Water-saving measures and comprehensive assessment of energy, greenhouse gas, water resources and biodiversity.
- Long term risk: Biodiversity disruption due to raw material supply and impact on stakeholders.
- Long term opportunity: Conservation programs for biodiversity conservation.
 Improve marine and terrestrial biodiversity.

Assessment Results

The current operating sites are not located in or adjacent to a country or a nationally designated important biodiversity area.

Management metrics

- Comply with regulatory standards and increase the proportion of water-based paint.
- Set water reduction goals; increase recycled water utilization.
- Proportion of usage of wood products and paper with non-deforestation certification.
- Marine species restoration program, combined with the cetacean restoration plan to build up conservation area.

Target

- Increase the proportion of water-based paint to more than 90% by 2025 (84.4% in 2022 meets the target of 80%
- Before 2025, the goal is to reduce the water consumption by 2% per year, which will eventually be equal to the water consumption quantity.
- HQ office implements FSC certification in 2025.
- Join "Restoration of Cetacean Population" program.



Restoration of Cetacean Population

Our actions start from identification of individual cetaceans and recording of their movement: Identification of individual cetaceans helps us understand the social structure of cetacean populations. TECO sponsors the AI identification system for Risso's dolphins, or "Photo ID", to identify them and their movement tracks automatically from numerous photos of the observers according to the scar analysis and individual features. 45 Risso's dolphins and 10 sperm whales are identified currently. These two commonly recorded populations will be used as a core for future extension to improve the effectiveness of the AI identification as quickly as possible.

2022 Performance

- 17 investigators were trained, 17 cetacean survey ships were dispatched, and 133 team members participated in the investigation.
- Training of 5 Photo ID analysts to assist in individual identification research.
- Completed the analysis of whale watching sighting data of 4 common species of cetaceans in Hualien.
- Completed the analysis of artificial scars on the body surface of patterned dolphins and interviews with fishermen.
- 55 patterned dolphin individuals can be identified by AI. (45 last year).
- 30 Sperm whale can be identified by Al. (10 last year).

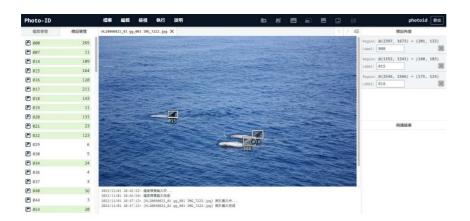


Photo ID

Individual identification and scar analysis

Using 813 photos for dolphin Al identification, currently 55 can be identified.

S: Social Engagement



TECO's Occupational Safety and Health Commitment:

- Compliance with international regulations: Comply with international occupational safety and health and sustainable development trends, and ISO 45001 specifications.
- Safe working environment: Continue to promote the improvement of safety and health management system and risks, achieve zero disasters at work, and build a safe and healthy workplace; implement preventive management and audit systems, and set up occupational safety and health committees by both employers and employees to reduce workplace safety and health risks together to promote workers' physical and mental health.
- Risk assessment strengthening: Strengthen the risk assessment of the value chain, carry out training on sustainable risk and occupational safety and health impact management and prevention, and maintain a safe, healthy, and clean working environment in the value chain through internal and external occupational safety and health audits, and improve the performance of industrial safety and environmental protection.

TECO Declaration of Human Rights Policy

TECO respects and encourages implementation of the labor standards of The *UN Universal Declaration of Human Rights, The UN Global Compact, and The International Labor Organization Conventions*, and TECO is committed to creating a dignified working environment to ensure that everyone in TECO, stakeholders, supply chain and partners, including but not limited to all employees, contract employees, as well as suppliers, joint ventures, customers, and local communities, their human rights can be treated with equality and dignity. TECO's declarations on its human rights policy includes:

√ Investment	√ Working hours
Fairness and non-discrimination	√ Meet basic salary requirement
Creating good employee relations	Safe and healthy work environment
No child labor	√ Training
Prohibit compulsory and forced labor	√ Communication channels

TECO 's Declaration of Human Rights

TECO actively establishes a communication bridge with employees. Including TECO's quarterly meeting and the activities of the factory's meeting, explain business results and recognize outstanding colleagues.



Letter of Commitment to Human Rights and Environmental Sustainability

In order to ensure that suppliers fulfill their corporate social responsibilities, TECO has not only demanded suppliers to provide competitive quality, delivery date and technology by implementing the appraisal system. Human Rights and Environmental Sustainability are also implemented with contacts.



3.1 Human Resource

TECO Group employee: 11,936. In this Report: 4,552. In Parent Company: 2,274 (as Dec. 31, 2022)

	FTEs		Temporary		Part-time	
	male	female	male	female	male	female
Taiwan	1610	765	203	58	22	1
United States	189	82	9	3	0	0
Italy	400	124	45	24	6	11
China	785	459	135	107	0	1
Vietnam	80	58	1	1	0	1

- FTEs are full-time permanent employees., TECO has no non-guaranteed hours employees.
- By full-time equivalent, FTEs are 4,819 in this Report, and 2,312 in Parent Company.

Diversity Indicators	
Female share of total workforce	33.1%
2023 Target 33.4%	
Females share in all management positions	22.1 %
2023 Target 23.0%	22.1 /0
Females share in junior management positions	23.2 %
2023 Target 23.5%	23.2 /6
Females share in top management positions	12.3 %
2023 Target 12.8%	12.5 /6
Females share in management positions (in	
revenue-generating functions)	36.5 %
2023 Target 37.0%	
Females share in STEM-related positions.	20 0 0/
2023 Target 28.5%	28.0 %

The scope of data disclosure includes Taiwan, Vietnam, the United States, Italy and all factories in mainland China. Data coverage 100%.

Management level: Supervisors above the rank of officer (including the ranks of Officer, Manager, Director,

Assistant Vice President and Business Group President)

- Junior management level: Supervisors of the rank of officer, supervisors of the rank of manager
- Top management level: Supervisors of the rank of director, supervisors, Assistant Vice President and Business Group President

Gender Pay Indicators by gender		
Mean gender pay gap	15.2%	
Median gender pay gap	10.0%	
bonus gap	0	

- Bonuses are gender neutral and are awarded based on performance appraisal results.
- Male's average pay is higher than female's, but female's pay in high positions are higher than males.

Gender Pay Indicators by position		
Supervisor	3.7%	
Managers	-6.3%	
Top management	24.6%	
Non-manager	22.4%	

Ratio of base salary plus salary for women to men (Base 1 for women)

Workforce by Natio		
Region	Share in total workforce	Managers share in all positions
Taiwan ROC	50.0%	51.4%
Asian but not ROC	35.2%	38.4%
Other Nationality	14.8%	10.3%

Workforce by Age		
Age range	Share	
<30	9.6%	
30-50	51.5%	
>50	38.9%	

The average age is 41.7 years old

3.2 Human Rights Mitigation and Remediation

According to UN "Universal Declaration of Human Rights" and "United Nations Global Compact" TECO develops "Declaration of Human Rights" to manage internal HR policies. Human right issues cover parent company, subsidiaries, and suppliers. TECO has established human rights due diligence procedures. It evaluates and reviews human rights risk issues every year, identifies affected objects and risk sources, and plans actions. Health, safety, and human rights risks includes "Working Environment Monitoring" and "Overload Hazard Prevention" and reveal and formulate improvement plans as listed in following table.

				and a man	
Issues of	Topics	Risk Assessment	Stakeholders	Mitigation Plan and	Implementation
Concern				Remediation Action	Results
Safe and healthy work environment	Formulation of health care plans for maternal employees	Assessments are carried out based on work environment and operating hazard evaluation charts	Female employees	Task adjustment based on risk communication and consensus, provision of breastfeeding facilities and exclusive parking spaces	4 protection is in progress. Regularly track the situation before, during and after pregnancy; report the progress to the safety committee.
	Unlawful Infringement Prevention	Employee self-appeal	Employee	To protect the rights of the complaining employees, after HR received the complaint CEO appoints the person in charge of the case and the Safety team carries out investigations and implement countermeasures	The number of notifications is 4 (2 cases have not been filed); the investigation completion rate is 100%
	Operating environment monitoring	Sampling, monitoring and improvement of the working environment of employees every six months.	Employee	By government regulation and tracking standards	No work environment monitoring exceeds the standard
Prohibition of forced labor	Overtime work is not encouraged; rest times of employees are respected	HR and Occupational Safety track overtime statistics on a monthly basis	Employees	It is announced in labor- management meetings and quarterly meetings that overtime work is not encouraged	Controlled adequately without risks

Issues of Concern	Topics	Risk Assessment	Stakeholders	Mitigation Plan and Remediation Action	Implementation Results
Concern	Overload hazard risk assessment (every three years)	Ratio of employees at overload risk levels 3 and 4: 1.08% (25/2305)%	Employees	Establish overload hazard preventive plan, perform consulting health education, operation adjustment according to the assessment result and track improvement.	Overload risk level 3 ended to 5 (0.21%) in the fourth quarter of 2022 and was downgraded to 20 after tracking. Note: (5/2305) *%
Prohibition of child labor	Supplier Code of Conduct: Signing of a Pledge to Human Rights and Environmental Sustainability	Compilation and audits in the context of supplier evaluation standards	Employees Supplier	Audits of employees aged 15 and above in accordance with relevant laws starting from recruitment	Controlled adequately without risks
Elimination of discrimina- tion	Focus on the spirit and future development of the Modern Slavery Act	Examination of the living and work conditions of foreign workers to rule out unequal treatment	Migrant workers	All foreign workers have official employee status	Controlled adequately without risks
Freedom of association and right to collective bargaining	Guarantee of the right to form labor unions and convene labormanagement meetings	Guarantee that employee grievance channels are secure and unobstructed, regular employee satisfaction surveys	Employees	Monthly Director and Supervisor meetings are convened to discuss various employee-related issues. Company representatives attend these meetings to communicate with the labor representatives.	Percentage of union-protected employees: 100%

- Coverage includes HQ Office, all factories, regional service posts and engineering projects in Taiwan.
- Coverage rate 50.1% (Taiwan region, 2,415/4,819)
- Employees include aborigines and new immigrants.

Human Rights Related Training:

Human rights-related training in 2022 included 21 courses for 38 hours, covering "Avoid workplace bullying management", "Personal data protection legal concept", "labor safety and health on-the-job education and training". The employee training completion rate was 100%.

Human Rights Related Agreements and Contracts:

TECO protects the human rights of employees through the labor union and labor-management conference system. The employee protection ratio of the labor union is 100%, and the suppliers of TECO are bound by the "Human Rights and Environmental Sustainability Commitment".

Labor union and labor-management meetings

TECO set up its own labor union in July 1974 to pursue higher work efficiency, improved labor conditions, and open communication of opinions of labor and management. TECO further signed a collective agreement with union representatives on December 28, 1981, which safeguards the rights and interests of all employees pursuant to the Labor Union Act and the Collective Agreement Act to safeguard the rights and interests of both sides and ensure harmonious relationships between labor and management. On February 21, 2023, the new version of the group agreement was signed with updated employee support programs.

The union convenes annual general meetings for the election of representatives, 11 Directors and 3 Supervisors by all members in attendance. Monthly Director and Supervisor meetings are convened to discuss various employee-related issues. Company representatives attend these meetings to communicate with the labor representatives. Labor union offices have been set up in plant areas to give employees a chance to communicate and exchange opinions with union representatives during working hours. TECO also organizes semi-annual conferences that serve the purpose of direct communication between union Directors and Supervisors and the president. In addition, model workers (one for every 100 employees) are selected and recognized on an annual basis. A total of 20 model workers were selected in 2019. All business activities of TECO strictly conform to the Labor Standards Act. Employees are notified of major operational changes by law in advance.

Labor union

- Established in 1974
- Collective agreement signed in 1981 and accepted by all TECO staff members.
- A new group agreement was signed in 2023 with updated employee support programs.
- General union meetings are convened on an annual basis for the election of union directors and supervisors.
- Conferences convened by the Chairman, President, union Directors and Supervisors are held on a semiannual basis.

Monthly Director and Supervisor meetings are convened to discuss various employee-related issues. Company representatives attend these meetings to communicate with the labor representatives.

Committees	Ratio of labor representatives	
Plant labor-management meetings	50%	
OSH committee	33%	

Number of employees in Taiwan under protection of unions

100%

There are total of 2,068 people qualified to join the unions. 100% people joined unions. Data coverage 50.1% (Taiwan Region).

3.3 Career Development

Training and Development Input

Average hours per FTE of	14.36	
training and development	14.30	
Average amount spent per		
FTE on training and	2054.05	
development.		

Training hours by gender

Gender	Hours	
Male	14.95	
Female	13.13	

Training hours by position

Position	Hours
Junior Supervisor	21.56
Managers	20.09
Top management	64.30
Non-manager	12.00

Training hours by type

Туре	Hours
Physical course	7.63
Online course	5.09
On job training	0.63
External training	1.01

Digital learning has become a new trend in corporate training in recent years. In order to meet the diverse training needs of colleagues and the culture of independent learning, a learning platform, "TECO e-Academy", was introduced in Q3 of 2022.

TECO Group provides multiple internal development opportunities. According to the company's core values, organizational development and strategic goals, for employees with outstanding performance, it plans to cultivate and reserve elite talents at all levels according to their interests, expertise and future career plans, and Opportunities for promotion or rotation development are provided in a timely manner. To actively cultivate successors in charge, the company has established a "key talent" system with grades 5 to 8. Every year, a talent development plan is planned for key talents. In 2022, key talents account for the entire company. The ratio of staff at grades 5 to 8 is about 2.6% (60/2274).

The total education and training hours in 2022 are 65,365.2 hours, the average training hours are 14.36 hours (=65365.2/4552), and the total investment in education and training is NTD 9,350,019.18 (average training cost=9,350,019.18/4552=2054.05 /person). The overall training hours increased by 45.6% compared with 2021, mainly due to the slowdown of the covid-19 epidemic, physical courses gradually resumed, and a new digital learning platform and online courses were introduced in 2022 Q3, so the average training hours per person There is significant improved.

Human Capital Return on Investment

In NTD	2019	2020	2021	2022
Total Revenue	47,786,260,172	45,350,607,265	51,248,387,334	58,315,216,068
Total OPEX	7,945,204,238	7,222,035,545	7,676,220,886	8,110,648,508
Total employee- related expenses	8,744,949,748	8,614,015,750	9,058,465,120	9,267,153,692
Resulting HC ROI	5.56	5.43	5.81	6.42
Total Employees	14,530	14,290	14,617	13,030

Total employee-related expenses include salary, employee remuneration, labor and health insurance expenses, pension expenses and other employment expenses.



Development Programs

Development plan	Description of benefits	Quantified benefits	Participation
Development plan	Description of benefits	Quantined benefits	Ratio
Digital Project	Key talents are potential employees of	10 proposals, and 6	1.58%
Competition	the company. In order to help them	projects were	
	develop towards manager level and	completed in 2022.	
Through competition,	above, and make stable contributions to		
cultivate key talents to	the company, in line with the company's	Among them, 3 cases	
think about the	digital transformation strategy in 2022,	have initially produced	
company's digital	key talents are arranged as digital	beneficial results by	
transformation plan	transformation leaders. This competition	saving \$1,611.1k and	
and lead colleagues to	starts from the ideas to the actual proof	generate revenue	
implement it.	of concept (POC) stage and by using	\$2,053.8k per year	
r	existing data and resources, these ideas		
	can be put into production.		

e-Academy online learning

In the era of digital transformation, update the internal education and training system and create a culture of independent learning for colleagues.

Training materials such as online, physical courses, and qualification tests for new recruits were built on this platform. And introduce to all FTEs in the company. In addition to the learning platform, online courses also came with diversified types, including leadership control, business management, digital marketing, data analysis, data visualization, workplace skills, audiovisual creation, business foreign languages, etc. In summary, in the second half of 2022, the number of training hours using this platform for online learning reached 17,579.7 training man-hours.

By the end of the year, a total of 17,579.7 hours of digital course learning had been completed, with an average learning time of 7.73 hours. 100%

Saved 948.5K fees for the physical course, the per capita learning hours increased by 45.7% compared with last year, and the HR work efficiency was improved by 50% (the course closing time is reduced from 60 minutes to 30 minutes)

Coverage rate 50.1% (Taiwan region, 2,415/4,819)

3.4 Compensation and Benefits

Hiring	2019	2020	2021	2022
Total number of new employee hires	201	219	304	427
Percentage of internal hirings	81.2%	54.6%	36.8%	21.9%

Coverage rate 50.1% (Taiwan region, 2,415/4,819)

- In 2019-2022, more than 50% of the vacancies filled by internal employees belong to production operations, and the ratio of male to female is maintained at about 80:20; the age of filled employees is 30-50 years old, accounting for about 47.2%.
- 2019-2022 Newly recruited employees, due to the nature of the industry, there are more male employees, but the ratio of male to female has dropped compared to before, about 60:40; in terms of age, young and middle-aged people have always been the main force of the labor force, and most of them are 30-50 years old. Accounting for about 59%.

base: 2022 / 12 / 31		New Hire			Turn Over	r	Total	number o	f FTE
Age / Gender	male	female	total	male	female	total	male	female	total
<30	75	44	119	44	26	70	162	77	239
<30	63%	37%	28%	63%	37%	16%	68%	32%	11%
30 -50	132	120	252	93	48	141	778	420	1198
30 -50	52%	48%	59%	66%	34%	33%	65%	35%	53%
. 50	43	13	56	21	11	32	610	227	837
>50	77%	23%	13%	66%	34%	7%	73%	27%	37%
T-1-1	250	117	427	158	85	243	1550	724	2274
Total	59%	41%	19%	65%	35%	35%	68%	32%	100%

TECO employees' resignation status is counted according to gender, the male resignation rate is 26.32%, and the female resignation rate is 28.18%. According to age-oriented statistics, it is divided into three groups: under 30 years old, 30 years old to 50 years old, and over 50 years old. The turnover rate is 29.28%, 11.77%, and 3.82%. The youth turnover rate is the highest. TECO will continue to Improve the workplace experience to increase young people's willingness to stay.

In accordance with the "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies", the Company discloses the number of full-time employees who are not in supervisory positions, and the average and median salaries of full-time employees who are not in supervisory positions in Taiwan, and the difference from those in the previous year.

	2022	2021	Difference
Number of full-time employees who are not in management positions	2,221	2,177	44
Average salary of full-time employees who are not in management positions	893k	877k	16k
Median salary of full-time employees who are not in management positions	715k	717k	-2k

Coverage rate 50.1% (Taiwan region, 2,415/4,819)



LONG-TERM COMPENSATION

Compensation Plan

Item

Measurement

ERFORMANCE MEASUREMENT

- Indivitual Performance appraisals: carried out twice a year (in June and December) by line supervisors and cross function team managers. Before the assessment, the supervisor arranges at least one performance interview, focusing on understanding employee performance and giving feedback, and confirming goals and development plans. Employees with poor results are given improvement recommendations by the supervisors. In 2022, there were a total of 188 coaching and improvements. Performance appraisals has following elements: Key objectives 70%, competence 15%, and attitude 15%.
- Multi-faceted performance appraisal: In response to differences in job attributes, for senior executives, employees who are promoted to manager level or above in the current year, matrix organization personnel, and expatriate personnel, Multi-faceted performance appraisal is applied for (1) performance dimension, (2) responsibility dimension, (3) leadership dimension, and (4) continuous improvement dimension, and (5) organizational dimension as the assessment dimension, so that employees can obtain multi-angle feedback.
- Team performance appraisal: The chairman, general manager and relevant senior executives review and evaluate the quarterly goal achievement status of each staff and departments by business groups.
- Agile Dialogue: From 2022 onwards, the company provides budget on a regular basis to give performance feedback and motivate colleagues through informal communication channels to enhance team consensus and solidarity.

• The "Special Bonus Issuance Operation Standard" coupled with a cash incentive method applicable to supervisors above the rank of manager. According to the reward approved for the personal performance, the reward is to be issued at three time points in a period of two years, and the actual amount of bonus collected at the time of issuance is linked to the KPI score in the last quarter. In 2022, the Company continued to issue special bonuses in accordance with this standard.

- For TECO's performance evaluation KPI, as the setting of the natural of the project execution involves the sustainability project related personnel, the KPI is also linked to relevant sustainability indicator.
- TECO has a long-term reward method for trust shareholding and incorporates sustainability indicators into the assessment. The trust fund has 2,427,321 shares, in which senior management have 693,555 shares; non-senior employees have 1,733,766 shares. On May 31, 2023, the Articles of Association of TECO Employee Shareholding Trust was revised. All employees can participate if their performance appraisal and seniority meet the regulations.

Average Pay in 2 years, Qualified employee ratio 71.42%

12.36% of non-management employee joins

Coverage rate 50.1% (Taiwan region)

Support Policy Superior to Regulatory Requirements

Support Type Notes In view of the fact that the birthday is a once-a-year special occasion, the Company has decided to create a special birthday leave to allow employees to arrange activities Birthday Leaves: in the month of their birthdays in a flexible manner, give them a chance to fully experience the joy of birthday, and offer our blessings to our employees on their special day. TECO offers volunteer leaves to encourage its employees to engage in welfare activities and Volunteer Leaves: fulfill its responsibility as a corporate citizen. Employees are eligible for a total of 3 day of paid volunteer leave per year without affecting their performance appraisal. There are full-time nurses working in each factory, as well as a medical offices where professional doctors are regularly invited to take care of the safety and health of employees. Provide employees with EAP psychological counseling services. employee has Employees' 4 hours of free professional psychological counseling services per year (one Physical and hour each time) by telephone or by making an appointment for physical Mental Health consultation. Regular health lectures are held every quarter. AEDs are added in the office, and CPR/AED courses are compulsory to encourage employees to learn. Four cancer screening activities every year. Also, gym class fee is partially covered for employees in need. In order to allow employees to handle family affairs, take care of their families, achieve Flexible Employee a work-life balance, avoid traffic jams during peak hours, and work according to the **Working Hours** pace of personal life, employees may choose to work between 07:50 and 09:00 depending on their personal situation. Part-time Working On a case-by-case basis and adjust flexibly. options To be considerate to employees who need to take care of young children, the Babysitting Company provides paid family-care leave, and has signed special contracts with nearby kindergartens, so that employees can pay attention to both their families and Measures their work with peace of mind. For pregnant employees, they may enjoy exclusive parking spaces and maternal Breastfeeding

health protection consultation after application; a breastfeeding room was set up

which obtained the certification of excellence in Taipei's 2019 assessment.

Facilities

Support Type	Notes
Paid parental leave for the primary caregiver	During pregnancy, the main childbearing person is entitled to 10 days of maternity leave with full pay, and 8 weeks of maternity leave before and after childbirth, totaling 9.5 weeks of paid leave.
Paid parental leave for the non-primary caregiver	During the pregnancy of the partner, 7 days each, a total of 2 weeks of paid leave.
Extra Paid Leave	The company provides 3 days of paid welfare extra leave per year. Support employees to balance work and family life.
Group Insurance	Through group insurance program, TECO provides protection for employees and their families, and consider the needs of both employers and employees.

Coverage rate 50.1% (Taiwan region)

Employee Turnover Rate

Turnover	2019	2020	2021	2022
Total turnover rate	14.7	15.7%	14.8%	13.44
Voluntary turnover rate	12.5%	12.8	13.3	10.96
Data coverage	100%	100%	100%	100%

Data coverage: 100%

Overall employee turnover rate = annual employee turnover / total number of active employees on the reporting date. Annual employee turnover includes the number of employees who left the company due to voluntary or severance, retirement, death, etc. For employees who retire or terminate their labor-employment relationship, TECO assists in the transition according to the law. There is also a consultant re-employment program to hire back the retired key executives to reduce the impact on company management.

In 2022, TECO Group has a total of 612 resigned employees, with a ratio of 13.44%. A total of 499 people voluntarily resigned, and the total resignation rate and voluntary resignation rate both decreased slightly. Among total resignation, 79 are managers accounts for 12.91%. By job function, resignation from sales positions is 7.84%, from technical positions is 21.41%, from other positions is 57.84%. Technical staff have the highest turnover rate and will improve their workplace experience in the future to increase their willingness to stay.

3.5 Employee Wellbeing

Employee surveys are conducted every year, with a total of 11 aspects and 49 questions, including leadership, colleagueship, innovation, digital cognition, work arrangements, employee benefits, performance appraisal system, career development, training, quality of life, and employee engagement. Process goes through an anonymous questionnaire survey. The goal is 80 points.

The questionnaire tracks four indicators of job satisfaction, woring purpose, happiness, and stress as followings:

- Job satisfaction: The welfare provided by the company meets my needs.
- Working Purpose: I have a clear idea of my deliverables.
- Happiness: I like my current job.
- Stress: My supervisor provides the necessary support for me to maintain a balance between work and personal life.

The topics of this questionnaire survey are the same as those of last year, so as to make differentiated analysis.

	2019	2020	2021	2022	Target
Score	Supervisor 83.8 Employee 79.4 Average: 81.6	Supervisor 75.2 Employee 69.6 Average: 72.4	Supervisor 73.6 Employee 71.3 Average: 72.4	Supervisor 84.8 Employee 88.8 Average	80
Participation Ratio (%)	32%	39.7%	51.0%	51.6%	55%

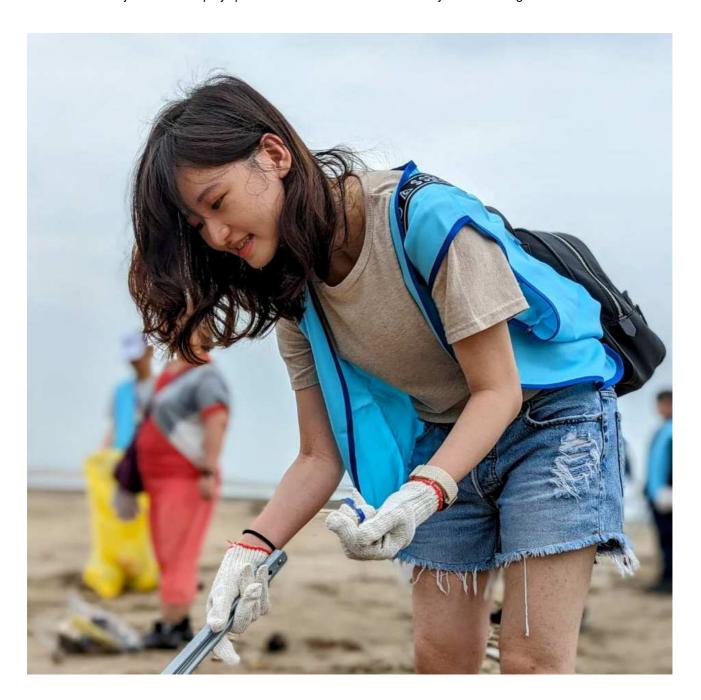
The suvery covers 100% sites.

According to feedback, the lowest 3 topics are Career opportunities, employee engagement and quality of life.

- Career opportunities: Employees in all units have doubts about performance appraisal, salary adjustment, promotion, and bonus systems. They have low willingness to pursue internal training and have doubts about the company's future development direction.
- 2. Employee engagement: Employees pay attention to whether the communication channels are transparent enough to pass on feedbacks.
- 3. Quality of life: Most employees expect house rental allowances and flexible office hours. Some employees expect benefits in subsidiaries should be the same as Parenat Company.

Although the Participation Ratio is higher than that in 2021, but it has not yet reached the target of 55%. The improvement measures are as follows.

- 1. Increase of the feedback period: Since the scope of the survey covers multiple regions, only half a month is not enough for everyone to finish. Next year the feedback period will be increased to 30 days.
- 2. Reward for Answering: provide reward to those who finished the questionnaire.
- 3. Content adjustment: simplify questionnaire to reduce the difficulty of answering.



3.6 Customer Satisfaction

TECO identifies its electromechanical business as the subject and sends the customer satisfaction survey questionnaire to its global customers twice per year to collect the feedback served as the goals of critical improvement. Home appliance business department mainly uses the method of telephone interview as the key method to collect customer feedback. The regional subsidiaries of TECO are the main sales channel for the industrial customers. In 2022, the online customer sales revenue accounted for 11.9%, and the sales volume accounted for 15.9%. The overall customer satisfaction evaluation result is published as follows:

Customer satisfaction	2019	2020	2021	2022	Target	
Overall	71.4%	74.2%	81.1%	85.6%	99 99/	
Data coverage	80.0%	86.3%	85.1%	83.7%	82.2%	
Electromechanical systems	69.2%	72.5%	78.1%	84.9%	80%	
Data coverage	90.4%	100%	100%	88.3%		
Home appliance	83.8%	82.6%	84.5%	86.3%	0E0/	
Data coverage	19%	21%	57%	64.5%	- 85%	
Engineering			86.1%	87.0%	0E 0/	
Data coverage			84.0%	96.0%	85%	

TECO reorganized its organization in July 2021 and integrated its products into three major business groups: electromechanical systems, home appliance, and smart energy engineering. The satisfaction ratio is calculated according to the statistical data of individual business groups and the individual goals and is calculated according to the proportion of the total revenue.

Improvements be made as follows:

In-Sales service	From the evaluation stage, the first version of the design drawing will be established, and the delivery time is expected to be shortened by 1 week to meet customer needs.
After-sales service	Customer is not satisfied with work arrange in weekends; Service team should coordinate with customer staff in advance before providing service.
Delay in construction	Due to the severe shortage of workers in various projects due to the epidemic, the construction period cannot be completed on schedule. Foreign migrant workers are actively recruited, and digital tools are introduced at the same time to reduce manpower demand.

3.7 Occupational Safety

Pollution-free Environment, Zero Occupation Disaster

TECO has formed an environmental safety task force which is subordinate to the President Office, exclusively in charge of formulation of environmental safety and health policies, program management and internal supervision for the whole Company and all plants. Meanwhile, dedicated environmental safety units have also been established at all factory premises for proper functioning of the environmental safety and health management system.

100% of the **13 production sites** worldwide have completed ISO 14001 environmental management and passed third-party verification. Conducted ISO 14064-1 greenhouse gas inventory since 2013. Every year, to avoid damages to the safety and health of employees or the company's financial losses due to employee operations, operating activities, or service facilities. Regular quarterly (1/4/7/10) meeting of the Occupational Safety and Health Committee, 1/3 of which are labor representatives, for communication and management of occupational safety and health. According to ISO 45001 Occupational Safety and Health Management System, perform the following actions:

- Regulations and stakeholder requirements: To grasp the latest changes and information of environmental safety and health laws and regulations and stakeholder requirements to make that the operation of the plant meet the requirements, the collection, identification, update and compliance evaluation of various regulations and requirements are clarified. In terms of occupational safety and health, 123 regulations are applicable, and 21 changes were issued in 2022.
- Identification of hazards and risks and environmental considerations: Hazardous operations, activities or services and facilities that cause direct or indirect hazards or are expected to affect the safety and health of the operating site.

A total of 4,825 hazards and risks were identified: 2 high-risk, 496 medium-risk, and 4,327 low-risk.

Description of high-risk (2 cases) management plan:

- 1. The automatic line production machine only has a safety protection mechanism but no interlocking device. According to the national standard, the manufacturer is required to cooperate.
- 2. The floor is in disrepair for a long time, and there is a risk of people stepping on the air and falling. Developed the "Factory Roof Renovation" to conduct a roof inspection of the entire factory area, all of which were completed in June.



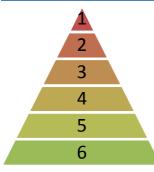
Hazard and Risk Identification Levels



- 5 Unacceptable risks (immediately review and improve)
- 4 Barely acceptable risk (priority for improvement)
- 3 Temporarily acceptable risk (considering how to eliminate the risk)
- 2 Acceptable risks (management in existing way)
- 1 Negligible risk (no improvement required)

A total of 2962 cases were identified in terms of environmental considerations; 4 cases were high-risk, 300 cases were medium-risk, and 2658 cases were low-risk. (Identified once a year, tracked quarterly, reviewed annually)

Environmental considerations identification level



- 1- Unacceptable risk (immediate review and improvement)
- 2- Barely acceptable risk (review and improvement)
- 3-Temporarily acceptable risk (note effective protection measures)
- 4-Temporarily acceptable risk (note the current control status)
- 5- Acceptable risk (management in existing way)
- 6- Negligible risk (no improvement)
- Quantitative target management: To implement the environment, safety and health performance efforts
 and the commitment to the environmental safety and health policy, and plan and implement the annual
 target management plan. There are 9 safety and health management plans and 12 environmental
 management plans. (Tracked quarterly and reviewed annually)

- <u>Standard operating procedures:</u> The relevant documents and information of the environmental safety
 and health management system are used as the basis for management. There are 116 standard
 operating procedures in total, and 7 are revised and updated after the review in 2022. (Irregularly
 revised)
- Environmental safety and health training and information dissemination: To ensure that the internal personnel who may be affected by the implementation of environmental safety and health work are controlled, and the training and information dissemination are implemented effectively. 22 employees have passed the ISO 14001 and ISO 45001 management systems' internal auditor training to strengthen their professional abilities for internal audit and effectively implement the management system; 135 messages on environmental safety information were communicated.
- Regular inspections, key inspections and security inspections: To prevent occupational accidents and ensure the safety and health of workers; the unsafe environment and unsafe behavior in the workplace are raised through the audit, recommendations for improvement are made through the audit of various machinery, equipment or environmental sanitation, and on-site assistance is provided for improvement. In 2022, there were 424 missing items in statistical inspections, and another 276 items were proposed for improvement through deficiency inspections. (Monthly statistics and quarterly reports)
- Investigation and statistics of occupational accidents and false alarms: To effectively and quickly report, handle and complete the accident investigation when an accident occurs, and take improvement measures to avoid similar accidents from happening. Emergency situations are identified for preparation and response according to the requirements of the "Environmental Aspect Identification Procedures", "Hazard Identification and Risk Assessment Procedures" and "Regulations Identification Procedures" formulated by each factory. The content of the emergency response plan is regularly reviewed for appropriateness, and tests and drills are carried out on a regular or irregular basis in accordance with the requirements of the "Emergency Preparedness and Response Procedures". In 2022, the number of cumulative working hours without disasters reached 9.61 million; there were a total of 18 test drills.
- <u>Purchasing, contracting and change management:</u> Following the requirements of ISO 45001, organizations should establish, implement and maintain processes to control related procurement activities. Through agreements with suppliers and non-workers, communicate management measures, and include occupational safety and health standards in the relevant contract review process and contract content.
- Health check management: In 2022, there was 0 cases identified by occupational disease doctors. Conduct relevant health promotion courses, including hypertension and cerebrovascular disease, workplace bullying risk management knowledge (unlawful infringement), and other health education. 22 articles on health promotion; 86 participants in total (112 from the new physical examination and health education); the participants include employees and outsourced personnel from the factory. Regarding the safety meeting and hazard notification content of outsourcing contractors entering the factory construction project, the contractor is required to evaluate the physical and mental state of the workers, whether they meet the factory entry regulations. In order to achieve TECO employees, outsourcing contractors, outsourcing personnel and other workers in the factory, to receive the publicity of health promotion activities.

Occupational Injury Statistical Data

Frequency Rate (FR)

TECO Group's Disabling Injury Frequency Rate (FR) (excluding traffic accidents) is 1.66

FR for other workers and contractors (excluding traffic accidents) is 0 \circ

(note) Formula: FR= (disability injury counts/total working hours X 10⁶⁾, under the definition of Labor Inspection Law Enforcement Rules 6. The disability injury counts are limited to incidents that occurred in 2021 and applied also to US, China and Vietnam subsidiaries.

Severity Rate (SR)

TECO Group's Disabling Injury Severity Rate (SR) (excluding traffic accidents) is 74 SR for other workers and contractors (excluding traffic accidents) is 0.

(note) Formula: SR= (Number of total lost workdays/total working hours X 10⁶), under the definition of Labor Inspection Law Enforcement Rules 6. The number of total workdays is limited to incidents that occurred in 2020 and applied also to US, China and Vietnam subsidiaries.

Lost-Time Injury Frequency Rate (LTIFR) (GRI 403-9)

n/million work hours worked.

	2019	2020	2021	2022
Employee LTIFR	1.16	1.77	1.17	1.66
Data coverage	77.6%	86.3%	89.5%	82.7%





ISO 45001

SGS

Certification

ISO 14001

Certification

The occupational injury incidents are divided into severe, moderate, mild, and false alarm levels. The detailed description for 2022 is as follows:

Level	Case	Туре
mild	16	3 cuts, 1 high fall (>1.2m), 5 falls on gound, 7 crushes or bruised.

No matter what level of occupational injury occurs, it must be reported according to the "General Accident Handling Procedure". After the accident investigation of moderate injuries, the treatment tools and standardized procedures should be optimized. Internal education and training nust be updated.

Scope of survey: TECO, TESEN, TECO-Westinghouse, Taian Technology (Wuxi), Wuxi TECO, TECO Electro Devices, Qingdao TECO Precision, Jiangxi TECO A/C, Wuxi TECO Precision, Jiangxi TECO, TECO Vietnam, Motovario Corp. Total accounts for 82.7% of the Group

TECO Group establishes the occupational safety and health supervision mechanism in accordance with the Occupational Safety and Health Act and the Labor Standards Act, accepts audits by the local authority, and convenes occupational safety and health committee meetings quarterly. The meeting content includes occupational safety and health management plan, management plan implementation progress and outcome, contracting operation management, occupational safety and health audit and supervision review etc.

To effectively manage occupational safety and health related issues through external supervision, TECO has established an environmental safety management system and ensures proper operations of the system in accordance with ISO 14001 and ISO45001. The Company has also acquired relevant management system certifications. Internal audits and external verifications are carried out annually to ensure the effective implementation of the management system.

No death case filed in 2022 for both employees and contractors.

3.8 Corporate Citizen

The Group's Policy

As TECO acts as the driving source for the global industry in manufacturing, the Group is further dedicated in the fulfillment of the responsibility of a corporate citizen to promote energy conservation and environmental protection, in light of achieving a wonderful life with integration of technology and culture.

TECO Award

TECO Awards witness Taiwan's technology development at the very beginning and the current highly developed technology. Each winner is not only involved in the process of innovation of the technology industry and R&D, but also made significant contributions to the relevant area including Electromechanical engineering, IT & Communications, Agriculture & Biomedicine, and Humanity & Education.



There are 7 winners this year, including 5 winners of science and technology awards, 738 technology transfer projects, and technology transfer funds of up to NT\$2.3 billion: 2 winners of humanities awards.

The TECO Awards have rewarded 169 social benchmarks in the past 29 years. Nearly 10 have served as cabinet ministers and political committee members, 31 have been appointed as university principal and vice principal, 7 have been academicians of the Academia Sinica, 8 presidents and vice presidents of ITRI. Each award is NT\$800,000. Over the past 22 sessions, the prize money awarded has reached NT\$90.3 million in total.

Indigenous Sustainable Education Program

From 2013, the Foundation formed a strategic alliance and a platform for "transmission and education" by enlisting NPOs, enterprises, and individuals. All circles of society are encouraged to serve as "sponsors" for the Foundation's programs which aim to pass down traditional indigenous music, dance, rituals, and cultural values. Furthermore, the Foundation encourages and supports tribal communities in their efforts to develop bespoke education initiatives with an equal emphasis on "culture," "education," "people" and "ethnicity." Extended learning activities ensure ongoing cultivation and development of new talents, as well as continuing and disseminating the heritage of ethnic art and culture. The aim is to increase the development of knowledge and skills and elevate competitiveness.



In 2022, 1,826 individuals participated in the cultural transmission program, more than 175 teachers participated in the program. A total of 494 folk songs and 154 dance numbers, and a total amount of NT\$ 6,135,088 was raised. Long-term supports have been provided to 30,000 children in ten groups.

TECO and corporate partners have continued to promote the project of "Exclamation mark" for 19 years, and the "Exclamation Musical Dance" held annually has become the brand for the indigenous folk songs and symphony fusion presentation. The grand show organized once per year has attracted more than 2,000 audience to participate in the show, such that the social awareness and power cohesion is achieved, and the learning energy of students is also created. The outcome of "Exclamation Mark" comes from the implementation of "cultural transmission education", and the cultural transmission education is able to facilitate the group's self-recognition and self-assurance, and it is also the main "drive" for the participation support from parents and seniors.



Green Mind Creative Competition

TECO held the first "Green Brain Creative Competition". After more than three months of two-stage selection, 9 teams from elementary school, middle school, and high school students were awarded the top 3 in each group. A total NTD 160,000 in scholarships and 68 sets of TECO energy-saving fans were awarded to encourage the winning teams. The origin of the Green Mind Creative Contest is that TECO participated in the government's "Air-Conditioning in Every Class" program. TECO has provided more than 700 schools with first-class energy-saving air-conditioning and hopes to continue this concept of energy conservation and emission reduction.



The winning team of the Green Mind Creative Contest is full of creativity. The first place in the national group, the "Destroying Girls Team", thanked the school for allowing them to disassemble a few electrical appliances and make an "air conditioner environmental protection circulating water collector machine".

In high school, after many trials, welding, and improvements, the "Office helper" was completed, which can be charged, serve as a fan and music player. And won the first place in the high school group.

Charitable Activities

To encourage employees to actively participate in social welfare activities, TECO provides employees with three days of "Volunteer Leave" each year. Employees can participate in various public welfare activities organized by the company on weekdays to accumulate public welfare points to receive gifts. In addition to New Year Dish donation, blood donation, beach cleanup, and farming activities held over the years, TECO will also hold "Used Shoes Save Lives - Send Used Shoes to Africa" in 2022, as well as the "Public Welfare Mountaineering Healthy Walk" that combines public welfare and health. 1,221 people participated in public welfare activities throughout the year and reached 1,791 hours in total.







G: Governance



4.1 Strategy to Growth

Growth of existing business

In Green Mechatronic Solution, sales of inverters and energy conservation solutions are expected to benefit from production of shale-oil, electrification of conveyance equipment and waste-heat recovery, sparked by various countries' carbon neutrality policy, including the U.S., which has pledged to reach the goal by 2050. Taiwan also aims to attain net zero emission by 2050, a goal expected to spur industrial investments in energy conservation, energy storage, and integrated smart system. With motor being an energy-intensive equipment, TECO has been offering end customers with overall energy-saving and carbon-abatement renovation plan and feasible solutions, an effort which has made major inroads into the Taiwanese and Chinese markets, especially in high carbon-emission fields, especially in iron & steel, papermaking and petrochemical industry. In the U.S. market, in addition to electrification of step-up stations for oil & gas pipelines and cogeneration systems for iron & steel and petrochemical industry, the company has also a firm grip on business opportunities related to E-Skid, green transportation, and hydrogen energy to boost revenue.

In Intelligence Energy, given popularity of 5G/big data/cloud-end services, TECO, backed by its outstanding technology, expects to continue enjoying robust growth in IDC engineering business, both on the domestic front and abroad, aiming to double orders from new customers/markets in 2023, on top of its total order intake exceeding 170 MW. In 2023, the company plans to further tap engineering opportunities of offshore substations for offshore wind farm, as well as related demands for gas insulated switchgear (GIS), spare generators, and offshore and onshore "E-house" solutions, the latest in collaboration with ABB. The company also expects to score robust growth in order intake and revenue related to renewable energy and energy storage, as the Taiwanese aims to boost the share of renewable energy in power generation to 20% by 2025, up from 2022's 8.6%, the latter representing 36% growth.

Air and Intelligent Life business group will continue focusing on provision of full-field smart air conditioning and energy management, contributing to the materialization of new life of ESG carbon-neutrality, and rollout of variable-frequency freezers for use by food factory and home-delivery low-temperature logistics plants. In technology strategy, it will provide AI freezing air-conditioning energy-conserving system, upgrade food safety and flexible cooling-power maneuvering with refrigerant quantum technology, and roll out changeable multi-temperature layer refrigerated chamber, in order to bolster revenue growth.



Strategic development plan

In line with its vision of "energy conservation, emission reduction, intelligence, and automation," the company's development strategy will center on the three major axes of green-energy creation and storage, foray into potential markets connected with the government's New Southbound Policy, and establishment of North American and Indian supply chains, to inject fresh momentum for corporate growth.

- 1. Energy creation and storage: Develop technology for producing core equipment of PV power devices and energy storage facilities, as a prelude to solar-plus-storage, then combine of energy management system and central-control information exchange platform, eventually develop into a comprehensive virtual green-power operator.
- 2. New southbound market: Focus on promotion of optimized product mix covering power, mining, e-vehicle, and HVAC, in addition to deployment in local sales services and supply chain.
- 3. Establishment of North American and Indian supply chain: Plan to set up motor factories in India and Mexico in 2023, to augment delivery and cost competitiveness.

Meanwhile in strategic development of technology, the company plans to develop PCS (power conditioning system) and high-voltage charging technology, as an offshoot of medium-voltage inverter, in 2023.

TECO has established a long-term cumulative reward mechanism for high management above the manager level and links the variable remuneration of managers with the ESG material topic of the year through Key Performance Indicators (KPI) KPI.

Senior Managerial Officer Remuneration

- Manager remuneration is divided into fixed and variable pay. The latter is directly linked to performance appraisal results based on key performance indicators (KPI). Each business department establishes the business department key performance indicators according to the annual development focus of TECO. KPIs are imposed from top to bottom encompassing all units at every level.
- 60% of KPIs are linked to financial indicators (such as revenue, operating profit, current profit and loss, total asset turnover, return on assets, return on invested capital, achievement of profit targets, etc..); 40% are strategic foresight related to short, medium and long-term planning and implementation (such as Strategy formulation, ESG and new business layout development, organizational management and talent training).

Long-Term Performance Reward Mechanism

- Establish [Trust Shareholding] Part of employee remuneration is given in the form of a shareholding trust, allowing employee to subscribe for shares at a preferential price subsidized by the company, which can be reclaimed after two years of deferred.
- In the salary structure, TECO also provides long-term incentive bonuses. However, unlike the deferred method of stocks or options, TECO's long-term incentive bonus is directly linked to the total shareholder return (TSR), linking corporate governance performance with the CEO's long-term incentive bonus. TSR includd the total capital gains and dividend income of TECO stocks for three years.

4.2 Risk Management Mechanism

Board of Directors

The TECO board of directors is the highest executive organ of TECO and is authorized to appoint and nominate top managers. It is also in charge of formulation of CSR, corporate citizen, and sustainable development strategies. The three functional committees, namely Audit Committee, Remuneration Committee and Corporate Governance and Sustainability Committee, were established by the Board of Directors to assist the Board in performing its duties. The organizational charters of all committees which are required to report are subject to approval by the board.

Management target	Target achievements	
At least 1 female director of the board members	The board includes 2 female directors, increased from 6.67% to 18.18%	
More than one-third of the board seats are independent directors	The proportion of independent directors increases from 20% to 36.36%	Ø
Directors concurrently act as managerial officers shall not be more than one-third of the board seats	No directors concurrently held the managerial officer position	Ø
No more than two directors have a marital relationship, or a relative within the second degree of kinship to any other director of the Company	No directors have a marital relationship, or a relative within the second degree of kinship to any other director of the Company.	Ø

The average tenure of directors is 6.27 years (until 2023/6/30): 1 executive director 2.5 years; 4 independent directors 2.75 years; 6 other non-executive directors 9.25 years.

	Name	Title	Term	Gender	ESG	G	Α	C	R	Other*
1	Chwen-Jy Chiu	Chaiman	3	Female	Ø			member	Convener	0
2	Cheng-Tsung Huang	Director	3	Male	Ø					1
3	Show-Shoun Chou	Director	3	Male				member	member	0
4	Pen-Ching Cheng	Director	3	Male	Ø					0
5	Li-Chong Huang	Director	3	Male	Ø					0
6	Jack Hou	Director	3	Male						0
7	Song-Ren Fang	Director	3	Male					member	1
8	Wei-Chi Liu	Independent Director	3	Male	Ø	Convener	member			2
9	Hsieh-Hsing Huang	Independent Director	3	Male	Ø	member	member	member		1
10	Li-Chen Lin	Independent Director	3	Female	Ø	member	member	Convener	member	0
11	Shiang-Chung Chen	Independent Director	3	Male	Ø	member	Convener	member		1

[•] Functional Committees: A Audit Committee Compensation Compensation Committee Compensation Committee Compensation Committee Compensation Committee Compensation Committee Compensation Compensation Committee Compensation Committee Compensation Committee Compensation Committee Compensation Committee Compensation Committee Commi

Other*: Number of Other Public Companies in Which the Individual is Concurrently Serving as an Independent Director.

GRI items	Disclose	
2-9 Governance structure and composition	As shown in the above table, please refer to the annual report for details (1) Information on directors.	social communities, stakeholder representative
2-10 Nomination and selection of the highest governance body	In accordance with the "Nomination Criteria for Director Candidates", the "Corporate Governance and Sustainability Committee" selects and nominates director candidates and submits them to the Board of Directors for approval before formally nominating them at the shareholders' meeting. Each year, the "Board Performance Evaluation Results" will be provided to the "Corporate Governance and Sustainability Committee" as a reference for the nomination of directors for re-election. For details, please refer to Annual Report: Implementation of Board Diversity Policy and Board Independence, Annual Report: Succession Planning for Board Members and Key Management. In the future, we will gradually add ESG impact management capabilities to the nomination and selection criteria for the board of directors.	none
2-11 Chair of the highest governance body	The chairman does not concurrently serve as CEO	none
2-12 Role of the highest governance body in overseeing the management of impacts	Refer to 1.4 Stakeholder Identification and Communication in this Report	none
2-13 Delegation of responsibility for managing impacts	The sources of risk are: (1) internal control risk, (2) financial risk, (3) strategic and operational risk, (4) legal compliance risk, (5) information security risk, (6) sustainability risk, and (7) quality Risks and other categories are managed and reported by the departments in charge. Refer to: Risk management in this report.	none
2-14 Role of the highest governance body in sustainability reporting	Information and data are compiled by the ESG Promotion Office and submitted to the "Corporate Governance and Sustainability Committee" of the Board of Directors for review.	none
2-15 Conflicts of interest	 5 directors concurrently serve on other boards of directors, please refer to the table above. There is no spouse or second-degree family relationship among directors. Those who have an interest in the proposals listed by the board of directors, themselves, or the legal person they represent, shall not participate in the discussion and vote. If it is harmful to the interests of the company, and when the discussion and voting shall be withdrawn and shall not act as an agent of other directors to exercise their voting rights. Please refer to the annual report for the implementation of the motion to avoid directors' interests. Cross-shareholding status with suppliers or other interested parties, existence of controlling shareholders: Please refer to the annual report. For related party transactions, please refer to Annual Report VII. Related Party Transactions. Information about part-time directors: Please refer to the annual report VI. Information about the company's chairman, general manager and other managers who have worked in an accounting firm or its affiliated companies within the last year. 	none

GRI items	Disclose	No info
2-16 Communication of critical concerns	emissions by 50% in 2030 and achieve carbon neutrality in 2050. 2022 Action Plan - Environmental aspect: Establish energy-saving/green electricity projects; Social aspect: Caring for employees to internalize ESG, integrating public welfare forces into caring; Corporate governance aspect: Deepen cooperation and communication with stakeholders. Please refer to the annual report for information on the operation of the Corporate Governance and Sustainability Committee. Financial: In 2022, four major cases were communicated, including the adjustment of the fixed remuneration of independent directors, the budget adjustment of the reconstruction of the old office building, the cash capital increase of Walsin Lihua, and the report of the new factory in Mexico. Internal Audit: In 2022, independent directors had four regular communications with the internal audit unit, please refer to annual report Communications between independent directors and the internal audit unit.	none
2-17 Collective knowledge of the highest governance body	In 2022, directors had a total of 83 hours of training, with an average of 7.5 hours per person. The courses include the outlook on the overall global economic situation in the second half of 2022, and the normative development under the confrontational international order: from core key technology regulation to global artificial intelligence governance. Please refer to the annual report Directors' training status. In the future, we will gradually incorporate TECO's ESG material topics into the board's training courses.	none
2-18 Evaluation of the performance of the highest governance body	The "Board of Directors Appraisal" is conducted once a year, and the evaluation is carried out by an external professional independent organization every three years. The content includes five aspects including participation in the company's operations, improving the quality of board decision-making, board composition and structure, director selection and continuing education, and internal control, with a total of 45 evaluation indicators. Please refer to the annual report for the performance of the Board of Directors' evaluation. Currently, TECO's ESG material topics management is not included in the performance evaluation of the board of directors.	none
2-19 Remuneration policies	The remuneration of individual directors is provided to the Remuneration Committee as a reference according to the "Board Performance Evaluation Results" each year. Senior managers conduct performance reviews against key performance indicators (KPIs) at the end of each quarter. The key performance indicator evaluation items include value-added operation, accelerated operation, in-depth management and forward-looking layout. About 60% of the evaluation items are linked to financial indicators (such as: operating income, operating profit, current profit and loss, total asset turnover, ROA, ROIC, etc.); 40% are linked to short-, medium- and long-term planning and implementation status. At present, there is no link between the management performance of TECO ESG material topics and the remuneration of directors.	Recruiting bonuses; severance payments; clawback mechanisms; retirement benefits

TECO is firmly committed to the establishment of a sound risk management mechanism. The Auditing Committee and Corporate Governance and Sustainability Committee are separately responsible for the management of various risks. Top management personnel are required to report risk management indicator assessment results in meetings of the committee. Sustainability KPI related performance appraisals have a direct impact on their variable compensation portion. Staff are required to list sustainability KPI into their performance evaluation items up to 15% and the emission reduction target achievement is up to 2% for business groups. Violations of these regulations affect their performance appraisal scores and may result in penalties based on the severity of the offense.

Audit Committee

The independent directors of the board serve as the members of the committee which is responsible for the management of financial and internal control risks. Independent director Wei-Chi Liu served as the convener for this term.

Corporate Governance and Sustainability Committee

Said committee consists of three directors or more, a majority of whom shall be independent directors. It is responsible for the management of sustainability, legal compliance, and information security risks. Standing independent director Li-Chen Lin serves as the convener for this term.

Internal Audit Division

This task force assists the board of directors and management level in the identification and assessment of risks as well as the review and confirmation of the effectiveness of internal control system design and operations. The task force formulates annual audit plans in accordance with the five main components of COSO internal control based on past audit experiences, the budget draft for the following year, and the current organizational framework. The task force delivers auditing reports upon completion of auditing operations and regularly reports to the Board and the "Audit Committee". Lead by Ruth Chang.

For the risk of TECO internal control, the "Audit team" proposes the audit plan according to the past audit centerpiece and the existing organizational structure in order to examine the operating risk control implemented by TECO management level, business department of TECO, and to review the effectiveness of internal control design and execution, in order to issue an audit report for submission to the "Audit Committee" and board of directors.

ESG Office

The "ESG Office Executive Officer" is the highest responsible rank of the management level. The ESG Office establishes the sustainability management specialist to be a full-time position responsible for the execution of works, and cross-department members also form part of the task force, consisting of the administrative units of "Representative of each business site" and "Safety and Health," "Human Resource" and "Financial Department" etc. to facilitate the promotion of management of works for the entire company synchronously. ESG office reports the work progress to the Chairman and President monthly.

 For the climate related risks and opportunities, after information provided by all members is collected by the "ESG office," it is summarized, reported, and recommended to the management level and board of directors.

Risk Management Culture

The sources of risk can be summarized as follows: (1) internal control risk, (2) financial risk, (3) strategic and operational risk, (4) legal compliance risk, (5) information security risk, (6) sustainability risk, and (7) quality risk. The various risk management methods are as follows:

Risk type	Management unit	Participating culture	Education and training	Control measures
Internal Control Risk	Audit team under the board of directors	The audit team continuously conducts auditing on each unit according to the annual plan; employees can point out potential risks during the process and report to the audit team.	"Management Cognition" and other 27 times totaled 136 hours	The audit team conducts auditing according to the annual plan, and regularly reports to the board meeting.
Financial risks	Finance and Management Center	Internal assessment reports are regularly filed for the positions of items to be hedged, such as interest rates, exchange rates, credit, net assets (liabilities), etc., and employees can put forward risks that affect financial performance during the KPI assessment process.	"Reading Financial Statements" etc. 4 times, 8 hours	The financial unit and management provide reports, and major decisions are submitted to the Audit Committee and the board meeting for decision.
Strategy and Operation Risks	Business Performance Improvement Office	Annual KPI item tracking and correction guidelines are conducted on a quarterly basis; employees can put forward the rationales and discuss with their supervisors during the KPI item formulation process.	"Intermediate supervisor training" and other 15 sessions totaling 41 hours	The Company conducts KPI evaluation on a quarterly basis and uses the evaluation results to link salary payments.
Legal compliance risks	Legal Compliance and Legal Affairs Office Under the Board of Directors	An e-newsletter is published to keep employees informed of the latest regulations that have been formulated or revised as well as practical cases; employees can review various legal compliance assessment items when signing various contracts and make suggestions.	"Labor Laws and Regulations New Supervisors Should Know" etc. 25 times count as 44 hours	The Legal Compliance and Legal Affairs Office functions according to the annual plan, and regularly reports to the Corporate Governance and Sustainability Committee under the board of directors.

Risk type	Management unit	Participating culture	Education and training	Control measures
Information security risks	BI Intelligence Team	Disaster recovery drills are conducted to ensure that operations are not interrupted; employees can alert the information security unit and call for repairs when the system is abnormal.	"Understanding hackers and information security self-protection rules" 9 times counts as 15 hours	The BI intelligent team monitors the security of the Company's IT environment, and immediately handles major incidents and informs the top-level supervisors.
Sustainability Risk	ESG Office	Participating in Materiality analysis questionnaires and responding to various ESG assessment tasks; employees can turn to ESG specialists for help when customers put forward new demands, and grasp market trends in advance.	"ESG Sustainable Development Goals SDGs Connection" 80 hours for 18 sessions.	The ESG Promotion Office proactively discovers or receives new customer needs, formulates policies and reports to the Chairman regularly.
Quality risks	Quality task force	Introducing quality control circle and quality improvement projects, and publicly praising outstanding employees; employees can put forward improvement suggestions and avoid quality risks in the process.	"Five QC core tools" and other 13 times total 98 hours	The quality control team functions according to the annual plan, assists each factory to conduct internal and external audits and tracks improvement measures, and regularly reports to the President.

Each business unit should clearly identify the major risks faced by its business, carry out risk planning in response to variables such as internal and external environment and legal adjustments, perform necessary risk assessment and management operations, and regularly summarize and update risk management conditions.

The ESG Office integrates major sustainability issues with corporate risk items based on the annual materiality analysis results, and sets risk mitigation measures, education and training, and management goals for identified risks.

Formulating, execute and track the risk management business under their responsibility, evaluating the Company's relevant risk-taking ability and the current status of the risks that have been taken, and proposing risk response measures. Each risk management unit of the Company shall regularly submit a risk management report to the responsible supervisor; the audit team supervises and controls the overall internal control risk, and regularly reports to the Audit Committee and the board meeting respectively to reflect the risk management implementation status and make necessary improvement suggestions.

4.3 Information Security Management

TECO set up the Information Security Management Committee, overseen the corporate governance and sustainability committee under the board of directors in 2021, in charge of supervision and governance of corporate information security. In the same year, the company passed ISMS ISO27001 certification.

No information security violations in 2022.

Security

Information An Information Security Committee is established under the Corporate Governance and Sustainability Committee of the Board of Directors, and the CEO serves as CIO.

Governance The BI team manages information security management, which has ISO 27701 and IEC 62443-2-1 lead auditor certificates.

Information security protection

In order to strengthen information security management, ensure the confidentiality and integrity of information, and the reliability and availability of information equipment and network systems, an [Information Security Policy] is formulated to manage information security risks. In addition, the company lists information security as part of performance appraisal and conducts information security education and training every year.

Process

Have a [Business Continuity Plan] to coordinate with the adjustment and changes of business, organization and personnel and update it at least once a year.

Penetration test in 2022, using hacker thinking to simulate attack methods to conduct penetration test on TECO's external service website.

Maintain ISO 27001 validation, assess other validations (BS 10012/ISO 27701)

Risk Control

In terms of system protection, this year, in order to ensure the stable and safe operation of the information system, the company strengthened the defense in depth, and aimed at the three main axes of information security protection: anti-virus, anti-hacking, and anti-leakage. Strengthen network firewall, anti-virus and network whitelist control, identify malicious traffic through the intrusion detection system, and actively block such traffic from entering the network. Improve the company's ability to defend against external attacks and ensure the security of internal confidential information, and ensure that the company's various information assets will not cause errors or interruptions in information services due to various threats and damages



4.4 Code of ethical conduct

TECO formulated the "Code of Ethical Conduct for Directors and Managers," "Ethical Corporate Management Best-Practice Principles" and "Code of Ethical Conduct and Integrity Operation Procedures and Conduct Guide" pursuant to the "Guidelines for the Adoption of Codes of Ethical Conduct for TWSE/TPEx Listed Companies" as the codes of ethical conduct to be followed by each director and employee of TECO, in order to ensure that directors and managers strictly abide by behavioral norms and ethical standards.

WE STOP

Harm to consumers' health and safety	Conflict of interest	Offering and acceptance of bribe
Illegal political contributions	Improper charitable donations	Unreasonable hospitality
Infringement upon business secrets	Infringement upon intellectual property rights	Unfair competition

WE IMPLEMENT

Compliance with laws	Preventive programs	Promotion and training
Whistleblowing system	Internal control	Information disclosure

Zero Political Contribution	 In 2022, the amount of TECO political donations was zero.
	In 2022, TECO did not experience any unfair competition,
	corruption or bribery, customer privacy data leakage, conflicts of
Integrity violations	interest, money laundering or insider trading.
	 In 2022, there were 2 discrimination or harassment cases, both
	are verbal or physical bullying.
	 In 2022, there were 7 violations and a fine of NTD 780,000. In
Environmental safety and	2021, there were 6 violations and a fine of NTD 15.63 million.
health violations	Details are listed in the appendix "5.6 Legal Compliance
	Violations".

Employee: All new employees are required to sign the Integrity Statement at the time of registration, and all the incumbent employees are required to sign the Integrity Statement at the end of the same year.

Contractors/suppliers/service providers: All 34 types of standard contracts, including distribution contracts and procurement contracts, contain human rights and environmental sustainability commitments, which are signed together at the time of contract signing.

Document signing

- Subsidiaries: All of them have signed the "TECO Electric & Machinery Co., Ltd. Related (Affiliated) Enterprise Ethical Management Commitment".
- Joint ventures (including companies with an investment ratio/contribution amount of more than 10%): A total of 73 related companies around the world have completed the signing of the "TECO Electric & Machinery Co., Ltd. Related (Affiliated) Enterprise Ethical Management Commitment".

Education and training

- Employees: All employees have completed the signing of the integrity statement. So far, the
 online test of integrity management for new employees has been conducted on a quarterly
 basis every year, integrity management courses have been comprehensively launched, and
 quarterly meetings have been held to promote integrity management.
- Subsidiaries and joint ventures (including companies with an investment ratio/contribution amount of more than 10%): All related companies are invited to send staff to participate in legal compliance meetings, overseas company meetings and CFO meetings to promote ethical management.



4.5 R&D and innovation

Motors rely on electricity to convert electrical energy into kinetic energy and thereby supplies a sustainable power source for humanity. The International Energy Agency (IEA) points out in an analysis that industrial equipment with motors as their core driving force are the main consumers of electricity. Universally used equipment such as machine tools, pumps, compressors, and fans account for 50% of global electricity consumption. The secondary sector constitutes 53% of the power consumption in Taiwan. 70% of this power is consumed by motors. The design of energy-efficient motors is therefore an effective way to achieve the goal of carbon reduction.

TECO takes "Energy Conservation, Emission Reduction, Intelligence, Automation" as the core values of our product policies and introduces innovations and new actions in the products and production processes.







In 2022, TECO reaped abundant R&D results, as evidenced by 12 items winning 31st Taiwan Excellence Awards, including silver award for "Intelligent Mobile Collaborative Robot". The company successfully developed cutting-edge products in the fields of energy conservation, emission reduction, intelligence and automation, including "high-power motor-gearbox integrated powertrain" for application in e-bus and e-truck; "large bipolar rigid-axis inverter duty smart motor", "IE5 ultra-high efficiency energy-saving permanent-magnet motor", "ultra-high performance smart drive control system for cooling tower", "high power-density energy-saving matrix inverter", and "smart logistics solution: smart precision positioning and navigational system for forklift" for industrial application, etc.

"UVC Purification Module" won the Gold Award in the Product Design Category of the 2023 MUSE Design Awards! TECO is ahead of its peers and is the first to install the Pure UVC Module on the top of the air conditioner, which can filter 99% of PM2.5 dirt particles, combined with ultraviolet lamps, can achieve 99.9% antibacterial effect. This design has been affirmed by the international highly indexed American Muse Design Award.

R&D Investment	in thousand NTS
----------------	-----------------

	2019	2020	2021	2022
TECO	574,548	555,889	567,739	542,554
Group Consolidate	1,179,300	1,027,177	1,112,911	1,144,263

Definition of New Product

	Motor and Drive	Home Appliance
New Product	Introduced within 3 years	Introduced within 2 years
Sales from new products (%)	5 %	6 %
Sales from Significantly improved products (%)	50 %	15%

TECO has integrated the strength of the R&D units that the Company established domestically and overseas and our market experiences in recent years. We have also enhanced our core business and invested in green industries proactively through industry-university-institute collaboration. We have launched a number of important R&D projects in the fields of PMSM, EV power components, robot arm drive motor, MV converter, sensor feedback free permanent magnet motor drive, precise servo motor, high speed spindle motor, IE5 synchronous reluctance motor and drive, advanced control algorithm, household and commercial air conditioner, and IoT applications.

To cope with the med-term and long-term R&D of new technologies and products and the short-term improvement of the cost-performance ratio, TECO's R&D team searches for external resources and increases the quantity of technology through consultation, collaboration and introduction of new technology.

In 2023, permanent magnet series will be the main new products for motors, and household air conditioners will be the main home appliances. Under the goal of reducing emissions, small household air conditioners will use environmentally friendly R32 refrigerants.

4.6 Supply Chain Engagement

TECO's supply chain is mainly distributed in Taiwan and mainland China, and its products are mechanical and electrical and home appliances under the TECO brand. The upstream of the mechanical and electrical supply chain is the bulk raw material supplier, and the downstream is the direct sales of major customers and the global distribution network. The upstream of the home appliance supply chain is raw material or key component suppliers, and the downstream is Taiwan's distribution network, malls and online e-commerce platforms.

To manage supply chain, TECO classifies suppliers by following definitions:

- Tier-1 suppliers: Suppliers who has direct trading contract for the bulk material (including single-source material) suppliers and within top 80% transaction amount of each factory in the current year.
- Non- Tier-1 suppliers: Suppliers who is original manufacturer but selling product to TECO through Tier-1 suppliers in the current year.
- Significant suppliers: Suppliers who has negative ESG impact and within top 80% transaction amount
 of each factory in the current year.

The total purchase from Tier-1 suppliers is about NT\$6.78 billion, of which the purchase amount from significant Tier-1 suppliers is about NT\$3.55 billion, accounting for about 52.4% of the total procurement.

Total number of Tier-1 suppliers	113
Total number of significant suppliers in Tier-1	74
% of total spend on significant suppliers in Tier-1	52.4%
Total number of significant suppliers in non Tier-1	9
Total number of significant suppliers (Tier-1 and non Tier-1)	83

Supplier Business Conduct

In order to ensure that suppliers fulfill their corporate social responsibilities, TECO has not only demanded suppliers to provide competitive quality, delivery date and technology by implementing the appraisal system, other indepth management measures have been applied, including: formulation of the supplier CSR clause, establishment of the supplier appraisal form, strategy to increase the ratio of local procurement, as well as the signing of "Prohibited /Restricted Substance Guarantee," "Declarations of Non-Use of Conflict Minerals" and "Letter of Commitment to Human Rights and Environmental Sustainability." In 2022, the "Supplier Code of Conduct" was newly added, and suppliers will be required to comply with it when signing or changing contracts. By regularly reviewing the supplier's economic, social, and environmental practices, TECO can ensure consistency with the supplier's code of conduct and avoid potential conflicts with sustainability-related requirements.



Download page of related document

Supplier Management and Indicators

TECO screens suppliers through the four aspects of environment, society, corporate governance, and operational performance (as shown in the table below), which is part of the TECO supplier assessment form, and all suppliers (100%) are required to carry out Appraisal and counseling, to confirm the status, ability and potential of the supplier and the needs to improve operational performance.

The quality control team supervises each business department to formulate the "Third Party Supplier Assessment Implementation Procedure" as a sustainable risk and assessment operation. Identifies negative ESG in accordance with national regulation risks, industry specific risks, or business risks (as shown in the table below). If any of the first six items do not meet the TECO's specifications, it is regarded as a significant supplier who has negative ESG risks.

The ESG Office is one of the key departments to supervise ESG implementation. ESG Office head, equivalent to CSO, is the highest decision-maker for suppliers' ESG strategy.

Definition of ESG high risk			
Risk #1	Wastes, water, gas emission and waste management process should comply with regulations.	Environment	National Regulation Risk
Risk #2	Was there any major occupational safety issues or cases?	Environmental and Social	Industry Specific Risks
Risk #3	Are there any process to handle harmful materials (for example RoHS & REACH) and how to store and report the usage of chemical material?	Environment	Product Specific Risks
Risk #4	Does the supplier violate social responsibilities related to labor human rights?	Social	National Regulation Risk
Risk #5	Does the supplier violate corporate governance and integrity management code?	Governmence	National Regulation Risk
Risk #6	Does the supplier implement measures to reduce greenhouse gas emissions?	Environment	Industry Specific Risks
Risk #7	Business performance indicators such as delivery capabilities, quality control, stability, and cost-effectiveness.	Business	Industry Specific Risks

Supplier Audit Procedure

Before trading

TECO ensures suppliers meet relevant quality, environmental, safety and health criteria and their products conform to green management and control. TECO has actively assisted its suppliers to improve their quality by obtaining ISO 9001, TS16949 international certifications. It has also demanded suppliers to design green, eco-friendly products, as well as implement ISO 14001, ISO 45001 or other hazardous substance control capabilities.

Contract signing

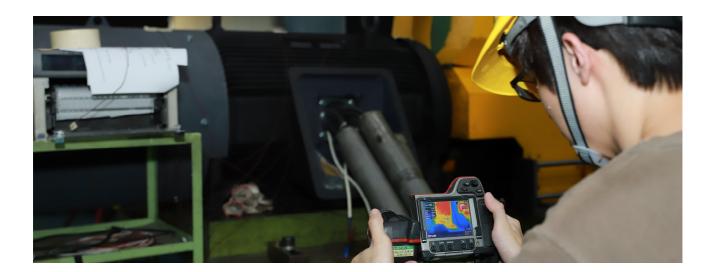
Signs the "Letter of Commitment to Human Rights and Environmental Sustainability" which allows TECO to terminate the contracts if any violation of social commitment is discovered. Signing rate reaches 99%

On-site audit

For new or high-risk, tier 1 or critical suppliers identified through risk identification, TECO forms evaluation teams through in-plant R&D, quality control, manufacture, procurement, safety and environmental, and audit related personnel to perform the onsite audit.

During trading period

All suppliers are assessed and audited every three years, and those with better ESG performance are considered as priority partner for continuous cooperation. If the key items or the minimum scoring standards cannot be met, corrective measures for non-conformities will be issued to suppliers, whom must submit a corrective report based on the actual situation within 30 days after receiving notice. After TECO reviews, the item will be included in follow up audit. The contract can be terminated to ensure compliance with TECO norms and identified potential risks if the criteria still can't be reached.



Supplier Evaluation Scoring Table

Items	Weighting	Ratio	ESG	Responsible Unit	Description
Marketing Process	15	4.4%	G	Procurement	Encompasses business conduct principles
Design & Development Process	41	12.0%		R&D	Encompasses schedule control and design capabilities
Document & Data Management	20	5.9%		QC	Encompasses document life cycle management and audit efficiency
Operation Management	10	2.9%	G	Procurement	Encompasses organizational duties and responsibilities and monitoring mechanism
HR & Environmental Safety	38	11.1%	E, S	Health & Safety	Encompasses ISO management, pollution control, water and energy conservation, labor rights, regular communication, prohibition of forced labor and child labor, and discrimination
Production Management	14	4.1%		Production Management	Encompasses production scheduling management and handling of emergencies
Procurement Process	30	8.8%	E, G	Procurement	Encompasses supplier evaluation system and control of prohibited substances and conflict minerals
Warehousing Process	23	6.7%		Production Management	Encompasses MRP system, control of non-conforming materials, and storage criteria management
Equipment Management	21	6.2%		Production Technology	Encompasses maintenance, spare part management, and mold life cycle management
Measuring Equipment	21	6.2%		QC	Encompasses calibration management, lab personnel control, and MSA analysis
Process Control	33	9.7%		Production Technology	Encompasses relevant SOP, rework management, and on-site 5S management
Quality Control	54	15.8%		QC	Encompasses quality assessment, sampling management, authorities and responsibilities in the handling of non-conforming items, five core management tools, and technician certificates
Internal Auditing Process	7	2.1%	G	QC	Encompasses audit plans and tracking of corrective actions for detected anomalies
Continued Improvements	14	4.1%		QC	Encompasses continued improvement of SOP and linkage to prevention of recurrence and control plans



Evaluation	Criteria	
	Quality Control \geq 80 and	
Qualify	All other items \geq 70 and	
	Critical items \geq 80	
Conditional	Quality Control \geq 70 and	
Conditional	All other items \geq 60 and	
Qualify	Critical items \geq 70	
	Quality Control < 70 or	
Disqualify	Any item < 60 or	
	Critical items < 70	

- Critical items are those specifically important to said vender, for example, failure items from last evaluation.
- For critical and tier one venders, TECO evaluates once every three years.
- ESG related weighting shares 29.3%



In the aspect of corporate social responsibility, TECO sets "Labor Human Rights Social Responsibility" and "Environmental protection" as top two assessment items.

ESG Goals	Management Strategy		
Labor Human Rights Social Responsibility	Ensure that all suppliers treat employees in accordance with TECO's human rights expectations	 Suppliers that employ child labor (under 15 years of will be listed as unqualified suppliers and terminate trading. Suppliers should have ISO45001. List labor human rights as one of the assessment items. "Letter of Commitment to Human Rights and Environmental Sustainability" must be signed with procurement contract. 	ld)
Environmental protection	 Select environmentally friendly suppliers. Guide suppliers to improve energy saving and emission reduction 	 Suppliers should have ISO14001. List environmental protection and emission status a the assessment items. "Letter of Commitment to Human Rights and Environmental Sustainability" must be signed with procurement contract. 	S

2022 Supplier Assessment Result

TECO audits suppliers once every three years and conducts a two-stage evaluation for key (central purchase) suppliers. In the first stages whether the supplier has its own ESG system or ISO certification is identified, and at the same time screening is carried out according to its category of manufacturing or trade. The second stage of evaluation is carried out after the identification of high-risk suppliers in the first stage. In the second stage, TECO's official supplier rating scale is used for evaluation, of which ESG accounted for 29.3%



Supplier GHG Inventory Assessment Results

In 2022, a total of 57 suppliers have conducted social and environmental assessments (including 44 significant suppliers). There is no negative impact found in social assessment, however, not performing GHG inventory is identified as significant environmental negative impact among SME suppliers. There is no trading relationship termination from failure ESG engagements.

Total number of suppliers assessed. (For GHG Inventory) 2022 target 35% (40)	57
% of significant suppliers assessed (Who don't not have GHG data)	68.67%
Number of suppliers assessed. (Need to conduct GHG)	8
% of suppliers without GHG but agreed on improvement plan	100%
Number of suppliers conducted GHG	0

For the significant suppliers identified with negative ESG impacts, TECO coached 8 suppliers with technical knowhow to carry out ISO14064 greenhouse gas inventory training programs, and taught the inventory on site, completed the greenhouse gas inventory statistics, and made it the key goal of subsequent emission reduction and improvement to reduce ESG risks. 8 internal training sessions were hold with 34 hours in total.

This supplier training program was launched in May 2022, and the 8 significant suppliers completed the greenhouse gas emission inventory by the end of 2022, which will be the key goal of subsequent emission reduction improvement, and TECO will continue to conduct supplier inventory in 2023 Counseling and conducting energy-saving improvements, and continuously observing whether they have implemented the new year's inventory and emission reduction, so as to help suppliers reduce ESG risks and improve suppliers' sustainable management capabilities.

Coverage and progress of suppliers with Capacity Building Programs

Total % of significant suppliers supported in corrective action plan implementation. 2022 target 10% (98)	8 (100%)
% of significant suppliers supported in Capacity Building Programs 2022 target 50% (8)	8 (9.6%)

TECO holds sustainable supply chain forum and guides SMEs to understand ESG trends, design emission reduction actions, access to ESG benchmarks against peers, experience sharing and to carry out GHG inventory under limited resources. 2 sessions in 2022 (68 joined) and 1 session in the first quarter of 2023 (37 joined) took place. About 105 small and medium-sized suppliers from various business divisions were invited to carry out emission reduction publicity and factory counseling.

For TECO internal buyers, 3 training sessions were offered to build up employee's knowledge and capability. All employees can learn to conduct ESG course lectures though on-line training platform to improve awareness of sustainable supply chains and strengthen supervision and capability to conduct supplier assessments.



Hazardous Substance Policy and Material Management

Implement the management of the prohibition of environmentally harmful substances. In addition to choosing conflict-free metals as raw materials for each product design stage, a hazardous substance management mechanism is also established to clearly declare that the company, suppliers, contractors, and partners shall follow. TECO promises that by 2023, 100% of motors and home appliances and their raw materials comply with international mandatory regulations and management.

Regulatory Trends	Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive, (RoHS), Registration, Evaluation, Authorization and Restriction of Chemicals, (REACH) must be included in the management measures at least one year before implementation.
Management Mechanism	The production sites are all in compliance with the group's management measures for prohibiting/restricting the use of environmentally hazardous substances, and the subsidiaries and affiliated companies have consistent implementation standards as well. Raw materials, parts, processed products, and consumables must be followed. At present, 10 categories of prohibited/restricted hazardous substances are controlled, covering non-steel, steel, plastic packaging, paper packaging, wood packaging, foam packaging and process chemicals.
Renew and Implementation	When there is a major change in the external norms, it will be discussed across business departments and re-promulgated. The frequency is about once a year.
Disclosure	All business groups follow TECO policy, and fully control 10 categories of prohibited/restricted hazardous substances.

Non-use of conflict mineral commitment

TECO has formulated a "Declaration of Non-Use of Conflict Minerals" to ensure the proper handling of conflict mineral issues. Suppliers are required to conduct detailed surveys of supply chains to ensure that metals such as Gold (Au), Tantalum (Ta), Wolfram (W), Cobalt (Co), and Tin (Sn) are not acquired from non-governmental military groups, illegal organizations, and mining areas in the conflict zones of the Republic of Congo or through smuggling. By effectively identifying and tracing the source of materials, TECO is able to prevent the use of conflict minerals in its production. Metals exported by the following nations do not meet conflict-free norms as determined by the US Security Council: DRC, Rwanda, Uganda, Burundi, Tanzania, Kenya.

100% procurement of non-conflict raw materials

- Copper and aluminum must be purchased by TECO suppliers from the London Metal Exchange (LME).
- Steel is mainly purchased from the China Steel and Nippon Steel and Sumitomo Metals Corporation, while iron ore is imported from Australia and Brazil.

Summary and Appendix

Let the World See Taiwan

TECO has been recognized by international sustainability evaluation institutions in three consecutive years and included in DJSI Emerging Markets Index and S&P Global Sustainability Yearbook, thanks to its outstanding performance in innovative management, talent cultivation, and supply chain management, the only enterprise included in the Electrical Components & Equipment category of DJSI Emerging Markets Index.

Under the pledge of "10-year 50% emission reduction," TECO has aimed to halve emission by 2030, according to which it will kick off global production base emission reduction plan this year, including inauguration of expanding PV power devices at its factory premises worldwide, so as to enhance the group's share of renewable-energy consumption, on top of establishment of sustainable supply chain, via assistance for smart and medium enterprises to conduct greenhouse-gas inventory and emission reduction. TECO will launch internal carbon price system this year, in the hope of spurring employees to actively carry out carbon abatement plan and imprint net zero emission concept in their minds deeply. In social engagement, to have the concept of energy conservation and emission reduction to take root in our society, TECO holds "Green Innovation Competition" for high and elementary school students, in the hope of implanting earth sustainability idea among them. TECO has also organized International Competition for Net Zero Emission Technology" for college students, encouraging engagement in R&D on emission reduction technology and passing on the mission of net zero emission sustainability. Moreover, TECO holds "TECO Award" for outstanding Taiwan figures in science/technology and humanity, for their contribution to build a progressive society with equal emphasis on both fields.

In conclusion, TECO will continue to uphold the concept of sustainable operations and implement corporate governance standards to create a sustainable working environment for employees, provide services in line with ESG value to customers, and bring the best interests to shareholders.



5.1 Participation in External Organizations and Initiatives

TECO actively participates in the activities of industry associations and non-profit organizations, and regularly lobbys proposals to the government on industrial upgrading, net-zero transformation, energy policies, fiscal and taxation policies, human resources, and business environment, hoping to assist the government in planning relevant policies. In 2022, TECO contributed a total of NT\$6,780,335 to tax-exempt groups such as industrial associations and non-profit organizations. The expenses were membership fees and event funding sponsorship. No monetary contributions were made to political groups.

Top 2 Topics for engagement

Transformation and upgrading of the electromechanical industry.

TECO is one of the members of the Epoch Foundation, and TECO CEO serves as the director.

Epoch Foundation promotes industry-university cooperation, support start-ups, and cultivate talents for digital transformation and energy transformation needed in the future. In 2022 it held 11 physical lectures and 20+ online lectures, covering supply chain management, data management, digital manufacturing, quantum sensing technology, life sciences, nanotechnology, computing technology, Energy, sustainable development, innovative financial technology, organizational innovation and medical and health technology, etc.

2. Sustainability development

TECO is one of the members of the Center for Corporate Sustainability, or CCS, under Taiwan Institute for Sustainable Energy, or TAISE Foundation, and TECO chairman serves as the director.

TAISE continues to pay attention to climate change, sustainable energy, corporate sustainability, and Sustainable Development Goals (SDGs), etc.

No political groups or lobby groups

According to Article 11 of TECO integrity management code (prohibition of providing illegal political contributions): employees of the company are not allowed to donate in the name of the company or other affiliated organizations or sponsor political candidates in other ways; charitable donations: any charitable donations made by company employees When sponsoring or sponsoring, the purpose of the donation should be confirmed, and bribery in disguise should not be allowed.

Lobbying and Governance of Trade Associations

TECO commits to incorporate climate change transition risks into management, the 1.5°C target is set as baseline. The scope of this commitment applies to TECO and all its subsidiaries. All climate initiatives should be in line with the Paris Agreement.

ESG office CEO, equivalent to CSO, is responsible for the implementation of the company's climate change lobbying policies and practices, and report directly to the chairman on a monthly basis on the implementation of sustainable development goals and policies. Functional committee under board of directors (Corporate Governance and Sustainability Committee) is the highest decision-making committee.

Regarding the participation in lobbying activities and the joining (withdrawing) of important industry associations, the relevant departments first check whether the purpose or activity content of the organization is consistent with the company's position and participate after the approval of the heads of each business department. Lobbying activities related to climate change need to be reviewed by the ESG Office and the implementation is supervised by the "Corporate Governance and Sustainability Committee."

To ensure direct and indirect climate change lobbying in all regions is in line with 1.5°C targets, the annual monitoring and review procedures are as follows:

- Through the investigation of membership and interested parties, confirm the important industry associations that should be included in the scope of review.
- Review whether the associations are in line with the 1.5°C goal based on publicly disclosed information.
- Confirm the assessment results with the regional business team.
- Seek advice from third-party consultants.
- Submit the annual review report to "Corporate Governance and Sustainability Committee" through ESG Office.
- Share the evaluation result with reviewee.
- Invite stakeholder feedback on the company's climate change lobbying policies, positions and activities.

Definition of important industry associations are:

- Membership fee is higher than NTD 10k.
- TECO holds important position in the association.
- Climate change related association.

In the event of a disagreement, TECO shall publicly declare to the association with "violate of the Paris Agreement." If the association does not revise its climate change policy stance within one month, TECO shall withdraw from the association, terminate membership and withdraw financial support.

Initiatives and lobby made in 2022.

The ESG Office conducts annual review in Q1 2023, and the results are as followings:

Association or	contents	Public
Organization		information
CW magazine	According to "Temperature Rising Index for Pathways" conducts by	https://csr.cw.co
天下雜誌永續會	one of the leading magazines in Taiwan (CW magazine). TECO with	m.tw/trips/trips/
	the goal of 50% emission reduction in 2030, wins outstanding	11332202
	performance that controls temperature rising under 1.479°C	
CNAIC	Launch the "1.5°C Climate Action Declaration" (2022.10.7): Echoing	https://cnaic.org
中華民國工商協	global net zero emissions, encouraging members to take effective	
進會	carbon reduction actions	/pages/climate
CNAIC	"Joint Meeting of Industrial Improvement and Transportation Research	
中華民國工商協	Committee" (2022.11.17): It is recommended that the government	https://cpais.org
進會	accelerate the promotion of motor energy efficiency upgrades and	https://cnaic.org /articles/0c1009
	formulate a more comprehensive policy for the electrification of	/articles/0c1009
	vehicles.	
TEEMA	Meeting with the Ministry of Economic Affairs (2023.3.17): The	
電機電子工業同	government is requested to build a testing and verification environment	
業公會	platform (electric vehicle/battery system), preferential tax rebate	n/a
	policies for green energy products, and corporate carbon reduction	
	incentives.	
TEEMA	Meeting with the Executive Yuan (2023.3.27): It is recommended that	https://www.tee
電機電子工業同	the government provide policy incentives to accelerate the penetration	ma.org.tw/exhibi
業公會	rate of high-efficiency motors (IE4) and improve the design and	tion-
	production technology of ultra-high-efficiency motors (IE4 and above)	detail.aspx?infoi
	for domestic motor manufacturers	<u>d=42562</u>
CNAIC	It is recommended that the Executive Yuan accelerate the upgrading of	https://cpaic.cra
中華民國工商協	motor energy efficiency to IE4 and assist in the implementation of	https://cnaic.org
進會	national energy conservation and carbon reduction goals	/articles/899d5d

Beside above, TECO is currently promoting low-carbon factory solutions to help customers upgrading to high-efficiency motors, but it is accompanied by a large number of second-hand motors to deal with. In addition to selling old motors as scrap hardware to recycling systems, TECO propose to initiate a recycling mechanism for second-hand motors with our peers in 2023 or afterward. Hoping to establish a recycling and secondary recycling joint venture to serve customer needs and meet social expectations for ESG.

TECO participation list:

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Topic of Concern	Association Name	Fee NTD	Roles
	Epoch Foundation (Epoch)	300,000	Director
	Taiwan Electrical and Electronic Manufacturers' Association (TEEMA)	135,524	Director
	Taiwan Machinery Industry Association (TAMI)	52,800	Member
	Electric-Electronic and Environmental Technology Development Association of R.O.C. (CED)	130,500	Chairman
	Chinese National Association of Industry and Commerce, Taiwan (CNAIC)	335,000	Honor Chairman
Industrial Transformation	Chung-Hwa Railway Industry Development Association (CRIDA)	40,000	Director
and Upgrading	Taiwan Excellent Brand Association (TEBA)	40,000	Director
	Taiwan Power Electronics Association (TaiPEA)	30,000	Director
	Taiwan Electrical Appliance Association (TEPA)	20,000	Director
	Taiwan Automation Intelligence and Robotics Association (TAIROA)	25,000	Director
	Taiwan Refrigeration and Air Conditioning Engineering Industry Association (TRAEA)	10,000	Member
	Taiwan Foundry Industry Association (TCIA)	21,600	Member
	Institute for Biotechnology and Medicine Industry	20,000	Member
Sustainable	Center for Corporate Sustainability (TAISE)	280,000	Director
development (Climate change)	Business Council for Sustainable Development of Taiwan (BCSD Taiwan)	120,000	Honor Chairman
(Olimate change)	Taiwan Smart City Development Association (TCSA)	10,000	Member
	Taiwan Wind Industry Association (TWIA)	20,000	Director
	Taiwan Wind Energy Association (TWEA)	20,000	Member
	Association of Atmosphere Protection in Taiwan (AAPT)	6,000	Director
Renewable /Clean Energy	Photovoltaic Power System Business Association (PVGSA)	20,000	Member
(Climate change)	Taiwan Solar Photovoltaic Industry Association (TPVIA)	10,000	Member
	Taiwan Smart Grid Industry Association (TSGIA)	10,000	Director
	Taiwan Smart Electric Vehicle and Green Energy Technology Association (TEGA)	35,000	Member
	Chinese International Economic Cooperation Association (CIECA)	50,000	Director
International	Taiwan-Turkey Business Association (TTBA)	25,000	Honor Chairman
Business	Taiwan India Business Association (TIBA)	15,000	Honor Chairman
	R.O.C. East Asian Economic Association (EAEA)	50,000	Honor Chairman
	Cross Strait CEO Summit	100,000	Director
Local Bussiness	Wuxi Xinwu District Taiwan Compatriots Investment Enterprise Association	210,201	Member
	Nanchang Taiwan Compatriots Investment Enterprise Association	97,689	Member
and Culture	Taiwan Science Park Science Industry Association	108,000	Member
	Taiwan Creative Arts Industry Development Foundation	200,000	Founder
	Top Ten Outstanding Youth Foundations	375,000	Vice Chairman

5.2 GRI Indicators Index in accordance

Statement of use	TECO has reported in accordance with the GRI Standards for the period
	January 1st to December 31st 2022
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	Not applicable

General d	isclosures	Page			
GRI 2: Ge	GRI 2: General Disclosures 2021				
2-1	Organizational details	7			
2-2	Entities included in the organization's sustainability reporting	7			
2-3	Reporting period, frequency and contact point	2			
2-4	Restatements of information	2			
2-5	External assurance	2			
2-6	Activities, value chain and other business relationships	29 (Motor value chain and GHG inventory), 100			
2-7	Employees	66			
2-8	Workers who are not employees	As contractors and sub-contractors (including Security, cleaning, catering, in-plant engineering contracting) Total number in TECO Group are 135,301. Other workers who are not employees (agency workers, home workers, interns, self-employed persons, and volunteers) to be included in the future.			
2-9	Governance structure and composition	93			
2-10	Nomination and selection of the highest governance body	94			
2-11	Chair of the highest governance body	95			
2-12	Role of the highest governance body in overseeing the management of impacts	95			
2-13	Delegation of responsibility for managing impacts	95			
2-14	Role of the highest governance body in sustainability reporting	95			
2-15	Conflicts of interest	95			
2-16	Communication of critical concerns	96			
2-17	Collective knowledge of the highest governance body	96			
2-18	Evaluation of the performance of the highest governance body	96			
2-19	Remuneration policies	96			
2-20	Process to determine remuneration	94			
2-21	Annual total compensation ratio	The ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees is 9.2.			

General disclosures		Page
GRI 2: Ge	neral Disclosures 2021	
		 the ratio of the percentage increase in annual total compensation for the organization's highest-paid individual to the median percentage increase in annual total compensation for all employees is -11.9% The salary is calculated according to the national accounting standards. CEO is changed in 2022, and the total annual salary is lower than the previous CEO.
2-22	Statement on sustainable development strategy	4
2-23	Policy commitments	26, 65, 81
2-24	Embedding policy commitments	27
2-25	Processes to remediate negative impacts	10
2-26	Mechanisms for seeking advice and raising concerns	11
2-27	Compliance with laws and regulations	100
2-28	Membership associations	118
2-29	Approach to stakeholder engagement	19
2-30	Collective bargaining agreements	69

Material topics		真碼
GRI 3: Material Topics 2021		
3-1	Process to determine material topics	10
3-2 List of material topics		19
3-3	Management of material topics	22

	TECO Material Topics	GRI Indicators in accordance
1	Product Decarbonization	GRI 201 Economic Performance 2016
		GRI 301 Materials 2016
		GRI 302 Energy 2016
2	Low Emission Factory Solution	GRI 201 Economic Performance 2016
		GRI 203 Indirect Economic Impacts 2016
3	50% Emission Reduction in 2030	GRI 305 Emissions 2016
4	Clean Technology Engineering	GRI 302 Energy 2016
5	Internalize the New Norm	GRI 305 Emissions 2016
6	Employee Life and Safety	GRI 401 Employment 2016
		GRI 402 Labor/Management Relations 2016

	TECO Material Topics	GRI Indicators in accordance
		GRI 403 Occupational Health and Safety 2018
		GRI 404 Training and Education 2016
		GRI 405 Diversity and Equal Opportunity 2016
7	Supply Chain Decarbonization	308-2 Negative environmental impacts in the supply chain
		and actions taken.
		414- 2 Negative social impacts in the supply chain and
		actions taken
8	Material Risk Mitigation	TECO's own topic
9	Solar Power Generation	GRI 302 Energy 2016
10	Worldwide Supply Chain Configurations	TECO's own topic

TOPIC		頁碼
Those that	are marked with ★ are material topics; others are voluntary disclosure topics	
GRI 201★	Economic Performance 2016	
201-1	Direct economic value generated and distributed	8
GRI 203★	ndirect Economic Impacts 2016	
203-1	Infrastructure investments and services supported	7
203-2	Significant indirect economic impacts	17
GRI 301★	Materials 2016	
301-1	Materials used by weight or volume	59
301-2	Recycled input materials used	59
GRI 302★	Energy 2016	
302-1	Energy consumption within the organization	49
302-5	Reductions in energy requirements of products and services	38
GRI 305★	Emissions 2016	
305-1	Direct (Scope 1) GHG emissions	46
305-2	Energy indirect (Scope 2) GHG emissions	46
305-3	Other indirect (Scope 3) GHG emissions	47
305-4	GHG emissions intensity	46
305-5	Reduction of GHG emissions	46
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	51
GRI 306 : 1	Vaste 2020	
306-1	Waste generation and significant waste-related impacts	52
306-2	Management of significant waste-related impacts	52
306-3	Waste generated	52
306-4	Waste diverted from disposal	52
306-5	Waste directed to disposal	52

TOPIC		頁碼
Those that	are marked with * are material topics; others are voluntary disclosure topics	
GRI 308 :	Supplier Environmental Assessment 2016	
308-2★	Negative environmental impacts in the supply chain and actions taken	107
GRI 401★	Employment 2016	
401-1	New employee hires and employee turnover	73
401-2	Benefits provided to full-time employees that are not provided to temporary or parttime employees	76
401-3	Parental leave	77
GRI 402★	Labor/Management Relations 2016	
402-1	Minimum notice periods regarding operational changes	30 days
GRI 403★	Occupational Health and Safety 2018	
403-1	Occupational health and safety management system	81
403-2	Hazard identification, risk assessment, and incident investigation	81
403-3	Occupational health services	81
403-4	Worker participation, consultation, and communication on occupational health and safety	84
403-5	Worker training on occupational health and safety	82
403-6	Promotion of worker health	82
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	83
403-8	Workers covered by an occupational health and safety management system	83
403-9	Work-related injuries	84
403-10	Work-related ill health	84
GRI 404★	Training and Education 2016	
404-1	Average hours of training per year per employee	70
404-2	Programs for upgrading employee skills and transition assistance programs	71
404-3	Percentage of employees receiving regular performance and career development reviews	71
GRI 405★	Diversity and Equal Opportunity 2016	
405-1	Diversity of governance bodies and employees	66, 91
405-2	Ratio of basic salary and remuneration of women to men	66
GRI 414 :	Supplier Social Assessment 2016	
414-2 🛨	Negative social impacts in the supply chain and actions taken	111

5.3 TCFD Index

Item Contents and page number

0	Describe the board's oversight of climate related risks and opportunities	27
Governance	Describe management's role in assessing and managing climate-related risks and opportunities.	27
	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	29
Strategy	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	33
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	71
	Describe the organization's processes for identifying and assessing climate-related risks	27
Risk Management	Describe the organization's processes for managing climate-related risks	27
·	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	100
	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	28
Metrics & Targets	Disclose Scope 1, Scope 2, and if appropriate Scope 3 greenhouse gas (GHG) emissions, and the related risks.	46
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	29

5.4 SASB Index

Topic	Topic Code Accounting Metric		Category (Unit)	Page
Energy Management	RT-IG-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative (GJ, MWH)	49
Employee Health & Safety	RT-IG-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative (Rate)	82
	RT-IG-410a.1	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Quantitative (KL)	51
	RT-IG-410a.2	Sales-weighted fuel efficiency for non- road equipment	Quantitative (KL)	51
Fuel Economy &	RT-IG-410a.3	Sales-weighted fuel efficiency for stationary generators	Quantitative (KL)	51
Emissions in Use-phase	RT-IG-410a.4	Sales-weighted emissions of: (1) nitrogen oxides (NOx) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) another non-road diesel engines	Quantitative (ton, KL)	51
Materials Sourcing	RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	113
Remanufacturing Design & Services	RT-IG-440b.1	Revenue from remanufactured products and remanufacturing services	Not avaiable	Not avaiable

Based on SICS Industry: Industrial Machinery & Goods

5.5 EU Taxonomy

Taxonomy guides investors locating funds into economic activities that contribute to sustainable development. At present, most sustainable finance classifications adopt the "EU Taxonomy". The six environmental objectives of the EU Sustainability Taxonomies are: (1) climate change mitigation, (2) climate change adaptation, (3) The sustainable use and protection of water and marine resources, (4) The transition to a circular economy, (5) Pollution prevention and control, and (6) The protection and restoration of biodiversity and ecosystems. Company's economic activities must make a significant contribution to at least one of the six major environmental objectives before it can be considered as "Taxonomy-Eligible". In addition, it can be regarded as "Taxonomy-Aligned" if it does not cause significant harm to the other five items. Before the Taiwanese government has its own Sustainability Taxonomies, TECO adopts EU Sustainability Taxonomy with self-declared TECO GO ECO low-carbon products and services classification.

Product revenue to EU Taxonomy

Business Group	Taxonomy Aligned	Taxonomy Eligible	Not Eligible
Green Mechatronic Solution (GM)	 System and software that enable emission management. System that enables carbon removal. 	 High-voltage motors with efficiency above 95% Mid/Low-voltage motors with efficiency above IE3. Electric Vehicle powertrain products. 	Other products and services
Air & Intelligent Life Business (AI)	System and software that enable emission management	 Home Appliance product with first degree energy saving or related certifications 	Other products and services
Intelligence Energy Business Group (IE)	 Constructions for renewable engery generation or storage. System that adopts carbon neutral fuels 	Offshore wind power station, grid resilience, green building constructions	Other products and services

Economic activities	Business Group	Total Revenue (NTD B)	(1) climate change mitigation	(2) climate change adaptation	(3) water resources	(4) Circular economy	(5) Pollution	(6) Biodiversity
3.3 Manufacture of low-carbon technologies for transport	GM	0.1	0.1%					
3.5 Manufacture of energy efficiency equipment for buildings	Al	3.8	6.5%					
3.6 Manufacture of other low-carbon technologies	GM	22.8	39.2%					
4.9 Transmission and distribution of electricity	IE	2.4	4.0%					
4.10 Storage of electricity	IE	0	0					
8.2 Data-driven solutions for GHG emissions reductions	GM	0	0					

Business activities and organization related to 8.2 and 4.10 were planned in 2022 and are implementing in 2023. Revenue is expected to be generated as well.

CAPEX to EU Taxonomy

Business Group	Taxonomy Aligned	Taxonomy Eligible	Not Eligible
All Groups	Investment and M&A in	Investments in new products,	Investments in general
	creating business that make	new technologies, new	(maintenance/ retirement/
	significant contributions and	processes, safety and	factory repair), expansion of
	do no harm to the other	environmental equipment,	production capacity, efficiency
	environmental objectives.	automation and intelligence	improvement, quality
		equipment	improvement, IT equipment

Economic activities	Business Group	Total CAPEX (NTD M)	(1) climate change mitigation	(2) climate change adaptation	(3) water resources	(4) Circular	(5) Pollution	(6) Biodiversit
3.3 Manufacture of low-carbon technologies for transport 3.6 Manufacture of other low-carbon technologies	GM	144.6	34.3 %					
3.5 Manufacture of energy efficiency equipment for buildings	Al	4.8	1.1 %					
4.9 Transmission and distribution of electricity	IE	37.5	8.9 %					

OPEX to EU Taxonomy

Business Group	Taxonomy Aligned	Tax	onomy Eligible	Not Eligible
All Groups	Expense on in business organization that make significant contributions and do no harm to the other environmental objectives.	•	Expense in R&D and sustainability related training. Expense to NGOs in sponsor and donation to sustainability related activities.	Other expense

Economic activities	Business Group	Total OPEX (NTD B)	(1) climate change mitigation	(2) climate change adaptation	(3) water resources	(4) Circular	(5) Pollution	(6) Biodiversit
3.3 Manufacture of low-carbon technologies for transport 3.6 Manufacture of other low-carbon technologies 3.5 Manufacture of energy efficiency equipment for buildings 4.9 Transmission and distribution of electricity	Entire TECO Group	1.2	14.6 %					

OPEX in all business units is presented as one (entire TECO group). It is because R&D, employee training, environment protection expense from factory sites, sponsor / donation to NGOs is managed by headquarter, not individual business groups.

5.6 Legal Compliance and Violations

Violations of occupational safety and health laws and regulations: 2022/10/26 Mainland China

Violation of laws and regulations: "The second paragraph of Article 41 of the Safety Production Law of the People's Republic of China"

Special operations personnel worked without certificates.

Penalty: RMB 74,000 (TWD 333,000, converted at an exchange rate of 4.5)

Countermeasures:

Provide training on special operation certificates to the whole plant and implement certificates for employment.

Violations of occupational safety and health laws and regulations: 2022/2/15 Taiwan

Violation of laws and regulations: "Occupational Safety and Health Facilities Regulations Article 27, Paragraph 1 and Occupational Safety and Health Law Articles 45 and 49"

There is no actual inspection of the temporary power consumption to perform piping operations.

The AC welding machine should have an automatic electric shock prevention device.

Penalty amount: NT\$30,000.

Countermeasures:

- 1. Confirm that the welding equipment has safety devices that complies with the regulations.
- 2. Immediately improve if unsafe behavior is found.

Violations of occupational safety and health laws and regulations: 2022/2/22 Taiwan

Violation of laws and regulations: "Article 281 Item 1 of the Occupational Safety and Health Facilities Regulations and Article 21 Item 1 of the Lifting Equipment Safety Regulations"

For high-altitude operations with a height of more than 2 meters, safety belts, safety helmets and necessary protective equipment should be used.

For stationary crane operations, people should be prevented from entering under the lifted objects.

Penalty amount: NT\$60,000.

Countermeasures:

- 1. Confirm that protective equipment such as seat belts and helmets should be used when working at heights.
- 2. Set up a warning area before the hanging operation and prohibit personnel from entering.

Violations of occupational safety and health laws and regulations: 2022/3/1 Taiwan

Violation of laws and regulations: "Occupational Safety and Health Act Article 27 Paragraph 1, Articles 45 and 49" Inadequate order to stop dangerous work indoors at a height of 2 meters or more, resulting in a fall accident. (Hospitalization for more than 1 day)

Penalty amount: NT\$100,000

Countermeasures:

- 1. Confirm the use of compliance, aerial work vehicles and construction frames
- 2. Immediately ask for improvement if unsafe behaviors are found.

Violations of occupational safety and health laws and regulations: 2022/5/18 Taiwan

Violation of laws and regulations: "Occupational Safety and Health Law Article 6 Paragraph 1, Articles 43 and 49" For construction operations with a height of more than 2 meters, there are no protective equipment. such as guardrails, covers or safety nets.

Penalty amount: NT\$30,000

Countermeasures:

- 1. Laying safety net rings and repairing safety railings.
- 2. Strengthen engineering safety and health management and education and training.

違反職安衛法令事項: 2022/6/28 台灣

Violation of laws and regulations: "Occupational Safety and Health Law Article 6 Paragraph 1, Articles 27, 43, 45 and 49"

For construction operations with a height of more than 2 meters (Basement plumbing room, 17th floor), there are no protective equipment such as guardrails, covers or safety nets. Not wearing helmet.

Penalty amount: NT\$130,000

Countermeasures:

- 1. Laying safety net rings and repairing safety railings.
- 2. Strengthen engineering safety and health management and education and training.
- 3. Immediately ask for improvement if unsafe behaviors are found.

Violations of occupational safety and health laws and regulations: 2022/8/18 Taiwan

Violation of laws and regulations: Article 26, Paragraph 1 of the Occupational Safety and Health Act

There are measures to prevent falling in air-conditioning installation works.

Penalty amount: NT\$100,000

Countermeasures:

- 1. Inform the contractor to comply hazards, occupational safety and health law and relevant safety and health regulations before construction.
- 2. Implement on-site patrol or supervision and punish any violations of safety-related regulations.
- 3. Require construction personnel to wear protective equipment.

Violations of occupational safety and health laws and regulations: 2022/11/8 Taiwan

Violation of laws and regulations: "Article 6, Paragraph 1 of the Occupational Safety and Health Act and Article 21 of the Facility Regulations"

A worker falls and gets injured at the workplace due to improper placement of cables on site.

Penalty amount: NT\$30,000

Countermeasures:

- 1. Place warning triangular cones
- 2. Post safety notes
- 3. Inform visitors with relevant safety precautions.

5.7 Third Party Certification and Assurance



Reference link for 3rd party assurance report and certificates, including ISO 14001, ISO 14064, ISO 14066, ISO 14067, ISO 45001 and AA1000 assurance letter for this report.







INDEPENDENT ASSURANCE OPINION STATEMENT

TECO Electric & Machinery Co., Ltd. 2022 Sustainability Report

The British Standards Institution is independent to TECO Electric & Machinery Co., Ltd. (hereafter referred to as TECO in this statement) and has no financial interest in the operation of TECO other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of TECO only for the purpose of assuring its statements relating to its sustainability report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by TECO. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to TECO only.

Scope

The scope of engagement agreed upon with TECO includes the followings:

- The assurance scope is consistent with the description of TECO Electric & Machinery Co., Ltd. 2022 Sustainability Report.
- The evaluation of the nature and extent of the TECO's adherence to AA1000 Accountability Principles (2018) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the TECO Electric & Machinery Co., Ltd. 2022 Sustainability Report provides a fair view of the TECO sustainability programmes and performances during 2022. The sustainability report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the TECO and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are fairly represented. The sustainability performance information disclosed in the report demonstrate TECO's efforts recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurors in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that TECO's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

— a top level review of issues raised by external parties that could be relevant to TECO's policies to provide a

- a top level review of issues raised by external parties that could be relevant to TECO's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 4 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments.
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).

Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness and Impact of AA1000AP (2018) and GRI Standards is set out below:

Inclusivity

This report has reflected a fact that TECO has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the TECO's inclusivity issues.

Materiality

TECO publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of TECO and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the TECO's management and performance. In our professional opinion the report covers the TECO's material issues.

Responsiveness

TECO has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for TECO is developed and continually provides the opportunity to further enhance TECO's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the TECO's responsiveness issues.

Impact

TECO has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. TECO has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization. In our professional opinion the report covers the TECO's impact issues.

GRI Sustainability Reporting Standards (GRI Standards)

TECO provided us with their self-declaration of in accordance with GRI Standards 2021 (For each material topic covered in the applicable GRI Sector Standard and relevant GRI Topic Standard, comply with all reporting requirements for disclosures). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the TECO's sustainability topics.

Assurance level

The moderate level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

Responsibility

The sustainability report is the responsibility of the TECO's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of Lead auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan

...making excellence a habit.™

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Statement No: SRA-TW-2022019

2023-06-14

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