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# 2014 TECO Corporate Social Responsibility Report



**TECO**

TECO GO ECO

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# 01

## About the TECO Corporate Social Responsibility Report

- 1.1 Reporting Process
- 1.2 Report Scope and Boundary
- 1.3 Reporting Principles and External Assurance
- 1.4 Production unit of the report

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# 02

## TECO's Commitment to Sustainability

- 2.1 Management Pledge
- 2.2 Honors

# About the TECO Corporate Social Responsibility Report

TECO Electric and Machinery Co., Ltd. has annually published a corporate social responsibility (CSR) report since 2010. The report provides information on the implementation and results of the company's sustainability strategy in the areas of environment (E), society (S), and governance (G), helping stakeholders to understand the company's efforts and commitment to improvement in ESG. Since 2012, the report has undergone a third-party professional assurance review. This review strengthens the report's credibility. It also provides a systematic basis for TECO in CSR development and setting improvement objectives, as well as underscores TECO's commitment to sustainable development.

## 1.2 Report Scope and Boundary

This report covers responses, specific measures and performance results related to major issues of concern to important stakeholders as determined by the company through materiality analysis. Until 2013, the report was limited in scope to the company's operations in Taiwan, including head office, factories and the TECO Technology Foundation. In 2014, the scope of the report was broadened to encompass company affiliates and subsidiaries, including Dongsheng Electric Co., Ltd.), TECO's main manufacturer of home appliances.

Data in the report on the company's ESG involvement and performance covers the period from January 1 to December 31, 2014. Financial figures are denominated in New Taiwan (NT) dollars. Environmental protection, health, and safety performance is expressed in internationally adopted indices.

## 1.3 Reporting Principles and External Assurance

The content and structure of the report are based on the Core Options of the G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI), with reference to the GRI G4 Content Index. PricewaterhouseCoopers (PwC) was commissioned to verify the report with limited assurance, based on the standards for "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" in the Assurance Standard Announcement No. 1 of the Republic of China (ROC). A verification statement is included as an annex.

## 1.4 Production unit of the report

The report was compiled by TECO CSR committee, available in both Chinese and English, and is posted on corporate website.

Frequency of publication: once a year

Last publication time: Dec. 2014

Contact: [csr@teco.com.tw](mailto:csr@teco.com.tw)

Corporate website: <http://www.teco.com.tw>

## 1.1 Reporting Process

1 Confirmation of report orientation (task force, reference standards, and verification standards)

2 Submission to CSR Committee for approval

3 Data collection

4 Compilation and production of report

5 Third-party assurance (limited assurance according to the ISAE3000 assurance standard for the current report)

6 Submission to CSR Committee for confirmation

7 Publication on company website

# TECO's Commitment to Sustainability

## 2.1 Management Pledge

Since its founding nearly six decades ago, TECO has supplied Taiwan and the world with high-quality motors developed with sophisticated R&D capabilities. Its progressive contribution in the industry can be seen everywhere, from high-profile national infrastructure to household appliances.

### Commitment to Sustainable Green Energy

In 2008, TECO embraced the "TECO GO ECO" vision in response to the increasing burden of industry on the environment. Product strategy was re-oriented around green technology development and a commitment to the development of green energy products. At every step, TECO has spared no effort in the development of green technology and new green energy. These efforts have achieved a number of important results. In the area of industrial products, TECO is developing high-efficiency motors. It led the industry in releasing IE4-compliant motors and has combined its inverter technology with other products to create energy-saving solutions that give customers new energy-saving choices. In addition to enhancing product efficiency, TECO has invested heavily in green energy development. Drawing on its industry-leading machinery integration capabilities, TECO was the first company in Taiwan to develop motors for electric vehicles (EVs). It is also a local pioneer in self-developed and produced wind turbine technology, positioning Taiwan as the world's eighth producer of large-scale wind turbines. TECO's green energy strengths are not only powering the company's sustainable development; they also respond to the needs of the green economy.

In 2014, TECO further elevated its green energy strengths into the realm of smart power. In line with the Internet of Things (IoT) trend, the company is integrating technologies across group subsidiaries and leading domestic brands in developing smart cloud air conditioning systems. The company also continues to raise the bar in product energy conservation and carbon emission reduction. Another initiative is the development of convenient home energy monitoring solutions with a user-friendly app interface. These systems integrate home appliances to optimize energy efficiency and create a more comfortable home living space. In

the industrial sector, TECO has developed smart motors with IoT technology enabling ubiquitous monitoring, helping plant managers to flexibly deploy equipment, schedule maintenance, and manage power supply. In all of these areas, TECO is advancing smart technology to provide customers with convenient and efficient green energy solutions.

### Managing with Integrity, Implementing Corporate Governance

At TECO, the pursuit of revenue and profit goes hand-in-hand with a commitment to management with integrity, implementation of corporate governance, fulfillment of social responsibility, and the pursuit of sustainable operations. By faithfully playing its role of corporate citizenship, the company aims to achieve its goal of sustainable development. In the area of corporate governance, TECO has developed an internal platform for notification of directives from the securities authority to proactively keep abreast of new developments and align TECO's corporate governance practices with the times. The company is also planning a "Corporate Governance Management Platform" to systematically monitor TECO's progress in corporate governance. TECO has also formed a solid board of directors. Two functional committees—an Audit Committee (est. in 2012) and Compensation Committee (established in 2011)—were established under the board to help directors fulfill their oversight responsibilities. Outside directors account for about 67% of the board membership, increasing the board's objectivity and independence; and the board's diversity is further broadened by the appointment of female directors. Attendance at board meetings is also high. In 2014, 92% of the directors personally attended meetings, strengthening the board's ability to effectively supervise and understand the implementation of business plans.

TECO also highly values communication with stakeholders, information disclosure, openness and transparency. The company has established both public and direct channels for regular and



non-scheduled communication with stakeholders and information announcements. In 2014, TECO earned the highest rating (A++) in the 12th Information Disclosure Evaluation of Public and OTC Companies, improving significantly on the previous year's showing. TECO also ranked among the top 5% of enterprises in the First Corporate Governance Evaluation conducted by the Taiwan Stock Exchange Corporation. These honors underscore TECO's achievements in corporate governance and transparency.

### Putting People First, Promoting Science and Culture

TECO has always believed in giving back to society. In 1993, the company established the TECO Technology Foundation with a mission to promote "technology, forward-looking vision, and progress." The foundation has fostered technological and cultural development in Taiwan through support for creativity and humanistic education. Among these initiatives is the TECO Award, held annually for several decades. The foundation also holds the Green Tech Competition to motivate green tech research by young people around the world. In addition, the foundation has launched the "Exclamation Point" sustainable teaching and learning in aboriginal communities, helping to bring Taiwan's indigenous culture onto the international stage. From 2014, TECO has also provided employee leave for volunteer work and organized a company volunteer club. Through its group resources and employee participation in community service activities, TECO aims to be a force of good in society.

Sustainability is a high-value issue at TECO. Over the years, the company has dedicated efforts to ESG issues, while responding to stakeholder expectations in this area. In 1995, TECO became one of the first members of Taiwan's Business Council for Sustainable Development, acting on its commitment to heightening awareness of sustainability issues in the corporate world. TECO has published a CSR report since 2010; and since 2012, the report has undergone third-party assurance review to strengthen its credibility. Going forward, TECO will continue with foresight and resolution to work for sustainable development, consolidating a foundation for sustainable growth, while also contributing to the building of an inclusive society and the green economy.



## 2.2 Honors

### Common Wealth Magazine's Corporate Citizenship Awards

- Award winner for three consecutive years
- Top ranking in conventional industry category



### Taiwan Excellence Award

- 18 awards
- No. 3 award winner in Taiwan



### Taiwan Corporate Sustainability Awards gold award

- Taiwan Corporate Sustainability Awards gold award



### Top 5% enterprise in corporate governance evaluation

- Taiwan enterprise model of sustainability



### Highest Rating (A++) in the 12th Information Disclosure Evaluation

- Taiwan enterprise model of sustainability



# 03

## Stakeholder Identification and Communication

- 3.1 Identifying issues of concern to stakeholders
- 3.2 TECO Stakeholder Issues of Concern and Communication Channels
- 3.3 Materiality Analysis of Issues of Concern
- 3.4 Stakeholder Issues of Concern and Boundaries

# Stakeholder Identification and Communication

## 3.1 Identifying issues of concern to stakeholders



TECO believes that stakeholder opinions can motivate continuous improvement at the company. Issues closely watched by stakeholders are identified through the following identification process. Identifying major and secondary issues is part of the daily work and annual planning of each unit. In mid-2014, TECO's CSR website also posted a questionnaire to more broadly sound out stakeholders' views.

● **TECO and Stakeholders**



### 3.2 TECO Stakeholder Issues of Concern and Communication Channels

	Stakeholder	Employees	Customer	Suppliers
Stakeholder Significance to TECO Issues of Concern	<p>Shareholder identification with the company is a key supporting force for business sustainability and long-term development. By maintaining good communication with shareholders and including shareholder opinions in operating guidelines, the company can continue to win shareholder approval and lay a foundation for sound operations.</p> <ul style="list-style-type: none"> <li>• Business performance</li> <li>• Financial transparency</li> <li>• Risk management</li> <li>• Corporate governance</li> <li>• Environmental protection</li> </ul>	<p>Employees are the most critical factor determining the long-term competitiveness and operating results of a company. Good employees are vital to the formation of a healthy organization, achieving results, and enabling an enterprise to grow sustainably.</p> <ul style="list-style-type: none"> <li>• Pays and fringe benefits</li> <li>• Education, training, and career development</li> <li>• Workplace</li> <li>• Management-labor relationship</li> </ul>	<p>TECO is committed to providing customers cost-effective, high-quality products. The company also uses various channels to understand customer expectations for TECO and its products in order to more closely align its products and services with customer demand.</p> <ul style="list-style-type: none"> <li>• Quality</li> <li>• Service</li> <li>• Energy-conserving products</li> <li>• Product appearance</li> <li>• Performance/value ratio</li> <li>• Packaging</li> </ul>	<p>TECO provides assistance to suppliers key raw materials and parts for motor production to ensure quality, price, and on-time delivery</p> <ul style="list-style-type: none"> <li>• Business performance</li> <li>• Order management</li> <li>• Quality management</li> <li>• Production technologies</li> </ul>
Issue Communication Channels & Communication Frequency	<ul style="list-style-type: none"> <li>• Market Observation Post System Updating information for 430 times in 2013</li> <li>• Investment section of corporate website Updating information at least once a month</li> <li>• Shareholders' meeting Once a year</li> <li>• Domestic and overseas investment forums Holding 14 investment forums in 2013</li> <li>• Visit by institutional investors 365 person/visits in 2013</li> <li>• e-mail dedicated to investor relationship and stock affairs Immediate response by designated staffers to any mail</li> </ul>	<ul style="list-style-type: none"> <li>• Management-labor meeting Once every quarter</li> <li>• Quarterly employees' meeting Once every quarter</li> <li>• Meetings with senior managers Once semiannually</li> <li>• Safety and Sanitation Committee Once every quarter</li> <li>• Employee Welfare Committee Once every quarter</li> <li>• Morning meeting Daily</li> <li>• Proposal for improvement 1,362 pieces in 2013</li> <li>• Company organ Bimonthly</li> </ul>	<ul style="list-style-type: none"> <li>• Call center Customer calls and monthly service meeting</li> <li>• Meeting with dealers Once quarterly and irregular visits</li> <li>• Service clerks Once every service and follow-up phone interviews</li> <li>• Corporate website Irregular updating</li> <li>• Facebook fans Updating FB information daily</li> <li>• Media ads Exposure of new product/event</li> </ul>	<ul style="list-style-type: none"> <li>• Supplier evaluation Evaluation of new suppliers and reevaluation every three years</li> <li>• Supplier review Once/quarterly</li> <li>• Assistance for suppliers Providing assistance, if necessary, according to the result of evaluation</li> <li>• Communications for procurement Irregular</li> </ul>



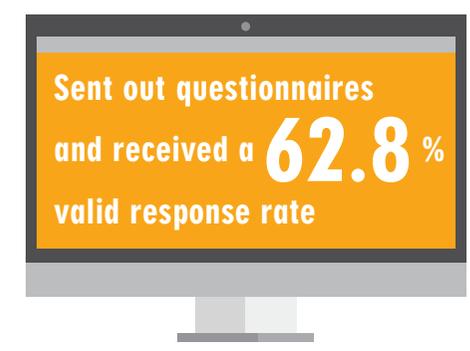
Local Community	NGOs	Government Units
<p>TECO values joint development with the communities where its production and business bases are located.</p> <ul style="list-style-type: none"> <li>• Environmental protection</li> <li>• Public service</li> </ul>	<p>TECO communicates proactively with NGOs to understand environmental and social issues of concern to them. The company also integrates the expert opinions of NGOs in formulating strategic direction and sustainable development policy.</p> <ul style="list-style-type: none"> <li>• Environmental protection</li> <li>• Public services</li> <li>• Labor conditions</li> </ul>	<p>TECO occasionally communicates with the government to clarify legal requirements and improve compliance efficiency when formulating internal regulations or planning foreign investment.</p> <ul style="list-style-type: none"> <li>• Legal compliance</li> </ul>

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Coordination meeting<br/><i>Irregular</i></li> <li>• Communications on phone<br/><i>Irregular</i></li> </ul> | <ul style="list-style-type: none"> <li>• Disclosure of non-financial information<br/><i>Irregular</i></li> <li>• Meeting<br/><i>Irregular</i></li> <li>• Assistance for events<br/><i>Irregular</i></li> </ul> | <ul style="list-style-type: none"> <li>• Seminar, Participation in various checks, and written replies<br/><i>Irregular</i></li> </ul> |
|---|--|--|



● **Issue Collection and Survey**

TECO communicates regularly or occasionally with stakeholders through a variety of channels to collect input on their issues of concern. The company also has compiled 31 issues of concern to stakeholders into a questionnaire formulated in reference to the GRI's G4 considerations and sector-specific indicators. This questionnaire was published on the company's CSR website for stakeholders to complete at their discretion. To increase the questionnaire completion rate and expand stakeholder reach, TECO also began in 2014 to send questionnaires to various stakeholder groups. In 2014, this survey achieved a 62.8% valid response rate.



### 3.3 Materiality Analysis of Issues of Concern

The CSR task force met with company business units to perform materiality analysis on the questionnaire topics and assess the impact of each issue on the company's operations. A materiality matrix was then formulated to identify material ESG issues based on alignment between the degree of issue concern to stakeholders and the materiality of the issue to TECO's operations.



**Issues of concern to stakeholders**

A	Sustainable development strategy and risk management
B	Economic performance and financial transparency
C	Corporate governance
D	Green products
E	Employee rights
F	Compliance
G	Customer satisfaction surveys
H	Customer health and safety
I	Workplace health and safety
J	Compensation and benefits
K	Product and service labeling
L	Career development, education and training
M	Freedom of association and collective negotiation
N	Moral/ethical codes of conduct
O	Marketing communication
P	Green supply chain management
Q	Pollution prevention and emissions
R	Customer privacy
S	Anti-corruption
T	Raw and recycled materials
U	Water
V	Greenhouse gas and Energy Management
W	Local Communities and Social Care
X	Anti-competitive Behavior
Y	Grievance Mechanisms for Impacts on Society
Z	Supplier Human Rights Assessment
AA	Diversity and Equal Opportunity
AB	Organization's Human Rights Assessment
AC	Human Rights Grievance Mechanisms

### 3.4 Stakeholder Issues of Concern and Boundaries

Stakeholder Issues of Concern	Boundaries G4 Material Aspects	Interior boundary		Exterior boundary			
		TECO	Dong Sheng	Customer	Supplier	Community	
Sustainable development strategy and risk management	Strategy and Analysis	●					
Governance	Corporate governance	Anti-corruption	●	●			
		Anti-competitive Behavior	●				
		Compliance (Environmental)	●	●			
		Compliance (Society)	●	●			
		Compliance (Product Responsibility)	●	●			
	Compliance	Compliance (Environmental)	●	●		●	●
		Compliance (Society)	●	●		●	
		Compliance (Product Responsibility)	●	●			
		Anti-competitive Behavior	●				
	Moral/ethical codes of conduct	Anti-corruption	●	●			
Economic	Economic performance and financial transparency	Economic Performance	●	●			
	Green supply chain management	Procurement Practices	●				
		Supplier Environmental Assessment	●	●		●	
		Supplier Human Rights Assessment	●	●		●	
		Child Labor	●	●		●	
Environmental	Green Product	Raw materials	●				
		Energy	●	●		●	
		Product and Service	●				
	Pollution prevention and emissions	Emissions	●	●		●	●
		Effluents and Waste	●	●		●	●
	Raw and recycled materials	Raw materials	●				

Stakeholder Issues of Concern	Boundaries G4 Material Aspects	Interior boundary		Exterior boundary			
		TECO	Dong Sheng	Customer	Supplier	Community	
Social	Employee rights	Labor/Management Relation	●	●			
		Employment	●	●			
		Equal Remuneration for Women and Men	●	●			
		Non-discrimination	●	●		●	
	Compensation and benefits	Labor/Management Relations	●	●			
		Equal Remuneration for Women and Men	●	●			
	Workplace health and safety	Workplace health and safety	●	●		●	
	Career development, education and training	Education and Training	●	●			
	Freedom of Association and Collective	Freedom of Association and Collective	●	●			
	Anti-corruption	Anti-corruption	●	●		●	
	Customer satisfaction surveys	Product and service labeling	●		●		
	Customer health and safety	Customer health and safety	●		●	●	
	Product and service labeling	Product and service labeling	●		●	●	
	Marketing communication	Marketing communication	●				
Customer privacy	Customer privacy	●		●	●		



● Material Issue Disclosure Sections and Results

Rank	Issue	Sections on issue disclosure	Key Results in 2014
1	Sustainable development strategy and risk management	5.6	<p>1. ESG indicators considered by TECO in overall internal controls, including green products, green operations, green supply chains, social responsibility and other factors, are included as sustainability assessment items. The company thoroughly reviews the the membership of its board of directors to determine if the board is has sufficient expertise in the areas of designing internal controls and supervisory capacity, market and organizational knowledge, as well as financial and regulatory expertise; and whether the independent director system, audit committee, information transparency and other systems are implemented.</p> <p>2. The 2014 audit results found that the overall level of environmental risk control was low risk.</p>
2	Economic performance and financial transparency	5.1 5.4	<p>1. 2014 revenue: NT\$24.3 billion</p> <p>2. 2014 EPS: NT\$2.06—a 15-year high.</p> <p>3. ROE: 8.83%</p>
3	Corporate governance	5.5	<p>1. Top 5% ranked company in the TWSE First Corporate Governance Evaluation</p> <p>2. TECO received an A++ (highest) ranking under the Information Disclosure and Transparency Ranking System</p> <p>3. Establishment of CSR Committee</p> <p>4. In 2014, the average personal attendance rate of directors was approximately 92%</p> <p>5. In 2014, the Audit Committee and Remuneration Committee had a 100% personal attendance rate</p>
4	Green products	4 6.2	<p>1. Energy-saving models account for 79.7% of home air conditioners and refrigerators sold, up 10.7 percentage points from the previous year.</p> <p>2. In 2014, energy efficient motors saved 485 million kWh of electricity and cut carbon emissions by 252,700 metric tons</p> <p>3. Inverter applications were developed, providing energy-saving solutions and enhancing energy efficiency by 35%.</p> <p>4. In 2014, 176 TECO products, including energy-saving air-conditioners and refrigerators, received the energy-saving Green Mark.</p>
5	Employee rights	7.4 7.7	<p>1. TECO established a EAP platform to help employees seek help, plan employee assistance program, and get health, family, and life related assistance.</p> <p>2. An employee work stress analysis in 2014 showed that 89% of employees were in the moderate pressure group.</p>
6	Compliance	6.1 7.2 8.1	<p>1. In 2014, there were no violations due to products and services provided or violations of regulations on anti-competitive behavior.</p>
7	Customer satisfaction surveys	6.4	<p>1. Customer satisfaction with motor increased universally over the 2013 level, with the biggest gains seen in delivery satisfaction due to active improvement measures.</p> <p>2. Domestic customer intention to repurchase motors increased to 94%</p>
8	Customer health and safety	6.1 6.2	<p>1. In 2014, TECO applied for 1,063 product certifications.</p>
9	Workplace health and safety	7.6	<p>1. TECO has established an OHSAS18001 and CNS15506 compliant occupational health and safety management system.</p> <p>2. The frequency of disabling injuries was 69% lower in 2014 compared with 2012.</p>



● Material Issue Disclosure Sections and Results

Rank	Issue	Sections on issue disclosure	Key Results in 2014
10	Compensation and benefits	7.4	1. The four features of TECO's compensation and benefits policy are: competitive salary, performance related pay, promotion salary adjustments, and welfare care
11	Product and service labeling	6.1	1. Product packaging, user manuals and sales information are all correctly labeled according to the Commodity Labeling Law.
12	Career development, education and training	7.5	1. Company training and development programs follow a management mechanism based on PDDRO principles and provide occupation-based training blueprints to help each employee design a personal development plan. 2. The company allocates 0.1% of revenue, averaging over NT\$20 million per year, for its training budget.
13	Freedom of association and collective negotiation	7.3	1. The workers' union at TECO was established in 1974 and holds a general assembly annually. 2. A conference is held semiannually joined by the CEO and union management and supervisors. 3. TECO has established factory labor-management meeting and safety and health committees, with labor representatives accounting for 1/2 and 1/3 of the committee membership, respectively.
14	Moral/ethical codes of conduct	5.5	1. TECO has formulated a Code of Ethics for Directors and Managers since 2011. 2. The company has formulated Ethical Corporate Management Best Practice Principles since 2014.
15	Marketing communication	3.2 6.1	1. TECO directly communicates with customers through various channels, such as dealer forums, the company website, and Facebook page to understand their needs. 2. TECO has had no violations related to product and service information and advertising.
16	Green supply chain management	6.3	1. TECO follows a rigorous supplier auditing process with regular assessment and consideration of social and environment issues in the supplier audit standards. 2. In 2014, 80% of TECO's top-10 suppliers published an annual CSR report. 3. In 2014, TECO conducted a comprehensive survey showing that 93.67% of its suppliers were in compliance with human rights and environmental regulations. for green supply chains.
17	Pollution prevention and emissions	8.1 8.3	1. In 2014, TECO's greenhouse emissions fell by 426.15 metric ton (MT) from the 2012 level of 33,727 MT.
18	Customer privacy	6.1	1. TECO received no complaints over violations of customer privacy in 2014.
19	Anti-corruption	5.5	1. TECO has formulated a Code of Ethics for Directors and Managers since 2011. 2. The company has formulated Ethical Corporate Management Best Practice Principles since 2014. 3. The company has formulated a CPA Selection and Assessment Method and annually assesses CPA independence and suitability
20	Raw and recycled materials	8.1	1. TECO reduced the size and weight of its large motors, reducing copper usage by 15.1 tons and iron by 80 tons 2. Obsolete products are easy to disassemble and have a recyclable ratio exceeding 90% 2. The company formulated a Restricted Substance Management Program and Regulations for the Management of Labeling and Hazard Communication of Hazardous Chemicals, setting rules for the management of chemical substances at the development and design phase and purchasing source.

# 04

## SMART TECO Smart Green Technology

- 4.1 New Green Products
- 4.2 Smart TECO – Smart Green Technology
- 4.3 New Green Energy

# SMART TECO Smart Green Technology

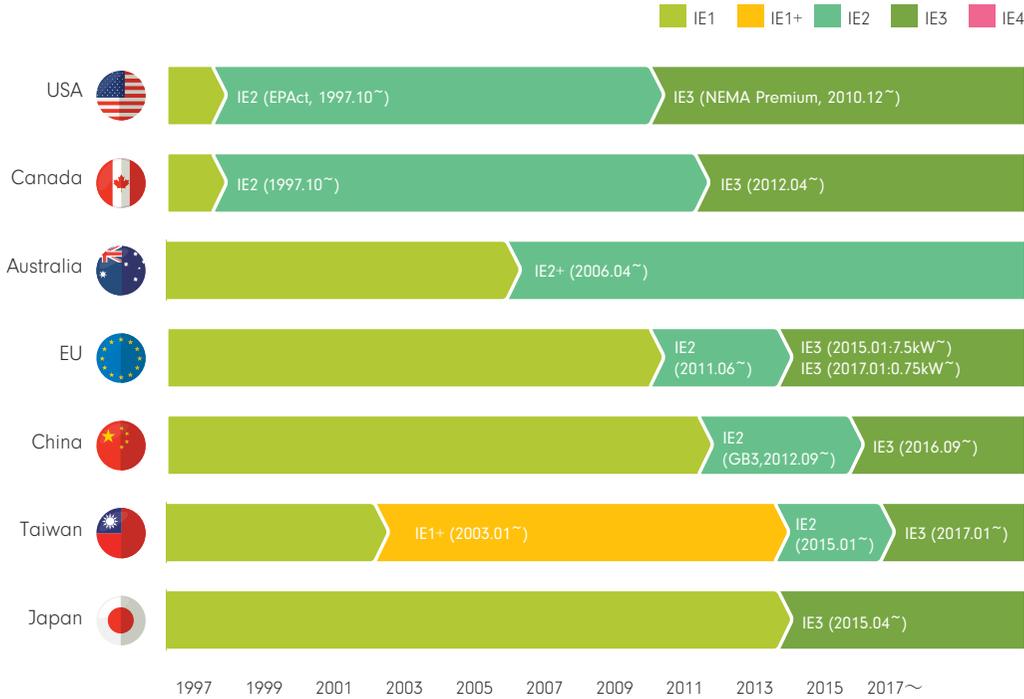
## 4.1 New Green Products

### 4.1.1 Development of High-efficiency Motors

Three-phase induction motors are the most popular type of industrial motor today since their broad range of applications. Major countries around the world have implemented IE2 efficiency standards. The United States and Canada have gone further by upgrading to the IE3-equivalent NEMA Premium efficiency standard and other countries are following suit. It is anticipated that by 2015 the IE3 standard will be internationally adopted.

In line with this trend, TECO has developed IE2 efficiency motors for the domestic market in Taiwan, as well as IE3-compliant motors that further 3-rated motors for energy-saving technology. TECO has also developed NEMA Premium compliant motors for the US and Canada, IE3 motors for the European Union (EU), New Zealand and Australia markets and Japan, which will implement the JIS C 4213 standard in 2015. TECO is committed to developing high-efficiency motors as part of its international strategy. The company developed the world's first IEC 60034-30 IE4-rated motor made with cost-effective aluminum die-cast rotor technology. It also plans to introduce lightweight aluminum case motors, high-efficiency IPM motors, and specialty motors to meet a full spectrum of industry needs. These advances will round out TECO's product line with motor series meeting IE1 to IE4, IEC, NEMA, CNS, JIS, GB and other standards.

● Energy Efficient Motor Adoption Timeline by Country



**Our Mission**

Guided by the "TECO GO ECO" vision, TECO is building from its core motor competencies in a commitment to enhancing product energy efficiency and developing green energy solutions. These initiatives are positioning TECO as a driving force in the global green energy industry, while also lightening the environmental burden on our planet to realize a greener future.

● Roadmap - high-efficiency motors - cast iron

Planning product



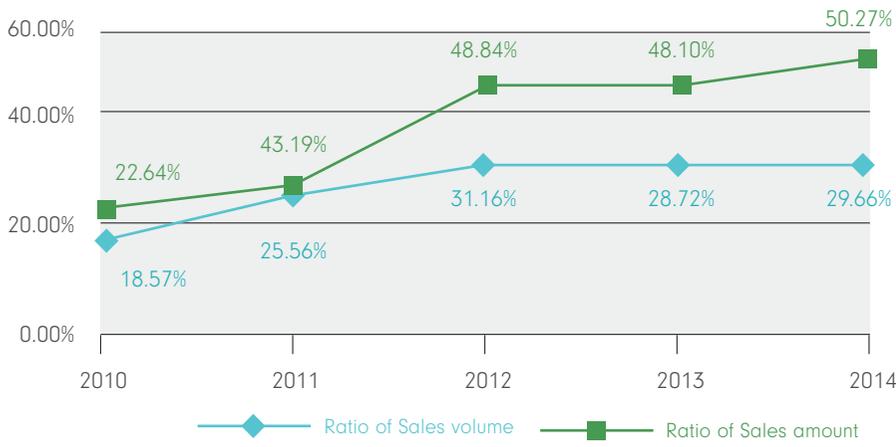
● Energy Savings from Energy-Efficient Motors (<= 300HP or 224kW) Sold by TECO in 2014

TECO Sales of High-efficiency Motors in 2014 (kW)	3,207,572 kW
IE2 motors	902,329 kW
IE3 motors	2,305,243 kW
IE4 motors	kW
Savings from Energy-Efficient TECO Motors in 2014 (based on 5,000 operating hours per year)	
Total	<b>485,044,924 kW</b>
IE2 motors	<b>94,301,451 kW</b>
IE3 motors	<b>390,743,473 kW</b>
IE4 motors	<b>0 kW</b>

Compared to IE1 rated motors, the energy-efficient motors (IE2, IE3, and IE4) sold globally by TECO in 2014 saved approximately 485 million kWh of electricity and cut CO2 emissions (CO2e) by 252,700 MT

Note: CO2e figures based on power coefficient of 0.521 kg CO2e/kWh announced by the Bureau of Energy, Ministry of Economic Affairs (MOEA) in 2014

● Ratio of Energy-efficient Motors (IE2+IE3+IE4) <= 300HP (224KW) to Total Shipments in 2014



● Ratio of Domestic and Export Shipments of Energy-efficient Motors (IE2+IE3+IE4) <= 300HP (224KW)



#### 4.1.2 Development of Other Key Motors

##### • Explosion-proof motors

Locations with explosive gas, dust, steam and other hazardous materials demand high prevention standards to safeguard against accidents, particularly in the choice of highly safe explosion-proof equipment. TECO has earned IEC/ATEX Ex d, n, e and tD product certifications in the export market since 2008, and CNS Ex d, n and e certifications in the domestic market in 2013. The company plans to upgrade its full range of explosion-proof products to the high-efficiency IE3 level.

##### • Aluminum motors

Aluminum die-cast motors have lightweight structures and an attractive appearance, making them popular in light industrial environments. TECO has developed IE3 high-efficiency series aluminium motors that meet IEC, GB, JIS and CNS standards and are sold in the EU, Japan, China, Taiwan and other markets. These models feature a high quality aluminum design, excellent energy-saving performance, F class insulation with B temperature rise, and high safety, durability, and life. Furthermore, these motors feature a modular structural design for interchangeability, including three (up/right/left) T box orientations, vertical and horizontal installation (B3/B5/B35), and interchangeable feet, streamlining inventory and increasing flexibility. TECO will continue to develop aluminum industrial motors to meet the diverse product needs of international customers and markets.

##### • Permanent magnet motors

TECO is developing high-efficient, lightweight and speed controllable permanent magnet synchronous motors. The company currently offers servo motors (0.85~15 kW) and high power permanent magnet motors for industrial equipment (3.7~110 kW). These models have a wide range of industrial applications, including use in hydraulic machinery, air compressor systems, paper cutting machines, mixers, pump and servo applications, vehicle electrical systems, and electric boats.

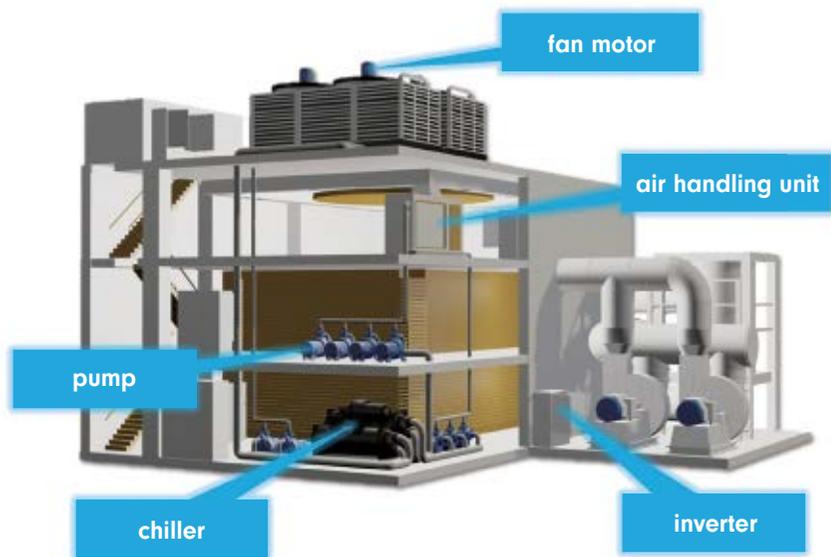
#### 4.1.3 Energy-Efficient Inverters and Green Energy Solutions

The global trend towards production automation, the rising use and cost of energy, and increasingly stringent energy efficiency specifications in Europe and the US, such as the ErP Directive, have heightened corporate attention to energy-saving products. Greater emphasis on control accuracy is needed to improve the efficiency and energy savings of mechanical systems. TECO's 510 series of inverters offers solutions for entry to high-end applications, delivering cost-effective horsepower in a variety of specifications. The series represents a major development in Taiwan's energy-saving inverter market both in terms of power performance and breadth of market applications.

TECO's inverter drive boasts optimal design for lessening burden on the environment, employing RoHS- and REACH-compliant materials, which are universally applied in machines at factories or equipment at buildings, since they can avoid human hazard and second environmental pollution. The company, for instance, dedicated inverter drives at part of the total solution for HVAC at buildings, as shown in the diagram.

For common buildings which need power supply for motors, water chillers, and air-conditioning boxes, complete solution is provided via installation of dedicated inverters, capable of achieving 35% power saving by reducing operating speed at off hours.

Note: Test data was provided by the Industrial Technology Research Institute under commission by TECO's Home Appliance Sector



Note: CO<sub>2</sub>e figures based on power coefficient of 0.521 kg CO<sub>2</sub>e/kW announced by the Bureau of Energy, MOEA in 2014

In addition, TECO has equipped its general purpose advanced inverters (A510 series) with advanced fifth-generation current vector control technology. This enables the automatic setting of precise motor control models and greatly reduces tuning time, while achieving extreme torque performance. The inverter is used in high-precision motors mainly aimed at metalworking, vertical conveyance and other high-end market applications. It is also the first TECO inverter to incorporate permanent magnet motor drive technology: one of TECO's key strategic products. In special industrial applications they can achieve a higher level of energy savings than induction motors. They are also more compact, lightweight and suited for precision CNC solutions. As industries worldwide embrace automated production (for high efficiency and energy saving), and as demand for precision mechanical system controls grows, this type of machine has become a leading TECO offering in the specialty inverter field.

It is estimated that the use of inverters in industrial, commercial and residential-use motors in Taiwan could annually save an estimated 17,500 Gwh of electricity, equal to energy output of one nuclear power plant, while also achieving a CO<sub>2</sub>e reduction effect equal to the creation of 23,438 Daan Forest Parks (Note a. Taiwan's average annual electricity consumption is approximately 200,000 Gwh; b. Taipower's first, second and third nuclear plants can supply an annual average of about 40 billion kWh of nuclear power; c. 1 kWh of electricity produces an average of 0.521 kgs of carbon dioxide; d. Daan Forest Park's annual carbon dioxide uptake = 389 MT; source: Taiwan Power Company (Taipower) and the Bureau of Energy. )

#### ● Inverter Advantages:

1. Motor speed control to save energy

Inverters enable power to be adjusted to the needs of each work cycle, obviating the need for motors to operate at full speed and maximum power.

2. Reduction of peak motor current to save energy.

3. Improved power factor

- Rectifier-equipped inverters can improve the power factor and thus avoid power supply limits. This lowers reactive energy demand and energy costs.

- The E510 series is equipped with a specially-made electronic board that enables usage in any hydraulic or pumping system and reducing installation time.

It empowers customers to:



- The E510 can reduce total energy demand by 40 to 50% compared to systems without inverters.

## 4.2 Smart TECO – Smart Green Technology

### 4.2.1 Smart Motors

#### Background

The Industry 4.0 wave is ushering in a new industrial revolution around the globe. As the mother of industry, motors must adapt to this trend. Data on industrial motor operations generally includes winding temperature, motor vibration, voltage and current. Such information can typically only be viewed and monitored from a power control panel or control room. Such interfaces fail to meet the need for ubiquitous, real-time platform response to motor running state or unexpected situations, reducing system reliability. This is changing with the rapid advance of mobile communications and combination of industrial production equipment with smartphone monitoring apps. In line with this trend, TECO has developed a smart motor monitoring system that enables plant managers to monitor the operating status of production equipment from a smartphone, avoid unexpected downtime, and optimize workloads.

#### Product Introduction and Technical Features

TECO's smart motor monitoring system is powered by cutting edge cloud and mobile communication technology. Users can access information on motor voltage, current, temperature, vibration and other real-time operating information from their smartphone over a Wi-Fi or 3G/4G connection. They can also get statistics on motor power usage to facilitate energy saving, as well as real-time alerts when motor abnormalities occur. Instant alarm, early-warning functions, alarm recording, maintenance history, operation manuals and contact groups are also integrated into the app to provide a complete monitoring, diagnosis, maintenance and operation solution. Users can optimize scheduling from any location, vastly reducing potentially huge losses from unexpected downtime. In addition, statistics on motor operation and electricity consumption can be used to flexibly manage equipment and plan power usage, increasing motor service life and saving energy. The system is especially well-suited for remote, high-temperature, high-altitude and other hazardous environments, as well as steel, petrochemical, power and other continuous production industries.

#### Future Development Plans and Objectives

In April 2015, Japan raised its motor energy efficiency standard to the IE3 level. TECO will make its mobile smart monitoring system a standard feature on

75kW-plus motors, highlighting its strong ambition to advance in the global market for smart motors. In the second quarter of 2015, real-time IP-based webcam transmission capability will be added to the system. Additional hardware mechanisms will be integrated in the third quarter, reducing volume by 25% or more and making the whole system more compact and simple. TECO also plans to release 75-plus kW motors integrating PB switchboards, TECO's mini SCADA, and a cloud display app by the end of 2015

### Ushering in a new generation of fully smartphone-based smart motors



### Real-time operating information: Temperature, Vibration, Power usage

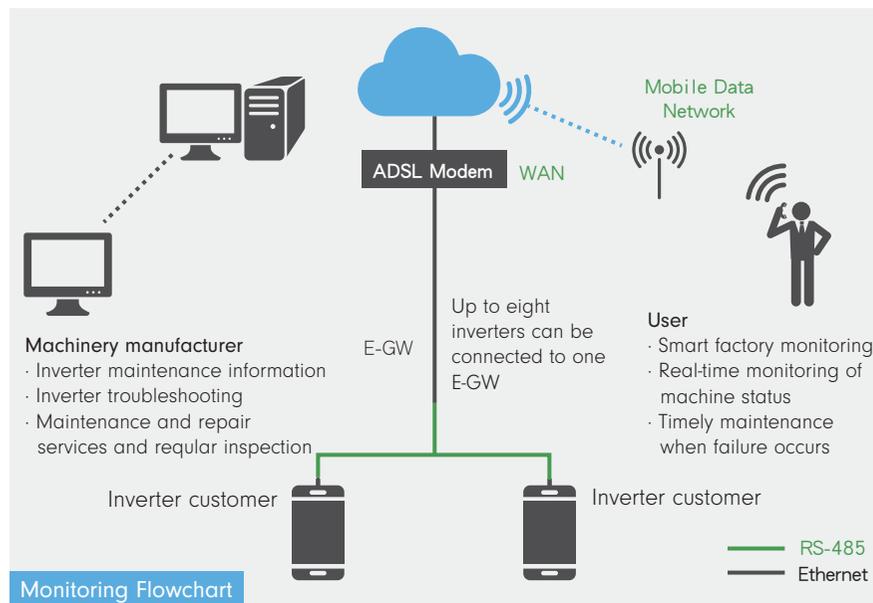


#### 4.2.2 Smart Monitoring Platform

In the Industry 4.0 era, a critical capability is to link factory terminal information with smart products. The main functions of SCADA are data collection and monitoring, with emphasis on real-time response, to help production planning and online referencing or monitoring of plant information. SMEs in Taiwan are hampered in their introduction of SCADA due first to limited size and lack of budget; second, the difficulty in setting up marketing channels and achieving results; and third, the need to consult with outside SCADA professional for achieve notable benefits.

#### ● Product Overview

Data mining is a central function of the smart monitoring platform in TECO electrical controls. Customers can upload information collected from online-connected systems to the platform and use this data for the key function of product life cycle forecasting. Customers can also monitor and access real-time data on their products from a smartphone or computer. The process is illustrated in the flowchart below:



#### ● Technical Features

Real-time Monitoring Items	Data Collected
Frequency command: Inverter setting commands and operating status	Alerting: Data for managing work environments
Output frequency: Inverter output frequency and operating status	Load conditions: Data on output power and energy saving
Output current: Status of inverter output current	Running time: Timing of predictive maintenance or replacement of internal electrolytic capacitors and fans
DC voltage: Normal/abnormal status of inverter input voltage or slowdown/shutdown	Failure circumstances: Diagnostics to determine if operating status and loads are normal
Motor speed: Motor switch speed	Heat sink temperature: Feedback on whether IGBT operating temperature is normal

#### ● Future Development Goals

Based on Internet of Things (IoT) technology, this project aims to improve the quality of TECO products and services with a smart monitoring platform for automated industrial control. The platform enables customers to monitor and control devices ubiquitously from a smartphone or computer. For example, on inverter-equipped models, this system enables the collection and recording of product information for big data analysis to give customers and companies an accurate basis for adjustments and decision-making. The monitoring platform could also be linked with manufacturing execution systems and internal management SAP to support everything from process optimization to formulation of sales strategies and systematic integration with automation departments.

#### ● Project Framework

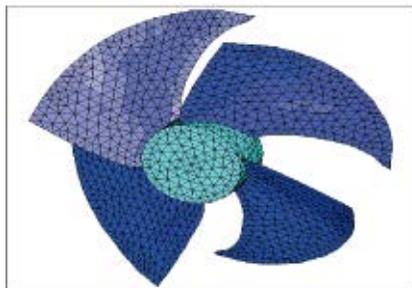
- I. Link industrial automation control products with IoT technology to strengthen services and plan applications in line with market values to create an effective business model and enable sustainable service development.
- II. Establish cloud monitoring inverter systems, focusing on IoT inverters, to provide users with a safe and smart control environment able to record and simultaneously transmit information on operating status, store data, and apply big data analysis tools to determine inverter fault, damage, and end of life.
- III. Integrate certain SCADA functions to enhance product technology and maintenance and repair services, and analyze inverter total running time, customer use status and other information to predict material needs and shorten product delivery times.

### 4.2.3 Cloud-based e-Home for a Smart, Energy-efficient Life

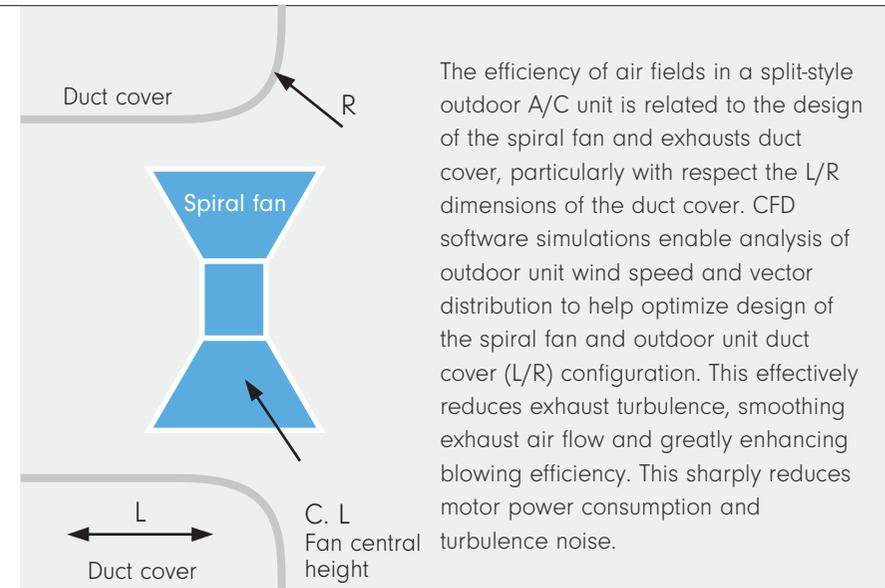
In 2014, Taiwan began upgrading its telecommunications networks to 4G technology, paving the way for its development as a 4G smart island. In line with this trend, TECO has formulated a blueprint to develop smart energy-saving home appliances drawing on the collective resources of the group. The company has taken electrical controls and system energy-saving technologies to a new level with the development of a full line of Class 1 energy-efficient inverter air-conditioners, refrigerators and other products. TECO has also incorporated optoelectronics and ICT technology in a line of cloud-based e-Home home appliances linked to its iHome APP. These smart linked home air conditioners (A/C), concept refrigerators, dehumidifiers, washing machines, fans and other products forming TECO's IoT appliance group overcome the barriers of space and distance with smartphone APP controls to enable a future of people-friendly technology.

#### ● Product Overview

The external units of TECO's new generation of smart cloud A/C (MS/MA-LV28IH) are equipped with the cutting edge 5 mm copper tubing (originally 7 mm). The smaller pipe diameter dramatically reduces air flow resistance and significantly enhances heat exchange efficiency. These units also have a new-generation spiral fan tested with CFD flow field simulation to achieve its low-drag airfoil design. The fan is paired with an optimized wind scooper to achieve high blowing capacity, reduce noise, improve airflow and saving energy. Refrigerant systems have also been improved with the adoption of the latest generation 6-pole concentrated winding compressor, reducing copper loss by 25 to 30%. Along with TECO's sine wave compressor drive technology, this dramatically improves the efficiency of the refrigerant system, bringing the full line to the Class 1 national energy efficiency standards for air conditioners in Taiwan.



Simulations designed with CDF software optimize the spiral fan blade design, reduce drag, and boost static pressure to achieve high efficiency.



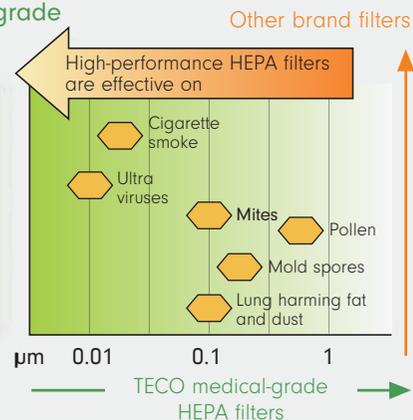
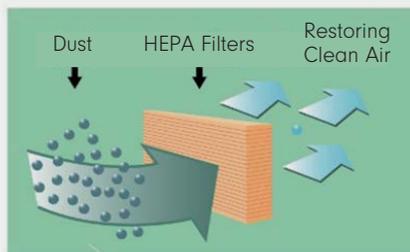
The efficiency of air fields in a split-style outdoor A/C unit is related to the design of the spiral fan and exhausts duct cover, particularly with respect the L/R dimensions of the duct cover. CFD software simulations enable analysis of outdoor unit wind speed and vector distribution to help optimize design of the spiral fan and outdoor unit duct cover (L/R) configuration. This effectively reduces exhaust turbulence, smoothing exhaust air flow and greatly enhancing blowing efficiency. This sharply reduces motor power consumption and turbulence noise.

#### ● Full line of Class 1 Energy-efficient Air-conditioners

Product Series	kW	EER	Efficiency
MA / S - BV22IC	2.2	4.17	1
MA / S - BV28IC	2.8	4.17	1
MA / S - BV36IC	3.6	4.2	1
MA / S - BV40IC	4.1	3.9	1
MA / S - BV50IC	5.2	3.9	1
MA / S - BV63IC	6.3	3.87	1
MA / S - BV72IC	7.2	3.81	1
MA / S - BV80IC	8	3.81	1



● **Healthy air conditioners: Medical grade HEPA filters**



**Medical grade HEPA filter**

TECO's ultra high-density HEPA filters take care of dust mites and harmful bacteria in one sweep. The Industrial Technology Research Institute has confirmed that HEPA filters are the most effective way to filter airborne dust particles and harmful bacteria.

HEPA is also known as a high efficiency filter that targets 0.3 μm airborne particulates. DOP test results confirm its cleaning effect

● **Smart cloud-based energy-saving air-conditioning**

In 2014, TECO submitted two smart cloud appliances for the Taiwan Excellence Awards: the MM80VN energy-saving multi-group inverter A/C and MM45VN high-efficiency energy-saving split-type inverter A/C.

Conserving energy and reducing carbon emissions has become a topic of global concern. The government and industry are actively working to promote energy-saving products and application services. In terms of usage of energy-efficient A/C, consumers increasingly want to know how much electricity their A/C systems are using to help them appropriately set temperature for energy saving. In terms of appliance maintenance and accident avoidance, the electrical components of air conditioners begin aging after long-term operation and can fail without maintenance and repair. This not only increases maintenance costs, but in serious cases of abnormal electrical load can lead to user property losses.

TECO is therefore actively developing networked smart energy-saving air-conditioners and timely maintenance systems and services. Among these products is a cloud-based energy-saving inverter A/C incorporating smart technology, and embedded electrical power measurement and communication modules. TECO has also teamed up with Information Technology Total Services (ICT provider) and AOK (service provider) and other companies to deliver high-quality repair and maintenance services integrating ICT and service experience.

● **This product has the following R&D and design features:**

- Smart air conditioning** 

This ICT-integrated A/C joins air conditioning and smart monitoring systems (for school and telecom engine rooms) in line with Taiwan's i236 energy-saving sustainability and sensor network policy.
- Electricity usage display** 

Data on power usage, room temperature, and temperature settings is collected by an embedded power detection module and can be viewed on an LED display so users can track and reduce energy usage.
- Connection to smart microgrid** 

A communication module can send data on electricity usage to a smart monitoring system and link with a smart grid to control power demand.
- Remote repair** 

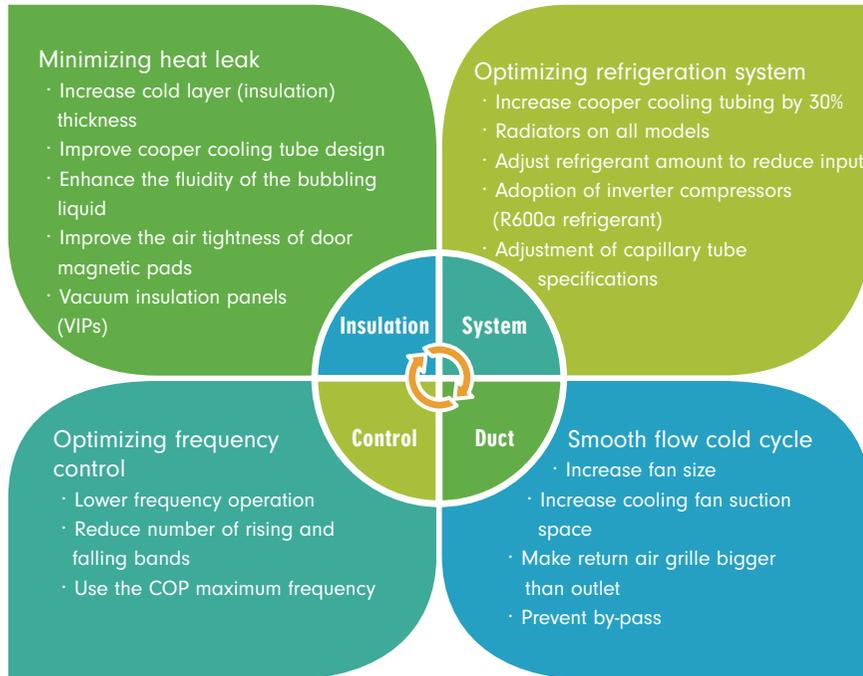
An aging detection module monitors the operating state of critical components (compressors, motors, and sensors). When an incident occurs, the communication module informs the service center and sends fault information to maintenance staff smartphones for ubiquitous maintenance.
- User-friendly control** 

External connection modules can link to a computer, tablet PC or smartphone for user-friendly bidirectional control.



## Smart Energy-saving Refrigerators

### ● Key Technologies



### ● TECO Smart Energy-saving Refrigerators: Benefits of Higher Energy Efficiency

Figures assume 5.75 million households (Taiwan's population of 23 million/ 4) and 480 L refrigerator

Model	Interior Capacity (L)	Class 1 energy efficiency electricity consumption (kWh/month)	Electricity use (kWh/month)*	Energy savings (kWh/month)
R4861XK	480	32	82.8	50.8

$$5.75 \text{ million} \times 50.8 \text{ kWh/month} = 292.1 \text{ million} / 30 = 9.74 \text{ million kWh/day}$$

The first and second reactors of Taipower's Fourth Nuclear Power Plant each generate 1.35 million kW

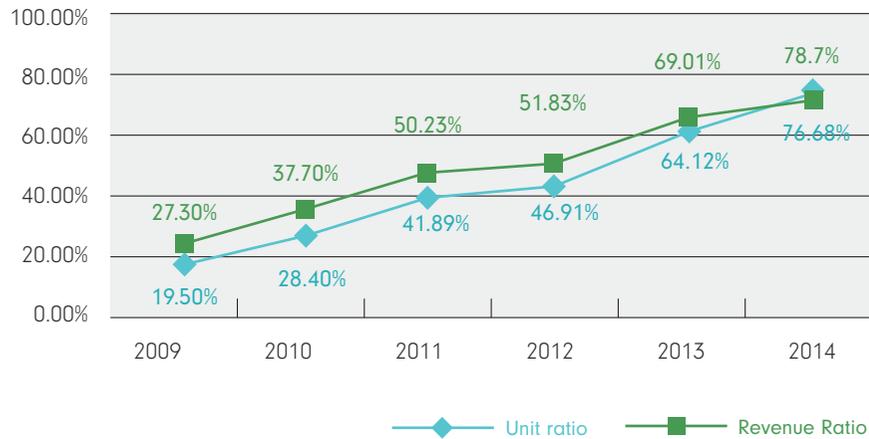
$$1.35 \text{ million kWh} \times 2 \times 24 \text{ hr} = 64.8 \text{ million kWh/day}$$

$$6,480 / 974 = 6.7$$

If everyone in Taiwan used Class 1 energy-efficient refrigerators, the savings over seven days would equal the daily power output of a nuclear power plant



● Ratio of Class 1 and Class 2 Energy-saving Models to TECO's Total Sales of Home Air Conditioners and Refrigerator in 2014



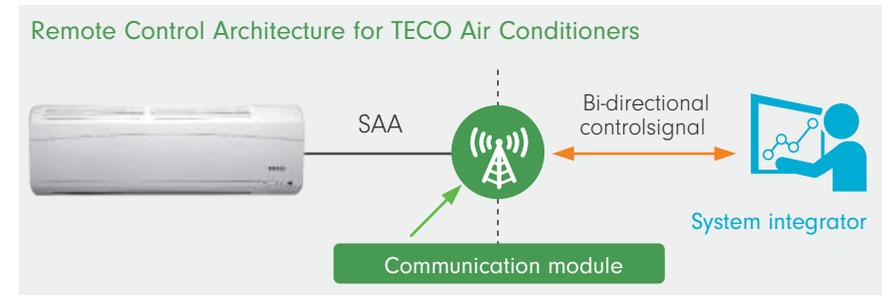
Annual power consumption of Class 4 models (kWh)	Annual power consumption of Class 1 and 2 models (kWh)	Annual energy savings of TECO Class 1 and 2 models (kWh)	Annual CO2e reduction of TECO Class 1 and 2 models (MT)
<b>74,337,490</b>	<b>65,915,784</b>	<b>8,421,706</b>	<b>4,388</b>

### Smart, Energy-saving, IoT Home Appliances

Since 2002, TECO has cooperated closely with Taiwan's Industrial Technology Research Institute (ITRI) and Smart Appliance Alliance (SAA) to develop communication protocols for appliances to interface with smart grids. In 2014, TECO introduced a full line of home air conditioners, mid to high-end refrigerators, dehumidifiers and other products incorporating the SAA protocol to achieve IoT communication functionality. These models are integrated with a smartphone interface to manage and save electricity smartly.

TECO's e-Home/iHome app offers a highly sophisticated and customizable interface to externally switch on and off home A/C systems over a cloud network. The system also has a distance sensor and can remind users to turn off the A/C when they are a certain distance from home.

TECO's cloud app supports government energy-saving and environmental protection objectives with its smart power-saving functions. The app can analyze weekly or monthly energy usage and provide statistics to precisely calculate energy savings. The device can alert users when electricity usage exceeds a certain level



to avoid high electricity bills. The app is also highly customizable, with functions for time and temperature settings, scheduling, and dehumidifier cleaning, enabling users to achieve the most comfortable and energy-efficient temperature throughout the day and in different environment.

**TECO has led the industry in bringing cloud-based air conditioning from the commercial sector to the home with a full line of energy-saving models**

TECO achieved commercial operation of a remote smart energy-saving monitoring solution in 2013 and expanded to telecom base stations in 2014

TECO has made cloud-based air conditioning a viable and option for general commercial locations and the home, enabling consumers to easily enjoy cloud the benefits of this technology and save a collective 11,184,408 kWh of energy.

**● Future Development: Comprehensive Air and Home Appliance Energy-Saving Management**

Consumers today place high importance on air quality at home environment. Most families rely on separate appliances for heating, cooling, dehumidifying and deodorizing. TECO aims to integrate these functions with an A/C based air management platform with IoT capabilities. Each system device will be able to collect data on the temperature, humidity and dust level of the ambient air and transmit this information to the host air management platform for integrated air management. In the future, TECO will integrate more home appliances with the platform. The system will also analyze power usage to improve energy efficiency and achieve smart energy-savings with a truly green appliance solution.

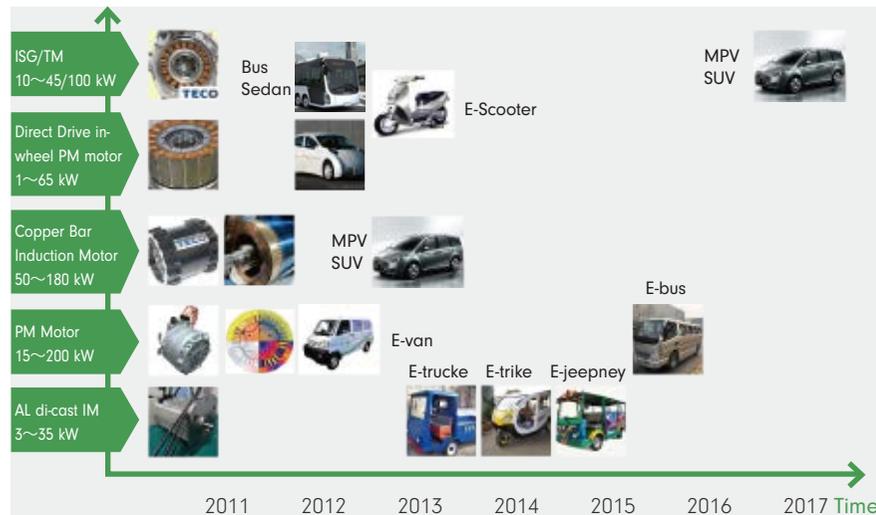
Air quality management involves multiple dimensions. For example, temperature, humidity, and odor are all mutually correlation: The feeling of comfort in a hot or cold environment depends not only on temperature, but also on humidity. Integrated A/C, dehumidifier, and fan systems can optimize temperature, humidity, and wind direction flow fields to create a comfortable environment in the most efficient way, saving energy and reducing CO2e. Dust mite and odor control can be achieved with an integrated A/C, air purifier and ventilation system able to detect ambient air quality, including CO2 and dust concentration, and control appliances to improve air quality.

Smart Decision Logic Modes	A/C	Air Purifier	Dehumidifier	Total Heat Exchanger	Fan
 Healthy Clean Comfort Mode	26°C	PM2.5 ON / OFF	RH60% + ON	Excessive CO2 Concentration ON	Coordinated w/RAC
 Pet Mode	27°C	PM2.5 ON	RH60% + ON	OFF	OFF
 Care Mode (Seniors)	26°C	PM2.5 ON	RH60% + ON	OFF	OFF
 Family Reunion	24°C	PM2.5 ON	RH60% + ON	Excessive CO2 Concentration ON	OFF
 Custom Mode Personal Setting	Active prompt	Active prompt	Active prompt	Active prompt	Active prompt

## 4.3 New Green Energy

### 4.3.1 Development status and application of EV (electric vehicle) motor

With petroleum resources gradually exhausting and global warming gaining growing concern, it has become a trend for governments worldwide to develop green-energy and environment-friendly mass transportation vehicles, boosting demand for low-pollution hybrid electric cars and pollution-free electric vehicles.



In compliance with the global development trend, TECO has made forward-looking deployment in the development of motors and related technologies for EVs, including permanent magnet motors, induction motors, and integrated starter motor/generator hybrid electric car, which are all included in the company's product development roadmap. The company has also embarked on the development of direct-drive in-wheel motor, featuring dynamic auto control. TECO owns various key technologies for the design, manufacturing, and testing of vehicle motors, which have been employed in electric commercial trucks, the electric

vehicles in the fruits and vegetables market of Xilo, in Taiwan's Yunlin county, electric tri-wheel cars in the Philippines, and 21-seat buses, highlighting the solid base TECO has established in the field of vehicle motors.



### 4.3.2 Wind Turbine

#### Development of new green-energy business

In compliance with the vision of "TECO GO ECO," the company has spared no effort in carrying out the R&D and production of energy-saving, environment protection, and high-efficiency products. In addition to consolidating its leading industrial status for heavy machinery and home appliances, the company has also actively forayed into the sectors wind turbine, in demonstration of its aggressiveness for energy and other new businesses, such as electric vehicle components and parts, an effort facilitated by its electric-machinery technological and manufacturing strength. In the future, in line with the spirit of "energy-saving TECO and green technology," we will fulfill the social responsibility of energy conservation, environmental protection, and sustainable development, thereby playing a pioneer for Taiwan to march into the global green-energy industry.

#### Development of green energy

According to the "guidelines for energy development" publicized by the Bureau of Energy, MOEA, the nation's energy policy pursues the setup of a energy supply-demand system featuring "safety, efficiency, and cleanness," reducing energy intensity, CO2 emission, and discharge of other pollutants, for which renewable energy plays an integral part.

TECO stepped into the realm of wind-power products several years ago and has developed 2kW and 3kW horizontal wind turbines and large-scale 2MW wind turbine, with a plan of continuing development of other models for regions with different wind velocities.



### ● Large-scale win turbine

TFC2000 series is first indigenous large-scale 2MW wind turbine in Taiwan, with the first unit having been installed in Inner Mongolia, which generated 9.2 million kWh of power during 2011-2014

#### TFC2000 series is based on the design concept of sustainability

- Recyclable and reusable materials, such as steel and cast iron, account for 60% of the total materials.
- Part of power consumption during the production process is recycled for reuse.
- The use of permanent magnet in the design for wind turbines, skipping carbon brush, can reduce waste materials and augment the performance of wind turbine.
- Certification for compliance with the standards of IEC61400 and the requirement of LVRT for linking up with power grid.

For product specifications, refer to <http://www.teco.com.tw/product/ProductView.aspx?id=3>

### ● Small wind turbines

TECO has developed three small wind turbines, with capacities of 400W, 2kW, and 3kW, suited for installation at open plots with strong wind, such as factories, roof of buildings, and farmland. 400W wind turbine is standalone alone, for such usages as landscape road lamp, while 2kW and 3kW models are mostly linked to power grid.



As a substitute for thermal power, wind power can cut CO2 emission and enhance the share of the nation's indigenous energy, in addition to lowering energy intensity.

For product specifications, refer to <http://www.teco.com.tw/product/ProductView.aspx?id=3>

#### Output of wind turbines and the effect on reducing CO2 emission

	model/code no.	height of tubular tower (meter)	Annual power output (kWh)	CO2 Reduction (metric ton)	Fuel oil reduction (kiloliter)	Fuel coal reduction (metric ton)	Fuel gas reduction (metric ton)
Inland large 2MW wind turbine	TFC2000-86	80	3,755.5	3,755.5	1,802.1	2,667.1	1,189.4
	TFC2000-86	100	3,961.0	3,961.0	1,900.7	2,812.0	1,254.4
Offshore large wind turbine	TDD5000-115 MW	100	8,034.8	8,034.8	3,855.5	5,706.1	2,544.6
Small wind turbine	H3000 3kW	10	7,170	3.7	1.8	2.7	1.2

1. CO2 emission co-efficient for power generation: According to the emission co-efficient for power generation, publicized by the Bureau of Energy, under the Ministry of Economic Affairs, 0.521 kilos of CO2e will be emitted for generation of 1 kWh of power.
2. Saving in fossil fuel: According to the data of Tai power, saving of 0.25 liter of fuel oil, 0.37 kilo of fuel coal, or 0.165 kilo of fuel gas can be achieved for every one kWh of wind power.

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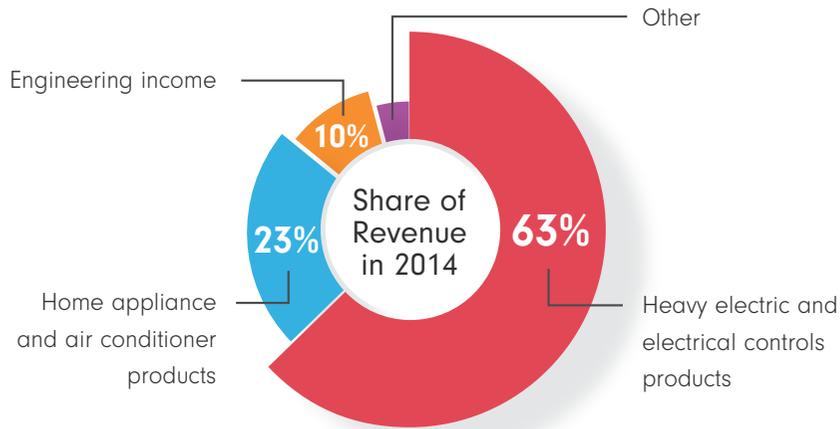
## Promoting Sustainability

- 5.1 Motor Manufacturing Overview
- 5.2 Sustainability Concepts and Core Enterprise Values
- 5.3 Company Profile and Products
- 5.4. Operating Performance
- 5.5. Corporate Governance
- 5.6 Sustainable Development and Risk Management



# Promoting Sustainability

## 5.1 Motor Manufacturing Overview



TECO's heavy electric business is dominated by motor and electrical control products. Facing global trends towards the promotion of energy saving and carbon reduction policies and industrial automation, TECO has continued to focus on high efficiency and low-carbon solutions in its motor business. The company is also integrating inverters, servo drives and other electrical control products to meet industry needs for safe electricity usage, automation and energy efficiencies.

On the technology front, TECO is committed to upgrading its motor energy efficiency ratings. The energy efficiency standards of the International Electrotechnical Commission (IEC) and advanced development of IE4 energy efficiency rated products is driving improvements in industrial motor efficiency. TECO is also accelerating the development of motor drive technology to deliver inverter-equipped motors that can provide industries with more comprehensive and cost effective energy-saving solutions.

In the global arena, TECO is steadily reaping the benefits from its operations in Wuxi, Jiangxi, Qingdao and Fujian in China, as well as its joint venture with Japan's Yasukawa, TECO Middle East (TME) and TECO Elektrik Turkey A.S. These operations are strengthening TECO's global production and marketing network, manufacturing and cost control strengths, and accelerating strategic alliances with international companies in China, Europe, the U.S., and Japan, helping the company to steadily expand global market share.

In Taiwan, TECO has been developing high efficiency motors with subsidy support from the Ministry of Economic Affairs. Supported by a ban on IE1 motors in Taiwan from 2014 and advances smart motor cloud monitoring technology, TECO expects revenue from high-efficiency motors to grow.

The domestic home appliance industry is also responding to increasing consumer demand for energy-efficient home appliances driven by growing environmental awareness and rising electricity costs. TECO has been building a full line of Class 1 energy efficient inverter air conditioner (A/C) systems, refrigerators and other power-saving products. The company has also led the domestic peers in responding to the IoT trend with the release of cloud-based A/C products that deliver superior convenience and comfort to consumers.

## 5.2 Sustainability Concepts and Core Enterprise Values

### Heavy Industrial Systems Sector

Heavy electric motors have broad applications in industry, business and residential equipment. Motors are the main industrial-use electrical equipment in Taiwan and abroad, accounting for about 70% of usage by power consumption. This has prompted governments worldwide to regulate motor efficiency standards and gradually replace low-efficiency motors with high-efficiency models. Businesses are challenged to meet the needs of both energy efficiency and price competitiveness, further contributing to the emphasis on energy efficiency in heavy electric motor development. TECO was founded as a motor producer and motors remain the company's core business today. The company ranks among the top-five motor producers of the world, with a complete R&D, production and sales value chain in the U.S. and Taiwan. Integrating technology across borders has given TECO an advantage and a superior technical ability. The company is an industry leader in introducing a full line of IE2, IE3, and IE4 compliant energy-saving motors, currently sold in five continents. It has also used its extensive industry experience to accurately grasp demand and develop explosion-proof motors, electric vehicle (EV) motors, permanent magnet motors, smart motors, industry specialized motors, and inverter motor drive technology that saves energy through superior motor control. TECO is also drawing on its extensive experience in the motor industry to cooperate with Japanese partners on electronic control technology, as well as self-developing motor inverters and other products to position as a provider of integrated solutions.

### Wind Power Sector

To cope with global warming and drastic climate change, countries around the world have been sparing no effort in developing renewable energies, setting specific goals, notably for wind power, due to its high economic benefits, such as

the European Union aiming to derive half of its power from wind power by 2030. Backed by its solid technological strength in machinery and electricity, TECO has made rapid inroads into the wind-power sector, known for its high entry threshold, such as the wind-turbine assembly market in the U.S. It has also successfully developed the first indigenous 2MW permanent-magnet wind turbine, boasting the highest local content rate among locally made wind turbines. The company has also set sight on the Chinese wind-power market, boasting huge potential. Moreover, backed by technology transferred from Europe, TECO is developing next-generation large-scale 5MW offshore wind turbine, suited to the Asian climate.

### Home Appliance Sector

TECO has positioned itself in the mature and highly competitive home appliance industry with an emphasis on energy-saving products. In addition to refrigeration heat exchange systems, high air flow and low noise duct system, and insulation technology, the company has accumulated more than ten years of experience in developing inverter controls and applying environmentally friendly refrigerants in major home appliances. These high energy efficiency rating (EER) products meet customer demand for energy-saving, environmental protection, and comfort. They also have spurred upgrading in the domestic appliance industry. TECO is also achieving breakthroughs in a mature industry by developing or introducing high value-added new products and key components. For example, the company has been comprehensively promoting smart appliances, and a full range of large-sized (39"~65") 4K2K LCD displays, and LED displays; high EF inverter and multi-temperature refrigerators, VRF (Variable Refrigerant Flow), remotely monitored SAA (Smart Appliance Alliance) A/C, energy-saving A/C with power use display, medical grade HEPA filter A/C and other appliances meeting health demands. The company is also broadening sales channels through product differentiation, increasing revenue and profit and creating blue ocean markets.

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TECO's full range of home appliances have hardware and software networking capabilities. TECO has also received orders for communications switchboard rooms, schools, and smart buildings and successfully brought these systems into commercial operation. TECO's cloud-based smart energy-saving appliances are paired with IoT applications to create a full line of top-tier inverter home A/C models, one-to-many variable refrigerant flow (VRF) A/C and other products that have won broad market acclaim and pushed TECO's market share higher.

In the commercial A/C segment, TECO has captured a nearly 50% share of the ice-storage A/C market in Taiwan through its strategic alliance with the country's top OEM in this segment. Since 2014, TECO's electronic control and inverter technology have been integrated in high level air handling unit and centrifugal chiller products for commercial A/C systems. TECO aims to supply a full range of commercial A/C products and challenge the exclusive grip of foreign brands on the centrifuge market with a commitment to providing customers cost-effective energy-saving products. The company has also launched the only commercial VRF products with home-grown technology in Taiwan. These high COP value products have gained access to chain, commercial office and residential markets, while also breaking the market monopoly of Japanese brands. TECO is also Taiwan's leading professional A/C manufacturer with comprehensive R&D and production abilities across a spectrum of residential, commercial and industrial, and train A/C systems. The company is applying professional skills honed in the demanding industrial sector to residential and commercial A/C systems to provide domestic and foreign customers with solutions for optimal comfort environments

### Other Sectors

In the power business, TECO has accumulated a wealth of experience in building machinery and engineering construction for mass rapid transit (MRT) and Taiwan High Speed Rail (THSR) systems. In addition to supporting infrastructure develop-

ment in Taiwan, the company has actively sought out large commercial office building, MRT and railway projects. With the rise of cloud computing, TECO has won numerous machinery contracts for computer facilities projects. The company has actively integrated multiple green energy products within the group to participate in green building construction projects and act on its commitment to the environment.

TECO has also tapped into Taipower's localized market for high-voltage gas-insulated switchgear (GIS) products. In addition to ongoing bids for Taipower tender contracts, the company is actively expanding in the private-sector market. TECO has also established a development platform for specialty EV prototypes integrating electric motors, drivers, electrical controls and other core power systems made with group-developed key components. The development of environmentally friendly EV products is opening up new territory for TECO in green energy development.

## 5.3 Company Profile and Products

### 5.3.1 Company Overview

TECO Electric and Machinery Co., Ltd.

Founding time : June, 1956

Address of head office : 5th fl., No. 19-9, Sanchong Road,  
Nangang District, Taipei City

Stock code No. : 1504

Company history <http://www.teco.com.tw/history02.asp>

### 5.3.2 Key Products and Services

#### ● Main Products

##### Wind Turbine

MW-grade wind turbine



Taiwan's first MW-grade wind turbine which passed LVRT certification in just 18 days, an industry record

Small wind turbine



kW-grade wind turbine suited to the wind condition of Taiwan. Applicable in grid tied or independent power storage

Wind power inverters



High-efficiency grid-tied wind power inverter

PV inverters



High-efficiency grid-tied solar inverter

##### Heavy electric machinery

IE4 High efficiency motor



Permanent magnet synchronous motor



Explosion proof motor



Explosion proof motor



Aluminum case motor 510 Inverter



PLC



ABC Air circuit breaker



### Home Appliance and Service Consumer Appliance & Service



TECO Cloud air-conditioning system

### ● Supporting National Progress and Development

TECO is involved in the construction sector mainly through the contracting and execution of mechanical and electrical engineering planning, construction and management. The company also integrates industrial product sectors within the group to realize synergies, bringing a strict project execution attitude to national infrastructure works, such as the THSR Changhua Station, THSR Miaoli Station, Kaohsiung Mass Rapid Transit (KMRT), and Taoyuan Metro projects. More than half of these cases have been green building projects that seek to lighten or avoid environmentally detrimental practices at the engineering design and construction stages, while also saving energy and reducing carbon emissions.



Case Studies: THSR Changhua Station and THSR Miaoli Station  
The THSR is a major infrastructure project developed by the government with private investment. The route runs north-to-south along Taiwan's Western Corridor, crossing 14 counties and cities, 77 townships, 32 urban planning areas, slashing north-south travel time and integrating the Western Corridor into a single economic living area and spurring economic, industrial and tourism development in the region.

### 5.4. Operating Performance

In 2014, the world continued to restructure in the aftermath of the financial crisis. China's economic growth slowed sharply and geopolitical tension created volatility in financial markets. Global raw material prices fell sharply, raising deflation fears. In Taiwan, the economy felt the impact from the cheaper yen and food safety issues. Nevertheless, broader penetration of mobile devices and smart technology applications, rising demand for automated production equipment, and plunging oil prices helped the domestic GDP to grow at a 3.74% pace. TECO's orders and revenues were also affected as domestic public works and investment in real estate construction fell and the Kaohsiung gas explosion shook investor confidence in the petrochemical industry. Facing these economic uncertainties, TECO rallied its employees to seize opportunities and lift operating profits and net income to record highs in recent years.

Item	year		
	2012	2013	2014
Revenue	25,461,139	25,604,449	24,256,762
EPS (unit NT\$1)	1.69	2.01	2.06
ROE (%)	8.41	9.4	8.83
Current net profit	3,079,802	3,759,872	4,066,924
Cash dividend (no stock dividend)	1	1.1	1.1
Expense of income tax	348,560	384,671	384,663
Investment tax credit	150,563	22,031	0

### 5.5. Corporate Governance

Under the "TECO GO ECO" corporate vision, TECO is dedicated to achieving revenue and profit goals in a manner consistent with good corporate citizenship and sustainability.

With operations in five continents and more than 40 countries, TECO is committed to building a high-quality, international brand with a big-picture outlook. The company's management has applied advanced systems to bring corporate governance to the world-class standards fitting a global company. In 2014, TECO established a Corporate Social Responsibility (CSR) Committee to integrate ESG considerations in the company's business decision-making process. These efforts are aimed at helping the company grow sustainably and meet its social inclusion and green economy responsibilities. They have also earned plaudits in society, including a ranking among the top 5% of the 1,393 publicly-listed companies evaluated for corporate governance performance by the Taiwan Stock Exchange Corp. (TSEC) in 2014.

TOP  
5%

**Ranked among top 5% of enterprises in the First Corporate Governance Evaluation**  
 Full score on 41 indicators, including protecting shareholder equity, treating shareholders equally, protecting stakeholder interests, and CSR

To ensure corporate governance advances with the times, TECO has established a platform for notifications from the securities authority to facilitate regular updating of the company's business-related regulations and information from the competent authority, helping related units to quickly keep abreast of new information. In 2015, the company, led by the Legal Affairs Office under the board of directors, planned the establishment of a Corporate Governance Management Platform to more efficiently collect, arrange and track various corporate governance benchmarks and effectively control TECO's corporate governance development. The platform is rooted in TECO's corporate governance vision and integrates the TSEC's Corporate Governance Evaluation index items. It provides a framework to regularly review relevant units, formulate corporate governance goals, and track the corporate governance implementation status and results by units in charge of corporate governance. In the future, TECO will continue to strengthen the standards and quality of corporate governance through ongoing improvements.

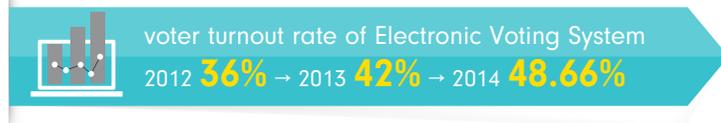
#### Corporate Governance Management Platform Process



## Strengthening Functions of the Board of Directors

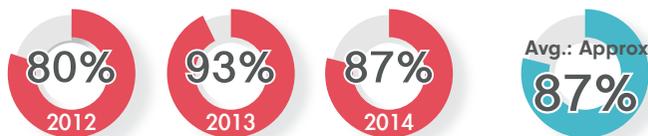
A sound and efficient Board of Directors is the foundation for good corporate governance. In order to strengthen the independence and plurality of the Board of Directors, for the betterment of corporate governance, TECO shareholders, meeting in 2012 reelected 15 directors, with a three-year term, including on female and one Japanese, with only two directors undertaking managerial posts and outside directors accounting for 67% of total seats. In addition to augment objectiveness and independence of the Board of Directors, three independent directors were elected, up from one originally. All candidates for directors were nominated.

The Board of Directors oversees the auditing committee (set up in 2012) and the compensations committee (set up in 2011), to help with fulfilling the task of supervision. The auditing committee consists of all the independent directors, while the compensations committee is comprised of independent directors and experts (three) in relevant fields. With their organizational charters being approved by the Board of Directors, the two committees regularly report their activities and resolutions to the Board of Directors.



## Electronic Voting System

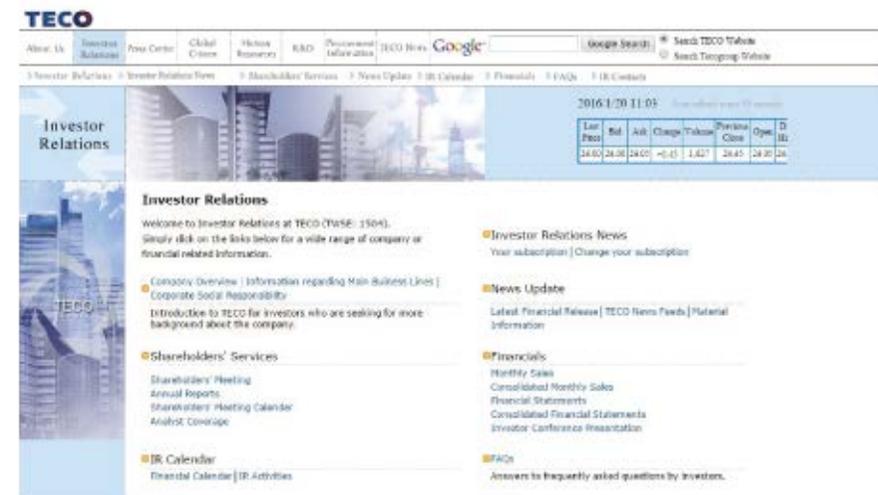
In order to strengthen information disclosure and fully communicate with shareholders, TECO has adopted a case-by-case voting system at regular shareholders meetings. In 2012, the company began using an electronic voting system for the meetings, attracting a 36% voter turnout. The voter turnout rose to 42% in 2013 and 48.66% in 2014, effectively protecting shareholders' equity. TECO shareholders also approved TECO's revised Company Articles and Regulations Governing the Election of Directors. The election of directors (including independent directors) fully adopted a nomination system and strengthened information transparency of director nomination reviews to further protect shareholders' equity and strengthen corporate governance. In addition, the members of TECO's board of directors actively participate in regular shareholders meeting, with the attendance rate reaching about 87% in 2014.



Director Attendance Rate at Shareholder Meetings (2012-2014)

## Communications with stakeholders and information disclosure

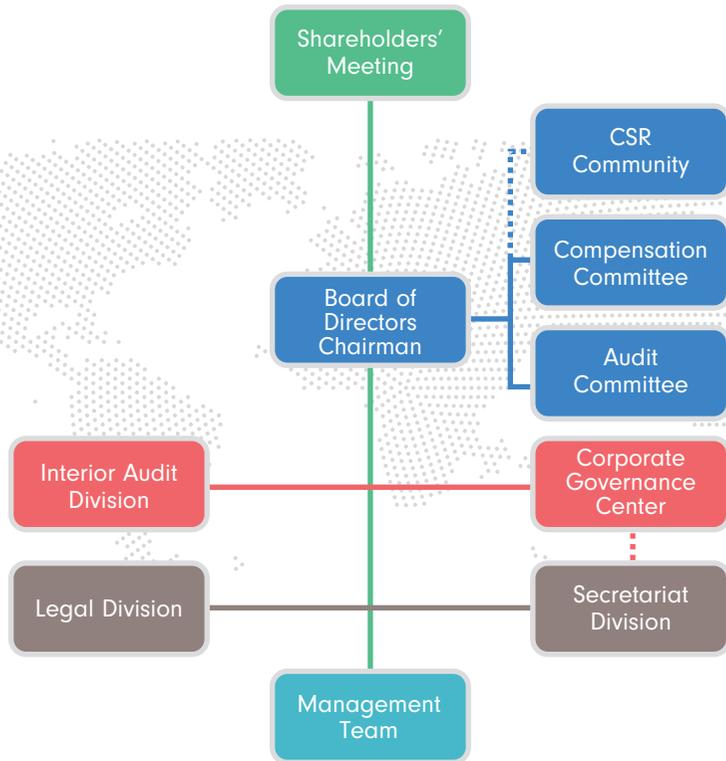
The company has instituted special section for investor relationship and corporate governance on its website (www.teco.com.tw), whose contents are available in both Chinese and English, allowing investors to make real-time inquiries, download the company's financial report, annual report, or major financial information, and browsing information on the company's share price and shareholders meeting. In addition, investors can communicate with the company via e-mail, which will be handled by designated unit.



To facilitate communications with stakeholders, TECO, in addition to the system of spokesperson, has instituted mailbox of independent directors on its website, enabling stakeholders to communicate with independent directors. The auditing and complaint mailbox on the website offers a channel for employees to inform on violations of laws or regulations, facilitating the company's sustainable development.

In addition to posting major company information on the Market Information Post System of Taiwan Stock Exchange, as required, TECO also attends domestic and overseas investors' forum irregularly, thereby explaining the company's business status, financial performance, strategic development, and business direction for investors. In 2014, TECO made significant strides in information transparency, earning the company the highest ranking (A++) in the 12th Information Disclosure Evaluation of Public and OTC Companies by the Securities and Futures Institute.

### 5.5.1. Governance Framework



### 5.5.2 Board of Directors

TECO's Board of Directors is its supreme institution of governance, responsible for selecting and nominating ranking managerial staffers and formulating the company's strategy for social responsibility, corporate citizen, and sustainable development. In compliance with the "practical guidelines for corporate governance," the company considers gender equality in selecting directors and takes into account their capabilities in business judgment, accounting and financial analysis, management, crisis handling, industrial knowledge, viewpoint on international market, leadership, and decision making, among others.

As of the end of 2014, the company's Board of Directors consisted of 15 members

(including three independent directors), including one female and one Japanese, with one third of the directors aged less than 60. They serve a three-year term and can be reelected. All of them are elites in the industrial sector and academics, boasting abundant experience in corporate governance and industrial technologies, as well as expertise in monetary affairs, finance, accounting, and law. The chairman also serves the director of the company's general research institute, leading the company to continuously achieve breakthrough in core technological competitiveness.

### Operation of the Board of Directors

In accordance with the stipulation of its corporate charter, TECO's Board of Directors convenes at least once a quarter, supervising and understanding the execution of business plan, the expression of financial report, auditing reports, and tracking related affairs. In 2014, the Board of Directors convened seven meetings, with the average rate of attendance reaching 90%. The Board of Directors invites at least twice certified public accounts to attend its meetings to discuss auditing operation related to annual report and semiannual report, so as to keep posted on the company's finance. Major resolutions of the Board of Directors are posted on the Market Observation Post System of Taiwan Stock Exchange and the investor-relationship section of the company's website, in addition to publicizing major company regulations, including corporate charter, practical guidelines for corporate governance, and norms on internal auditing, as reference to the public.

Operations of the Board of Directors in 2014

Number of Board Meetings	Average Director Attendance Rate	Major Regulations Formulated/Revised
7	Approx 92%	<ul style="list-style-type: none"> <li>• Company Articles</li> <li>• Regulations Governing the Election of Directors</li> <li>• Procedures for the Acquisition or Disposal of Assets</li> <li>• Organization Rules of the Compensation Committee</li> <li>• Internal Audit Implementation Measures</li> <li>• Ethical Corporate Management Best Practice Principles</li> <li>• Corporate Governance Code of Practice</li> <li>• Regulations on the Selection and Assessment of Certified Public Accountants</li> </ul>

## Year

### Milestones in Strengthening Corporate Governance

2008

- Formulation of "guidelines for corporate governance," according to the "guidelines for corporate governance of listed firms"
- Revision of corporate charter
- Revision of "measures for election of directors and supervisors"
- Revision of "rules on meetings of Board of Directors"

2009

- Institution of an independent director

2010

- Passage of evaluation of corporate-governance system on the criteria of "CG6005" common version by Taiwan Corporate Governance Association
- Grade A for evaluation of information disclosure by listed firms

2011

- Institution of "Compensation Committee" and formulation of "charter of Compensation Committee"
- Formulation of "criteria on the ethics and behaviors of directors and managers," according to the "reference sample for formation of criteria on ethics and behaviors of listed firms"
- Revision of "corporate charter"
- Revision of "measures for selection of directors and supervisors," which was renamed as "measures for selection of directors"
- Grade A for evaluation of information disclosure of listed firms



2012

- Institution of three independent directors
- Institution of Audit Committee and formulation of "organizational charter for Audit Committee"
- Pushing e-balloting for shareholders' meeting

2013

- Revision of "guidelines for corporate governance"
- Grade A from evaluation of information disclosure for listed firms



2014

- Revising the Company Articles and Regulations Governing the Election of Directors to fully adopt to a nomination system for the election of directors (independent directors).
- Revising company internal control systems according to the Regulations Governing Establishment of Internal Control Systems by Public Companies.
- Formulating Ethical Corporate Management Best Practice Principles according to the Ethical Corporate Management Best Practice Principles for TWSE/GTSM-Listed Companies.
- Annually assessing CPA independence and suitability according to the Corporate Governance Code of Practice rules, formulate Regulations on the Selection and Assessment of Certified Public Accountants.
- A++ rating in the Information Disclosure Evaluation of Public and OTC Companies.
- Ranked among top 5% of enterprises in the TSEC's First Corporate Governance Evaluation.

2015

- CSR Objectives in 2015
- Approve CSR Codes of Practice.
- Reelect board members.
- Promote establishment of a corporate governance platform.



### Avoiding Board Member Conflicts of Interest

To avoid conflict of interests, new directors have to sign an agreement to abide by the regulation of article 23 of the company's charter, faithfully executing their duties and fulfilling of the obligation of notice as a good managerial staffer. Meanwhile, every director has to sign a statement, acknowledging the requirement of avoidance of conflict of interest, along with the legal consequence for its violation, when exercising voting right, as stipulated in article 206 of the Company Law, article 32 of the company's guidelines for corporate governance, and article 14 of the meeting rules of the Board of Directors.

In 2014, board members raised five motions on avoidance of conflicts of interest involving 13 directors.

### Abiding guidelines for ethical behaviors

To assure strict abidance of behavioral norm and ethical standards by directors and managers when conducting business activities, the company formulated "guidelines for ethical behaviors of directors and managers" in Dec. 2011, based on the "reference sample for guidelines for ethical behaviors of listed firms," covering avoidance of conflict of interests and pursuit of self-interest, information confidentiality, fair trade, and legal compliance, in the hope of establishing a system for corporate governance and sound mechanism of supervision, thereby achieving the company's sustainable development.

### Director and Supervisor Education

The Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies advises that newly appointed directors and supervisors complete a minimum of 12 continuing professional education (CPE) hours in the year the person is appointed, and a minimum of three hours per year in each following year. A re-appointed person should complete a minimum of three CPE hours per year during the term of appointment. In 2014, all TECO directors met the CPE requirements, with a total education time of 63 hours. The company also annually holds regular refresher courses for directors to help them continue to strengthen their ability during their terms. Affairs related to such education are announced in the Annual Report and Market Observation Post System (<http://mops.twse.com.tw/mops/web/index>). In 2014, the teaching courses looked at the protection of trade secrets from the perspective of director and supervisor duties.

### Purchase of director and supervisor liability insurance

In order to exercise of rights and fulfillment of obligations by directors, as well as lower individual liabilities and financial loss of directors from law suits filed by a third party for affairs related to their jobs, the company regularly takes out "liabilities insurance for directors and supervisors" for directors, supervisors, and key managerial staffers, in addition to reviewing the contents of the insurance policy, for assuring completeness in the conditions for continuing the insurance policy.

### Social participation

In adhering to the concept of "giving back what one takes from the society to the society," TECO set up the "TECO Technology Foundation" in 1993, for dedication to the causes of "contribution to sci-tech and humanities," "education of creativity" "sustained education for aborigines," highlighting the social-development concept of "co-prosperity of science and humanities" with concrete actions. TECO's Board of Directors proper subsidy for related events, according the event planning of the foundation every year. In 2014, the foundation organized a litany of events, including "Green Tech competition," "workshop for creating teaching," "event on experiencing life and artistic innovation," "night for aboriginal children."

## 5.5.3 Auditing Committee

### Audit Committee Work

TECO set up the "Auditing Committee" in 2013, as a substitute for supervisors. The committee consists of the three independent directors, who elect among themselves one to serve as convener and chairman of the committee's meetings. The committee is in charge of assuring proper expression of the financial statement, appointment and dismissal of certified public accountants, on the basis of their independence and performance, execution of corporate internal control, legal compliance, and management of existing or potential risks. In accordance with organizational charter for the Auditing Committee," the committees auditing key corporate affairs, including financial statement, the company's policy and procedure for auditing and accounting, system for corporate internal control, transaction and raising of major assets or derivatives, issuance of securities, appointment or dismissal of certified public accountants, and appointment and

dismissal of financial, accounting, or internal-auditing chiefs. The Audit Committee meets at least once per quarter. In 2014, the committee met ten times, with an average actual attendance rate (excluding commissioning) of 100%.

### Communications conducted by independent directors

TECO's independent directors can directly contact the internal auditing chief and certified public accountant, thereby conducting regular auditing of the company's finance and business before communicating directly with management and governance units. After completing auditing for semiannual or annual financial statement, certified public accountant would report the result at the auditing committee and conduct communications for other affairs, as legally required. In addition to the submission of monthly auditing report to independent directors, the auditing chief has to deliver report on specific issues upon the requirement of independent directors. Internal auditing report is also available at the quarterly meeting of the auditing committee.



#### 5.5.4 Compensation Committee

##### Compensation Committee

In order to set up a sound compensation system for directors and managerial staffers, the company set up the "Compensation Committee" in Aug. 2011, whose members are appointed by the Board of Directors. The committee must have three members at least, including one independent director at the minimum, and all the members elect one independent director sitting on the committee as the convener and chairperson of its meetings, which is now served by Chen Tien-chih. The committee is in charge of formulating and reviewing regularly policy, system, standard, and composition for performance evaluation and compensation amount for directors and managerial staffers. The Compensation Committee held two meetings in 2014, with an actual average attendance rate of 100%.

Average attendance rate for members of the Compensation Committee **100%**



##### Compensation policy for directors

In addition to reference to the pay levels of peers, TECO offers compensations to directors according to individual performance, company's business performance, and future risks. Total compensation for directors is set at 1-5% of the remainder of finalized earnings after deducting taxation, making up for loss, and 10% provision for legal retained earnings. Actual payout is made according to "measures for allocation of compensations for directors."

##### Compensation policy for managerial staffers

Compensation for managerial staffers consists of fixed and variable compensation, with the former being directly linked to the result of KPI (key performance indicator). According to the focus of the company's annual development plan, each department would formulate its KPI every year, covering its performance goal, as well as development of energy-conserving products, environment-related indicator such as improvement of production line, and talent cultivation, including global power development, cultivation of key talents, and passing of experience.

KPI is reviewed quarterly, for full reflection of individual and team performance. The result is submitted to the review by the Compensation Committee and approved by the Board of Directors, with related information also being disclosed in the annual report (p. 25, annual report, <http://www.teco.com.tw/stocker2.asp>), so that all stakeholders can fully understand linkage between compensations for directors and managerial staffers and company's business performance. The company regularly reviews the rationality of compensations and general pay levels on the market, to assure competitiveness of the compensation level, thereby achieving the goal of talent recruitment, motivation, and retention.

## 5.6 Sustainable Development and Risk Management

TECO is committed to building a sound risk management system. Following current administrative organization systems and internal control loops, the company has actively faced and controlled operational risks to continue to steadily grow, create strong operating results, and achieve business sustainability. TECO's risk management system is based on clear specialization at various levels, including internal risk, financial risk, investment risk, legal risk, and environmental, safety and health risks.

Through rigorous internal control systems, TECO aims to ensure the effectiveness and efficiency of operations, the reliability, timeliness, transparency, and specification compliance of internal and external reporting, and ensure the company's compliance with relevant laws and regulations. TECO's audit system further provides reasonable assurances of the continued effectiveness of internal control systems.

##### Auditing Team

TECO has established a specialized Audit Team under its board of directors to help the board and management identify and assess company risk and inspect and confirm the effectiveness of the company's internal control system design and operations.

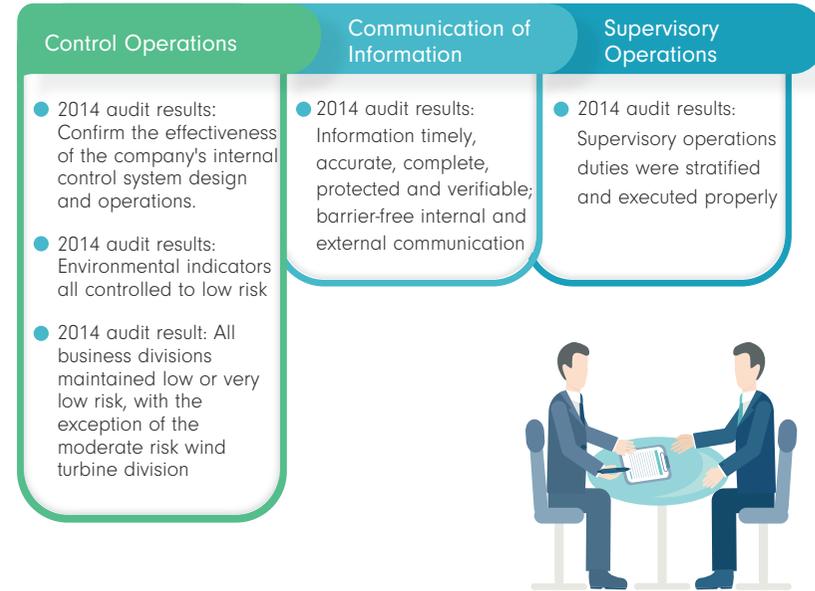
The Auditing Team annually prepares an audit plan according to the five elements of COSO internal control and based on past inspection experience, the following year's draft budget, and current organizational structure. The plan is designed to review the ability of TECO's management to control overall levels of internal and external environmental risks, business division operational risk, and the effectiveness of internal control system design and execution. After completing the audit work, the team issues an audit report and regularly reports to the Audit Committee and board of directors.

In order to continue implementation of the company's overall sustainable development strategy, TECO considers ESG indicators in the overall level of internal controls. Green products, green operations, green supply chain, social responsibility and other factors are all included as sustainability assessment items. The assessment also includes a thorough review to determine if the board of directors has professional ability covering internal control design and implementation supervisory capacity, market and organizational knowledge, financial expertise, regulatory expertise and other areas. Also covered in the assessment is whether the independent director, audit committee, and information transparency systems have been implemented. In this way, TECO aims to achieve its environmental, social and corporate sustainability vision.

Concrete Results

● Internal Control Items

Control Environment - Overall Level		Operational Risk Assessment - Business Division Level	
External environment	Economic growth rate, exchange rate, interest rate, political, price index	Sales	Operations, demand, surplus and other risks
Corporate governance	Board of directors membership structure and professional degree, independent director system / audit committee, information transparency	Management	Strategic, manpower structure, supply, procurement, RD, productivity and other risks
Sustainable operations	Green products, green operations, green supply chain, social responsibility, legal risk	Financial	Operating profit margin, return on assets, cash flow, inventory turnover days, days sales in accounts receivable and other risks



● Audit System Implement Process:



Table: Audit system implement process

In 2014, the Auditing Team completed its various audit operations and all units with audit deficiencies completed improvements by the deadline. The audit frequency was adjusted based on the overall impact on TECO of business units with different risk to ensure the company's operations maintained low or very low risk.

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### Financial risk management

Various functional units carry out risk management in different aspects according to professional division of labor, so as to cut the company's operating risk. In order to effective control financial risk, the company has formulated procedural measures for related operations covering loaning, endorsement, and obtaining and disposal of assets. Meanwhile, the company has set up mission-oriented unsecured loan auditing committee, to assure safety of the company's accounts receivable and notes payable, as well as the propriety for quota of unsecured loans.

In addition, the company regularly evaluates status of market fund and banking interest rates, in addition embracing risk hedging measures against fluctuation of exchange rate, so as to minimize the effect of interest rate and exchange rate on the company. The financial unit reports quarterly effect of interest- and exchange rate change on the company's operation, as well as investments in derivatives, to the Board of Directors.

### Investment-risk management

Another mission-oriented committee is investment and disposal commission, consisting of 8-9 outside members (scholars, experts, and directors) and internal members (representatives of various business groups and investment chief), responsible for decision of investment strategy and assets allocation, formulation of standard operating procedure for investment evaluation, screening new investment projects, tracking investment performance, and overseeing execution of assets disposal plan, so as to strategically cut or avoid investment risk and assure the sustainable development of the company.



### Legal-risk management

The Board of Directors oversees the legal office, in charge of screening various contracts of the company and affiliates and provide legal consultation, to avoid breach of law and dealings with parties with dubious track record, in addition to helping business units handle patents, trademarks, and other intellectual properties. The legal office regularly posts new or revised law/regulations, conducts legal education/training, and revises company regulations, including guidelines for handling legal cases, measures for patent management, and measures for trademark management, as well as management measures for safety and keeping of personal data, which are executed by panel for protection and management of personal data. In addition, in 2013 the legal office formulated guidelines on abidance of anti-trust law, so as to avoid breach of the law in the company's business activities.

### Management of risks related to environment, safety, and sanitation

Adhering to the concept of "pollution-free environment and accident-free work," the company has dedicated to upholding physical and mental health of staffers, creating a friendly environment, fulfilling social responsibilities, and pushing sustainable development. In view of the involvement of professional knowledge, the company has set up a dedicated unit for environment, safety, and sanitation and established the company's management system, and related measures and norms for environment, safety, and sanitation, on the basis of ISO 14001, OHSAS 18001, and CNS 15506 (Taiwan's vocational safety and sanitation management system, assuring legal compliance via systematic operation and avoiding risk of legal breach. In addition, the company has formulated "measures for handling accidents" and "contingency measure for emergencies," as well as conduct drills on the measures annually.



Taiwan High Speed Rail Changhua Station / Green Building project

# 06

## Impressing Our Customers

- 6.1 Products and Specifications
- 6.2 Outstanding Quality Control
- 6.3 Green Supply Chain
- 6.4 Customer Satisfaction



# Impressing Our Customers

## 6.1 Products and Specifications

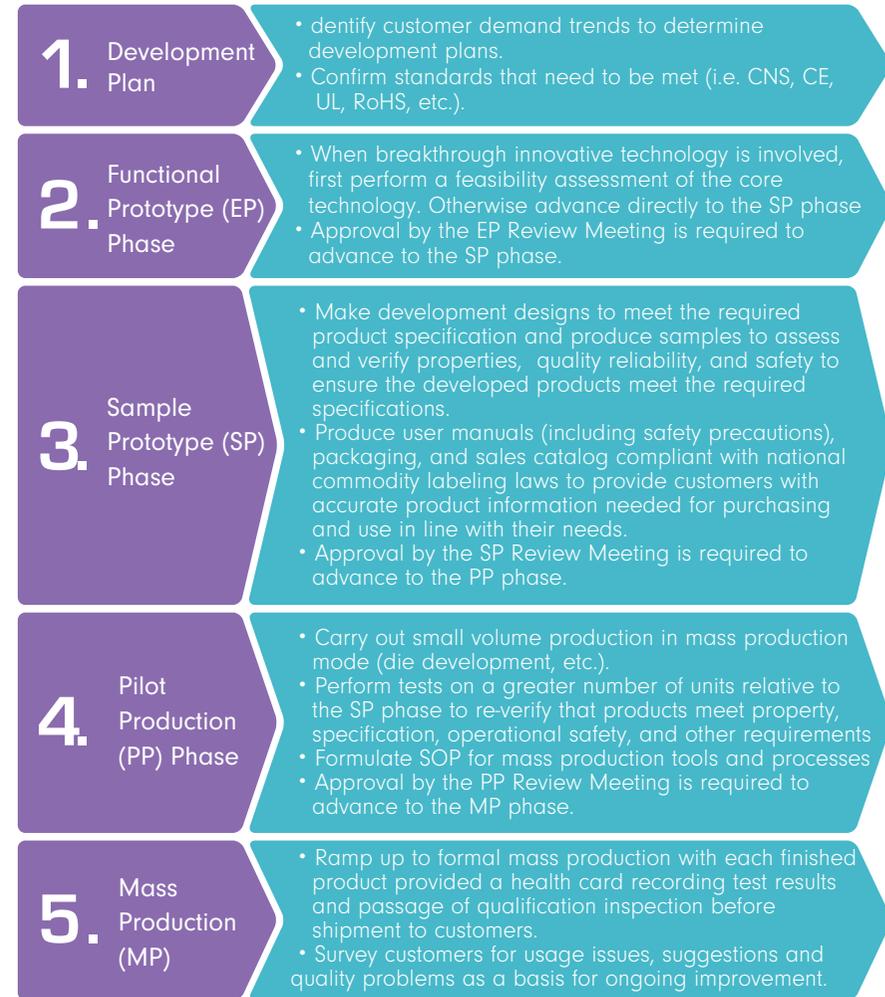
TECO is committed to developing energy-saving and high-efficiency products in line with the "TECO GO ECO" vision. IE2, IE3, and IE4 high-efficiency motors sold in 2014 potentially enabled customers to reduce electricity usage by 485 million kWh (relative to IE1 rated motor use). TECO is also certifying its products under various national standards. The company has equipped motors with its self-developed 510 inverter series (for cooling towers, commercial fixed-frequency A/C, and machine tools) to achieve a more than 35% power savings. The company's major product testing labs, including its motor lab, have been certified under the US Department of Commerce's NVLAP and Canadian CSA systems to ensure the quality of product verification.

In the home appliances sector, TECO's sales emphasis has been on the domestic market. The company has applied for Taiwan's Green Mark, Energy Label, and Water Saving Mark certification of its major commercial and home A/C systems, refrigerators, washing machines, and small home appliances in keeping with its commitment to develop environmentally-friendly products.

TECO has also applied its industry-leading mechatronics technology to develop innovative green energy products, such as high-power electric vehicle (EV) motors, EV controllers, wind turbine inverters, and 2MW-plus wind turbine assemblies. These products highlight TECO's achievements in bringing core technology to the mission of environmental sustainability.



### ● Rigorous product development process



● **Pushing certification of quality management system and accreditation of laboratory, to assure compliance of products with customer needs**

All TECO factories have passed ISO9001 certification for manufacturing quality management system, with tools of the Chungli and Hukou factory even having passed TS16949 certification for auto-industry quality management system, assuring effective execution of quality management system, on top of regular internal and external auditing.

In addition, to assure its lead in technological development and product functions, TECO has also actively obtained accreditation for its laboratories, including the motor testing laboratory at the premise of Chungli factory, which has passed not only the accreditation of the Taiwan Accreditation Foundation (TAF) and the Canadian Standards Association (CSA), but also, as the first one in Asia, (DoE) NVLAP. The accreditation of TECO laboratory proves the possession of qualified

Table of Quality Certification of TECO	
Kinds of certification/accreditation	Certified/accredited sites
ISO9001 quality management system	<ul style="list-style-type: none"> <li>• Chungli factory</li> <li>• Hukou factory</li> <li>• Power equipment of Kuanyin factory II</li> </ul>
ISO/TS16949 quality management system	<ul style="list-style-type: none"> <li>• Chungli factory</li> <li>• Electric-control products of Hukou factory</li> </ul>
laboratory accreditation of (DoE) NVLAP	<ul style="list-style-type: none"> <li>• Motor laboratory of Chungli factory</li> </ul>
Laboratory accreditation of CSA ISO/IEC 17025	<ul style="list-style-type: none"> <li>• Motor laboratory at Chungli factory</li> </ul>
Laboratory accreditation of TAF ISO/IEC 17025	<ul style="list-style-type: none"> <li>• Motor laboratory of Chungli factory</li> <li>• High-voltage switchboard laboratory of Hukou factory</li> <li>• Calibration laboratory of Chungli factory</li> </ul>



testing equipment and technology of TECO, facilitating product development and technological enhancement.

● **Product certification**

TECO embraces certification registration for its products on the domestic market, following the certification registration measures of the Bureau of Standards, Metrology & Inspection for all products sold domestically. For overseas markets, the company applies for logos according to certification standards of various countries before sales, to assure the benefits of users. Take certifications for high-efficiency IE1-IE4 motor series as example:

○ completed ● scheduled for completion in 2015

NO	Countries (areas)	Efficiency grade	notes	Product certification	Status for certification
1	U. S. Canada	IE2			○
		IE3			○
		IE4			○
2	Europe (The International Electrotechnical Commission)	IE1			○
		IE2			○
		IE3			○
		IE4			●
3	Taiwan	1E1+			○
		IE2			○
		IE3			○
4	Japan	IE2			○
		IE3			○
5	Australia New Zealand	IE2		MEPS	○
		IE3			○
6	China	GB2 (IE3)	TYPE3	Level 1 Level 2 Level 3	●
		GB3 (IE2)	TYPE3		○

● **Product certification**

To uphold the interests of consumers, TECO has formulated the management procedure for banned and restricted objects, preventing user of hazardous objects at roots. Design and manufacturing are carried out according to various related standards and “simulated vicious test” for product safety is conducted during the development and testing stage. In addition, according to Product Labeling Act, the company makes correct labeling on product packaging, usage illustration manual, and sales information, helping consumers make correct product purchase and safe usage, in addition to undertaking marketing in compliance with the Fair Trade Law and other legal regulations.

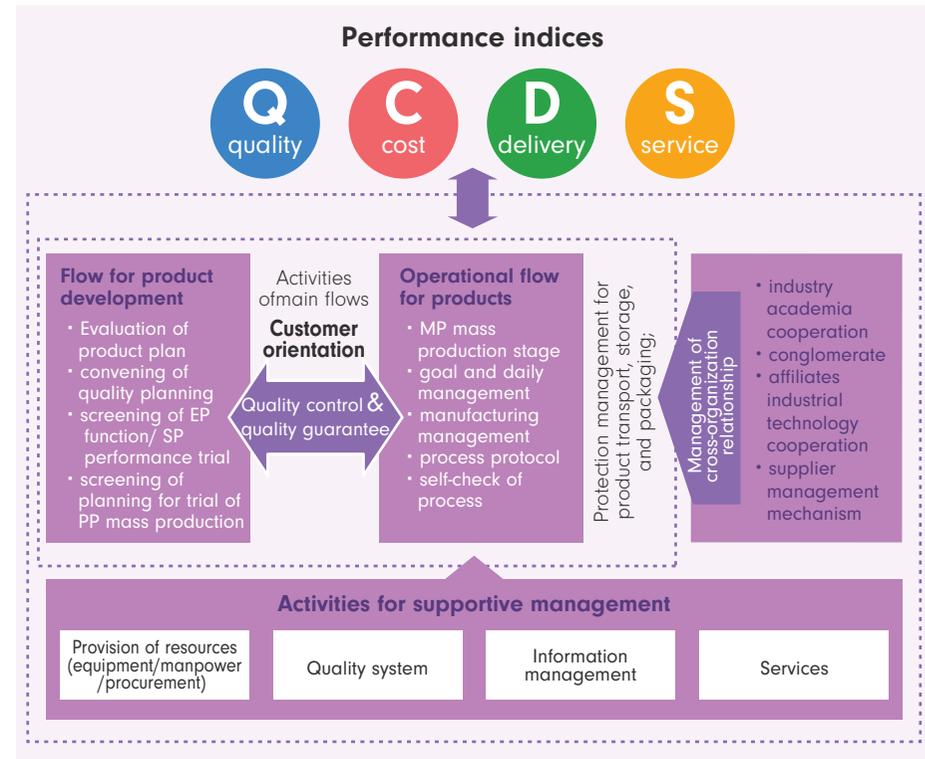
TECO doesn't have record of legal violation in products, service information, advertisement, and promotion. A misstep was recall in 2007 of some models of dehumidifiers produced during 2003-2006, with model No. and manufacturing number listed below, due to concern over possible fire, as result of small capacitor in electronic substrate. As some channels still cannot obtain information on some customers, the recall is still underway, mainly via the company's website at <http://www.teco.com.tw> and the website of the company's affiliate Appliance Service Provider at <http://www.a-ok-service.com.tw>.

To rectify the problem, the company has equipped the small capacity with a protective device and will incorporate fire-proof feature into the design for related plastic products. The company will continue providing quality safe products to customers in a responsible manner.

TECO and its service provider subsidiary (AOK Co., Ltd.) have established management measures to safeguard the privacy of customer data obtained from product sales and services. In 2014, the company had zero complaints for customer privacy violations.

**6.2 Outstanding Quality Control**

TECO has always followed the spirit of the ISO quality management system with rigorous quality management at each stage, from R&D, design, manufacturing, and sales management to after-sales service. Customer satisfaction and continuous improvement form the basis for control processes used in product execution and management rules. This is supplemented by supportive activity management and cross-organizational relationship management to create a more complete process management operating system and provide products designed to satisfy our customers.



To ensure the efficiency of each process review and improvement activity, TECO convened meetings in 2014 to review and improve quality objectives. The meetings have helped the company to effectively track the progress and results of quality improvement activities and promptly amend strategies and programs.

Review Activities	Chair	Description	Cycle
Annual quality strategy meeting (company-wide quality review meeting)	President	Review annual quality performance and set annual quality policies and guidelines.	2014/2/6
Annual quality control review (quality control review meeting)	Assistant VP	Report business division's 2014 quality performance and review quality objectives for 2015	<ul style="list-style-type: none"> <li>Industrial Product and System Sector: 2015/1/20</li> <li>Green Electric Machine Sector: 2015/1/21</li> <li>Industrial Product and System Automation Sector: 2014/12/15</li> <li>Consumer Appliance Sector: 2015/1/22</li> </ul>
Market quality performance review (market quality review meeting)	Quality Supervisor	Convene meeting with sales representatives, service unit and production units to jointly review and improve market quality performance.	Once per month for each business sector
Production quality performance review (production quality review meeting)	Quality Supervisor	Convene internal production units to review quality standards of various production activities and follow-up on corrective and preventive measures for abnormal cases.	Once per month for each business sector

## Major Achievements in Quality Management in 2014:

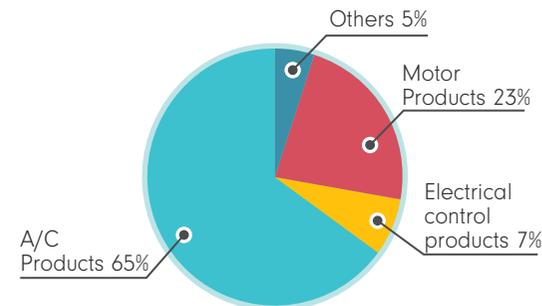
### I. Product development

TECO applied for registration of product certification (RPC) for 1,063 product models, including the following:

1. Motor products: 244

2. Electrical control products: 77

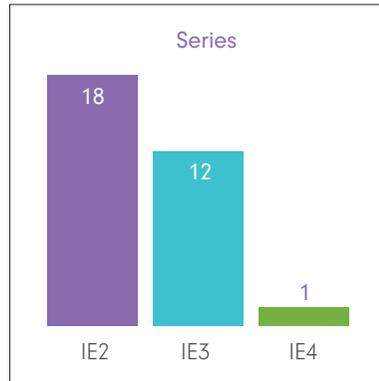
3. A/C products: 693



Models in five of TECO's new product series won the Taiwan Excellence Award in 2014, including the AEHF-4P-1HP JIS premium efficiency induction motor (IE3); the AEHHXU explosion-proof high-efficiency motor series for the North American market; the LV2001ZW low-carbon, smart, high-precision full DC inverter water cooler for mechanical equipment; the PQDG-K2100SCS energy-efficient centrifugal central A/C; the R6161XH energy-saving, smart, cloud-based composite twin inverter A/C; the MM71VN, smart cloud refrigerator; the ASHYLD series of high efficiency energy-saving cooler motors; the MM86VN multifunctional multi-split inverter air conditioner; and the AFJHXC series of medium voltage non-sparking explosion-proof motors (with cast iron case).

In the motor sector, TECO responded to the international energy-saving and carbon reduction trends with the roll out of 18 motor series meeting the IE2 motor efficiency rating, 12 series meeting the IE2 energy efficiency rating, and a line of motors meeting the highest level IE4 motor efficiency rating formulated by the International Electrotechnical Commission (IEC) under the IEC 60034-30 international standard.

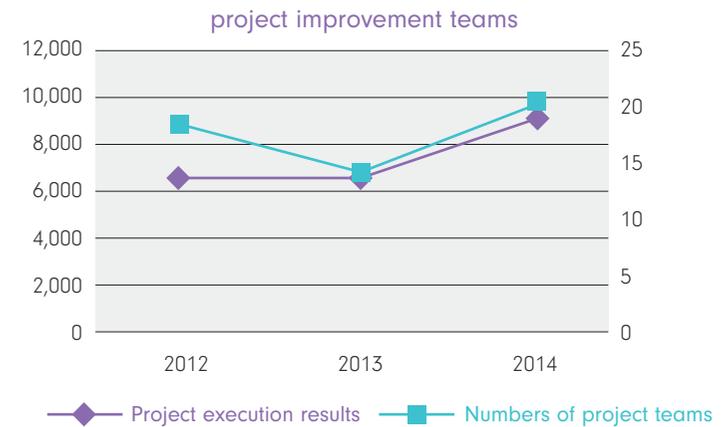
In 2014, TECO received a total of 96 certifications for motor series and single motor models under the explosion-proof electrical equipment type testing system adopted by the CNS in January 1, 2011.



Energy-saving Products	No. of Models
Air conditioners	108
Electric fans	21
Dehumidifiers	6
Refrigerators	24
Washing machines	14
Warm-hot drinking water dispenser	1
Monitors	1
Air purifiers	1

## II. Constant Improvement

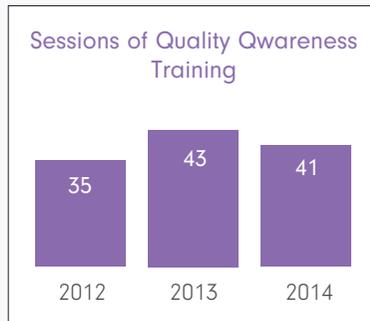
In 2014, TECO formed 18 project improvement teams that achieved the following significant project execution results:



- 1** DISA-LINE sand hole improvement: Molds were improved with the addition of strainer cores and improved sand shot, reducing fusion electricity, carbon additive, silicon steel scrap, and waste casting sand from faulty compression and lowering sand blasting costs by NT\$1,231,974 per year. Work standardization establishment and revisions also enabled sustained improvements.
- 2** Design negligence quality improvement: TECO took a systematic approach to prevent design negligence, update material databases, reduce omission of design proofing, adopt explicit design norms, create a sound design system, introduce a motor design checklist, and create an automatic verification system. The improvements reduced failures from design negligence, saving the company over NT\$2 million from the year before.
- 3** Improving inverter electronic control market stability: The company improved RAC external 30A electrical controls in response to market and customer complaints over the cold compressor's failure to start and communication anomalies with the RAC MM86VN. The RAC external 30A and RAC MM86VN external electrical control software was improved to reduce the RAC inverter electronic control defective rate and produce an economic benefit of NT\$2,598,000/year.

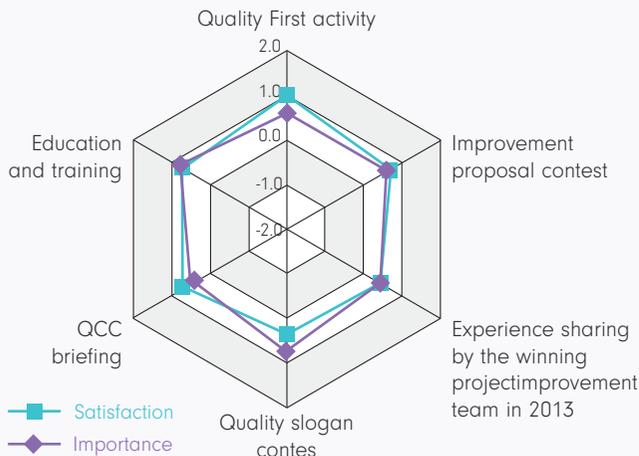
### III. Quality Awareness

In its globalization drive, TECO is bringing an international perspective to localized services. The company has also formulated a quality policy rooted in "first-class talent, value-added work, top-tier products, and zero customer complaints." To cultivate first-class talent and create first-class products, TECO has been providing quality education for company employees for several decades.



In 2014, TECO arranged an Environmental Safety Quality Month activity to inspire quality awareness among employees. The program included an improvement proposal contest, events to share the experience of project improvement winning teams, a quality slogan contest, QCC issues, and education and training related to quality techniques. The program attracted 2,903 participants with activities at TECO's Nangang Head Office, Zhongli plant, Guanyin plants I and II, and Hukou plant.

An employee survey conducted as part of the Quality Month activities found that company employees universally affirmed the importance of quality and were moderately satisfied with the results of the activity. TECO will continue to carry out and improve Quality Month to fully realize the benefits of the activity.



### 6.3 Green Supply Chain

Under the "TECO GO ECO" vision, TECO is dedicated not only to ongoing development of green energy products, but also to greening its supply chain and leading the upgrading of the entire industry chain.

#### 6.3.1 Management Flow for Green Supply Chains

TECO has adopted a rigorous supply chain management approach. In addition to evaluating new suppliers, the company conducts a quarterly delivery and quality assessment of its existing suppliers. To ensure that TECO suppliers continue to pay attention to the environmental, human rights, and other issues, the company incorporates environmental and human rights assessment in new vendor evaluations and re-evaluates suppliers every three years to confirm their suitability.



- CSR conformance by current major suppliers

Major Supplier	CSR Report
China Steel	✓
ITOCHU	✓
TAYA Group	✓
TAI ELECTRIC WIRE & CABLE	
Pacific Electric Wire and Cable Co.	
RENK	✓
SKF	✓
CHALCO	✓

- 2014 comprehensive survey of suppliers on human rights and environmental issues

In 2014, TECO conducted a comprehensive review of human rights and environmental objective achievement by all domestic suppliers. Suppliers were scored on 20 evaluation items in the three categories of labor / human rights social responsibility, environment, and energy saving / waste reduction to comprehensively assess their level of concern and implementation in environmental and human rights objectives. Based on the evaluation score, the suppliers were classified as qualified, needing attention, and unqualified as a basis for future development of a supplier guidance mechanism.

Cat.	NO.	Evaluation Items
Labor / human rights social responsibility	1	Certified or not under the ISO18001 occupational health management system
	2✘	Employment of child labor (15 years of age and younger)
	3	Importance placed on workplace safety and health
	4	Mechanisms for communication with workers' groups
	5	Discrimination (gender, etc.)
	6	Forced labor
	7	Assistance for community employment (proportion of local hires)
	8	Participation in community welfare
Environment	9	Certified or not under the ISO14001 environmental management system
	10	Noise prevention management
	11✘	Management of waste water and gas emissions
	12	Waste management
	13	Are hazardous substance regulations (RoHS, etc.) implemented under management systems?
	14	Are there documented procedures for hazardous substance operations?
	15	Chemicals management (material safety data sheet (MSDS), storage, etc.)
Energy saving and waste reduction	16	Energy conservation methods and implementation
	17	Water conservation methods and implementation
	18	Clean production
	19	Acting to reduce waste
	20	Verification of greenhouse gas inventory

- The results of the 2014 supplier assessment are as follows:

Assessment Ranking	Scoring Standard	No. of Suppliers	Ratio
Qualified	Over 75	311	93.67%
Needing Attention	60~75	21	6.33%
Unqualified	Under 60	0	0.00%
Total		332	100.00%

Among the assessment items, all suppliers found to have employed child labor or lack management of waste water and gas emissions were given scores of zero and listed as unqualified suppliers. In the 2014 assessment, there were no suppliers receiving zero scores on these two assessment items.

TECO will continue to assess the qualified suppliers on a quarterly basis and re-evaluate suppliers every three years. The company will also continue to pay attention to and dialogue with suppliers needing attention, as well as provide timely counseling and assistance to help them conform to green supply chain needs.

### 6.3.2 Supply Chain Development Strategy

#### ● Increasing local procurement ratios

TECO operates in the heavy electric industry in which many of the needed raw materials are large volume and heavy items, the transport of which can have some environmental impact. TECO is committed to developing and providing guidance to local suppliers to reduce the potential environmental impact of the material feeding process.

Apart from insulation, bearings and other specialty materials from European and American brands, TECO currently procures its main materials from domestic manufacturers, reducing the environmental impact of transportation through local procurement. The company is also planning to gradually increase the local procurement ratio of overseas manufacturing subsidiaries. TECO's head office in Taiwan is building a supplier management platform to assist supplier evaluation and refer local suppliers that meet TECO's standards.

#### ● Joint development with suppliers

TECO is well aware of its position in carrying on tradition and pioneering new ground in the industrially vital motor sector. The company jointly develops with its suppliers and, through more direct communication with suppliers, aims to advance the technology in the motor industry.

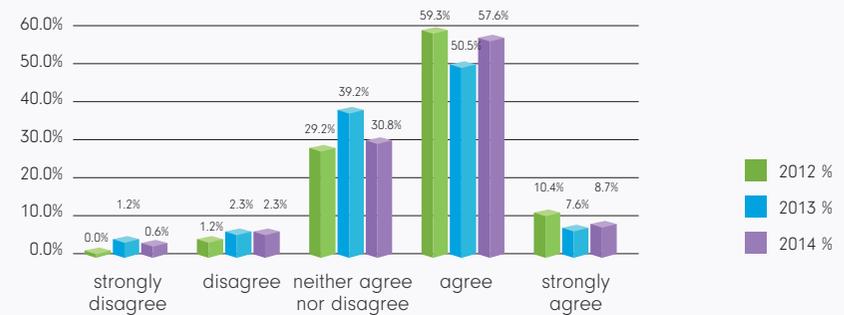
To this end, TECO regularly holds meetings with China Steel, Nippon Steel and Sumitomo Metal Corporation, and other major manufacturers to exchange motor technology. In one case, such collaboration enabled the company to upgrade silicon steel thermal conductivity and magnetic flux density to enhance overall motor performance. TECO also hopes to shorten the development process and accelerate industrial upgrading through upstream and downstream technical cooperation.

## 6.4 Customer Satisfaction

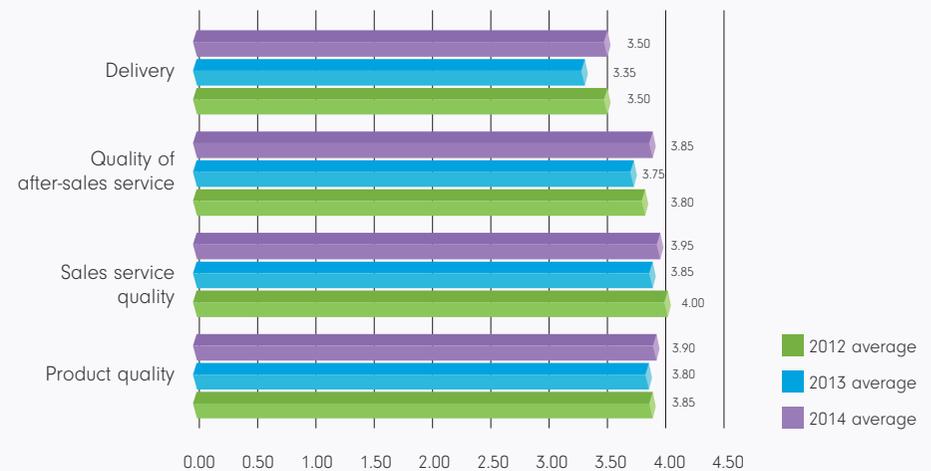
#### ● Motor Products Customer Satisfaction in 2014

Average scores improved from the 2013 level, with the greatest gains in delivery schedules

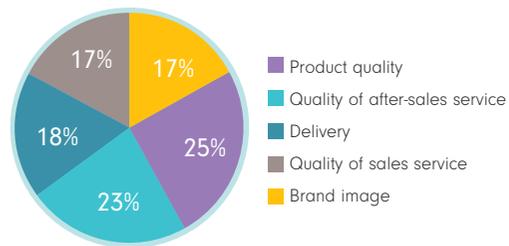
1 Customer satisfaction surveys over the past three years



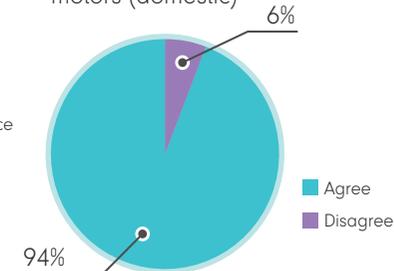
2 Distribution of customer survey items over the past three years



**3** Distribution of main TECO motors items purchased (domestic)



**4** Repurchase intention for TECO motors (domestic)

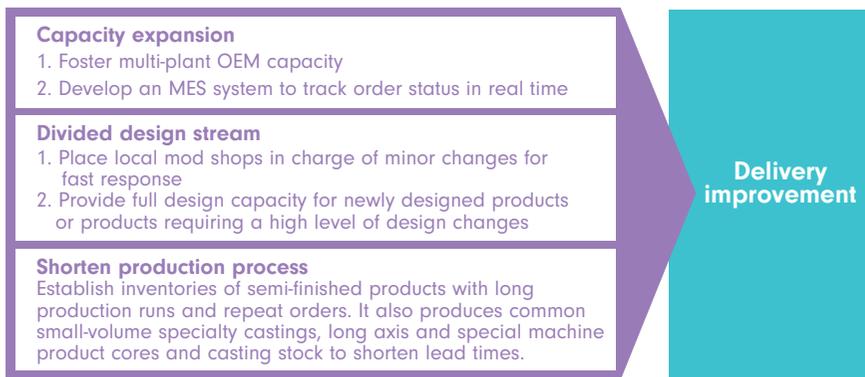


**5** Delivery improvement measures

Improving delivery schedules is a process encompassing everything from product design to capacity expansion. Thorough at-source improvement of design and production capacity can effectively enhance product delivery.

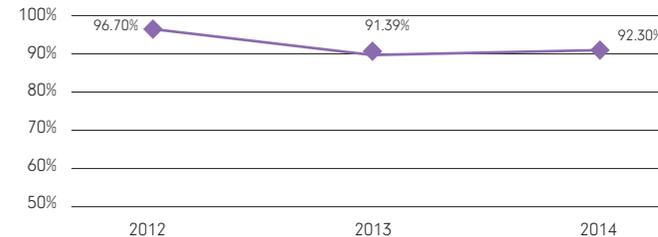
To this end, TECO has expanded production at overseas plants so those operations have more complete capacity to produce product parts and greater flexibility on order deployment to avoid capacity crowding. TECO has also adopted MES systems to make production information transparent, as well as established a real-time shop-floor reporting system to help units control production schedules and order delivery.

TECO has also adopted a mod shop production system to re-plan and design operating procedures based on order structure and expand design-side order processing capability. Local remodeling teams are trained and established to divide the design stream and enable local mod shops to handle small changes from an inventory of standard items to quickly meet customer needs, avoid resource waste, and shorten the design process.



In terms of the manufacturing process, TECO establishes inventories of semi-finished products with long production runs, repeat orders. It also produces common small-volume specialty castings, long axis and special machine product cores and casting stock to shorten lead times.

● Home Appliance and A/C Service Customer Satisfaction



Home appliance and A/C service customer satisfaction surveys are conducted monthly through proportional random telephone interviews. In 2013, TECO adopted a more stringent survey method, shifting from random sampling for all product groups to product type sampling. This method more clearly defined and exposed problems so that specific improvements could be made. The survey results for 2013 showed that major customers were dissatisfied with the peak season time-to-service for home appliances. In-depth follow-up found that this was an operational problem. In 2014, the consumer appliance sector actively adopted the following improvement measures:

1. Enhance the alerting functions of machines to avoid user mis-operation and reduce the number of customer repair calls.
2. Build self-diagnosis functions into the design to facilitate maintenance, assist rapid diagnosis and repair, and increase customer trust.
3. Offer Saturday service to improve customer convenience.
4. Strengthen service personnel's products, technical, attitude, and feedback education and training during low demand periods to improve service efficiency and response attitude during peak demand periods.
5. Increase assistance to plant R&D teams on special cases to address under-service during peak demand periods, as well as enable technical units to directly access information on product issues to design and produce products more in line with customer expectations.

TECO highly values customer satisfaction and believes that customer satisfaction is more than just a number. Through telephone surveys and dealer and customer interviews, the company looks into customer complaints, dissatisfaction and hidden problems to find ways to continuously improve and truly enhance customer satisfaction.

# 07

## Inspiring Employees

- 7.1 Human Resources Policy
- 7.2 Human Resources Management
- 7.3 Communication Channels
- 7.4 Compensation and Benefits
- 7.5 Career Development
- 7.6 Workplace Safety and Health
- 7.7 EAP and Employee Work-Life Balance



# Inspiring Employees

## 7.1 Human Resources Policy

People are TECO's most important asset, as well as the foundation for the company's sustainable development. TECO is dedicated to continuous development rooted in the vision of "Green TECO, Green Technology" and the five values of "Ambition, Customer Focus, Teamwork, Integrity, and Innovation."

In the area of human resources (HR), TECO aims to cultivate the global talent it needs to develop sustainably and become the best employer brand. In recent years, the company has worked to instill employees with five core values to inspire individual potential and build organizational cohesion.

In 2014, TECO focused on the following three HR strategies to meet the strategic development needs of the group: strengthening talent development, integrating group resources, and enhancing employee well-being. In 2013, TECO received the Taipei Award for Best Companies to Work for. The company also helped employees to develop and realize their full potential and contribute to TECO's sustainable operations, creating a win-win outcome for employees and the company.

- **Develop dual-track grades:** Adopt a dual-track system of professional grades and management grades to encourage employees to steadily grow and enhance their abilities.
- **Implement career development:** All employees undergo a semiannual performance review, including performance interviews with their immediate supervisor and, after full communication, joint planning of personal development and career plans.
- **Customized training course:** Interviews are conducted annually to determine the training needs for talent development at various business divisions to help formulate customized personnel training programs.
- **New executive coaching:** A mentoring program is offered for new executives. Under the program, senior executives can pass down their experience to help new executives smoothly transition to a new post.
- **Cultivate key personnel:** Key or potential talent cultivation and development plans are arranged annually for all units based on needs.
- **Provide diverse learning channels:** The company regularly publishes book digests and information on films and exhibitions in conjunction with theme reading plans, cultural lectures, and theater bookings for movie viewings to create a corporate culture of diverse learning.

### Strengthening talent development



### Integrating group resources



### Enhancing employee well-being

- **Formulate a group HR development strategy:** Establish HR system transfer mechanisms, establish overseas affiliate salary framework management mechanisms, and strengthen work reporting management and problem response mechanisms.
- **Optimize systems and services for expatriates:** Carry out programs to help expatriate employees returning to Taiwan for work reports to recuperate, establish expatriate information zones, and arrange meetings for expatriate supervisors to share experience.
- **Assist foreign affiliates with training and development:** Including internal instructor training and the planning and implementation of courses on problem analysis and resolution.
- **Regularly convene meetings of group HR heads:** Recruit external lecturers and arrange workshops, seminars and other channels to help affiliates stay abreast of recent trends.
- **Strengthen compensation and benefits:** Regularly review TECO's remuneration policy and annually participate in external compensation surveys to facilitate recruitment and retention of high-quality talent.
- **Retirement planning:** Establish associations for retired employees and regularly arrange seminars for retired employees (on financial planning, etc.) so they can absorb new knowledge and have channels for re-employment.
- **Work-life balance:** Provide employee group insurance, special offers on home appliances, wedding and funeral subsidies, bonuses (gifts) on the three major festivals, refreshing summer drinks and other benefits. The company also works with the Employee Benefit Committee to provide employees with comprehensive 360-degree benefits and care.

## 7.2 Human Resources Management

The wind-turbine business department, set up in 2010, was the latest addition to TECO's highly diversified operation spanning heavy machinery, electric control, home appliances, wind power, electronics, and infrastructural engineering, which poses major challenge to the company in human-resources management, as the company strives to cultivate talent needed by its global deployment. TECO's existing structure and personnel structures follows (data based on Dec. 31, 2014) :

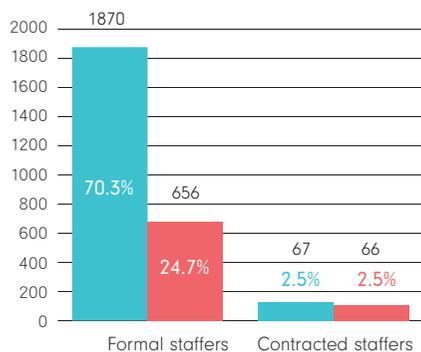
1. The company has six business departments and one general research institute, with 2,659 employees on its payroll.
2. The company boasts remarkable personnel structure, with 64% of its staffers owning college or higher degree, offering critical support to its continuous and stable development.
3. Employees age 41.6 on average, with 13.9 average service years. A focal point of the company's personnel development is passing of experience and knowledge and cultivation and retention of key talent.
4. TECO's Recruitment Approach:

**Diversification :** TECO recruits talents through a variety of channels. In addition to job bank hires, the company has annually recruited 10 to 12 college students for summer internships. The intern program, launched in 2010, aims to promote youth employment, help new graduates compete, cultivate suitable potential talent, and help young people put their knowledge to work. A questionnaire survey of males fulfilling their mandatory military service showed that TECO is among the top-five most-liked companies in the traditional / machinery industry among this group.

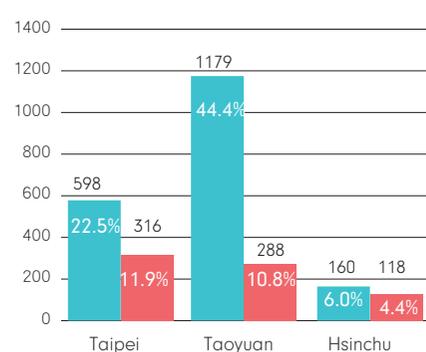
**Systematic recruitment :** The company employs Notes system in personnel recruitment, covering various procedures in the process, such as application for recruitment and appointment, greatly boosting quality and efficiency for personnel recruitment and appointment.

In full compliance with Labor Standards Law, the company abstains from employing laborers aged fewer than 15 and offers complete cultivation course and care for interns aged under 16. The company employs mainly natives, with foreign staffers only numbering 24, and there are now 34 handicapped persons and 28 aborigines on the company's payroll, higher than the government's requirement, in line with its policy of offering suitable job openings to the underprivileged group.

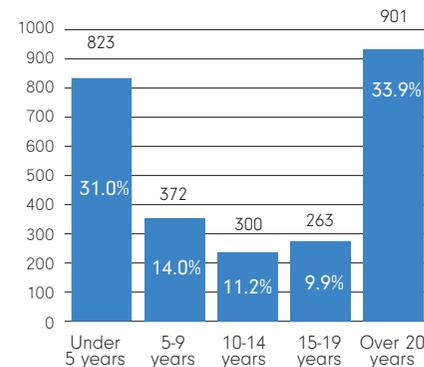
Formal / Contracted staffers



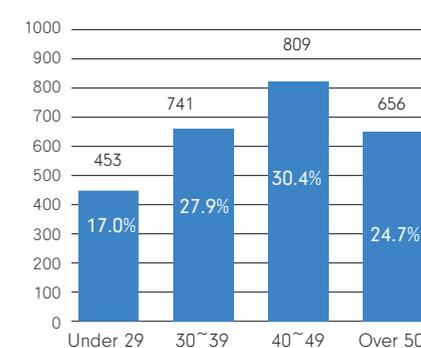
Employment region-wise



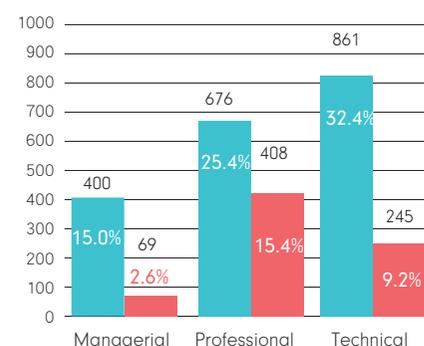
Service-year structure of staffers



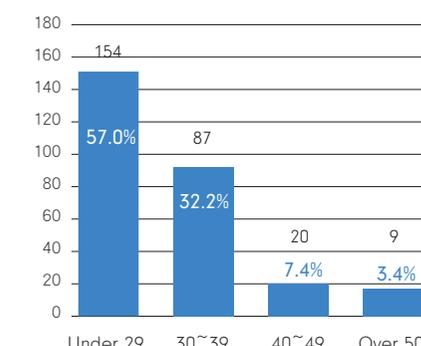
Age structure of staffers



Employment in different lines of jobs

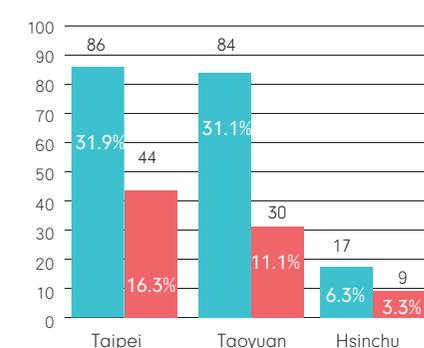


Age structure of new staffers



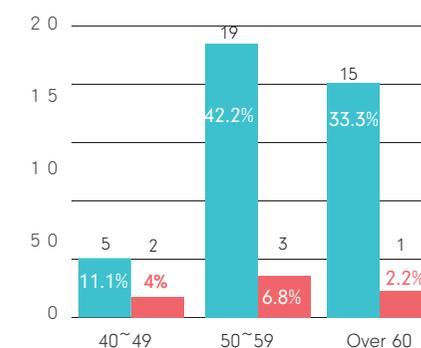
Note : In 2014, 270 new staffers joined the company.

Gender structure of new staffers



Note : The calculation for shares is based on the number of new staffers (270).

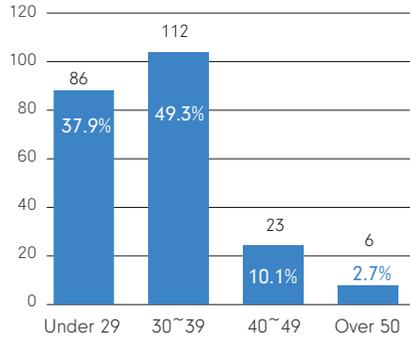
Age structure of senior managers



Note: Senior executives refer to managers at the division level or higher

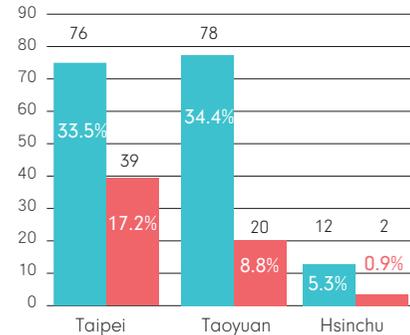
In 2014, 227 employees left TECO, representing a turnover rate of 8.5%, lower than the 10.9% industry turnover in the Towers Watson salary survey report. TECO's high personnel stability and low turnover underscores TECO's success in providing employees with opportunities for long-term development. It also has contributed to social stability.

Age structure of quit staffers



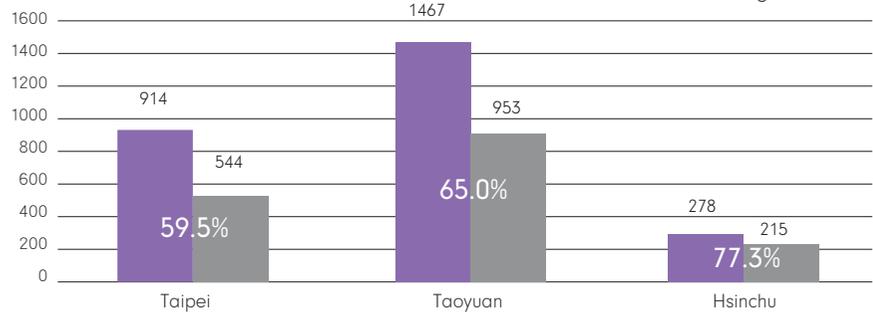
In 2014, 17 employees requested maternity leave: 11 later returned to work, five requested parental leave, and one resigned. Among the 16 employees requesting parental leave (11 women and five men), seven employees returned to work at the end of their leave period, while the other nine are still on leave.

Gender structure of quit staffers



In 2014, 17 employees requested maternity leave: 11 later returned to work, five requested parental leave, and one resigned. Among the 16 employees requesting parental leave (11 women and five men), seven employees returned to work at the end of their leave period, while the other nine are still on leave.

Shares of staffers with local household registration



### 7.3 Communication Channels



TECO actively established channels for communications with employees, including quarterly events for employees at headquarters and morning meetings at factories, enabling senior managers to explain in front of employees the company's current business achievement and challenges, in addition to complimenting staffers for outstanding performance.

In addition, for higher working efficiency, better labor conditions, and closer labor-management coordination, TECO set up labor union in July 1974 and in order to uphold labor-management rights and achieve a harmonious labor-management relationship, TECO and labor-union representatives signed a collective agreement on Dec. 28, 1981, in accordance with the stipulations of the Labor Union Act and Collective Agreement Act. The labor union holds an annual plenary meeting, wherein members elect representatives before the latter elect 11 directors and four supervisors of the union. The union leaders would meet every month for discussing various employee-related issues, often with managerial representatives attending the meetings to answer related questions. There are labor union offices at various factory premises, where employees can communicate with union officials at regular time. The company also holds semiannual conferences for communications between the president and union leaders. The company holds election of exemplary laborers, at a rate of one for every 100 employees, and gives them proper rewards. In 2014, there were 23 exemplary laborers. The company strictly abides by the Labor Standards Law in its operation and would give employees notice seven days in advance for every major change in operation.

#### TECO Labor Union

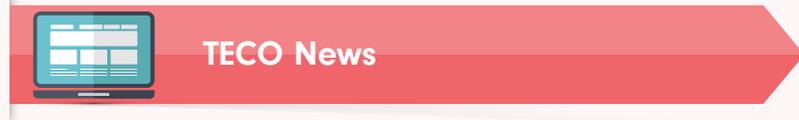
- Established in 1974
- In 1981, a collective agreement is signed and accepted by all TECO employees.
- The union holds an annual plenary meeting to elect union management and supervisors
- The TECO CEO and union management and supervisors meet semiannually

Committee	Share of labor representatives
Factory labor-management meeting	One half
Safety and health committee	One third



TECO's effort in forging a good labor-management relationship has been acknowledged with various awards, including "national award for enterprises with good labor-management relationship" and "award for exemplary labor-management meeting" granted by the Council for Labor Affairs (predecessor of the Ministry of Labor) and "award for enterprise with good labor-management relationship" granted by Taoyuan county government in 1999. It ranked 11th place on the list of large enterprises as good corporate citizen, compiled by Chinese-language Commonwealth magazine in 2013.

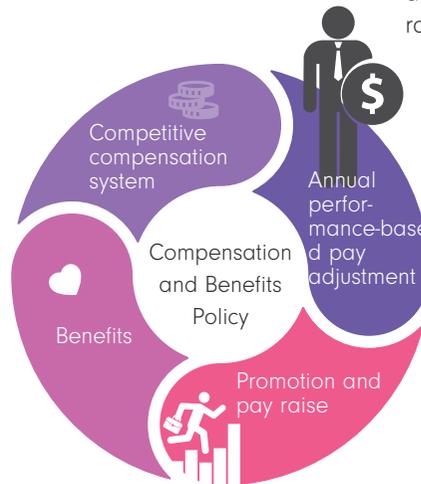
Since 1970, TECO has published the biweekly "TECO Tops" newsletter as a communication bridge between corporate culture services and employees. The newsletter is currently published in both print and online editions. The online version includes an "Interaction and Exchanges" section to foster closer interaction among company employees and provide a platform for real-time employee communication.



## 7.4 Compensation and Benefits

TECO offers employees compensations somewhat above the median level in the market. There is no sex discrimination in determining starting pays for newcomers.

The company embraces merits-based compensation system, including pay raise and the provision of variable bonuses and dividend sharing, on top of a complete system for job classification and ranking, which is applied impartially to both male and female employees. The company conducts performance evaluation twice a year, as a basis for pay adjustment and job assistance. Compensations for managerial staffers vary quarterly, in line with the company's business performance. Various incentives are granted, as reward to staffer's hard work and fulfillment of responsibilities.



Note : The pay differential is calculated on the basis of the average monthly pay of female staffers.

- 1 Competitive compensation system:** The company has formulated "measures for compensation management," as the basis for pay setting and adjustment for employees. It also actively tracks the general payment level on the market and regularly reviews the company's compensation policy, to facilitate and retain talent. Subsidies are available for jobs with rigorous working environment and overtime works on holidays are entitled to pays higher than 1.5 times regular pays as stipulated in the Labor Standards Law. The company also provides various bonuses to stimulate employee morale, in the aspects of business, R&D, patent, proposal, and passage of technical certification. Compensation system is tailored to the retention of talent and employees can share the company's business fruit in the form of year-end bonus and dividend sharing.
- 2 Annual performance-based pay adjustment:** When considering pay raise, the company takes into account general market level, living-cost index, and company's finance. Pay hike, if approved, takes effect on Jan. 1, every year and staffer's, pay-hike scale varies according to individual performance. New comers with less than one year of service time would receive discounted pay raise proportionately.
- 3 Promotion and pay raise:** Staffer receiving promotion according to the company's "measures for job promotion" would get corresponding pay raise, on the basis of the "measures for compensation management." Statistics for pay differential, based on average pays for male and female staffers with different job ranking and nature, follow:

Job ranking	Pay differential (time)
Rank-and-filers (first-6th job ranking)	Male : 1.07
	Female : 1
Section director (7th-8th ranking)	Male : 1.07
	Female : 1
Manager (9th-10th job ranking)	Male : 0.97
	Female : 1
Factory management, department chief, and jobs with higher ranking (11th job ranking and above)	Male : 0.71
	Female : 1

## 7.5 Career Development

TECO has put in place a complete system of career-development channels for employees, including promotion, job rotation, and overseas dispatch, for choice by employees, according to their personal conditions.

New comers will be subject to various training courses, including introduction to the company, occupational health and safety training, and anti-corruption instruction, from the outset before undertaking a half-a-year orientation program, including buddy-to-buddy assistance from senior staffers. The company has also formulated training road map for positions in different categories and conducts survey of training needs among employees annually, in addition to helping staffers formulate individual development plan (IDP), via consultation with superiors. Superiors would discuss with staffers over their performance once every half a year and review their performance together, which will also serve a basis of modifying their IDP and study plan, to ensure that every staffer can maximize the exercise of their specialties at optimal posts.

The company holds nomination and evaluation for promotion every half year, thereby granting promotion to those with good performance and potential.

**1. In strict compliance with the PDDRO principle, the company formulates and implements the following management mechanism for training and development:**

**1** When planning annual training courses, the company would undertake overall analysis and consideration from needs of strategy/organization, work, and personal needs.



**2** In accordance with the company's "enforcement rules for talent development," annual training courses focus on management capabilities, professional capabilities, general knowledge, and corporate policy, as well as key talent and internationalized talent.



Lower/middle management training: Management function benchmarking (Taught by Prof. Chen Horng-chi and Prof. Lin Wen-cheng)

### A. Training for management capability:

To strengthen the management capability of potential talent, the company regularly holds training courses for managerial positions at different levels, have senior managers assist new managerial staffers under the "mentoring program," and conducts courses for special talent.

### B. Key personnel training:

- The courses aim to augment the magnitude of the capabilities of ranking managerial candidates, including:
  - Planning for the development route of high-ranking key talent
  - Arranging overseas visits by ranking managerial staffers, to help them understand topnotch technological standards and practices in the world
  - Holding forum on high-level political and economic trend
  - Complete executive training and BU strategy briefing, including the arrangement of a workshop on IOT industry trends and developments



- Develop potential key personnel:

TECO has established an internal "key personnel" system to cultivate management successors. The company annually plans talent development programs for key personnel, who currently represent 13% of all employees. In 2014, there were 38 key personnel picked for grade promotion, management assignment, rotation or overseas assignment, representing 25% of all key personnel. This ratio was significantly higher than the company-wide ratio.

- Deepen key technology
  - Arrange certifications of key trade skills.
  - The Craftmanship Award was presented to three people in 2014.

**C. International talent cultivation project:**

- Pre-assignment training for expatriate staff
- Intercultural experience sharing seminars
- Learning diversity: English news quarterly



**2. Mechanism for integrated personnel training effectiveness tracking and improvement**



### 3. Education and training facilities and funding

1 Complete education and training facilities: To enable the smooth implementation of in-house training, TECO has established four training classrooms at its Nangang head office, Zhongli plant, Guanyin plant, and Hukou plant. Company business divisions also have ample meeting space for self-arranged courses.

2 TECO annually allocates NT\$20 million for its training budget, equal to 0.1% of revenue.



Nangang plant classroom

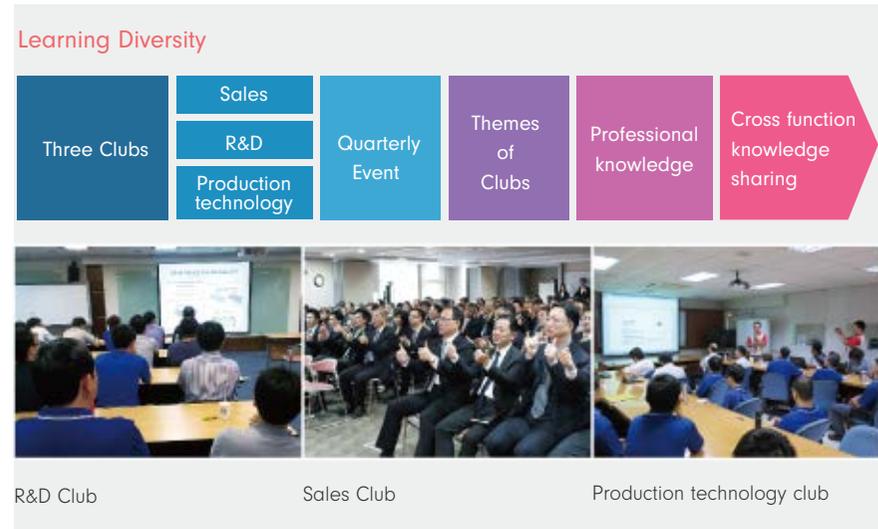
Zhongli plant classroom

Hukou plant classroom

Guanyin plant classroom

In 2014, TECO provided training courses for a total of 17,710 person-sessions, averaging 23.03 hours of training per person. The company has also established cross-division professional associations for biotech, R&D and sales personnel to expand opportunities for exchanges and learning among employees in these professional fields, as well as to incentivize colleagues to learn and grow.

In 2014, TECO arranged 613 training classes and division-level courses. Among these were 40 courses on occupational health and safety, 26 courses on operation related policies and regulations, four courses on the protection and advocacy of human rights, and 11 courses on anti-corruption and consideration of the potential negative impacts of anti-competitive behavior and business operations on the local community.



R&D Club

Sales Club

Production technology club

In order to encourage diverse and independent learning, TECO continued to promote a variety of learning programs in 2014 to give employees more opportunities outside the classroom for independent study for self-improvement in the areas of aesthetics, language, creativity, professional ability, international perspective, and values. The following are posters promoting learning diversity programs:

- External learning opportunities provided in 2014: 269 / Intellectual reading: 18 books / Movies: 7 / E-learning: 3 types / English news quarterly: 3 volumes / Book digests: 4 volumes / One Minute Manager: 3 volumes.

- Number of participants in learning diversity programs in 2014: 1,154

## 7.6 Workplace Safety and Health

Promoting a safe and healthy work environment

### 1. Creating a safe and healthy workplace

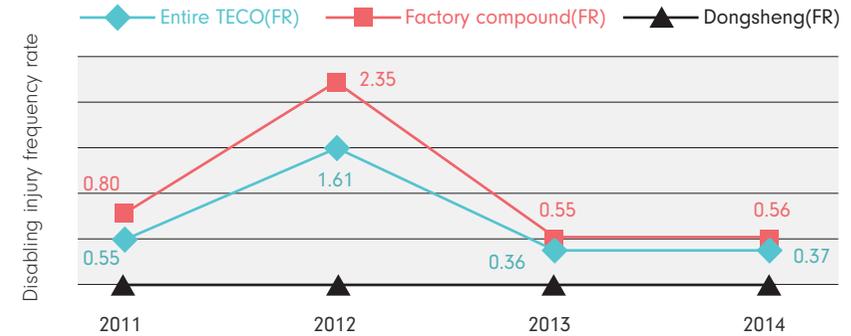
In the basis of OHSAS 18001 and CNS 15506, the company has establishment a management system for pushing safety- and health-related affairs, which has been certified. In order to cut occupational accidents, managers in charge carry out monthly safety field check and the company conducts education and training on safety regularly, in addition to holding the event of environment and safety month, spreading safety-and health-related information, and posting safety-related information at corporate website.

Factory management and labor union jointly formulate guidelines for workplace safety, setting out safe working procedures for abidance by employees. The company also conducts hazard assessment, risk evaluation, and change management on production process, to assure compliance of equipment and production process with safety norms, in addition to formulating measures for handling emergencies and carrying out regular drills every year, to assure a safe and sanitary workplace for employees.

TECO has taken a series initiatives that have dramatically heightened safety awareness among employees. In 2014, the company significantly lowered the frequency of occupational accidents resulting in disabilities to just two such incidents (excluding commuting accidents). The frequency and severity of disabling injuries is presented below (including figures for TECO and its subsidiary Dongsheng) To prevent recurrence of such accident, the company banned the use of common insulated tape in wrapping broken part of electric cable, as the tape would detach on heat. There was another occupational accident resulting in disability in 2014, with the rate of disabling injury and severity of accident with disabling injury being shown in the following chart.

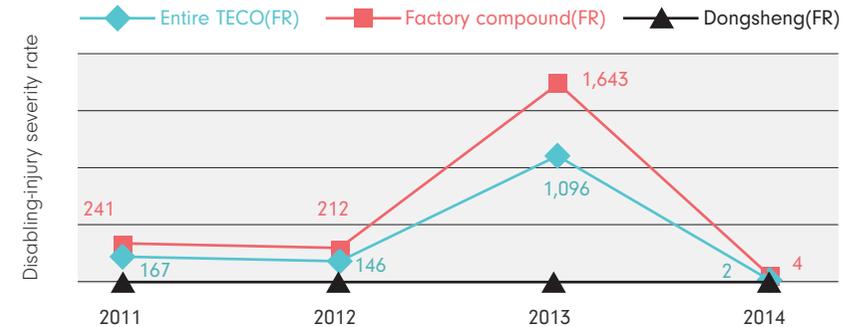
As analysis shows that failure to abide the operational norms has been mail culprit for occupational accidents in recent years, TECO has intensified safety training and invited experts to conduct safety inspection at factories, in addition to listing safety as a major item in performance evaluation for factory foremen and directors. Meanwhile, TECO has set up Occupational health and safety committee, headed by the president and attended by union representatives and business-department directors and factory managers, with the mission of reviewing the result of continuous safety improvement, in order to achieve the goal of zero occupational accident.

2011-2014 TECO's disabling injury frequency rate (excluding commuting accidents)



Note: Disabling injury frequency rate=Number of disabling injuries/total working hours x 1,000,000 (the latest figure varies according to different formulas; in Taiwan the figure is five times the value of 200,000 set by the International Labor Organization.)

2011-2013 TECO's disabling-injury severity rate (excluding commuting accidents)



Note:

1. Analysis of TECO's disabling-injury severity rate=total working days lost/total working hours x 1,000,000 (the latest figure varies according to different formulas; in Taiwan the figure is five times the value of 200,000 set by the International Labor Organization.)

2. Statistics on the number of days lost to incapacitating injuries from occupational hazards at plants in 2014 cover the period to December 31, 2014 (at which time employees were still recuperating and rehabilitating at home).



Award for cumulative accident-free hours at TECO plants



Plant environmental safety area

In cooperation with Vanguard Security, the company now has 16 security guards, all with complete security-guard training, such as awareness of human rights, politeness for reception, and security knowledge.

## 2. Work space design and comfort

### 1 Comfortable and spacious space:

TECO dedicates to the creation of a comfortable working environment, including office environment, leisure-time space, and conference room. Per capita space available at factories follows:



### 2 Measuring CO2 concentrations and illumination:

TECO regularly partners with environmental safety units to measure carbon dioxide (CO2) concentrations and illumination in offices to ensure normal air flow and lighting levels. On-site testing confirmed that CO2 concentrations were within the standard range (less than 1000ppm) and that illumination levels were all over 300 lux, in compliance with regulatory standards



職業衛生二氧化碳監測紀錄

製 造 廠 別：臺北廠  
測 測 日 期：102 年 08 月 04 日  
監 測 單 位：台北技術服務處在品安室

區段/樓層/機台編號	區 別	區 別 名 稱	空氣中濃度(ppm)	備 註
二五廠區 (105年)	1	製線工廠製成線機台	999	100%合格
	2	製線工廠製成線機台	870	100%合格
	3	製線工廠製成線機台	900	
	4	製線工廠製成線機台	900	
	5	製線工廠製成線機台	880	
	6	製線工廠製成線機台	950	
	7	製線工廠製成線機台	999	
	8	製線工廠製成線機台	999	

### 3 Regular cleaning and disinfection

### 4 Promoting a green work environment

### 5 Workplace accessibility facilities and measures:

## 7.7 EAP and Employee Work-Life Balance

In 1964, TECO established an Employee Benefit Committee to jointly promote benefit measures for employees beyond the enjoyment of business profits. In recent years, personal, family, work pressure and other psychological issues have created a growing burden on society. TECO therefore established an employee assistance program (EAP) platform to help employees find needed assistance. The company has also planned a series of EAPs to help employees improve family relations, enhance their abilities, and boost job performance. The overall plan of TECO's EAP program is shown in below.

### Health promotion

Healthy, mentally and physically, staff is conducive to high-efficiency and high-quality, work performance. To take good care of employees' health, TECO has set up medical unit staffed with professional nurses, offering outpatient-treatment service by contracted physicians regularly every week. Smoking is banned at factories, especially at designated outdoors smoking areas. In 2013, TECO was certified for self-management of independently designated smoking areas.

TECO has been actively pushing various health-promotion events, such as education and training on labor safety and sanitation, annual physical checkup, pap smear test, smoke-free workplace, betel nut-free workplace, weight-reduction program, yoga course, gymnastic exercises, spiritual-growth course, pressure-relief course, lectures on health issue, blood donation, hiking, ball games, and fun tournament, in addition to providing information on health regularly and holding training courses on occupational health and safety.

Except helping employees conduct all-round health management and health promotion, the company has also extended its care to employees' families, irregularly providing them information on health management. In addition, the conducts annual physical checkup on staffers whose works contain special health

hazards (such as powder, noise, and radiation). Medical staffers at factories would track the results of such activities, for instant improvement of defects. Environmental-protection and safety units would check compliance of various working units with related laws/regulations and norms on safe operations, such as wearing various protective gears. The outstanding performance in pushing healthy workplaces has won the company various awards, such as the "award for happy and healthy staff" granted to the Hukou factory, as well as the obtaining of "health promotion certification" listed below:

Work sites	Location	Kinds of certification	Duration of certificates
Head office	Taipei city	Health promotion	2017.12.31
Kuanyin factory	Taoyuan	Health promotion	2017.12.31
Hukou factory	Hsinchu	Health promotion	2014.12.31

TECO also provides health and medical facilities and services to help employees maintain personal health and improve their quality of work and life. An employee work stress analysis conducted in 2014 showed that, among the 1,299 respondents (representing a 48.9% response rate), 89% were in the moderate pressure group (a pressure index of 30 or less). This indicates that the majority of TECO employees enjoy their work and do not feel excessive pressure.



Dental health class



Cancer prevention class



Yoga class



Fitness class



Family Day



### Family

Understanding that employees are motivated at work by family, TECO offers general scholarship grants, group insurance and other benefits for employee dependents. In 2014, the company arranged employee sports competitions to build team spirit and provide a chance to relax outside work. These activities attracted 762 participants and earned an average employee satisfaction score of 8.4 points. TECO also holds many fun and educational activities (i.e., Family Day and a Mid-autumn Festival barbecue), to interact with employees and their families, as well as build family identification with the company and understanding of the work environment at TECO. These activities attracted 1,359 participants during the year.

### Life

TECO provides seminars and services to help employees solve relationship, financial, legal and other personal problems so they can work with peace of mind. Eight such seminars and other activities were arranged in 2014, attracting 286 participants.



TECO sports competition



Practical legal knowledge lecture



Cooking class



Arts lecture - The Enigma of M.C. Escher



# 08

## Protecting Nature

- 8.2 Environmental Safety and Health Management System
- 8.2 Environmental Safety and Health Management System
- 8.3 Environment-related Achievements and Performance



## Protecting Nature

TECO highly regards the issues of climate change and environmental protection, a commitment embodied by the company's "TECO GO ECO: Green TECO, Green Technology" vision. TECO believes that the best way to its reduce environmental footprint is to utilize its core technology on the product end and reduce energy consumption on the user end. To this end, the company has developed a full line of energy efficient products, as well as electric vehicle (EV) motors and wind turbines generating clean, renewable energy, cutting air polluting carbon emissions. Green products are helping TECO to not only achieve its economic performance targets, but also realize a vision of care for both the natural environment and sustainable development.

Management Principles and Policies

### 8.1 Green Product Life Cycle

TECO's green product life cycle extends from design to manufacturing, transportation, sales, and use. Guided by the 3Rs (reduce, reuse, and recycle) and green energy principles, TECO develops and produces green, energy-saving products. At the development end, TECO considers environmental protection and integration of leading-edge technology within the group to achieve energy-efficient, compact and lightweight products. On the production side, the company aims to reduce energy use and increase recycling and reuse. TECO also supports environmental protection by producing green products that reduce energy consumption at the user end. For example, TECO's IE2 to IE4 energy-saving motors potentially reduce power consumption by 485 million kWh per year, while its Class 1 and 2 energy-saving household A/C models can reduce power use by 8.42 million kWh per year. TECO products are also designed for ease of disassembly and recycling (with recovery rates topping 90%) as part of a green life cycle from development source to scrap recycling to minimize environmental impact.

#### REDUCE

- Compact and lightweight, standardized, simple packaging, environment-friendly materials (i.e. R600a refrigerant)
- Increase unit transport amount, reduce energy consumption and waste during manufacturing

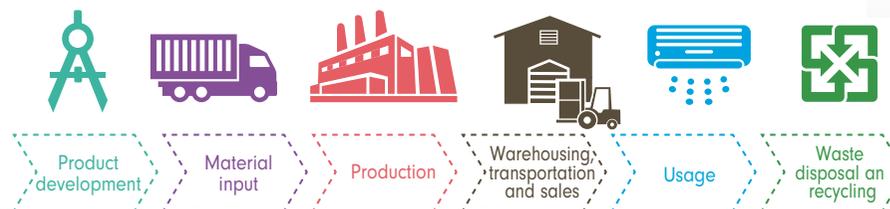
#### REUSE

- Re-use transport containers and metal scrap (silicon steel, steel sheet), and refrigerants

#### RECYCLE

- Products use recyclable materials, are designed for disassembly, and have recycling marks; manufacturing waste is sorted and managed

Green, energy-saving products: Including material selection management (i.e. banned/restricted substances), development of energy-efficient products, and expansion into renewable energy products



**1 Product development stage:** Environmental impact at this stage is related mainly to the choice of the main resources used in products, energy saving on the user end, and enhancing recovery rates.

TECO uses its core technology to optimally match components and structures. It also works with suppliers to develop high-efficiency materials and components to minimize product size and weight, while reducing energy use and environmental impact. For example, the company uses earth-friendly R600a refrigerant in refrigerators, while also halving the refrigerant amount. This has significantly reduced the global warming potential (GWP) of these models (from 1,430 to 3). TECO has also increased the potential recovery rate of its products to over 90% by designing for disassembly and recycling. The company has applied for the Green Mark on its home air conditioners, a major item in its home appliance line. In addition, a government certified agency has verified that TECO products comply with environmental regulations. In the green energy field, TECO offers a full line of Class 1 energy-efficient inverter home air conditioner models, as well as a complete range of IE2 to IE4 motors, inverters, electric vehicle (EV) motors, and wind turbines that reduce the environmental footprint on the user end.

An example of TECO's progress in reducing large motor size and weight:

#### Copper use

Model	Average Reduction Per Unit (Tons)	Reduction in 2014 (Tons)	Reduction in 2013 (Tons)	Reduction in 2012 (Tons)
Steel case	<b>0.223</b>	13	16	25
Cast iron case	<b>0.044</b>	2.1	2.0	2.2

#### Steel use

Model	Average Reduction Per Unit (Tons)	Reduction in 2014 (Tons)	Reduction in 2013 (Tons)	Reduction in 2012 (Tons)
Steel case	<b>1.059</b>	61	75	120
Cast iron case	<b>0.389</b>	19	17	19

**2 Material input stage:** Environmental impact at this stage is determined mainly by whether raw materials or components contain banned/restricted substances, energy use during the production process, air pollution from production, waste and other effects, packaging materials, and energy consumption during transportation.

TECO has formulated "Procedures for the Management of Banned/Restricted Substances" and "Regulations for the Management of Labeling and Hazard Communication of Hazardous Chemicals" to provide clear guidelines on the management of chemical substances in components at the development, design and purchasing source stages. Environmental effort by suppliers in the production process is also a focal item in supplier evaluations.

In the area of transportation, TECO considers ways to maximize transportation efficiency and reduce the number of shipments. Improved packaging for components and finished products increases the unit volume of transportation. TECO partners with manufacturers to encourage use of easily recyclable mesh cages for shipping containers. The company also collects and sorts cartons and requires recycling and reuse by suppliers. At the material input end, TECO works with suppliers to minimize environmental impact.



Carton recycling and reuse Wood pallet recycling and reuse



**3 Production stage:** The main environmental impacts at this stage are energy use, air pollution and waste from production activities.

TECO's manufacturing operations, including the Zhongli, Hukou, and Guanyin 1 and 2 plants and Dongsheng, are not located near ecological reserves or biodiverse habitats. These operations have a small impact on the environment and no impact on protected species. Dongsheng uses groundwater for its operations and has wastewater treatment facilities that are regularly inspected to ensure compliance with emission standards. All of TECO's other plants use tap water and discharge both manufacturing and non-manufacturing wastewater to industrial zone facilities for unified treatment fully in compliance with wastewater treatment regulations. The plants have also adopted water-saving measures to reduce the impact of water use on the environment and ecology.

A/C and refrigerator refrigerants are major GHG contributors. TECO develops products of this type, but it outsources production from Dongsheng. The company is promoting a shift from non-ozone-depleting refrigerants to refrigerants with lower GHG effects, such as R600a refrigerant (with a GWP close to 0) in its refrigerators. The company is also studying the adoption of lower GWP refrigerants, such as R32, for home A/C models. Moreover, TECO and Dongsheng have commissioned third-party verification of their annual GHG emissions to identify the main GHG producers and make improvements.

TECO also continues to improve production methods and increase equipment energy-efficiency to reduce energy use, as well as promote recycling and reuse of materials (such as silicon steel scrap and scrap iron). The company is also investing in equipment to control air pollution from production in a commitment to ongoing improvements aimed at meeting or surpassing emission standards. Waste is classified as "renewable" or "needing treatment" and handled in regulatory compliance by a third-party provider to reduce the environmental footprint of production activities.

Table: Silicon Steel Scrap Recycling and Reuse

Unit: MT

Item	Year	2012	2013	2014
Silicon steel scrap		13,082.05	12,735.66	12,240.34
Plant recycling volume		12,705.10	12,070.07	11,453.18
<b>Recycling ratio</b>		<b>97.12%</b>	<b>94.77%</b>	<b>93.57%</b>

**4 Warehousing, transportation and sales:** Reduction of environmental impact at this stage mainly involves recycling packaging materials and reducing energy consumption and carbon emissions from transportation.

TECO designs product packaging for simplification and reuse/recycling of transport containers. For example, domestically sold small motors are shipped in mesh cages with simple isolation protection. Home appliances are shipped in stackable wood crates to minimize size and weight and increase the number of units per shipment. Such approaches enable multiple recycling and reuse and lower transport energy consumption per unit, thereby reducing the impact of transportation on the environment.



Photo: Domestically sold motors are shipped in mesh cage with minimal protective packaging.  
Photo: Washing machine packaging is designed to facilitate flat packing, increasing transport capacity by 28% (increasing container capacity from 136 units to 174 units)

**5 Product usage stage:** Product usage impacts the environment, mainly via energy/resources consumption. TECO has dedicated to the development, production, and sales of energy-saving products, in order to lessen the impact of power and water consumption on the environment. Shipment of TECO,s high energy-performance motor series, IE2 and IE3, as well as IE4 which just entered mass production, for instance, can help clients save 485 million kilowatts/hour of power consumption and cut CO2 emission by 253,000 metric tons a year.

TECO,s variable-frequency drives also enable industrial motors to cut power consumption by over 35%. Home appliances with first-grade energy performance passing certifications of environmental protection, energy conservation, and water conservation are also available. Thanks to its core energy-saving technology, the company has considerably boosted the energy-consumption efficiency for the use of its products, thereby lessening the impact on the environment.

Environmental protection, energy-saving, and water-saving marks earned by TECO home appliances in 2014.

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Note: All plastic items have recycling marks

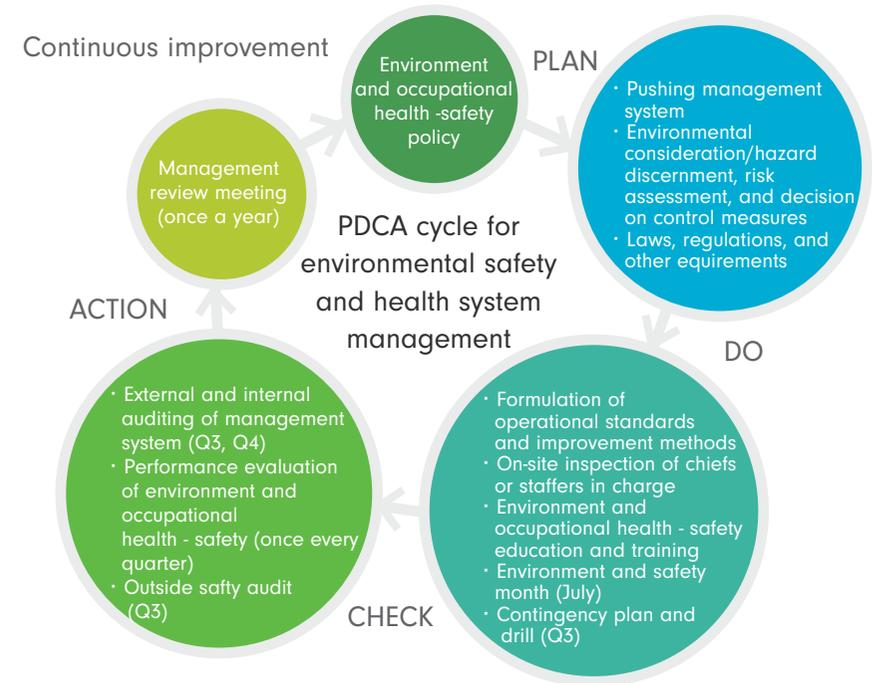
## 8.2 Environmental Safety and Health Management System

### 8.2.1 Policy and Organization

TECO has set up an environmental-protection and occupational health - safety panel under the presidential office, as well as factory-level environmental-protection and occupational health - safety units overseen directly by directors of business departments, responsible for formulation of environment-protection and occupational health-safety policy, planned management, and internal inspection. The company embraces an environment-protection and occupational health-safety policy featuring:

<b>1. Compliance with international norms</b> Compliance with international norms, in line with the global environment-protection trend, so as to meet the demand and expectation of stakeholders	<b>4. Dedication to energy conservation</b> Dedication to energy conservation, better utilization of resources, and pollution abatement, so as to lower impact on the environment and augment ecological benefits
<b>2. Intensification of environmental and plant-safety management</b> Sound environment-protection and occupational health-safety management system, so as to protect the environment and prevent damages	<b>5. Development of green technologies</b> Development of green technologies and pushing of green products, so as to attain economic and environmental-protection goals simultaneously
<b>3. Strengthening of risk assessment</b> Strengthened risk assessment and education/training and intensified inspection of environmental protection, and occupational health-safety, so as to uphold a safe, healthy and clean working environment and augment performance in workplace safety and environmental protection	<b>6. Fulfillment of corporate-citizen duties</b> Fulfillment of corporate-citizen responsibilities by encouraging staffers and contractors to take part in environmental-protection, safety, and hygienic events, plus enhanced communication and coordination

### 8.2.2 Complete environment-protection and occupational health - safety management system



On the basis of ISO 14001, OHSAS 18001, and CNS 15506, TECO has established and implemented environment-protection and occupational health-safety management system, which has passed various certifications. The company carries out internal auditing and external inspection annually to assure the effective implementation of the system. In addition, the company has conducted review and verification of greenhouse-gas emission according to ISO 14064-1 from 2013, to assure accuracy of statistics, which are then used as the basis for pushing energy conservation and carbon abatement. Via complete management system and PDCA (plan-do-check-action) management, the company has aimed to achieve environmental protection and reduce impact on environment, at an extent better than mandatory level.

TECO holds the event of environment-protection and safety month every July, by posting banners and posters at workplaces and conducting training program and question-and-answer session with awards, so as to augment the knowledge and awareness of environmental protection and safety among employees.



Prize Q&A activity during Environmental Safety Month



Environmental safety management system certificate

### 8.3.1 Energy Consumption and Management

#### 5 GHG inventory

Since 2013, TECO has commissioned third-party verification of the accuracy of GHG emission inventories by the company (head office, home appliance service centers, and four factories) and Dongsheng. The inventory and external verification clarify sources of carbon emissions from TECO's activities and guide efforts to reduce emissions and their environmental impact.

The accuracy of TECO's GHG inventory received ISO 14064-1 verification of a "reasonable level" of assurances. Since 2012, TECO has reduced total GHG emissions by 426.15 mt to 33,727.00 mt. The improvement was achieved by mainly by reducing the filling amount of high pressure sulfur hexafluoride (SF6) in gas insulated switchgears. TECO's efforts to reduce GHG emissions are now focused mainly on reducing energy usage and increasing the energy efficiency of machinery and equipment. TECO publically discloses GHG information in its annual report, website, and Sustainability Report.

## 8.3 Environment-related Achievements and Performance



Table: GHG Emissions in 2014 by Category

GHG Emission Type	Direct Emissions (Scope 1)						Indirect Emissions (Scope 2)	Total
	CO2	CH4	N2O	HFCs	PFCs	SF6	Energy indirect emissions Electricity	
GHG amount (CO2e MT/year)	1,979.78	229.01	6.32	13.54	00.00	193.59	31,304.76	33,727.00
Ratio of total emissions (%)	5.87%	0.68%	0.02%	0.04%	0.00%	0.57%	<b>92.82%</b>	<b>100.00%</b>
	<b>7.18%</b>							

Chart: GHG Emissions by TECO in 2012-2014

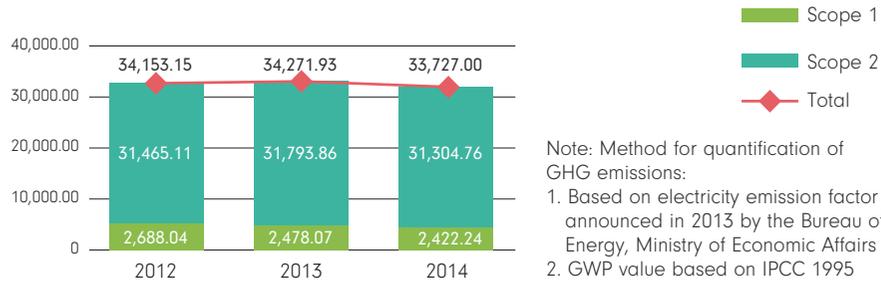
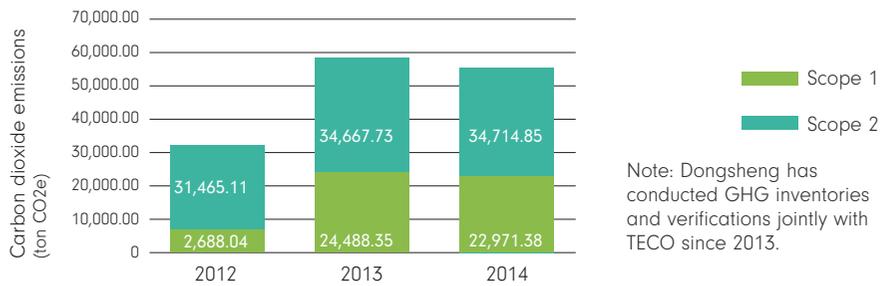


Chart: GHG Emissions by TECO and Dongsheng in 2012-2014



**Scope 1**

- Burning by stationary equipment
- Emission from manufacturing
- Transportation and transport
- Cesspool
- Fire-fighting equipment
- Refrigerant

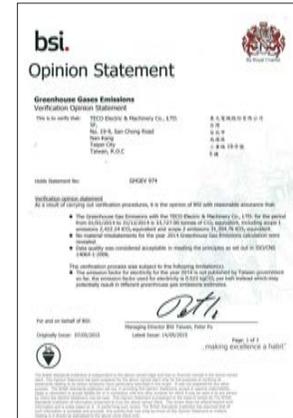
**Scope 2**

- External source of power supply

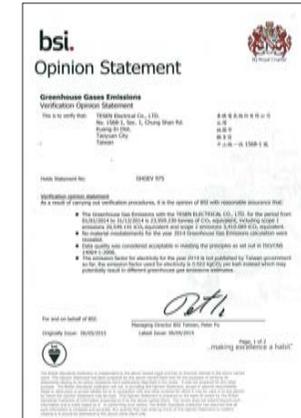
**Scope 3**

- Out-of-town assignments
- Business travel
- Product transport
- Transport of raw materials
- Vehicles used by suppliers
- Outsourced treatment of wastes

Note: 1. Explanations for scope 1, scope 2, and scope 3 for greenhouse-gas inventory listed above  
 2. The greenhouse-gas inventory covers only scope 1 and 2, as defined above, excluding scope  
 3. due to difficulty in grasping greenhousegas emission caused by activities in scope 3.



Opinion Statement on TECO's 2014 GHG investigation



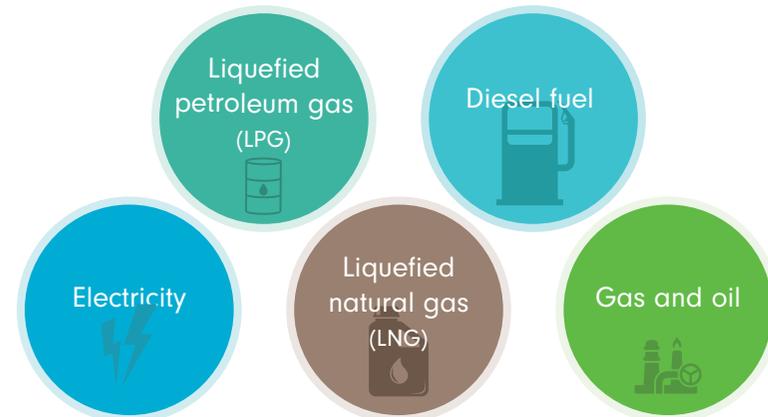
Opinion Statement on Dongsheng's 2014 GHG investigation

## 2 Energy management

The low-carbon era has tasked companies to put energy conservation and GHG emission management at the forefront of their sustainability strategies. TECO has stepped-up management of energy usage to improve energy performance, increase equipment operating efficiency, and reduce energy costs.

### \* Energy statistics

The primary sources of energy-related emissions at TECO can be divided into the following five categories:



● **Electricity:** TECO's total electricity usage in from 2012 to 2014 is shown in the figure below. Indirect emissions from electricity in 2014 accounted for 92.82% of total GHG emissions for the year, with Scope 1 direct emissions accounting for the remaining 7.18%.

Chart: 2012~2014 TECO power consumption

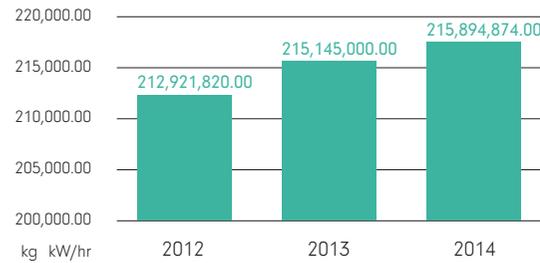
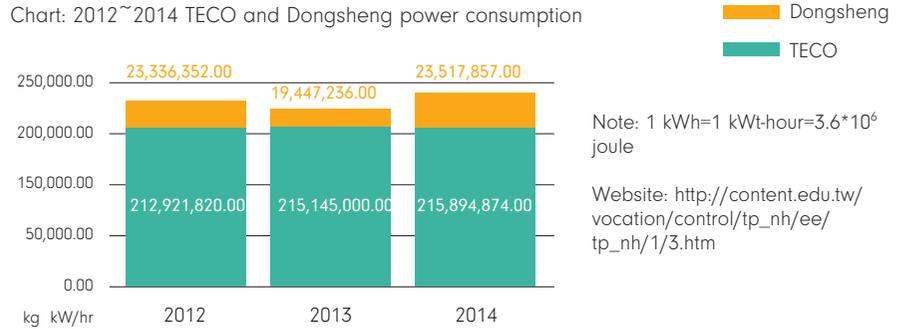


Chart: 2012~2014 TECO and Dongsheng power consumption



Note: 1 kWh=1 kWt-hour=3.6\*10<sup>6</sup> joule

Website: [http://content.edu.tw/vocation/control/tp\\_nh/ee/tp\\_nh/1/3.htm](http://content.edu.tw/vocation/control/tp_nh/ee/tp_nh/1/3.htm)

● **Liquefied petroleum gas (LPG):** TECO's total LPG usage from 2012 to 2014 is shown in the figure below. LPG was used mainly for plant cafeteria operations and on-site manufacturing.

Chart: LPG consumption by TECO in 2012-2014

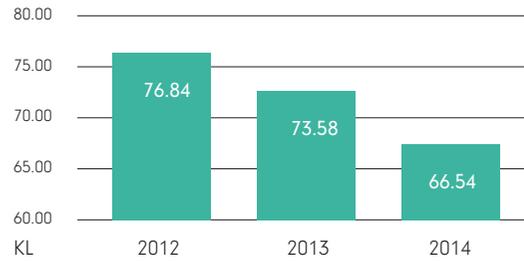
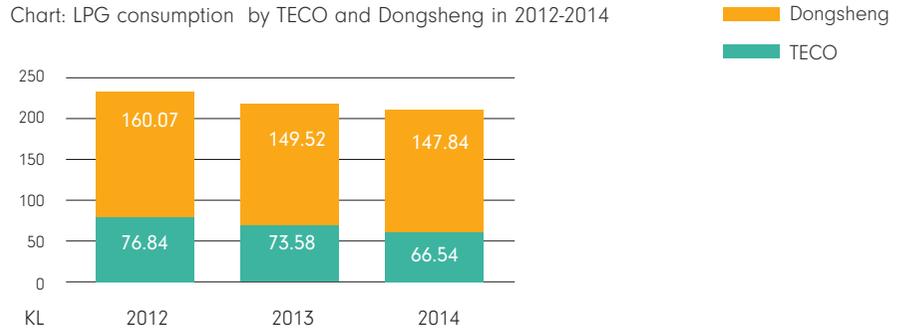
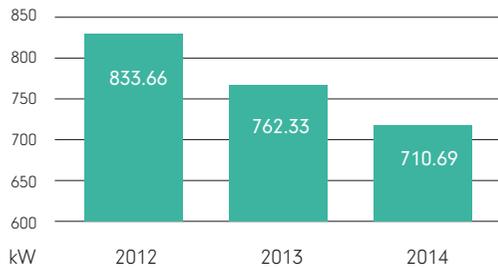


Chart: LPG consumption by TECO and Dongsheng in 2012-2014



● **Liquefied natural gas (LNG):** In 2008, TECO's Zhongli plant replaced LPG with LNG, mainly for aluminum melting furnace and paint baking, to reduce cost, GHG emissions, and safety hazards.

Chart: LNG consumption by TECO in 2012-2014



Note: Dongsheng does not use LNG



● **Diesel fuel:** TECO's total usage of diesel fuel from 2012 to 2014 is shown in the figure below. The main usages were for diesel forklifts, dormitory hot water boilers, and generators at the company's Zhongli, Guanyin 1 and 2, and Hukou plants.

Chart: Diesel consumption by TECO in 2012-2014

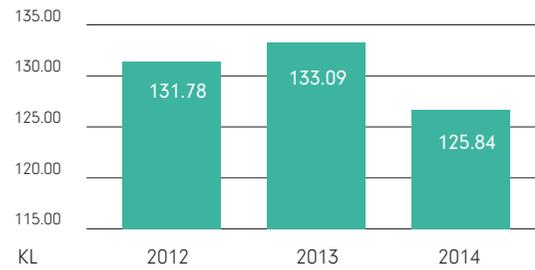
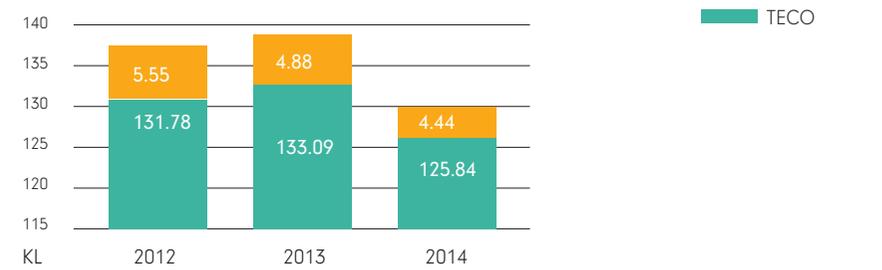


Chart: Diesel consumption by TECO and Dongsheng in 2012-2014

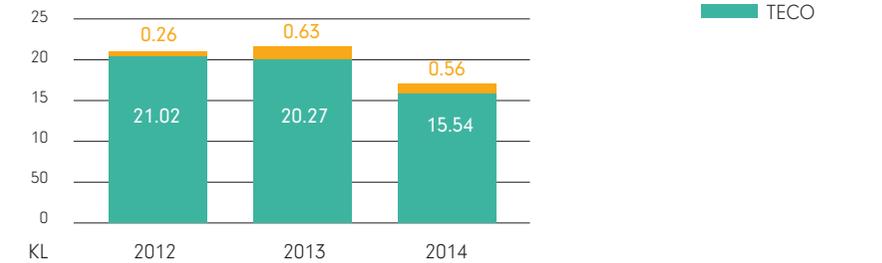


● **Gas and oil:** TECO's total usage of gas and oil from 2012 to 2014 is shown in the figure below. The main usages were for public service vehicles (excluding private cars used for company business) at the company's Zhongli, Guanyin 1 and 2, and Hukou plants.

Chart: Gas and oil consumption by TECO in 2012-2014



Chart: Gas and oil consumption by TECO and Dongsheng in 2012-2014



### 8.3.2 Resource Consumption and Management

Chungli plant, under the jurisdiction of heavy electric-machinery department and green electricmachinery department, mainly produces motors, both large and small ones, with main materials including metals (iron alloy, silicon steel plates, round iron, pig iron, and copper wires) and non-metals (such as lacquered wire), and others (wood, plastic bags, and paper boxes).

Hukou plant, under the jurisdiction of electriccontrol department, mainly produces switchboards and variable-frequency drives, with main materials including machinery components/parts, electric wires, and insulated wires.

The Guanyin plant is home to TECO's Consumer Appliance Sector. Dongsheng produces home and commercial A/C systems, refrigerators and other products for sale by the Consumer Appliance Sector, while the Guanyin plant is in charge of human resources for product development and other activities. Raw materials can be divided into the categories of metals, such as steel sheet, copper piping, and

aluminum coil sheet, and non-metallic materials, including plastics, refrigerants (with 0 ozone depletion potential [ODP]).

Guanyin II plant, under the jurisdiction of power department and wind-turbine department, mainly produces 161 KV and smaller SF6-insulated switching equipment and peripherals for renewable-energy equipment, with main materials including machinery components/parts, electric wires, and insulated wires.

Chungli plant	Guanyin plant and Dongsheng	Guanyin II plant	Hukou plant
<ul style="list-style-type: none"> <li>Metals (iron alloy, silicon steel plates, round iron, pig iron, copper wire)</li> <li>Non-metallic materials (iron alloy, silicon steel plants, round iron, pig iron, copper wire)</li> <li>Others (wood, plastic bags, paper boxes)</li> </ul>	<ul style="list-style-type: none"> <li>Metals( steel sheet, copper piping, and aluminum coil sheet)</li> <li>Non-metallic materials ( plastics, refrigerants)</li> </ul>	<ul style="list-style-type: none"> <li>Machinery components/parts</li> <li>Electric wires</li> <li>Insulated wires</li> </ul>	<ul style="list-style-type: none"> <li>Machinery components/parts</li> <li>Electric wires</li> <li>Insulated wires</li> </ul>

Table: statistics on usage of various resources 2012-2014

Unit : metric ton

Year Item	Plant	Product line	2012	2013	2014
Silicon steel plate	Chungli and Hukou plant	motor and no-fuse switch	39,501.46	37,492.77	35,773.77
Insulated wires	Chungli and Hukou plant	motor and no-fuse switch	6,290.70	4,169.23	2,866.09
Aluminum ingots	Chungli plant	motor	862.34	867.35	826.00

Thanks to modification of manufacturing process at Chungli factory in 2008 recycling silicon-steel scraps resulting from manufacturing process as materials for producing motor cases, recycling rate for silicon-steel plates topped 90% during 2011-2013. For ecological benefits, the company will continue endeavoring to raise reusable rate for other materials. Meanwhile, the company shuns ODP (ozonedepletion potential) materials in manufacturing.

### Water Resources Management

TECO uses tap water throughout its operations, with the exception of Dongsheng, which relies on groundwater. Although Dongsheng is not in an industrial area, it has established a sewage treatment facility that is regularly tested to ensure wastewater complies with regulatory standards. Use of tap water at TECO (including head office and plants) and Dongsheng increased by 5.47 MT in 2014 compared to 2012. TECO will continue to take water saving measures, including installation of water-saving toilets and other devices. The company's water intensity (1,000 mt / NT\$1 million output value) in 2014 is shown in the following table:

Chart: Groundwater consumption at Dongsheng, 2012-2014

Unit: metric tons

Year	Factory	Dongsheng
2012		55.97
2013		57.93
2014		60.34



Table: Tap-water consumption amount at factory premises 2012-2014

Unit: metric tons

Year	Factory compound	TECO					Subsidiary Dongsheng	TECO Total	TECO and Dongsheng Total
		headquarters	Chungli factory	Guanyin factory	Guanyin factory II	Hukou factory			
2012		35.92	162.19	6.08	1.19	17.58	0.54	222.96	223.50
2013		35.48	163.96	2.04	0.96	16.74	0.24	219.18	219.42
2014		46.70	159.21	5.15	0.83	15.91	1.17	227.80	228.97

Note: Tap-water consumption at Hukou plant includes tap-water consumption at power department and office area.

Figure: Water Intensity at TECO and Dongsheng, 2012-2014



Note: This method increases the calculated water consumption at the TECO head office and Dongsheng

TECO estimates wastewater discharge amount as equal to 80% of water consumption. Dongsheng's wastewater discharge amount is based on wastewater from manufacturing activities. The wastewater discharge amounts from 2012 to 2014 are shown in the following table. TECO's three plants have all had water quality tests performed by qualified third-party testing suppliers. After confirming compliance with standards, the plants discharge wastewater to industrial zone wastewater facilities for treatment in line with regulations. Wastewater from Dongsheng is treated at inspected sewage facilities to ensure the quality of discharged water quality conforms with regulations. The Zhongli plant, TECO's only facility with painting operations, recycles water. However, the recycling ratio is quite low at just over 0%. Additionally, TECO's three plants and Dongsheng are not located near environmental protection zones, habitat or high biodiversity areas and therefore have little impact on the environment and ecology.

Table: Waste-water amounts at various factory premises, 2012-2014 Unit: metric tons

Year	Factory compound	TECO					Subsidiary	TECO Total	TECO and Dongsheng Total
		headquarters	Chungli factory	Guanyin factory	Guanyin factory II	Hukou factory	Dongsheng		
2012		28.74	129.76	4.86	0.95	14.06	12.98	178.37	191.35
2013		28.38	131.16	1.64	0.77	13.40	9.75	175.34	185.09
2014		37.36	127.37	4.12	0.67	12.73	8.33	182.24	190.56

Table: Waste-water treatment methods of various factories and final outlets

Factories		Factory Treatment method	Final outlet
TECO	Chungli factory	Discharge to waste-water treatment plant of Chungli Industrial Zone	Laochieh Stream
	Hukou factory	Discharge to waste-water treatment plant of Hsinchu Industrial Zone	Xingfeng Stream
	Guanyin II factory	Discharge to waste-water treatment of Guanyin Industrial Zone	Shulin Stream
Subsidiary		Waste-water discharge after treating at inspected sewage facilities to ensure the quality of discharged water quality conforms with regulations	Dajue Stream

### 8.3.3 Waste and Pollution Treatment

#### 1 Waste management

TECO and Dongsheng has formulated management measures for waste storage and disposal under its environmentprotection and safety management system, calling for setup of unified waste placement areas in factory premises and tracking and recording of waste disposal and treatment procedure, in addition to keeping the record for three years. Total amount of general wastes produced by Chungli factory, Guanyin factory, and Guanyin II factory is displayed in the following table, which shows that the 2014 amount is 0.6% less than 2012.

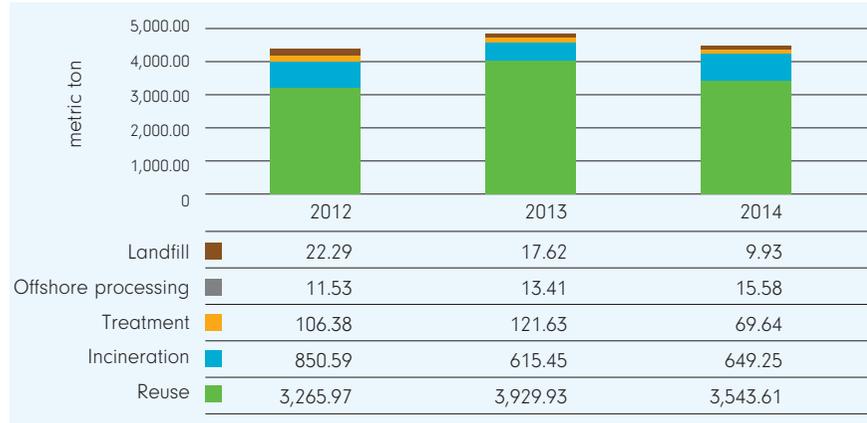
TECO's main methods of waste management are reuse, incineration, treatment, offshore processing, and landfill. The main waste streams handled by offshore treatment include mainly wire and cable waste shipped to mainland China for processing. Dongsheng relies mainly on reuse, incineration, treatment and landfilling, as shown in the following figure and table

Table: Waste and resources recycling (sale) 2012-2014 Unit: metric tons

Item	Year	Company	2012	2013	2014	
			General business wastes	TECO	4,152.28	4,613.99
		Dongsheng	92.95	70.64	108.99	
Total			4,245.23	4,684.63	4,270.93	
Hazardous business (waste electric wire)		TECO	11.53	13.41	17.08	
		Dongsheng	0	0	0	
Total			11.53	13.41	17.08	
Recycling of resources (resell)	Scrap iron	TECO	2,337.20	2,142.70	1,677.16	
		Dongsheng	28.55	36.02	152.36	
	Total			2,365.75	2,178.72	1,829.52
	Scrap copper	TECO	60.64	81.64	63.17	
		Dongsheng	0.31	0.47	3.29	
	Total			60.95	82.11	66.46
Scrap paper	TECO	49.53	58.06	61.89		
	Dongsheng	17.67	21.29	7.08		
Total			67.20	79.35	68.97	



Chart: Waste Treatment at TECO and Dongsheng from 2012 to 2014



## 2 Air pollution management

Air pollutants are produced at TECO's Zhongli plant and at Dongsheng. In compliance with regulations, both facilities have installed qualified air pollution control equipment operated by specialists in accordance with environmental regulations. TECO is also dedicated to reducing the concentration of pollutants to meet air pollution standards. Air pollutants at TECO and Dongsheng include sulfur oxides, nitrogen oxides, and volatile organic compounds. Emissions of these contaminants from 2012 to 2014 is shown in the following table.

Table: TECO and Dongsheng Emission amount of air pollutants, 2012-2014

Unit: metric tons

Pollutant	Company	2012	2013	2014
SOX	TECO	2.14	1.78	1.63
	Dongsheng	0.83	1.35	1.08
<b>Total</b>		<b>2.97</b>	<b>3.13</b>	<b>2.71</b>
NOX	TECO	1.16	1.05	1.03
	Dongsheng	0.55	0.84	0.68
<b>Total</b>		<b>1.71</b>	<b>1.89</b>	<b>1.71</b>
VOCS	TECO	123.9	126.22	141.39
	Dongsheng	6.85	2.08	2.92
<b>Total</b>		<b>130.75</b>	<b>128.30</b>	<b>144.31</b>

## 8.3.4 Compliance with Environmental Rules

TECO will continue to invest in and improve air pollution control equipment, strengthen on-site inspection and self-management to meet regulatory requirements, and revise its environment-related operating standards. In 2014, TECO was fined for two violations of the Air Pollution Control Act, as detailed below:

Chart: Environmental Protection Act Violations by TECO from 2012 to 2014

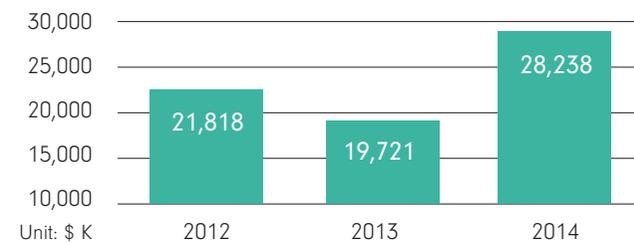
Year	2012	2013	2014
Pollution type	None	None	Air pollution
Reporting agency	None	None	Taoyuan City Dept. of Environmental Protection
No. of Violations / Amount of Fines	None	None	2/NT\$300,000

The two violations mainly involved inconsistent recording of circulating wastewater for varnished exhaust gas scrubbers and inspection of exhaust pipes. TECO responded by changing operating instructions and replacing conventional differential pressure gauges (which require climbing to monitor) for exhaust pipe inspection with electronic differential pressure gauges. The new gauges are linked to offices for real-time monitoring to ensure precision control. In addition, the factory validated more earth-friendly motor paints to reduce air pollution at source and improve waste treatment efficiency.

## 8.3.5 Environmental Protection Outlays

To prevent potential pollution during production, TECO has intensified assessments of energy conservation, carbon emissions reduction, waste cleanup, and pollution control equipment. The company has also budgeted for environmental protection expenses, with outlays for 2012 to 2014 shown in the figure below.

Figure: Environmental Protection Spending by TECO from 2012 to 2014



Note: Dongsheng leases all of its equipment from TECO, which therefore bears all environmental protection expenses.

# 09

## Driving Innovation and Education

- 9.1 Caring for Society
- 9.2 TECO Technology Foundation



# Driving Innovation and Education

Management Principles and Policies

## 9.1 Caring for Society

Responsible corporate citizenship is a central tenet in TECO's operations. In the spirit of "giving back to the society on which its success is built," the company established the TECO Technology Foundation in 1993 to support and sponsor activities consistent with TECO's commitment to caring for society.

TECO also provides opportunities for employees to contribute to the community through a company volunteer team established in 2014. Full-time employees who have been with the company for at least three months can take up to three days leave each year without salary deduction or demerit to engage in volunteer work. TECO also makes company resources available to support employee involvement in the community.



TECO: A Place to Grow



"Park Happy Day" fund-raising activity



Public benefit year-end party performance

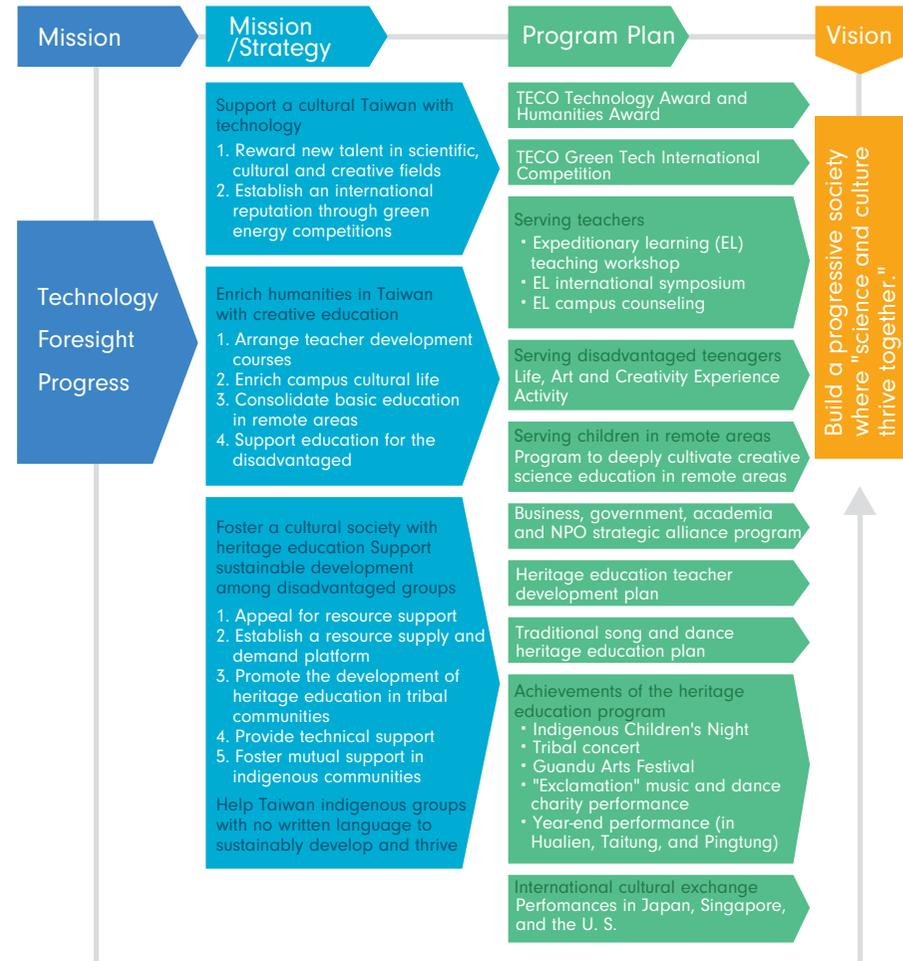


Donations to Chung Yi Social Welfare Foundation

## 9.2 TECO Technology Foundation



Strategy and Plan



### 9.2.1 Supporting a Cultural Taiwan through Technology: The TECO Award

The TECO Award was established along with the TECO Technology Foundation in 1993. Entering its 21st year in 2014, the award aims to encourage scientific and technological research and its application to support industrial development. It also seeks to inspire insightful people in the humanities and social science fields to find synergies with technology and develop their creativity to support social progress. With a mission to enrich cultural and artistic life, a humanities category was added to the awards. The award presentation ceremony also generally features a performance by a group led by the humanities award winner, capturing the humanistic theme of the TECO Award, while advocating and realizing the social development spirit of "science and culture, thriving together." The award activity attracted 783 participants and was funded with a budget of NT\$6.55 million.



Winners: The award was presented to six winners in five fields for their contribution to society and their international influence. For details, please visit: <http://www.tecofound.org.tw/teco-award/2014/prev-winner.php?p=21>

#### Concrete Results

### Significance to TECO

#### 1. A learning model for the establishment of an outstanding corporate culture

- The TECO Foundation has held the TECO Award for 21 years. The award winners have elevated the status of the award through their contributions and achievements in a variety of fields. They also provide models for society, earn professional respect, and serve as learning benchmarks for TECO employees.

- TECO Award winners continue to interact closely with TECO employees in a project-based cooperation and technology integration and development process involving both technical exchange and learning models. They also deliver keynote speeches that help TECO to develop an outstanding corporate culture.

#### 2. Winners promote the development of earth-friendly and energy-saving technology for industry

Institute for Information Industry (III) Chairman Chintay Shih serves as the award jury convener. Each year, he reviews the content of the award categories according to industry, technology and social trends, setting the guidelines for industrial R&D and technological innovation. Previous award-winners are entrusted for promotion, guidance and implementation related to energy industry investment and development and plant environmental protection technology.



A total of **NT\$54.2** million was awarded to 110 winners during the 21 years of the award (to 2014)

### Social Impact

1. The award brings innovation, encouragement and positive energy to technological fields, enhancing the climate for innovation and the development of scientific and technological research in Taiwan.

2. The award further cultivates and promotes an atmosphere of innovative development in domestic culture and arts, encouraging and affirming quiet cultivation by individuals and teams in humanities fields.

3. The award aids the selection of social benchmarks. The winners and TECO Award Winner Fellowship offer professional advice and technical guidance to support diverse industrial development.

4. The award is unique in Taiwan in its emphasis on both technology and humanities. It actively advocates and implements the social development spirit of "science and culture, thriving together." All of the award winners have had a far-ranging impact on industry and society.

5. Awards were added in the humanities, energy technology, and environmental protection technology fields to heighten public attention to and involvement in environmental protection.

6. In 2015, the Humanities Award was presented for achievements in forest restoration, including protection of biological habitats, biodiversity and other practices supporting the sustainable management of forest environments. The award aims to encourage ongoing environmental protection work by people who have made outstanding contributions in this area.

### International Impact

1. Most of the award winners are members of the Institute of Electrical and Electronics Engineers (IEEE). The list includes Professor Liao Wan-jiun, director of the IEEE Communications Society Asia Pacific Board and an active participant in international academic events. Winners also have contributed their academic achievements and research results to develop technology addressing the environmental protection, energy depletion, food shortages and other issues facing the world, as well as supporting international industrial-academic cooperation and technology transfer.

2. Japanese venture capital firm Leave a Nest met with TECO Award winners in Taiwan to explore technical cooperation.

### 9.2.2 TECO "Green Tech" International Competition Turns Seven

The seventh TECO "Green Tech" International Competition was held in 2014 to encourage involvement by young people in green technology R&D. Twenty elite teams from universities in Taiwan competed in the main contest, while 19 teams from top universities in the U.S., Japan, Russia, Singapore and mainland China



participated in the international contest. More than 200 creative youth from around the world competed at the finals, representing a record turnout.

In 2013, researchers at the University of Tokyo developed an ocean current power generation system capable of producing power equal to the output of 30 nuclear power plants. The technology won the top prize in the international contest. In 2014, the university not only continued to send outstanding teams to join the competition, but also motivated teams from Keio, Waseda, Kyushu and other Japanese universities to take part in the contest. Waseda University's respected Leading Graduate Program sent a team highlighting the school's achievements in green energy technology. In May, Waseda University sent twelve graduates of the program to Peking University to participate in a green energy innovation workshop jointly held with TECO. The winning team also won the 2014 TECO Green Tech Competition. The University of California, Los Angeles and Boston University in the U.S. also sent teams, further intensifying the contest atmosphere at the 2014 "Green Tech" finals and helping to usher in a new dawn for renewable energy research.

Green Tech Competition website : <http://www.tecofound.org.tw/greentech-contest/2015/index.php>

## Impact on TECO

The award encourages environmental awareness among employees and improves employee understanding of advanced and new creative ideas and technological developments. It also promotes industrial, academic, and international exchange and provides examples for energy conservation, carbon emission reduction, environmental preservation and other public interest activities. The award also heightens public attention to and actions supporting environmental protection, while also highlighting the urgency and importance of these issues. Additionally, it inspires younger people to engage in green tech R&D and encourages universities to foster technology R&D talent in related areas to contribute strategies and resources for the development of green energy technology.

### Highlighting Green Energy Tech on the Global Stage:

1. In 2015, the Green Tech Competition expanded on the 2014 event with nearly 30 teams participating from 11 countries, including the U.S., Japan, the U.K., Germany, Sweden, Switzerland, Australia, Russia, Singapore, Saudi-Arabia, and China.
2. Experts and scholars from China and Japan were invited to serve as jury members at the "Green Tech" finals. The jury reviewed the entries in line with the professional operating principles of fairness, openness, and international participation.
3. Competition attracts international attention and participation
  - 1 Professor Shingo Igarashi of Japan's Kyushu University invited Sweden's top universities to participate in the competition in 2015.
  - 2 The Science and Technology Division of the Taipei Representative Office in Germany invited top universities in Germany, Switzerland and Austria to participate in the competition.
  - 3 The representative of the Australian Office Taipei invited Australian schools to participate in the competition.
  - 4 The rector of the University of Madrid in Spain invited the University of Madrid to participate in the competition.
  - 5 The Industrial Technology Research Institute invited Nottingham University in the UK to participate in the competition.

4. Shanghai Jiao Tong University and C9 League universities in China affirmed the competition results. In 2015, these schools began to jointly hold a Cross-Strait Youth Entrepreneurship and Leadership Development Camp two weeks before the competition to establish long-term cooperative relations.

### Social Impact

1. The spirit of the award is to advance with the times and heighten public awareness to environmental protection issues and action.
2. The award encourages universities to foster R&D talent in green tech fields and inspires young people to engage in green tech R&D. In the past seven years, the award has helped to motivate more than 3,000 young people to engage in green tech R&D.
3. Promoting industrial-academic cooperation
  - 1 The award brings green technology off campus through the contest finals and online sharing of the contest information. The competition provides a platform for the exchange of ideas on theory, research, practice, technology, projects and other regards, as well as to showcase creative work and technical achievements. This in turn encourages industry and school research teams to develop long-term or project-based cooperative projects.
  - 2 Team entries at the main and international competitions earn high marks and proposals for technology transfer cooperation plans from industrial circles. In this way, the awards realize and promote development and cooperation between industry and school research team.

The "Green Tech" competition provides effective strategies and methods. In just seven short years, it has inspired nearly a hundred U.S. and Asian universities to carry out green tech research projects.



### 9.2.3 Enriching Cultural Attainment through Creative Education

#### ● Realizing practical education: EL Education Promotion Plan

The theory of creative education: Neurological research has shown that experience can affect synaptic connections, density and apperception, all of which are related to creativity. Experience includes personal experience, learning or reading, and the internalization of previous experience. In short, experience is the basis of creativity and the fertile soil for incubating creative shoots. Expeditionary learning (EL) is considered among the best educational methods for inspiring and enhancing creativity.

Since 2014, the two sides of the Taiwan Strait have promoted expeditionary learning (EL) education and enterprise education and practical training experience for young people. TECO has teamed up with Ping Liao, a teacher and early EL proponent to arrange workshops conducted in two stages over six days. The workshops provide guidance and assistance to teachers in Taiwan to develop skills in guiding students to engage in independent thinking and proactively discover, observe, induce, analyze and resolve problems, reflect, design interdisciplinary courses, and achieve other teaching functions. The goal is enhance teaching effectiveness, help children gain experience through "learning by doing," foster in children the ability to continuously learn, as well as socially appreciated qualities and self-restraint.

#### Results

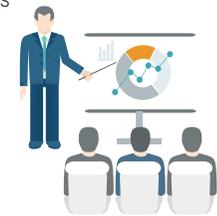
The six-day workshop was attended by more than 100 EL seed teachers from over 20 schools in the seven counties and cities of Taipei, Taoyuan, Yunlin, Chiayi, Tainan, Pingtung, and Taitung. The program helped teachers to hone their abilities



in guided, topic-based teaching and discipline integration, develop new ideas for creative teaching, and inject new thinking for creative education and campus operations. EL teaching methods help students to find and apply knowledge, build creativity, develop respect for others, care for society, enhance teamwork ability, and foster independent thinking and problem solving skills.

#### 2015 EL Education Promotion Plan EL Teaching Workshop:

This workshop introduced Project Adventure and Team Adventure (TA) with a program led by outreach education teacher Ping Liao. Sessions were arranged in Chiayi, Yunlin, Taitung, Pingtung, Tainan and other counties and cities. The program helped instructors to develop curriculum and disciplinary integration, curriculum design and development, situational leadership, group dynamics, exploratory experience and other EL teaching skills needed for creative teaching functions.



#### ● Campus Guidance and Presentation

The program offers campus guidance at schools that lack teaching resources but wish to implement EL. Year-end presentations are also held at the Ministry of Education to showcase the program's achievements.

### International Symposiums and Workshops:

Jennifer Seydel, the school designer for U.S.-based Expeditionary Learning, was invited to a seminar in Taiwan to introduce Taiwan teachers to the EL implementation and promotion experience in the U.S. Workshops were held to share teaching experience and help Taiwan teachers to re-ignite enthusiasm for teaching, and help education in Taiwan to embrace "expeditionary teaching."

For program details please refer to:

<http://www.tecofound.org.tw/workshop/2015/download/2015workshop.pdf>



### ● Cultural Education in the Remote Central Range Area: Life, Art and Creativity Experience Activity

The remote areas of Taiwan have a high prevalence of single-parent families, orphans and grandparenting, as well as a lack of educational resources. This has disadvantaged children in these areas compared to their urban counterparts in the areas of science, reading, information and art education. In order to improve children's education in these remote townships, the TECO Foundation has held the Life, Art and Creativity Experience Activity since 2005. This activity draws on the inspiration of art and cultural appreciation in a humanities oriented education policy aimed at providing children in remote areas with a rich and diverse art and cultural feast.

Over the years, the program has arranged concerts, Beijing, Henan opera, and traditional Taiwanese opera performances, children's plays and other drama performances, as well as movie appreciation, ballet, humanities art lectures,

science theater and aboriginal song dance performances. These activities present culture and arts in a fun and educational way, deepening students' learning and encouraging schools in remote townships to value art and cultural education. These diverse art and cultural activities help to enrich humanities courses and deepen cultural education in the most remote areas of Taiwan's Central Range area.

### Laying the Foundation for the 2015 Life and Creativity Experience Activity

In 2015, the TECO Foundation continued to arrange a wide range of high-quality performances to enrich the art and cultural life of indigenous children. Children in tribal communities of Taitung, Pingtung and Hualien counties were invited to enjoy world-class modern dance performances by the Bulareyaung Dance Company. Taiwan Pure Strings (combining traditional indigenous music and dance) played beautiful chamber string music for the children, and Chen Chien-jung showed classic movies on life education during a film appreciation event. Godot Theatre Company gave fun and educational theater performances. In addition, a heritage education team under the "Exclamation" Sustainable Indigenous Education Program presented the "Marvel" traditional aboriginal song and dance performance. A feast of life and art, these performances were among the most highly anticipated events of the year for schoolchildren in Taiwan's remote communities.

### Bringing Science Education to the Remote Central Range: Program to Deeply Cultivate Creative Science Education in Remote Townships

In 2014, this program served more than 17,000 students at 147 schools. In 2015, the program was expanded to 151 schools in six counties and cities (Nantou County, Chiayi County, Pingtung County, Yilan County, Hualien County, and Taitung County). Overcoming formidable transportation difficulties, program teams provided a broad range of services aimed at helping teachers in rural areas to deeply cultivate creative science education, both through knowledge and by giving remote townships direct access to educational resources in order to bring science education to the most remote communities of Taiwan's Central Range.

The program curriculum applies the theories presented in "Brain Rules," translated by Prof. Daisy L. Hung, for achieving the most effective learning results.

There are 12 course topics. One science course is taught each semester to ensure that indigenous children taking the program from first grade to graduation never repeat the same course.

At each class, rural teachers are joined by program instructors to develop interactive techniques and design stimulating science courses. The program helps teachers to build creative instruction ability, broaden teaching perspectives, and inspire teaching enthusiasm so that schoolchildren in remote areas can enjoy high quality learning opportunities and educational resources. To date, the program has inspired over 1,500 teachers.



The TECO Technology Foundation also supports science education in the remotest communities of the Central Range in partnership with various sectors and non-profit organizations (NPOs), as well as by applying for government grants for such work. These initiatives support rural teachers in helping disadvantaged children achieve their dreams in the field of science. In September 2014, a crowdfunding project on the FlyingV platform exceeded its goal with more than one hundred donors, underscoring the value of grassroots support in fund-raising efforts. In 2015, the foundation continued to raise funds through FlyingV, hoping to channel the public's enthusiasm into sustained support for the educational mission of teachers in rural areas.

### FlyingV crowdfunding website

Science Education in the Central Range: Rural Teacher Program to Deeply Cultivate Creative Science Education in Remote Areas



<https://www.flyingv.cc>

Map of communities served by the program in 2014:  
<http://www.tecofound.org.tw/aboriginal/science.html#top4>



## 9.2.4 Enriching the Humanities and Social Sciences through Heritage Education

### ● Why "Exclamation" ?

The "Exclamation" program is a call for NPOs, non-governmental organizations (NGOs), enterprises, private organizations, individuals, government and schools to join hands and establish a public benefit platform for education "supply and demand matching and services." Operating as a strategic alliance, the program aims to promote the planned commitment of resources by various parties to encourage and support school or tribal development education programs under the principles of cherishing, respect, mutual aid, mutual trust, heritage, and sustainability. These programs aim to preserve the cultural and artistic heritage of indigenous communities in Taiwan so these communities may continue to foster talent and develop knowledge skills. They also bring the refinement and value of Taiwan's indigenous culture and arts to the world stage. The program's name embodies the spirit of stunning achievements in traditional culture and art, education and the sustainable force of Taiwan's indigenous communities.

TECO motors have powered Taiwan for over half a century. Building on this tradition, TECO established the TECO Technology Foundation 21 years ago to support scientific and technological research and innovation, humanities and social sciences for the technology era and highly competitive creative education. The company also launched the "Exclamation" education program to support the sustainability of indigenous communities. Through an "adoption" method, the program seeks to raise ample funding to assist tribal development with culture at the root, education as the pillar, people at the center, and the tribe as the identity.



## Developing educational plan by integrating resources, technology and professional teachers

The "Exclamation" program materializes the vision of "helping tribes without a written system for their languages can achieve sustained prosperous development," via the strategy of integrated resources, inheritance of skills, and professional teachers, funding 41 teams of tribal schools and supporting tribal sustainable education plan by rallying the forces of 36 NPO/NGO units, 46 enterprises, five private social groups, 19 urban schools, over 100 individuals, and three government sectors. The tribal sustainable education plan contains the following items:



1. Supporting traditional folk-song team in developing traditional folk-song education
2. Supporting traditional dancing team in developing traditional dance education
3. Supporting traditional crafts team in developing traditional crafts education
4. Supporting physical competition team in developing physical training
5. Supporting craft learning team in developing potential cultivation education
6. Organizing performances exhibiting result of inheritance learning
7. Holding courses for teachers of inheritance learning
8. Organizing visiting activities for understanding science, humanism, and art.

## Innovative Work in 2014

### 1. Recruitment of heritage teacher:

Each "Exclamation" heritage team is formed of two to three heritage teachers. However, these teams often require additional professional support for song, dance, ritual, and ceremony compilation, creation and teaching. "Exclamation" operations also require administrative and other assistance. To meet these needs, TECO has recruited six indigenous heritage teachers with expertise in the areas of performance, compilation and teaching. These teachers visit tribal communities with "Exclamation" teams to help teachers develop performance, compilation, creation, rehearsal and other teaching skills and knowledge. Such support has laid a solid foundation that has helped supported groups perform at the Indigenous Children's Night and Guandu Art Festival, as well as at various international events, year-end performances, and tribal concerts.

### 2. Support for professional indigenous theater and dance:

Support was given to TaiBodyTheatre and Bulareyang Dance Company

### 3. Recruitment of professionals for performance production and presentation:

Composer Lee Che-Yi was recruited as conductor for indigenous performances. He also wrote traditional Rukai, Tsou and Amis song arrangements and accompanied the Fengyuan Philharmonic Chamber String Orchestra to bring the 10th Indigenous Children's Night concert to a perfect close.

### 4. Implementing programs through small strategic alliances

### 5. Participation in fund-raising platforms

#### (1) FlyingV

- Program to Deeply Cultivate Creative Science Education in Remote Areas
- Participation of Kuo-Shin Chuang's Experimental Theatre of Indigenous Dance and Ching-Yeh Folk Music and Dance Group in the Edinburgh International Festival.
- Performance by Hualien County's Beipu Elementary School at the Festival Gauargi in France.

#### (2) WeBackers

- Participation of Haiduan Junior High School at the World Scout Jamboree in Japan
- Participation of Puzangalan Children's Choir at the Children's Chorus Festival in Japan

#### (3) Donations from Union Bank of Taiwan credit cardholders

Map of areas served by "Exclamation" heritage teams:

<http://www.tecofound.org.tw/aboriginal/main.html#top7>

Supported Performances in 2014: <http://www.tecofound.org.tw/aborigines/2014/index.html>



# 驚嘆祭典



原住民兒童之夜



## "Exclamation" Achievements: Inspiring Action

- ★ Creating a platform for public support of education with culture at the root, education as the pillar, people at the center, and the tribe as the identity
- ★ Providing learning and development resources for 15,000 indigenous youth
- ★ Developing customized education programs for 17 tribal schools
- ★ Developing a repertoire of 183 traditional songs, 70 traditional dances, two traditional skills, two talents and two physical exercises to help indigenous children gain knowledge and skills.
- ★ Creating a model for diverse inter-school and inter-tribe and community exchanged
- ★ Creating opportunities for professional performances and cultural presentations:
  - Performances by Pingtung's Taiwu Children's Ancient Ballads Troupe and Nanzhuang's Penglai Saisiyat Dance Ceremony Heritage Team at the Guandu Arts Festival.
  - Holding of the Exclamation Song and Dance "Beidawu Mountain Gathering" tribal concert
- ★ Leaving a complete record of traditional indigenous culture and arts:
- ★ Bringing the indigenous songs of Taiwan to the world:
  - Performance by Taitung's Haiduan Bunun Song Ritual Heritage Team at the World Scout Jamboree Cultural Village in Japan (7/28-8/8)
  - Performance by Pingtung's Puzangalan Children's Choir at the 2015 Japan Choral Association's Children's Chorus Festival in Japan (7/23-8/4)
  - Performance by Hualien's Beipu Amis Children's Dance Troupe at Festival Gavargi in France (7/13-24)
  - Performance by Chiayi's Laiji Tsoou Dance Company and Pingtung's Saijia Paiwan Ancient Ballads Troupe in Singapore
  - Performance by Pingtung's Taiwu Children's Ancient Ballads Troupe in Kyushu, Japan (8/7-10)
  - U.S. stop on world concert tour by Pingtung's Taiwu Children's Ancient Ballads Troupe with Daniel Ho

Houston concert (8/14)

- Taiwan Vox Nativa Children's Choir concert tour in Germany, Poland and Austria (8/29-9/11)
- "Exclamation" continued to be one of the charity programs supported by BNP Paribas.



## International Recognition for "Exclamation" Heritage Education

1. The "Exclamation" program for sustainable indigenous education has been invited over the years to arrange performances across Europe (France, Germany, Belgium, Luxembourg), Asia (Japan, China, and Hong Kong), and the Americas (United States and Brazil). These events present the quintessence of traditional indigenous culture and art in Taiwan on the world stage through song, dance and ritual performances rooted in knowledge and skills supported by the Exclamation program.
2. Continuing support for "Exclamation" by BNP Paribas:  
Since 2013, "Exclamation" has been one of the four charity programs supported by BNP Paribas in Asia, first at the local branch level and later by the bank's head office. Along with support from individual volunteers and employee donations, the bank's involvement has helped the program to support a succession on heritage teams, from the Rukai Children's Dance Troupe at Qingye Elementary School to the Bunun Children's Choir at Wuling Elementary School as the main sponsor of activities ranging from the "Living Art Education" to the Indigenous Children's Night.
3. Michele Paciulli provided sound engineering support for Indigenous Children's Night to bring Taiwan's indigenous music to the world and promote international exchanges.
4. Surge in international performances in 2015  
Performances were arranged in Japan, France Festival Gavargi, Singapore, the United States, Germany, Poland, and Austria.



## 10.1 Report Summary

For many years, TECO has dedicated efforts in a unwavering commitment to environmental, social, and governance (ESG) fields. Under the "TECO GO ECO" vision, the company has developed its core business closely in line with the guiding principle of "Green TECO, Green Tech." The company's green energy products help to drive industrial development, while also lightening the burden on the environment. In the spirit of "giving back to the society on which its success is built," the company established the TECO Technology Foundation to promote technology and creative education aimed at supporting the development of a society where "science and culture thrive together." In the area of corporate governance, TECO has been guided by the principle of "management with integrity," strengthening the independence of its board of directors and establishing sound internal control mechanisms to achieve sustainable operations.

Looking to the future, TECO will continue to implement CSR from the solid foundation laid over the years. The company will also strengthen communication with stakeholders and realize the hopes of stakeholders in its future development plans. At the same time, TECO will continue to champion CSR values to achieve sustained growth, as well as to become a driving force for industrial development and social progress.

## 10.2 GRI G4 Index

Indicator #	GRI and Indicators	Sections on issue disclosure	Pages	External Assurance (Yes/No)
<b>Strategy and Analysis</b>				
G4-1	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	2	4	
G4-2	Provide a description of key impacts, risks, and opportunities.	5.6	38	
<b>Organizational profile</b>				
G4-3	Organizational profile	5.3.1	31	
G4-4	Report the primary brands, products, and services	5.3.2	32	
G4-5	Report the location of the organization's headquarters.	5.3.1	31	
G4-6	Report the number of countries where the organization operates, and names of countries where either the Organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	5.3.1	31	
G4-7	Report the nature of ownership and legal form.	5.3.1	31	
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and Beneficiaries).	5.3.1	31	
G4-9	Report the scale of the organization	5.3.1、7.2	31、56	
G4-10	Report the total number of employees by statistics on the classification	7.2	53	◎
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	7.3	55	
G4-12	Describe the organization's supply chain.	6.3	48	
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	1	3	
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.	5.6	38	

Indicator #	GRI and Indicators	Sections on issue disclosure	Pages	External Assurance (Yes/No)
<b>Identified Material Aspects and Boundaries</b>				
G4-17	A. List all entities included in the organization's consolidated financial statements or equivalent documents. B. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	1、3.4 5.1	3、11 29	
G4-18	A. Explain the process for defining the report content and the aspect boundaries. B. Explain how the organization has implemented the reporting principles for defining report content	1	3	
G4-19	List all the material Aspects identified in the process for defining report content.	3.4	11	
G4-20	For each material Aspect, report the Aspect Boundary within the organization,	3.4	11	
G4-21	For each material Aspect, report the Aspect Boundary outside the organization	3.4	11	
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	1	3	
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	1	3	
<b>Stakeholder engagement</b>				
G4-24	Provide a list of stakeholder groups engaged by the organization.	3.1	7	
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	3.1	7	
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	3.2	8	
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	3.4	12	
<b>Report profile</b>				
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	1	3	
G4-29	Date of most recent previous report (if any).	1	3	
G4-30	Reporting cycle (such as annual, biennial). SEE IMPLEMENTATION MANUAL	1	3	
G4-31	Provide the contact point for questions regarding the report or its contents.	1	3	
G4-32	A. Report the 'in accordance' option the organization has chosen. B. Report the GRI content index for the chosen option (see tables below). C. Report the reference to the external assurance report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.	1、10.2 10.3	3、87 94	
G4-33	A. Report the organization's policy and current practice with regard to seeking external assurance for the report. B. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. C. Report the relationship between the organization and the assurance providers. D. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.	1	3	

Indicator #	GRI and Indicators	Sections on issue disclosure	Pages	External Assurance (Yes/No)
<b>Governance</b>				
G4-34	A. List all entities included in the organization's consolidated financial statements or equivalent documents. B. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	5.5.1 、 5.5.2	35 、 35	◎
<b>Ethics and InteGRity</b>				
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	5.5.2 、 7.1	35 、 53	
<b>Category: economic</b>				
Aspect: economic performance				
G4-DMA	Disclosures on Management Approach	5.1	29	
G4-EC1	Direct economic value generated and distributed	5.4	33	◎
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	5.2	30	
G4-EC3	Coverage of the organization's defined benefit plan obligations	7.4	56	
G4-EC4	Financial assistance received from government	5.4	33	◎
Aspect: market presence				
G4-EC7	Development and impact of infrastructure investments and services supported	5.3	31	
Aspect: procurement practices				
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	6.3.2	50	
<b>Category: environmental</b>				
Aspect: materials				
G4-DMA	Disclosures on Management Approach	8.1	65	
G4-EN1	Materials used by weight or volume	8.3.2	72	
Aspect: energy				
G4-DMA	Disclosures on Management Approach	8.1	65	
G4-EN3	Energy consumption within the organization	8.3.1	69	◎
G4-EN7	Reductions in energy requirements of products and services	4 、 8.1	14 、 65	
Aspect: water				
G4-DMA	Disclosures on Management Approach	8.3.2	72	

Indicator #	GRI and Indicators	Sections on issue disclosure	Pages	External Assurance (Yes/No)
G4-EN8	Total water withdrawal by source	8.3.2	72	
G4-EN9	Water sources significantly affected by withdrawal of water	8.3.2	72	
G4-EN10	Percentage and total volume of water recycled and reused	8.3.2	72	
Aspect: emissions				
G4-DMA	Disclosures on Management Approach	8.1	65	
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1)	8.3.1	69	Please refer to BSI certificate ☉
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (scope 2)	8.3.1	69	Please refer to BSI certificate ☉
G4-EN17	Other indirect greenhouse gas (GHG) emissions (scope 3)	8.3.1	69	
G4-EN19	Greenhouse gas (GHG) emissions intensity	8.3.1	69	
G4-EN20	Emissions of ozone-depleting substances (ODS)	8.3.1、8.3.2	69、72	
G4-EN21	Nox, Sox, and other significant air emissions	8.3.3	74	
Aspect: Effluents and Waste				
G4-DMA	Disclosures on Management Approach	8.1	65	
G4-EN22	Total water discharge by quality and destination	8.3.2	72	
G4-EN23	Total weight of waste by type and disposal method	8.3.3	74	
G4-EN24	Total number and volume of significant spills	8.3.3	74	No such circumstances in 2014
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	8.3.2	72	
Aspect: Products and Services				
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	4、8.1	14、65	
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	8.1	65	
Aspect: compliance				
G4-DMA	Disclosures on Management Approach	8.2	68	
G4-EN29	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	8.3.4	75	
Aspect: transport				
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	8.1	65	

Indicator #	GRI and Indicators	Sections on issue disclosure	Pages	External Assurance (Yes/No)
Aspect: supplier environmental assessment				
G4-DMA	Disclosures on Management Approach	6.3	48	
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	6.3	49	
Category: social				
Sub-category: labor practices and decent work sub-category: labor practices and decent work				
Aspect: employment				
G4-DMA	Disclosures on Management Approach	7.1	53	
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	7.2	53 - 54	⊙
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or parttime employees, by significant locations of operation	7.4	56	
G4-LA3	Return to work and retention rates after parental leave, by gender	7.2	54	⊙
Aspect: labor/management relations				
G4-DMA	Disclosures on Management Approach	7.1	53	
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	7.3	55	
Aspect: Occupational Health and Safety				
G4-DMA	Disclosures on Management Approach	7.6	60	
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	7.3	55	
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	7.6	60	⊙
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	7.6	60	
G4-LA8	Health and safety topics covered in formal agreements with trade unions	7.6	60	
Aspect: Training and Education				
G4-DMA	Disclosures on Management Approach	7.5	57	
G4-LA9	Average hours of training per year per employee by gender, and by employee category	7.5	57	
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	7.5	57	
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	7.5	57	

Indicator #	GRI and Indicators	Sections on issue disclosure	Pages	External Assurance (Yes/No)
<b>Sub-category: human rights</b>				
<b>Aspect: Non-discrimination</b>				
G4-DMA	Disclosures on Management Approach	7.1	53	©
G4-HR3	Total number of incidents of discrimination and corrective actions taken			No such circumstances in 2014
<b>Aspect: Freedom of Association and Collective Bargaining</b>				
G4-DMA	Disclosures on Management Approach	6.3 ∨ 7.3	48 ∨ 55	
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	6.3 ∨ 7.3	48 ∨ 55	
<b>Aspect: child labor</b>				
G4-DMA	Disclosures on Management Approach	6.3 ∨ 7.2	48 ∨ 53	
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	6.3 ∨ 7.2	48 ∨ 53	
<b>Aspect: Forced or Compulsory Labor</b>				
G4-DMA	Disclosures on Management Approach	7.3	55	
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	7.3	55	
<b>Aspect: supplier human rights assessment</b>				
G4-DMA	Disclosures on Management Approach	6.3	48	
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	6.3	48	
<b>Sub-category: society</b>				
<b>Aspect: local communities</b>				
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	3.2 ∨ 8.1 9.2	8 ∨ 65 77	
<b>Aspect: Anti-corruption</b>				
G4-DMA	Disclosures on Management Approach	5.6	39	
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	5.6	39	
G4-SO4	Communication and training on anti-corruption policies and procedures	7.5	57	
G4-SO5	Confirmed incidents of corruption and actions taken	5.6	39	
<b>Aspect: Anti-competitive Behavior</b>				
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	5.6 ∨ 6.1	39 ∨ ∨ 43	

Indicator #	GRI and Indicators	Sections on issue disclosure	Pages	External Assurance (Yes/No)
Aspect: compliance				
G4-DMA	Disclosures on Management Approach	5.6	39	
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations			No such circumstances in 2014
Aspect: Supplier Assessment for Impacts on Society				
G4-DMA	Disclosures on Management Approach	6.3	48	
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	6.3	48	
Sub-category: product responsibility				
Aspect: Customer Health and Safety				
G4-DMA	Disclosures on Management Approach	6.1	43	
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	6.1	43	
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	6.1	43	
Aspect: Product and Service Labeling				
G4-DMA	Disclosures on Management Approach	6.1	43	
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	6.1	43	
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	6.1	43	No such circumstances in 2014
G4-PR5	Results of surveys measuring customer satisfaction	6.4	50	
Aspect: marketing communications				
G4-DMA	Disclosures on Management Approach	6.1	43	
G4-PR6	Sale of banned or disputed products	6.1	43	
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	6.1	43	No such circumstances in 2014
Aspect: customer privacy				
G4-DMA	Disclosures on Management Approach	6.1	43	
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	6.1	43	
Aspect: compliance				
G4-DMA	Disclosures on Management Approach	6.1	43	
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	6.1	43	No such circumstances in 2014

### 10.3 Summary of information assured

No.	Page	Assured item	Information assured	Reporting criteria	Chapter
1	15	Sales proportion of high energy saving motors with capacity below 300HP (224kW) in 2014	Sales proportion of high energy saving motors with capacity below 300HP (224kW) in 2014 (in sales value and volume)	Total and separate annual sales value and volume of IE2, IE3 and IE4 motors (classified in accordance with the standard of IEC 60034-30:2014) with capacity below 300HP, divided by annual sales value and volume of motors from the department of Green Electric-Machinery.	4.1.1 The New Development of High-Efficiency Motor
2	15	Power saving statistics of high energy saving motors with capacity below 300HP (224kW) in 2014.	Power saving statistics of high energy saving motors with capacity below 300HP (224kW) in 2014. (conversion of power saving, in terms of kilowatts/hour, to CO2 emission amount)	Power saving, expressed in kilowatts/hour, was calculated by multiplication of separate and total annual sales volume of IE2, IE3, IE3 motors (classified in accordance with the standard of IEC 60034-30-1:2014) by the difference between the power consumption with that of IE1 motor, using 5,000 operating hours per year.	4.1.1 The New Development of High-Efficiency Motor
3	21	Sales proportion of first- and second-grade energy-saving household air conditioners and refrigerators in 2014	Sales proportion of first- and second-grade energy-saving household air conditioners and refrigerators in 2014. (in sales value and volume)	In line with of the Bureau of Energy, under the Ministry of Economic Affairs by "Window/box-type air conditioner energy efficiency ratio standard of matter, method and check" and "Refrigerator/freezer energy factor numerical standards". The annual sales value and volume of first- and second-grade household air conditioners and refrigerators, divided by the total annual sales value and volume of household air conditioners and refrigerators from the home-appliances business department. Sales volume of air conditioners was based on the amount of outdoor units, while sales value included indoor and outdoor units.	4.2.3 Cloud e-Home Build Energy-saving Smart Life
4	21	Statistics of power saving for first- and second-grade energy-saving household air conditioners in 2104	Statistics of power saving for first- and second-grade energy-saving household air conditioners in 2014. (conversion of power saving, in terms of kilowatts/hour into CO2 emission amount)	Multiplying annual sales volume of first- and second-grade household air conditioners, which meet the energy efficiency as defined by the Bureau of Energy, under the Ministry of Economic Affairs, by the difference of the power consumption with fourth-grade energy efficiency, using 1,200 operating hours per year.	4.2.3 Cloud e-Home Build Energy-saving Smart Life
5	29	Sales proportion of each product in 2014.	Sales proportion of each product in 2014.	Annual sales proportion of each product on a stand-alone basis.	5.1 Overview of electric-machinery industry
6	33	Performance highlights in 2014	Performance highlights in 2014 (revenue, earnings per share, return on equity, net profits, cash dividends, income tax expense, and investment tax credits).	Revenue, earnings per share, return on equity, net profits, cash dividends, income tax expense, and investment tax credit, on a stand-alone basis.	5.4 Business performance
7	35	Operation of the Board of Directors in 2014.	Number of meetings of Board of Directors and average rate of attendance in person by all directors, in 2014.	Number of meetings of Board of Directors and average rate of attendance in person by all directors, in the year. (excluding proxy)	5.5.2 The Board of Directors
8	37	Operation of audit committee in 2014. Operation of audit committee in 2014.	Number of meetings of the Audit Committee and average rate of attendance in person by all committee members, in 2014. (excluding proxy)	Number of meetings of the Audit Committee and average rate of attendance in person by all committee members, in the year. (excluding proxy)	5.5.3 Audit Committee
9	38	Operation of compensation committee in 2014.	Number of meetings of the Compensation Committee and average rate of attendance in person by all committee members, in 2014. (excluding proxy)	Number of meetings of the committee and average rate of attendance in person by all committee members, in the year. (excluding proxy)	5.5.4 Compensation Committee

No.	Page	Assured item	Information assured	Reporting criteria	Chapter
10	57	Courses relating to operating policies and regulations course in 2014	Number of courses on regulations in 2014.	Number of legal compliance courses as defined in accordance with the Company's educational system, courses including regulations of performance management on engineering construction, occupational safety and health regulations, and regulations of finance and taxes. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.5 Career Development
11	53	Number of employees region-wised as of December 31, 2014.	Number of employees region-wised as of December 31, 2014	Statistics were made according to the regions of employees at the end of the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.2 Human Resource Management
12	53	Statistics of employees' seniority as of December 31, 2014.	Structure of employees' seniority as of December 31, 2014.	Statistics were made according to the seniority of employees at the end of the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.2 Human Resource Management
13	53	Statistics of employees' age as of December 31, 2014	Age structure of employees as of December 31, 2014.	Statistics were made according to the age of employees at the end of the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.2 Human Resource Management
14	53	Statistics of employee category as of December 31, 2014.	Number of employee category as of December 31, 2014. (managerial job, professional job, and technical job)	Statistics were made based on the numbers of employees in management, professional, and technical jobs, defined according to the Company's human-resource system, at the end of the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.2 Human Resource Management
15	53	Statistics of local hires as of December 31, 2014.	Comparison of the site of employees' household registration and their workplaces as of December 31, 2014.	Statistics were made based on the site of employees' household registration and their workplaces at the end of the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.2 Human Resource Management
16	53	Applicants for parental leave in 2014.	Number of applicants for parental leave in 2014.	Annual number of applicants for parental leave in the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.2 Human Resource Management
17	57	Advocacy on protecting human-rights in 2014.	Number of courses relating to human-rights in 2014.	Annual number of courses on human-rights policy, defined and announced according to the Company's educational system. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.5 Career Development
18	60	Performance of occupational safety in 2014.	Disabling Frequency Rates (FR) in 2014. (excluding traffic accidents)	FR as set by the Minister of Labour equals to Total number of injuries and illnesses/ Total employee hours worked x 1,000,000, which was five times as what was defined by International Labour Organisation (multiplier as x200,000), in the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.6 Occupational Health and Safety
19	60	Performance of occupational safety in 2014.	Disabling Severity Rate (SR) in 2014. (excluding traffic accidents)	SR as set by the Minister of Labour equals to Total number of lost days/ Total employee hours worked x 1,000,000, which was five times as what was defined by International Labour Organisation (multiplier as x200,000), in the year. The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	7.6 Occupational Health and Safety
20	69	Performance of energy consumption in 2014.	Statistics on natural gas consumption in 2014.	Total natural gas consumed in the year, calculating from gas receipts issued by CPC Corporation, Taiwan The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	8.3.1 Energy Consumption and Management
21	69	Performance of energy consumption in 2014.	Statistics on power consumption in 2014.	Statistics on total power consumed in the year. Only the power consumed by TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company was included. If there was a meter shared at a factory site, home-appliance sales outlet, affiliate, or outsourced suppliers, the amounts of power consumption was based on the reading of power meters or the proportion as agreed by both parties.  The above information comprises data of TECO Electric and Machinery Co., Ltd and Dongsheng Electric Company.	8.3.1 Energy Consumption and Management

## 10.4 Assurance Statement



### 會計師有限確信報告

東元電機股份有限公司 公鑒

本所受東元電機股份有限公司（以下稱「貴公司」）之委任，就選定 2014 年度企業社會責任報告（以下稱「社會責任報告」）所報導之永續績效資訊執行確信程序，並依據結果出具有限確信報告。

#### 確信標的資訊與報導基準

有關 貴公司所選定 2014 年度社會責任報告所報導之永續績效資訊（以下稱「確信標的資訊」）及其報導基準詳列於 貴公司 2014 年度社會責任報告第 96 及 97 頁之「確信標的資訊彙總表」。

#### 管理階層責任

貴公司管理階層應依據適當報導基準編製及報導 2014 年度社會責任報告及其永續績效資訊，並應建置相關流程、資訊系統及內部控制以防範 2014 年度社會責任報告及永續績效資訊有重大不實表達之情事。

#### 執業人員責任

本執業人員依據確信準則公報第一號「非屬歷史性財務資訊查核或核閱之確信案件」，對確信標的資訊執行確信程序，以發現前述資訊是否在所有重大方面有未依報導基準評估而須作重大修正之情事，並出具有限確信報告。此報告不對 2014 年度社會責任報告整體及其相關內部控制設計或執行之有效性提供任何確信。

#### 適用品質管制規範

本所適用審計準則公報第四十六號「會計師事務所之品質管制」因此維持充備之品質管制制度，包含與遵循職業道德規範、專業準則及所適用法令相關之書面政策及程序。

#### 遵循獨立性及其他道德規範

本執業人員及本所已遵循會計師職業道德規範中有關獨立性及其他道德規範之規定，該規範之基本原則為正直、公正客觀、專業能力及盡專業上應有之注意、保密及專業態度。

#### 所執行確信程序彙總

本次確信工作依確信標的資訊，以 貴公司為工作執行範圍，執行之程序包括：

- 閱讀企業社會責任報告

資誠聯合會計師事務所 PwC member firm Coopers & Lybrand  
11012 臺北市信義區基隆路一段 333 號 27 樓 / 27F, 333, Keelung Road, Sec. 1, Xinyi Dist., Taipei City 11012, Taiwan  
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- 對參與提供永續績效資訊的相關部門進行訪談，以瞭解並評估編製前述資訊之流程、內部控制與資訊系統；
- 基於上述瞭解與評估，對永續績效資訊進行分析性程序，如必要時，則選取樣本進行測試，以取得有限確信之證據。

上述執行程序之選擇係基於本執業人員之專業判斷，包括辨認確信標的資訊可能發生重大不實表達之領域，以及針對前述領域設計及執行程序，以取得有限確信並作出執業人員之結論。有限確信所執行程序之性質及時間與適用於合理確信案件者不同，其範圍亦較小，有限確信所取得之確信程度明顯低於合理案件所取得者。

#### 先天限制

本案諸多確信項目涉及非財務資訊，相較於財務資訊之確信受有更多先天性之限制。對於資料之相關性、重大性及正確性等之質性解釋，則更取決於個別之假設與判斷。

#### 有限確信結論

依據所執行之程序與所獲取之證據，本執業人員並未發現確信標的資訊在所有重大方面有未依報導基準評估而須作重大修正之情事。

2014 年度社會責任報告中，與確信標的資訊並列之 2013 年度永續績效資訊，業經本執業人員於 2013 年 8 月 15 日出具無保留結論之有限確信報告在案，備供參考。

#### 其它事項

貴公司網站之維護係 貴公司管理階層之責任，對於確信報告於 貴公司網站公告後任何確信標的資訊或報導基準之變更，本執業人員將不負就該等資訊重新執行確信程序之責任。

資誠聯合會計師事務所

會計師 李宜樺  

2015 年 8 月 14 日

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## Limited Assurance Report of Independent Accountants

### To TECO Electric and Machinery Co., Ltd.

We have been engaged by TECO Electric and Machinery Co., Ltd (hereafter referred to as the "Company") to perform assurance procedures on the selected sustainability performance information reported in the 2014 Corporate Sustainability Report (hereafter referred to as the "CSR Report"), and issue a limited assurance report based on the result of our work performed.

### Information assured and reporting criteria

The sustainability performance information selected by the Company (hereafter referred to as the "Selected Information") and their respective reporting criteria are stated in the "Summary of Information Assured" on page 96 to 97 of the CSR Report.

### Management's responsibilities

The Management of the Company is responsible for preparing and reporting the CSR Report and sustainability performance information in accordance with respective appropriate reporting criteria. The Management is also responsible for establishing relevant processes, information systems, and internal controls to prevent the CSR Report and sustainability performance information from material misstatements.

### Our responsibilities

We conducted our assurance work on the Selected Information included in the CSR Report in accordance with the Statement of Assurance Standard No.1 "Assurance Engagements other than Audits or Reviews of Historical Financial Information" in the Republic of China to identify whether the aforementioned information is not prepared, in all material aspects, in accordance with respective reporting criteria, and issue a limited assurance report based on the result of our work. We do not provide any assurance on the CSR Report as a whole or on the design or operating effectiveness of the relevant internal controls.

### Quality control requirement

We applies Statements of Auditing Standard No 46."Quality Control for Public Accounting Firms" in the Republic of China and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Compliance of independence and ethical principles

In conducting our engagement, we have complied with the applicable requirements of the Code of Ethics for Professional Accountants, including integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

### Summary of work performed

We conducted our assurance work on the Selected Information within the Company.

The procedures include:

- Read the CSR Report.
- Inquire the personnel responsible for providing the sustainability performance information to understand and evaluate the processes, internal controls and information systems relating to the preparation of the aforementioned information.
- Based on the understanding and evaluation above, carry out analytical review procedures on the sustainability performance information. If deemed necessary, perform selective testing to obtain evidence of limited assurance.

The determination of the procedures performed above is based on our professional judgement, including identifying the areas where there may be risks of material misstatement of the Selected Information, and for those areas, designing and implementing procedures to obtain limited assurance to draw our conclusion. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

### Inherent limitations

Certain Selected Information involves non-financial data which is subject to more inherent limitations than financial data. Qualitative interpretations of the relevance, materiality and accuracy of data are subject to individual assumptions and judgments.

### Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information referred to in the second paragraph is not prepared, in all material respects, in accordance with their respective reporting criteria.

Please refer to the non-qualified limited assurance report issued on August 15, 2014 for the corresponding selected information of 2013.

### Other

The Management of the Company is responsible for maintaining the Company's website. If the Selected Information or related reporting criteria are changed after this limited assurance report is issued, we are not obliged to re-perform the assurance work.

### PricewaterhouseCoopers, Taiwan August 14, 2015

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For the convenience of readers and for information purpose only, this document has been translated into English from the original Chinese version. In the event of any discrepancy between the English version and the original Chinese version or any differences in the interpretation of the two versions, the Chinese-language version shall prevail.



**TECO** 