# 2015 TECO Corporate Social Responsibility Report


TECO

# TECO Corporate Social Responsibility Report - Development Milestones

**2015**

- The scope of the CSR report was broadened to encompass foreign company affiliates and subsidiaries for the first time: TECO-Westinghouse and Taian Technology (Wuxi)
- Continued adoption of the Statement of Assurance Standard No.1 with independent limited assurance
- TECO's Corporate Governance Center was established

**2014**

- CSR report was compiled in accordance with G4 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI), and the scope of the report was broadened to encompass company affiliates and subsidiaries for the first time, including Dongsheng Electric Co., Ltd.
- Continued adoption of the Statement of Assurance Standard No.1 with independent limited assurance TECO's CSR Committee was established

Honors: Taiwan Corporate Sustainable Report Awards - "Gold Award"

**2013**

- First Taiwanese enterprise to adopt the Statement of Assurance Standard No.1 of the Republic of China (ROC) with independent limited assurance

CSR website was established

Honors: Taiwan Corporate Sustainability Report Awards - "Gold Award"

Honors: Taiwan Corporate Sustainability Performance Awards - "Social Inclusion Award"

**2012**

- CSR Report was verified for the first time by a third-party impartial agency (BSI AA1000)

**2011**

- Second issue of TECO Corporate Social Responsibility Report was published

**2010**

- First issue of TECO Corporate Social Responsibility Report was published

# About the TEC 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.

## 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

## 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. In 2015, two major foreign company affiliates and subsidiaries, including TECO-Westinghouse and Taian Technology (Wuxi) were incorporated into the 2015 CSR Report.

Data in the report on the company's ESG involvement and performance covers the period from January 1 to December 31, 2015.Financial figures are denominated in New Taiwan (NT) dollars. Environmental protection, health, and safety performance is expressed in internationally adopted indices.

## 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.

## 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. 2015)

Contact: csr@teco.com.tw Corporate website: http://www.teco.com.tw

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# 01

# TECO's Commitment to Sustainability

## 1.1 Management Pledge

Founded in 1956, it is officially the sixth decade this year for TECO. For the past sixty years, TECO has supplied the global market with motor-related industrial products, and its industrial core driving forces have not only driven the company's revenue growth and industrial development, but also provided the entire world with endless supply of growth momentum. Since its inception, TECO's development has been closely intertwined with the industry trends. The advancement of TECO's motor electrical and mechanical technology not only has witnessed the progress of Taiwan's industry and technology but also was inseparable from the development of global industrial trend. TECO, initially the provider of industrial "kinetic energy", in response to the increasing burden of industry on the environment, started to embrace the "TECO GO ECO" vision in 2008 and has since actively devoted itself to the development of "green energy". In the recent years, in response to the development trends of technology and internet of things (IoT), TECO has further developed "smart and automatic" applications, with the aim to integrate its core competencies with technological innovations, to upgrade its corporate sustainable competitiveness, drive industry smart innovations, and create positive outlooks for TECO in the next six decades yet to come.

### "Energy Conservation・Carbon Emission Reduction/Smart・Automation"

Since the end of the 20th century, issues related to climate changes and energy have caused severe impacts on all humankind; therefore, it has become imperative for economic development to pursue continued industrial and technological development while simultaneously reducing environmental burdens. TECO has taken "TECO GO ECO" as its development direction since 2008, by committing itself to the research and development of green technology products and green energy products, as well as obtaining a wide range of energy-efficient products, including the industry-leading high energy-efficient motors, the energy-efficient solution programs to integrate motors with variable-frequency drives, and a full line of Class 1 energy-efficient home appliances. For many years, TECO has been drawing on its superior electrical and mechanical integration capabilities by investing considerable amount of resources in the exploration of green energy industries, such as vehicle electricity, wind turbine technology, etc.; TECO has spared no effort in contributing to the development of sustainable green energy.

Chairman : Sophia Chiu
2016/8

TECO is committed to the research and development of green technology. In addition to providing the user end with energy-saving solutions, in 2016, TECO surpassed the Taiwanese industry by leading the major suppliers and completing a series of environmental footprint and water footprint inventory and investigation for the motor products, and further examined and analyzed raw materials supply chain and manufacturing processes, from inside out, aiming to achieve the overall goal of a green product life cycle.

As of 2014, as the infrastructure of cloud, 4G networks, etc. has gradually reached maturity, TECO, while expecting the waves of internet of things would sweep the whole industry, has been seeking innovations in its core business by integrating its core products with technological development, and has proposed a new wave of growth strategies steered to smart and automation innovations. Through the technological integrations across the group's diversified subsidiaries, TECO integrates its solid core competencies with the development of science and technology by researching and developing the industrial and residential products, including smart device monitoring systems, energy management systems, smart cloud air conditioning systems and etc. TECO's development in the realm of smart technology, while maintaining its consistent, steady and pragmatic tradition, adopts the innovative applications to integrate its core products with technology, with the aim to solve the practical issues arising from client production/manufacturing and user experiences. The company also draws on IoT technology as to promote the smart upgrade of traditional manufacturing industry, with solutions including an economical approach to smart predictive maintenance, energy management and equipment deployment.

In 2016, while TECO is celebrating its 60th anniversary, it is also actively planning its production line automation; the optimization of green smart production line will be carried out in Taiwan Chungli factory, so the electric wire production area will adapt the automation management, and it is expected to bring advantages including product efficiency upgrade and cost reduction. Meanwhile, the group's newly established stamping center will be designed according to the green building and smart factory concepts; active planning will also be under way to implement smart global factory on the group level, as TECO will take the initiative from within the group to actively achieve the strategic goal of "Energy Conservation・Carbon Emission Reduction - Smart・ Automation".

## "Implementing Corporate Governance・ Achieving Sustainable Development"

In addition to the pursuit of revenue and profitability, TECO simultaneously implements the business concept of "Managing with Integrity, Implementing Corporate Governance, Fulfilling Social Responsibility, and Achieving Sustainable Development", and aims to achieve the goal of sustainable corporate development by rigorously fulfilling its corporate-citizen duties. In 2014, TECO established a Corporate Social Responsibility (CSR) Committee to oversee the implementation effectiveness of sustainability related issues, to facilitate the integration of ESG (Environment, Society and Governance) triple indicator considerations in the company's business decision-making process. These efforts are set to at helping the company grow sustainably while fulfilling its corporate social responsibilities, including social inclusion and green economy. In 2015, TECO has further established a Corporate Governance Center to plan and coordinate the objective of TECO's governance development; the Corporate Governance Center would lead and establish a "Corporate Governance Management Platform" to more effectively collect, aggregate and track all corporate governance indicators to gain the systematic control of the company’s progress on governance.

TECO adopts the professional manager system and accepts the legal person's supervision. When making decisions, the company focuses on the stakeholders' opinions as well as the industry trends and social development needs. In addition to the smooth communication channels with all stakeholders in all fields as well as regular and non-scheduled information announcements or direct communication with the stakeholders, the company also participates actively in external organizations, such as Taiwan's Business Council for Sustainable Development, Taiwan Electrical and Electronic Manufacturers' Association (TEEMA), Taiwan Automation Intelligence and Robotics Association (TAIROA), etc. and actively exchanges information with the society and welcomes various viewpoints from all sectors.

The company was ranked among top 5% of enterprises in the "Corporate Governance Evaluation" for the second consecutive year for its positive contribution to corporate governance and sustainable development.

## "Create the Best Company to Work for ・ Construct a Society with Well-Developed Culture and Technology"

People are TECO's most important assets as well as the foundation for the company's sustainable development. In addition to a labor system well in compliance with laws and regulations, the company regularly sends out employee satisfaction surveys and commissions third-party agency to conduct employee pressure testing in order to understand the employees' expectations of the company and their overall workplace health. While providing a complete benefits system and actively creating a work-life balanced working environment, TECO focus even more on employees' career development by actively seeking innovations in the human resources field, promoting key personnel development program, providing cross-function and cross-industry project involvement opportunities, implementing company's internal entrepreneurial seed team cultivation plans, launching overseas paid holidays, exceptional promotion plans, etc., with the aim for the innovative systems to continuously bring vitality to the company and to create a better stage for TECO's employees to shine.

### • TECO's Sustainability Vision and Business Concept

**TECO's Sustainable Development Vision**

Energy Conservation・Carbon Emission Reduction -Smart ・ Automation

Implementing Corporate Governance Achieving Sustainable Development

Create the Best Place to Work Construct a Society with Well-Developed Culture and Technology

**TECO's CoreCompetencies**

- Motor mechanical and electrical integration strengths
- Elevate green energy technology development
- Group's development in multidimensional fields to enhance the breadth of innovative cooperation

**Considerations**

- Establish the Foundation for Corporate Sustainable Development
- Meet Stakeholders Expectations
- Respond to environmental issues of climate change, energy shortage and etc.
- Construct a Society with Well-Developed Culture and Technology and Social Inclusion

**TECO's Sustainable Development Concept**

**Economy/Governance**

- Integrate the Core competences with technological innovation and focus on the innovative development direction of "Energy Conservation・Carbon Emission Reduction -Smart・Automation"
- Managing with Integrity, Implementing Corporate Governance, and Achieving Sustainable Development

**Environmental Sustainability**

- Response to issues of climate change and energy shortage with smart green product development
- Reduce overall environmental impacts of product life cycles with green supply chain and optimization of manufacturing processes

**Social Inclusion**

- Strengthen talent development and create the best company to work for
- Continue to support TECO Technology Foundation and implement TECO's concept to construct a society with "well-developed culture and technology" through creativity, humanities and education

# 02

# Stakeholder Communication

## 2.1 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. TECO's CSR website also posted a questionnaire to more broadly sound out stakeholders' views.

### Identify stakeholders

• CSR task force identifies major TECO stakeholders through discussions with related units, reference to the experience of motor industry peers, and definitions of stakeholders in the G4 Guidelines.tions of stakeholders in the G4 Guidelines.

### Survey issues of concern to stakeholders

• Survey questions are based on GRI G4 considerations.
• Refer to GRI "sector-specific indicators" and the questionnaire topics of industry peers.
• Various channels are used to directly communicate with stakeholders and collect information on their issues of concern.

→ Please refer to chapter 2.2 for stakeholders' survey questionnaire.

### Materiality analysis of issues of concern

• Survey stakeholders by questionnaire to understand the degree of issue concern.
• Internal analysis of the materiality of issues based on the assessment of related units on the impact of each issue on the company's operations
• Compile information on level of stakeholder concern for issues and internal materiality analysis; calculate an average score weighted according to the degree of association between the issues and stakeholders and materiality on the company's operations. Prioritize issues according to a two-dimension scoring matrix
• The issues of concern are scored from high to low; the first 40% are of high impact, the last 30% general impact, and the middle 30% medium impact
• Prioritize issues according to a two-dimension scoring matrix.

→ Please refer to chapter 2.2 for material and secondary issues

### Reporting

• Major and secondary issues are report and discussed during the company's annual strategic planning and the strategic planning of business divisions; begin implementation in the annual plans and the daily work of each unit.

### Compilation and publishing

The implementation results, communication channels, and communication frequency on major and secondary issues is published in the CSR report at the end of the year.

## 2.2 Materiality Analysis of Issues of Concern

### 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 29 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 and achieved an average 62.8% valid response rate.

### Materiality Analysis of Issues of Concern

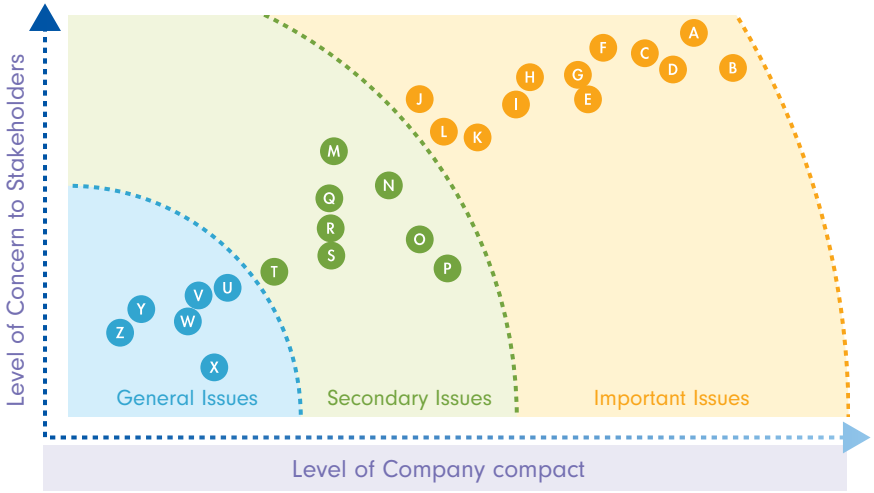
The CSR task force met with company business units to perform materiality analysis on the questionnaire topics and assess the impact of each issue on the company's operations. A materiality matrix was then formulated to identify material ESG issues based on alignment between the degree of issue concern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

| Material Issues | Secondary issues | General issues |
|---|---|---|
| • High degree of issue concern to stakeholders<br>• Significant impacts on the company's operations | • High or medium degree of issue concern to stakeholders<br>• Significant or medium impacts on the company's operations | • General or medium degree of issue concern to stakeholders<br>• General or medium impacts on the company's operations |

The 2015 Paris Climate Conference has heightened the public awareness to environmental protection issues and action; TECO, a major green energy manufacturer, has always been committed to providing high efficiency and energy-conserving motors and Class 1 energy efficient home appliances. Being concerned about the material impacts of climate changes on the society and the environment, as of 2015, TECO has re-examined its supply chain and manufacturing processes, aiming to fully monitor and control the impacts of its overall manufacturing processes on the environment, so TECO can steer its production development to meet the stakeholders' expectations and the needs of the society.

### TECO and Stakeholders

## Stakeholder Questionnaire Statistics




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

Environmental Social Governance / Economic

## Issues of concern to stakeholders

"After the company's unit heads identify the materiality of issues according to the impacts of the issues of concern to stakeholders on the company's operations, the impact boundary of the issues are also defined based on the GRI G4 considerations, corresponding to the material issues, as well as the impact level of issues on the company's internal subsidiaries and external stakeholder groups. After the considerations, corresponding to the issues, and the impact boundary are identified, they are submitted to the CSR Committee and the functional executives for their approval and confirmation. With respect to the issues of concern to stakeholders, the company will propose future development strategies and actions, subsequently in the corresponding chapters, to actively respond to the major issues of concern to stakeholders."

| Stakeholder Issues of Concern | Chapter | Boundaries / G4 Material Aspects | Interior boundary | | | | Exterior boundary | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | TECO | TESEN | Taian Technology (Wuxi) | TECO-Westinghouse (TWMC) | Customer | Supplier* | Community |
| Sustainable development strategy and risk management | 3.1 4.2 | Strategy and Analysis | ● | | | | | | |
| | | **Governance** | | | | | | | |
| Corporate governance | 4.1 | Anti-corruption | ● | ● | | | | | |
| | | Anti-competitive Behavior | ● | | | | | | |
| | | Compliance | ● | ● | | | | | |
| Compliance | 4.1 | Compliance | ● | ● | | | | ● | |
| | | Anti-competitive Behavior | ● | | | | | | |
| Moral/ethical codes of conduct | 4.1 | Anti-corruption | ● | ● | | | | | |
| | | **Economic** | | | | | | | |
| Economic performance and financial transparency | 3.2 | Economic Performance | ● | ● | | | | | |
| Green supply chain | 5.1 | Procurement Practices | ● | | | | | | |
| | | Supplier Environmental Assessment | ● | ● | | | | ● | |
| | | Supplier Human RightsAssessment | ● | ● | | | | ● | |
| | | Child Labor | ● | ● | | | | ● | |
| | | **Environmental** | | | | | | | |
| Green Product | 5.2 | Raw materials | ● | | | | | | |
| | | Energy | ● | ● | ● | ● | | ● | |

| Stakeholder Issues of Concern | Chapter | Boundaries / G4 Material Aspects | Interior boundary | | | | Exterior boundary | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | TECO | TESEN | Taian Technology (Wuxi) | TECO-Westinghouse (TWMC) | Customer | Supplier* | Comm kunity |
| Green Product | 5.2 | Product and Service | ● | | | | | | |
| Pollution prevention and emissions | 5.2 | Emissions | ● | ● | ● | ● | | ● | ● |
| | | Effluents and Waste | ● | ● | ● | ● | | ● | ● |
| Greenhouse gas and Energy Management | 5.2 | GHG emissions intensity | ● | ● | | | | | |
| | | NOX, SOX, and other significant air emissions | ● | ● | ● | | | | |
| | | Energy intensity | ● | ● | ● | | | | |
| Water | 5.2 | Water | ● | ● | ● | ● | | | |
| | | Effluents and Waste | ● | ● | ● | ● | | | |
| | | Social | | | | | | | |
| Employee rights | | Labor/Management Relations | ● | ● | ● | ● | | | |
| | 6.1 | Employment | ● | ● | ● | ● | | | |
| | 6.2 | Equal Remuneration for Women and Men | ● | ● | ● | ● | | | |
| | 6.4 | Non-discrimination | ● | ● | ● | ● | | ● | |
| | | | ● | ● | ● | ● | | | |
| Workplace health and safety | 6.7 | Workplace health and safety | ● | ● | ● | ● | | ● | |
| Career development, education and training | 6.5 | Education and Training | ● | ● | ● | ● | | | |
| Freedom of Association and Collective | 6.3 | Freedom of Associationand Collective | ● | ● | | | | | |
| Local Communities and Social Care | 7 | Local Communities | ● | ● | ● | ● | | | |
| | | Grievance Mechanisms for Impacts on Society | ● | ● | | | | | |
| Customer satisfaction surveys | 3.9 | Results of surveys measuring customer satisfaction | ● | | | | ● Taiwan customers | | |
| Customer health and safety | 3.8 | Customer health and safety | ● | ● | | | ● Taiwan customers | | |

| Stakeholder Issues of Concern | Chapter | Boundaries / G4 Material Aspects | Interior boundary | | | | Exterior boundary | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | TECO | TESEN | Taian Technology (Wuxi) | TECO-Westinghouse (TWMC) | Customer | Supplier* | Comm kunity |
| Product and service labeling | 3.7 | Product and service labeling | ● | | | | ● Taiwan customers | | |
| Marketing communication | 2.3 | Marketing communication | ● | ● | | | ● Taiwan customers | | |
| Organization's Human Rights Assessment and human Rights Grievance Mechanisms | 4.2<br>5.1 | Human Rights Grievance Mechanisms | ● | ● | | | | ● | |

## 2.3 Materiality Analysis of Issues of Concern

The issues of concern are complied after surveying the stakeholders by questionnaire and confirming with the stakeholders during communications; the degree of issue concern to the stakeholders are defined through the statistical analysis of the questionnaire by the stakeholders, and the emphasis is placed on the issues scored higher in the questionnaire as well as the issues frequently brought up by the stakeholders during communications.

| Stakeholders | Stakeholder Significance to TECO | Issues of Concern | Issue Communication Channels / Frequency | Communication Effectiveness in 2015 |
|---|---|---|---|---|
| Shareholders | 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. | • Company business performance<br>• Financial transparency<br>• Risk management<br>• Corporate governance<br>• Environmental protection | • Market Observation Post System<br>Updating information for 400 times in 2015<br>• Investment section of corporate website<br>8,860 visitors in 2015<br>• Shareholders' meeting<br>Once a year<br>• Domestic and overseas investment forums<br>Holding 12 investment forums in 2015<br>• Visit by institutional investors<br>269 person/visits in 20135<br>• e-mail dedicated to investor relationship and stock affairs<br>Immediate response by designated staffers to any mail | • The IR business unit's efforts to provide operational information and to assist with communications have strengthened the foreign institutional investors' confidence in investing in "TECO" as well as increased their shareholdings gradually year by year.<br><br>• In the second Corporate Governance Evaluation in 2015, "TECO" received outstanding evaluation results on all indicators and was ranked among top 5% out of 1,447 enterprises participating in the evaluation. |
| Employees | 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. | • Company strategy and operating results<br>• Labor/management relations<br>• Employee rights<br>• Education and training and career development<br>• Work Environment<br>• Interactions and Communications with Employees | • Management-labor meeting / Once every quarter<br>• Quarterly employees' meeting / Once every quarter<br>• Meetings with senior managers / Once semiannually<br>• Safety and Sanitation Committee / Once every quarter<br>• Employee Welfare Committee / Once every quarter<br>• Proposal for improvement / 888 pieces in 2015<br>• Company organ / Bimonthly<br>• Customer service call center - irregular<br>• Meeting with dealers -1 to 4 times / year, irregular visits<br>• After-sales service tracking - Once every service and follow-up phone interviews<br>• Official website and media - Irregular updating<br>• Customer satisfaction surveys - 1 to 4 times/year<br>• Employees' satisfication survey / Once a year | • Annual conferences are held for communications among general manager, factory managers, human resources managers, and directors and supervisors of labor union. In 2015, the average rate of attendance by general manager, factory managers, and human resources managers was 100%. And the average rate of attendance by directors and supervisors of labor union was approximately 90%.<br>• An annual satisfaction survey on human resources services and policy was conducted with 42% response rate, manager satisfaction scored 81.6 points, up 2.1 points from the previous year; general employee satisfaction scored 76.0 points, 1 point higher than the previous year.<br>• In 2015, there were a total of 888 proposals for improvement, including a total of 167 proposals of improvement to ensure employee property security, accounting for 18.81% percent. |
| Customers | 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. | • Product and service labeling<br>• Customer health and safety<br>• Marketing communication<br>• Customer satisfaction surveys<br>• Green products | • Customer service call center - irregular<br>• Meeting with dealers -1 to 4 times / year, irregular visits<br>• After-sales service tracking - Once every service and follow-up phone interviews<br>• Official website and media - Irregular updating<br>• Customer satisfaction surveys - 1 to 4 times / year | • Smooth communication channels via telephone and e-mail allow the customers to make real-time contacts with the designated unit<br>• The latest and accurate information is made available for the customers to inquire through updating and maintaining the official website<br>• Provide the customers with more effective information by modifying catalog labeling according to the customers' needs |

| Stakeholders | Stakeholder Significance to TECO | Issues of Concern | Issue Communication Channels / Frequency | Communication Effectiveness in 2015 |
|---|---|---|---|---|
| Suppliers | TECO provides assistance to suppliers key raw materials and parts for motor production to ensure quality, price, and on-time delivery | • Green supply chain management<br>• Supplier human rights assessment<br>• Business performance<br>• Order management<br>• Quality management<br>• Production technologies | • Supplier evaluation<br>Irregular<br>• Supplier review<br>Once /quarterly<br>• Assistance for suppliers<br>Irregular<br>• Communications for procurement<br>Irregular<br>• E-procurement<br>Irregular | • Promote the establishment of e-procurement platform to not only create a unified list of qualified dealers within the group but also make additional communication channels available between TECO and its global suppliers<br><br>• Visit and communicate with all suppliers at least twice per year in average |
| Local communities | TECO values joint development with the communities where its production and business bases are located. | • Occupational safety and health<br>• Environmental management<br>• Social involvement<br>• Volunteer services | • Industrial park service center - Irregular<br>• Industrial park joint defense- Once / quarterly<br>• Institute mailboxes on the company website for communications - Irregular<br>• Volunteer activities - Irregular | Participate in the Taiwan Energy-Saving Patrol Team jointly formed by Epson and BCSD-Taiwan to provide free onsite energy-saving inspections and diagnosis services for companies and organizations with energy-saving needs, and to specifically assist Taiwan's SME's with their improvements on energy consumption efficiency. |
| NGO's | 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. | • Environmental protection<br>• Public services<br>• Labor conditions | • Disclosure of non-financial information<br>Irregular<br>• Meeting<br>Irregular<br>• Assistance for events<br>Irregular | Actively participate in external organizations, initiatives, and various organizational activities, such as societies, associations, NGO's, etc., including Taiwan's Business Council for Sustainable Development, Taiwan Electrical and Electronic Manufacturers' Association (TEEMA), Taiwan Automation Intelligence and Robotics Association (TAIROA), etc. to contribute to the promotion of domestic and foreign industrial and economic interactions and exchanges and to push Taiwan's green energy technology development forward. |
| Government Units | TECO occasionally communicates with the government to clarify legal requirements and improve compliance efficiency when formulating internal regulations or planning foreign investment. | • Legal compliance<br>• Occupational safety and health<br>• Greenhouse gas reduction<br>• Environmental management<br>• Energy consumption | • Seminar, Participation in various checks, and written replies<br>Irregular | • Establish an OHSAS18001 and CNS15506 (Taiwan Occupational Health and Safety Management System) compliant occupational health and safety management system to systematically promote the management tasks of occupational safety and health and to ensure the compliance and effective implementation of the management system.<br><br>*During the GHG inventory in 2015, TECO received BSIISO 14064-1 (GHG inventory) verification of a "reasonable level" of assurances.<br><br>• In accordance with the "Regulations for Energy Users to Set Energy Conservation Goals and Implementation Plans" announced in 2014 by the Ministry of Economic Affairs, our company reduced electricity consumption by 897,421 kWh in 2015.<br><br>• In 2014, TECO signed the Green Procurement Agreement aimed to continue to promote green procurement plans, and was recognized by the Taoyuan City Government with the"Excellence in Procurement for Green Life" award " for its outstanding performance. |

# Promoting TECO's Sustainable Development

03

## 3.1 Sustainability Concepts and Core Enterprise Values

TECO Corp. was founded in 1956 and currently runs operations in five continents, more than 40 countries and hundreds of cities. The manufacturing, marketing and sales of motor products were initially TECO's core business, however, over the years, TECO has gradually transformed and highly diversified its operations in the realms of heavy machinery, home appliances, information, communications and engineering, etc. In 2008, TECO embraced the "TECO GO ECO" vision in response to the increasing burden of industrial development on the environment. The product strategy was re-oriented around green technology development with a continuing commitment to the development of green energy products and energy-saving systems, including high-efficiency motor products, inverters, etc. Drawing on its industry-leading machinery integration capabilities, TECO was the first Taiwanese company to have developed motors specifically for electric vehicles (EVs). TECO is also a local pioneer in self-developed and self-produced wind turbine technology, positioning Taiwan as the world's eighth producer of large-scale wind turbines.

In 2015, in response to the rapid Internet of Things (IoT) development prompted by the popularization of smartphones and wireless network as well as the enhanced data analysis and transmission capabilities, TECO, drawing on its core business, started to integrate its original green energy products and energy-saving home appliances with the technologies from the realms of communications and IT within the group and to develop smart green products. TECO aimed to make energy consumption more efficient and to trigger a smart evolution in the traditional manufacturing industry through the integration and application of innovative technologies.

### ITECO's Core Competencies

- Mechanical and electrical integration strengths
- Dedication to green energy technological developments
- Diversified technology development and product upgrades through innovation and cooperation

### Achievements in 2015

- Continued efforts in development of high-efficiency products and contribution of high-efficiency products - carbon emission reduction: 220,463 tCO2e
- Developed smart motor monitoring systems and initiated the smart revolution to upgrade traditional industrial products through the integration with innovative technologies.
- Acquired Motovario and made inroads into the power transmission system industry.
- Developed a full line of inverter-equipped products, and the variable-frequency function contributed to energy conservation by more than 35% in both industrial and air conditioning applications.
- 100% of the new home appliance models fully support cloud-based management features.

### Development Plans in 2016

- Production line automation was realized in Chungli plant, achieving high-efficiency and effective cost reduction, and reinforcing product competitiveness.
- Enhanced smart green solutions, including achievements in smart motor system, etc., seizing IoT4.0 business opportunities and led the industry-wide upgrade
- Developed a smart energy conservation system for Yilan County government by integrating smart home products with Internet of Things (IoT) technology, and hence paved the first mile for the path to TECO's smart city development.

### Future Development Strategy

- Persist on the development of high value-added products with smart and variable-frequency inverter features, and sustain TECO's smart green idustrial competitiveness
- Actively roll out production line automation and realize TECO's Industry 4.0 concept of "Energy Conservation・Carbon Emission Reduction・Smart・Automation" through optimization of green smart production line, green building and smart factory
- Mass production of home appliances with smart feature technology and communication module products for Internet of Things (IoT)

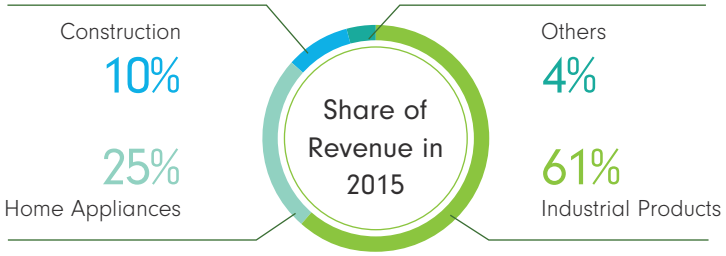
### Achievable Efficiency Objectives

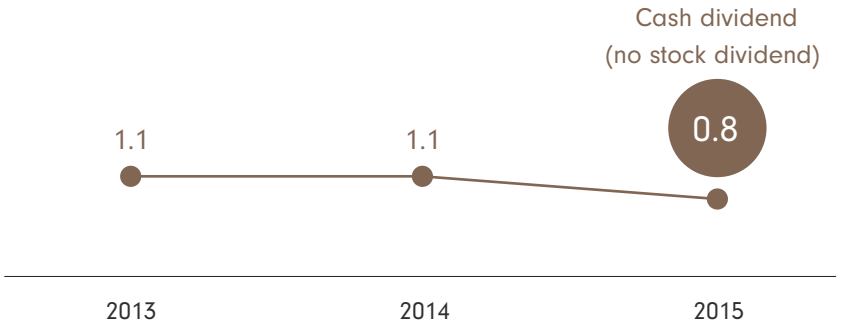
For Customers
- Provide high-efficiency energy conservation systems and lead the energy consumption oriented carbon emission reduction.
- Apply economical approach for smart solutions to improve manufacturing qualification rate and stability and to drive the traditional industry towards IoT4.0 upgrade.
- Drive product innovation with technology, provide upgraded products, and enhance ease of use for customers to enjoy more comfortable and convenient user experiences.

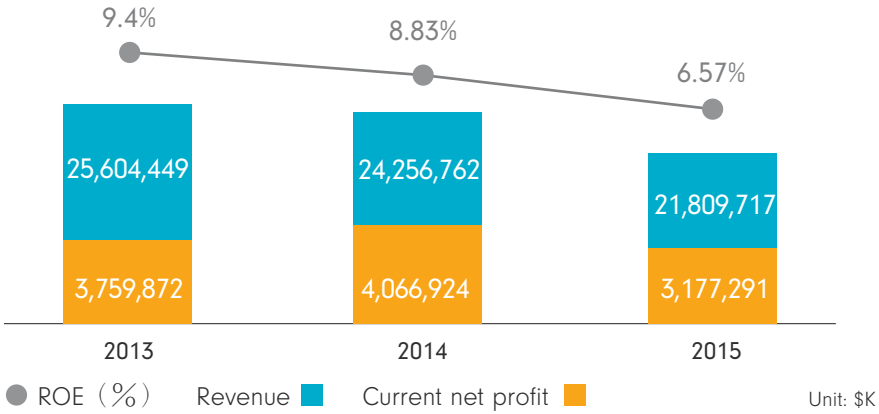
Enterprise Sustainability
- Continue to enhance product strengths and sustain competitiveness in the green energy industry.
- Progress from single-product sales to comprehensive bundled marketing to more accurately weigh and consider customers' needs and maximize revenue growth potentials.
- Drive product upgrade with innovation and secure the cornerstone for sustainable development.

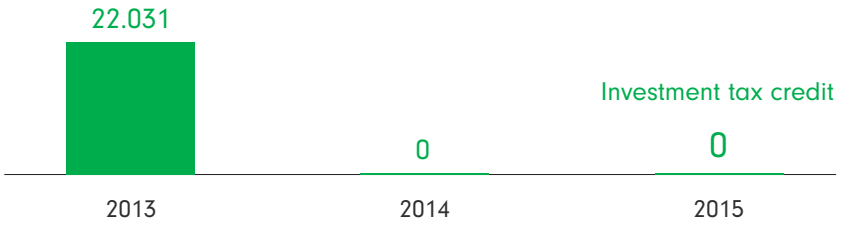
Environmental Sustainability
- Enhance the efficiency of green energy and promote environmental sustainability with green economy.

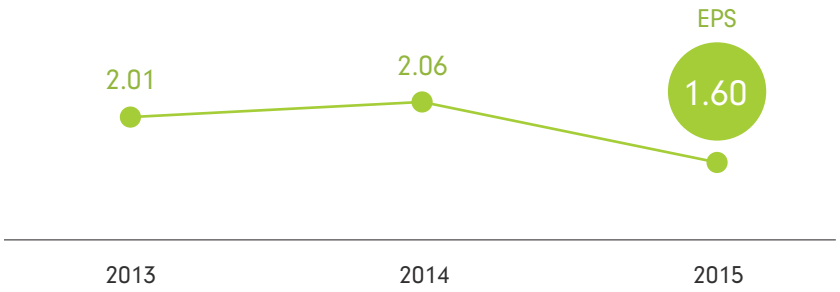
## 3.2 Operational performance

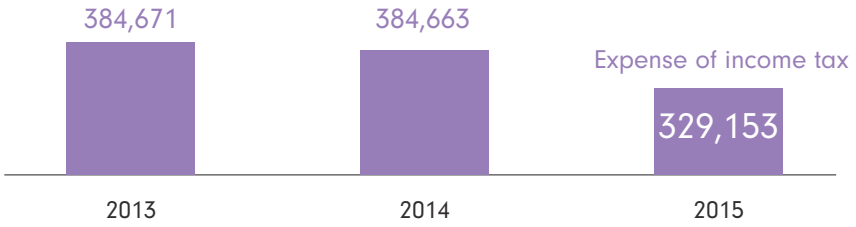


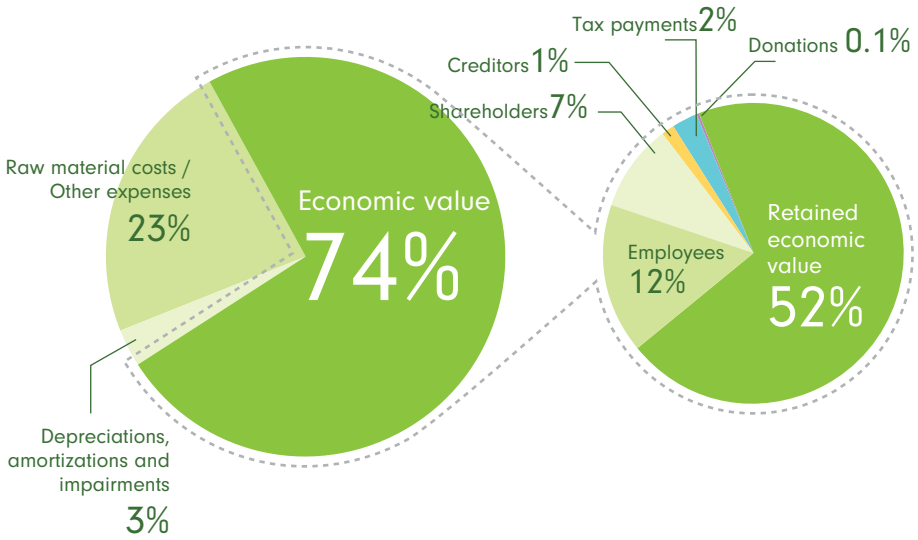



## 2015 Operating Results

Unit: $ K




## Operational challenges

As far as the international political and economic conditions were concerned, year 2015 was yet another challenging year since the financial crisis, and on top of the Greek government-debt crisis and China's stagnant economic growth, not to mention the plummeting prices of energy and raw material, the development of the global economy was weakened overall. Domestically, under the influence of the mitigated global trade demand, the performance of investments and exports both declined quarter by quarter, hence the annual GDP growth fell to below 1% percent and hit a new low since 2009. Facing the challenges posed by the atrophy of domestic and foreign demands, the impacts on both revenues and earnings were more than doubled; however, TECO not only continued to research and develop high value-added smart and inverter products but also broadened its market boundaries and branched out into new industries through mergers and acquisitions to solidify its foundation for sustainability.

## Operational Strategy and Objective

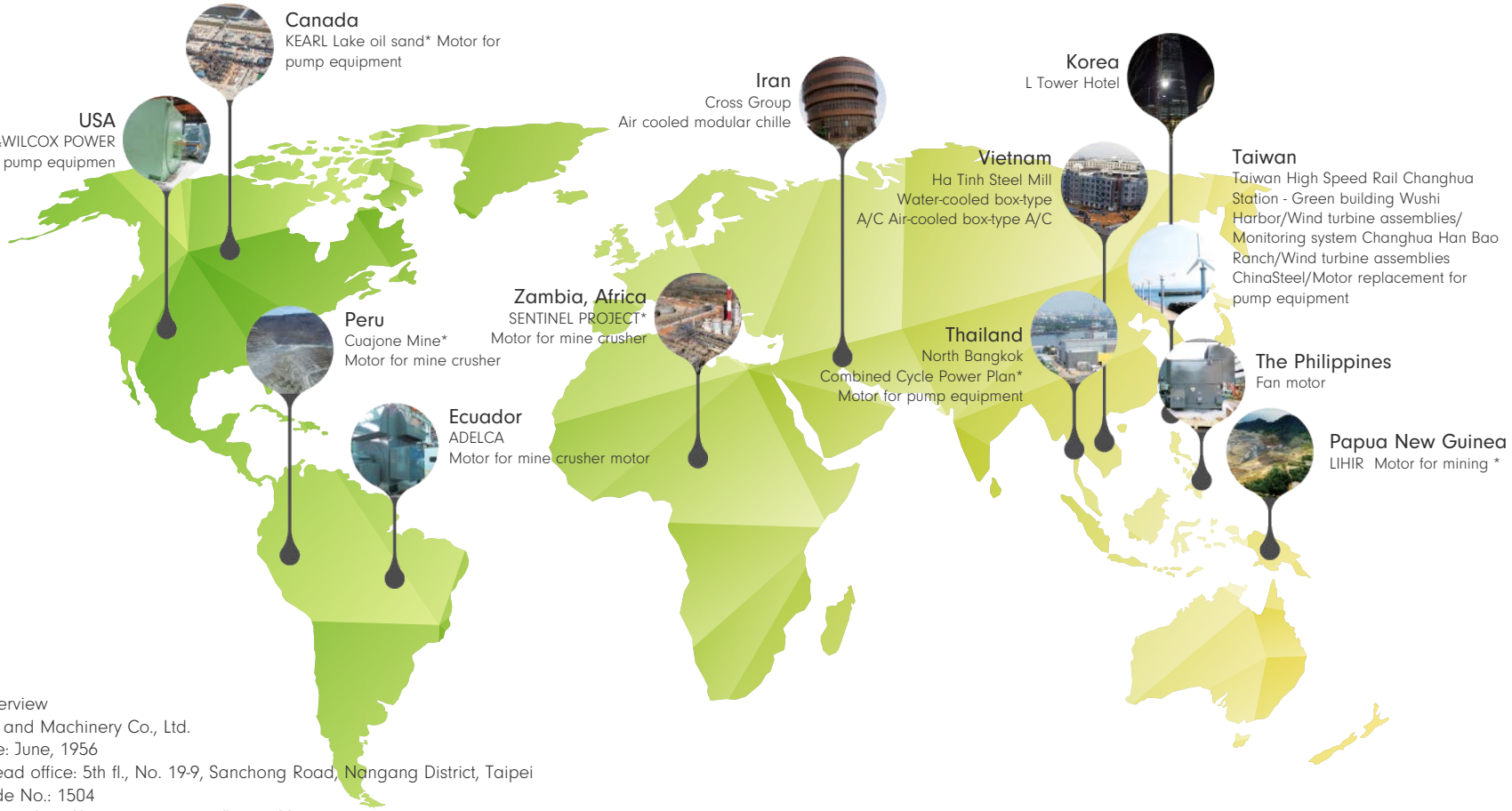
In response to the severe challenges in the market, while sustaining its long-term development, TECO's operation-wide strategy was continue to strengthen its dedication to "energy-saving and smart" to ensure the company's leading edge and its competitive capabilities; TECO's successful developments in 2015: smart motor monitoring systems, IE5 ultra high-efficiency variable-frequency energy-saving permanent-magnet motors, IE4 ultra high-efficiency induction motors, high-power medium voltage excellent-efficiency motors for the North American market, and multiple voltage vector inverters, and cloud-based one-to-many variable frequency A/C systems, cloud-based smart seawater A/C (SWAC) systems, and twin inverter high-efficiency inverter central A/C, and R32 environmental cooler A/C as well as winning 31 domestic and foreign patent technology certifications.

Looking forward to 2016, the Directorate-General of Budget, Accounting and Statistics of the Executive Yuan has predicted the annual economic growth rate to be 1.47%, up slightly from 2015; however, the scale of the domestic public expenditure has shown a declining trend year by year, the prices of crude oil and raw material have been lingering low, and the country-wide economic growth continued to remain stagnant, so there are still full of uncertainties with respect to economic recovery. To better cope with the uncertain challenges and opportunities, the company will continue to uphold the concept of "Energy Conservation・-Carbon Emission Reduction・Smart・Automation", and continue to develop new products, new applications and broaden new markets.

At TECO, the pursuit of revenue and profit goes hand-in-hand with its commitment to implementation of corporate governance, fulfillment of social responsibility, and the pursuit of sustainable operations. In 2015, TECO was ranked among the Top 5% enterprises in corporate governance evaluation, won the Common Wealth Magazine's Corporate Citizenship Award for four consecutive years, and was recognized with Taiwan Top 50 Corporate Sustainability Report Award - traditional manufacturing gold award, for two consecutive years. The company endeavors to not only manage with integrity but also embrace vision of "energy-conservation, automation and smart application", while upholding the committed to developing smart and environmentally friendly products to maximize the stakeholders' interests.

## 3.2.1 Global Achievements

"Taiwan High Speed Rail Changhua Station" was the winner of the 4th New York ARCHITIZER Typology A+ Awards - Bus and Train Stations Category.




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

Key products and services：http://www.teco.com.tw/department.asp
Note: For sources of pictures please refer to annex CH8

## 3.3 Development of Smart Green Industrial Products

### 3.3.1 Overview of Development in Heavy Electric Industry

At present, motors are not only the major power source but also account for about 40%-50% of total global electricity consumption, as well as over 70% of industry electricity consumption; therefore, in the heightened global carbon reduction initiative, they play very critical roles. Development of high-efficiency motors: how to enhance the efficiency while deriving electric energy from mechanical energy is the fundamental challenge for the heavy electric industry. As shown in the figure below, as of September 2016, except for Australia still maintaining its IE2 (Note) energy standard for electric motors, the majority of countries around the globe have already implemented IE3 energy standards; therefore, the motors not meeting the specified efficiency standards may not be sold in the market; while upholding the mission of "Reform brings us new horizons, innovation takes us to the future", TECO is committed to the international marketing strategy for high-efficiency motors, and has developed a full line of high-efficiency motors very much needed by the majority of global markets around the world

▶ Note: IE1~IE5 are the motor efficiency rating standards formulated by the International Electro-technical Commission (IEC), and IE5 is currently the highest efficiency rating.

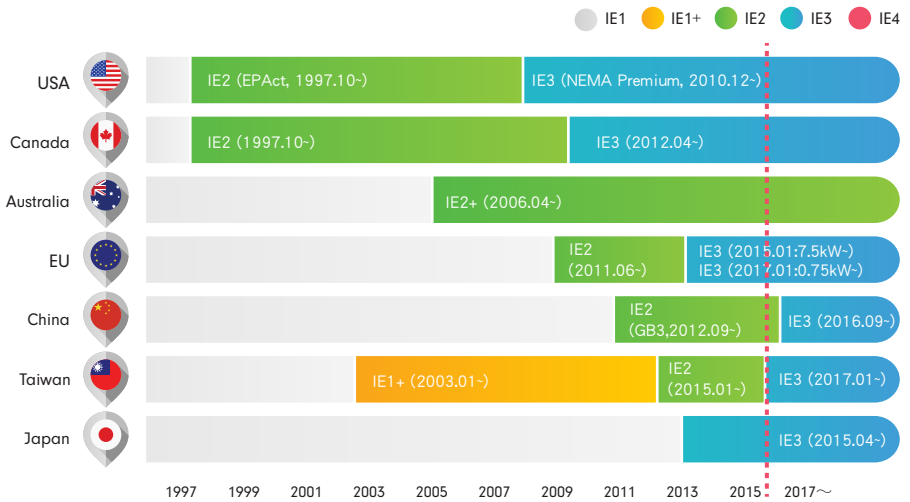
### Development of TECO's High-Efficiency Motors

As shown in the figure below is TECO's roadmap of high-efficiency motor development in major markets around the world, including USA (NEMA), Europe (IEC), China (GB), Japan (JIS) and Taiwan (CNS), etc.; basically, a full line of products were already developed before each market's IE2 and IE3 regulatory standards were implemented.

Even though the specific implementation timelines for IE4 and IE5 standard high-efficiency motors are not yet available for most countries in the market, TECO's focus on high-efficiency and low-carbon solutions for its customers and its commitment to its own self-improvement in the technical capabilities have prompted TECO to complete the world's first known series development of aluminum die-cast rotor IE4 high-efficiency induction motors as well as the IE4 high-efficiency permanent magnet motors integrated with inverter drives. In addition, TECO has deployed its efforts in the realms of IE4 Synchronous reluctance motors using no or little rare-earth magnet, the magnet-assisted synchronous reluctance motors, or even as far as the development of the most efficient IE5 permanent magnet motors.

In 2015, the sales of energy-efficient motors below 300hP (224kW) (IE2+IE3+IE4) accounted for approximately 50% of TECO's revenues, and the total energy savings reached 400 million kWh of electricity; please refer to the statistical charts shown below.

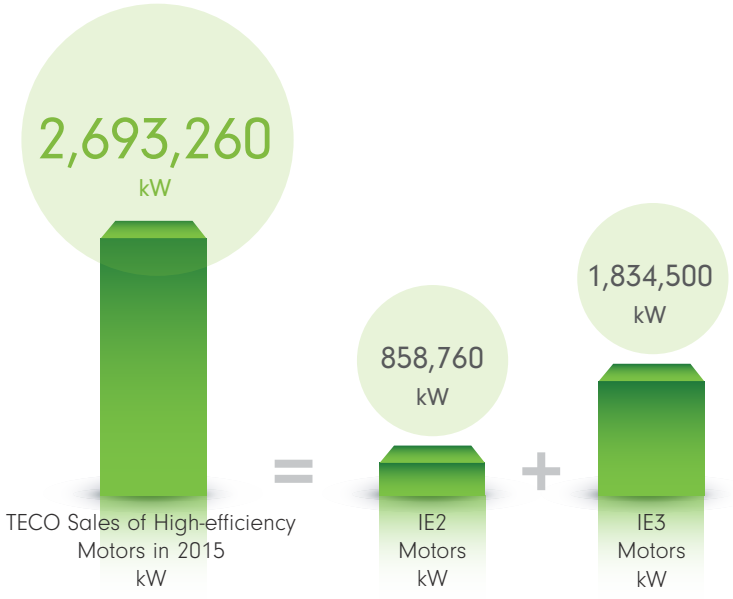
● Energy Efficient Motor Adoption Timeline by Country

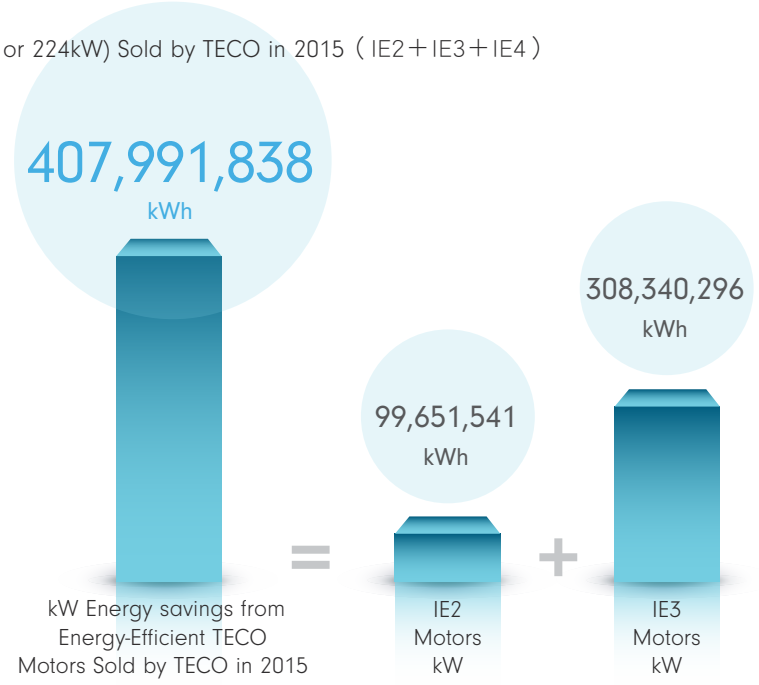



● Roadmap - high-efficiency motors - cast iron

## Green product performance

Energy Savings from Energy-Efficient Motors (<= 300HP or 224kW) Sold by TECO in 2015（IE2＋IE3＋IE4）

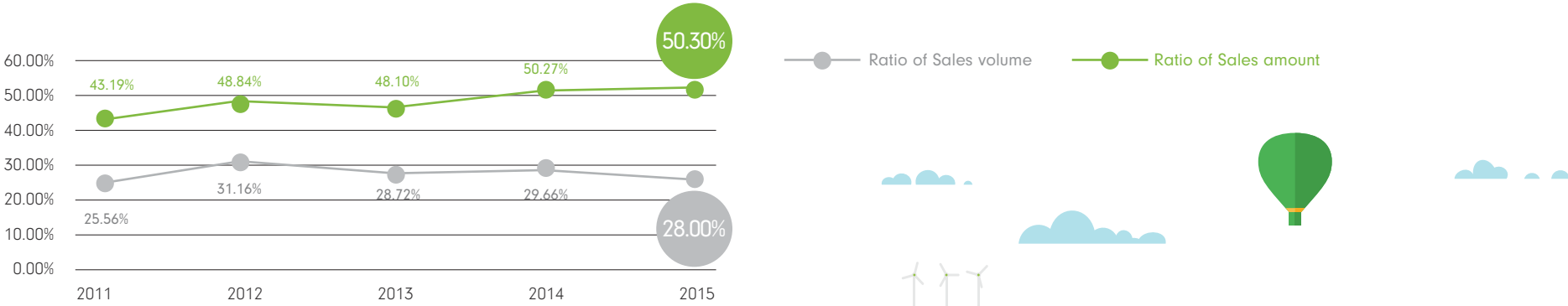



Compared to IE1 rated motors, the energy-efficient motors (IE2, IE3, and IE4) sold globally by TECO in 2015 saved approximately 400 million kWh of electricity and cut CO2 emissions (CO2e) by 211,200 MT

▶ Note: CO2e figures based on power coefficient of 0.528 kg CO2e/kW announced by the Bureau of Energy, Ministry of Economic Affairs (MOEA) in 2015

▶ based on 5,000 operating hours per year

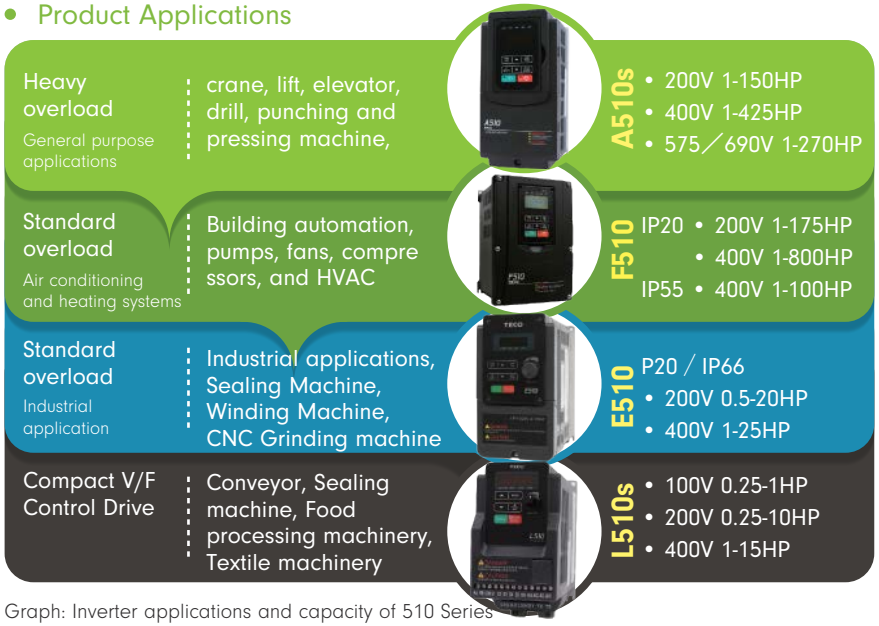


## Energy-Efficient Inverters and Green Energy Solutions

In addition to high-efficiency energy-saving motors, TECO has also actively developed industrial low voltage and medium voltage inverters and servo drives to seize the energy-conservation opportunities as they have presented themselves; in response to the global trends for energy-conservation and carbon emission reduction, green technology, and the global industrial development of production automation, the spotlight of electric control business development has been on the solutions demanded for high-efficiency, energy conservation and precision control mechanical systems. Under the "TECO GO ECO" vision, the company has also developed control components for motors, such as inverters, servo drives and other peripheral protection low voltage products to meet industry needs for safe electricity usage, automation and energy efficiencies.

TECO's 510 industrial control series inverters are named starting with L, E, A, F, respectively, and when put together they become "LEAF" and expresse the core spirit of harmony with nature, aimed to realize the dual environmental goals of higher efficiency and energy conservation through just the energy consumed by motors. TECO's inverter drives boast optimal design for lessening burden on the environment, employing RoHS and REACH compliant materials, which can avoid human hazard and second environmental pollution, thus meet the green environmental protection features. TECO also actively promotes the environmental safety and health management system by obtaining ISO14001, TOSHMS/OHSAS 18001 certifications to maintain its employees' operational safety and to reduce the burdens on the environment. TECO's 510 series of inverters offers solutions from entry level 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.

### • Product Applications




Graph: Inverter applications and capacity of 510 Series

Among them, the A510s F510 series, in addition to their capacity to control induction motors, have also shown great progress with even higher technical difficulties than controlling synchronous motors, and have broken through the bottleneck to further enhance the energy-saving efficiency of inverters by achieving an average of 45% energy-saving efficiency.

### • 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.

▶ Note: It is estimated that the use of inverters in industrial, commercial and residential-use motors in Taiwan could save an estimated 17,500 Gwh of electricity annually, equivalent to the energy output of one nuclear power plant, while also achieving $CO_2e$ reduction effects equal to the creation of 23,438 Daan Forest Parks. Based on the data of Taiwan Power Company (Taipower) and the Bureau of Energy, MOEA: 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. According to the data of Bureau of Energy, MOEA, 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.

## 3.3.2 Future Development of Heavy Electric Business

### • Branch Into the Sales of Power Transmission Systems

In July 2015, TECO officially made inroads into the sales of power transmission systems by completing the acquisition of 100% shares of Italian Motovario S.p.A, a further step up from merely product sales to system sales, and fully branched into the power transmission sector.

Motovario S.p.A was founded in 1965 with its headquarters located in Italy, and its core business includes production and sales of gear reducers and motor power transmission products; the key product are worm gears well positioned as a global leading brand. Motovario S.p.A owns production bases in Italy and Spain with highly automated production capacity, and its distribution channels spanning over 60 countries and more than 150 sales offices. In 2014, it acquired the Spainish reducer manufacturer Pujol, and successfully expanded its production capacity with promising future growth potential.

In line with TECO's long-term operational strategy, through this acquisition, TECO integrated the existing resources from both sides and optimized TECO's product competitiveness. TECO also broadened its motor products into the realm of power transmission system, to provide its customer with more comprehensive transmission solutions and to demonstrate TECO's determination to move forwards to the early phase of Industry 4.0 era, so TECO's original development roadmap for "Power Transmission System" is also strengthened. With Motovario S.p.A's complete distribution channels and stable profitability, the cornerstone for TECO's strong foothold in the European market is firmly laid, so TECO's effective presence and market share in Europe can be rapidly expanded.

### • Smart Motor Remote Control and Monitor System (SMS)

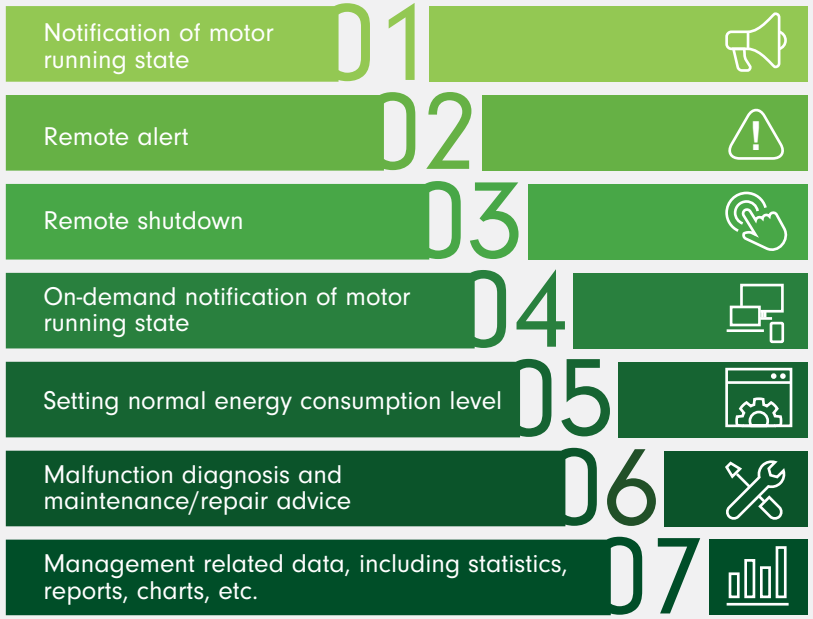
#### System Profile

TECO group created the world's first SMS, Smart Motor Remote Control and Monitor System, meeting the IE3 motor efficiency standards as well as Industry 4.0 rating remote control and monitor system. TECO's smart motor monitoring system is powered by cutting-edge Industry 4.0 core technologies: "cloud computing", "big data" and "mobile commucation technology". It can be applied to the motor equipment in factories, so the plant managers are able to monitor real-time operating conditions of motors, make the best and timely equipment scheduling, predict maintenance/repair time and implement energy management.

The system installation is simple, as all it requires is the download of the TECO Group Smart Mechanical-Electrical Equipment App on the smartphones. Users can access information on motor voltage, current, temperature, vibration and electricity consumption statistical data from their smartphone over a Wi-Fi or 3G/4G connection. When motor abnormalities occur, the system makes early-warning diagnosis, and sends out real-time alerts to the users.

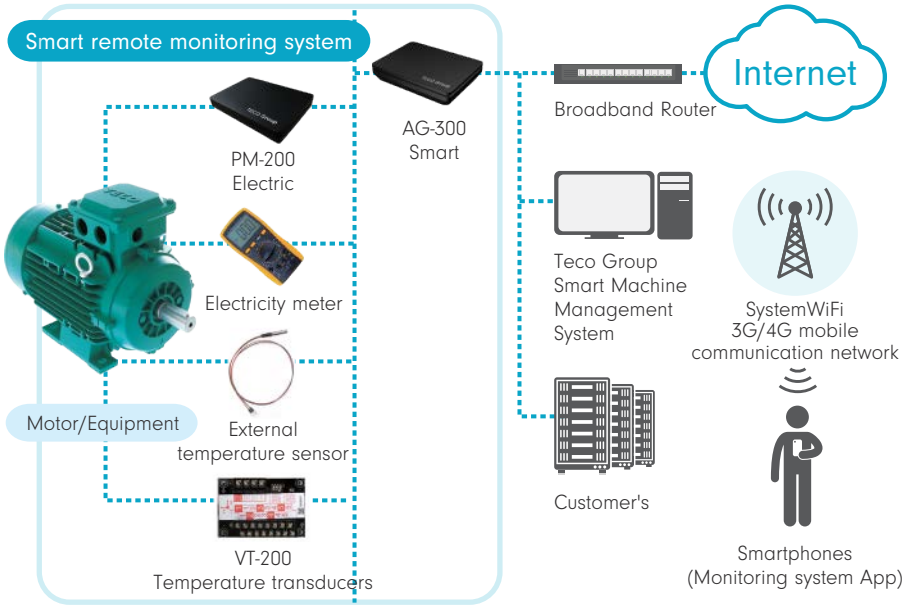
#### Technical Features

TECO's Industry 4.0 Smart Motor Remote Control and Monitor System can monitor motor voltage (v), current (I), power consumption, vibration (VBR), temperature (key components), electrical and mechanical health condition and offers seven technical features:




This smart monitoring system adopts cutting-edge design, and is first of its kind in the market, as all its technical features and functions are tailored made to bring various advantages to its owners and operators.

## System Framework




All of the remote monitoring functions are controlled by Private Cloud to meet the requirements of information security management.

## System Benefits

This remote monitoring system offers the most economical solution with the most convenient application, and is aimed to provide new generation functions as well as various advantages for any brands or for existing motor equipments. For the owner of the factories, they can rapidly upgrade their existing factories to Industry 4.0 standards to achieve energy conversation and to enhance productivity by simply acquiring the Smart Motor Remote Control and Monitor System + Smart Mechanical-Electrical Plant Management System.

| Functions | Benefits |
|---|---|
| Remote/mobile notification and alert | Monitor motor running state at any time |
| Remote shutdown | 1. Avoid major damage<br>2. Avoid unnecessary replacements, save money and time |
| Trend notification | 1. Advance planning of preventive maintenance and increase machine utilization<br>2. Timely maintenance to extend the life of machine and reduce replacements |
| Setting normal energy consumption level | Reminder for examination to rapidly control energy waste |
| Malfunction diagnosis and maintenance/repair advice | Reduce repair time and increase hours of utilization, avoid production downtime without pre-warning and resulting in losses, and significantly save repair expenses |

## Future Development Plans and Objectives

In 2015, TECO launched its smart motor product series, and in 2016, an Industry 4.0 smart remote monitoring system was rolled out to specifically target the existing motors in the market, so the plant owners can rapidly and conveniently upgrade their factories to Industry 4.0 standards. They can either purchase TECO's smart motor products or simply upgrade their existing mechanical-electrical equipment to realize digital data, real-time and cloud-based effects. This remote monitoring system, in addition to being applicable for general mechanical-electrical equipments, can also achieve Internet of Machine (IoM) for all modern factories in the future, so various industrial power control equipments, such as motors, pumps, inverters, etc. can all be connected and display real-time running state and data. It can even further be integrated with user-end SCADA system to optimize energy management, equipment scheduling and maintenance planning automation, so the equipment owners can reap the actual benefits of management personnel reduction and simplified equipment scheduling

**SMS Development Objectives:**
- Digital, real-time and cloud-based mechanical and electrical equipment information
- Assist traditional factories transform their factories into modern smart factories with Internet of Machine, IoM

**2015** Developed TECO's smart motor product series

**2016**
- Develop smart motor upgrade applications applicable to other brands' motors to broaden the scope of customer services.
- Provide customized smart solutions to customers in different industries and fields.

**Future developments**
- Develop IoM platform to consolidate and monitor the operational data of various industrial power equipments within the factories
- Use motor running information and big data analysis to provide reference information for management.

## Development of Smart Microgrid

TECO is actively making its deployment to develop Industry 4.0, through data analysis of IoT technology, integrating power mains and the storage and release management of green energy, the capacity to conduct electricity self monitoring and scheduling, and flexibly and expediently consolidating renewable sources of energy, such as power mains, solar energy, small wind turbines, fuel cells, etc. to serve as the auxiliary power generation and to operate in connection with the large power grids, in order to reduce carbon emissions. This system can also operate independently and be a large-scale mobile power supply to provide energy or be the standby electrical power for the military, power companies, computer facilities, medical units, emergency rescue units, etc. as well as remote areas or outer islands without stable power supply. Business owners can access the status of power supply at any time through the mobile APP with TECO's smart microgrid system and cloud-based smart monitoring system.


## Development Progress of Smart Microgrid

Dec. 15, 2015 Completion of sample prototype→ 2016 Overall product testing and verification

### Features of Smart Microgrid System

**Optimizing Engergy**

Optimal deployment of electricity, wind turbine power generation, solar power generation, emergency and standby power generation

**Reducing impacts on equipment**

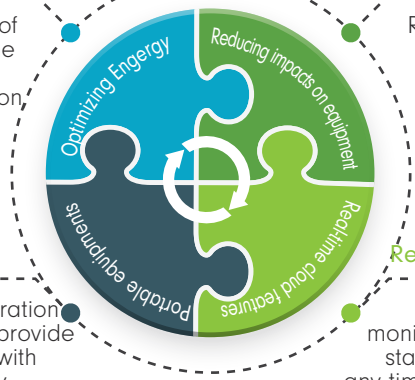
Reducing investment in power generation equipments and the high-low impacts of instantaneous electric consumption on the feeder system

**Portable equipments**

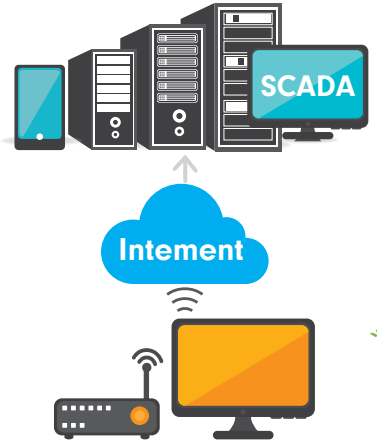
Portable power generation equipment, ready to provide stable power supply with mobility and reliability

**Real-time cloud features**

Cloud-based smart monitoring system, provide status of power supply at any time through mobile APP




## Smart microgrid energy management system architecture




Energy Management Systems

Emergency electricity generation


Green electricity generation

Supply mains


ESS energy storage systems
BMS battery management system

LOAD

EV

## 3.4 Smart, Energy-Saving, IoT Home Appliances

**2014**

- Developed a full line of Class 1 Energy-efficient Air-conditioners
- Launched cloud-based smart energy-saving air conditioners

**2015**

- Rolled out brand new products 100% supporting cloud-based management features

**Development in 2016 and the Future**

- Lead the development of smart home appliance systems with customer-oriented practical smart features
- Integrate cloud-based home appliance control technology and establish the infrastructure for ioT air management platform
- Develope solutions for energy-conservation control home appliances

### 3.4.1 Development Trends for Smart Home Appliances

With science and technology advancing and the society progressing, it has become an inevitable trend for the home appliance sector to develop products with smart features. The increasingly rapid pace of modern life and the omnipresent media advertising have prompted people to pay more and more attention to home appliance products with more comprehensive function and innovative styles.

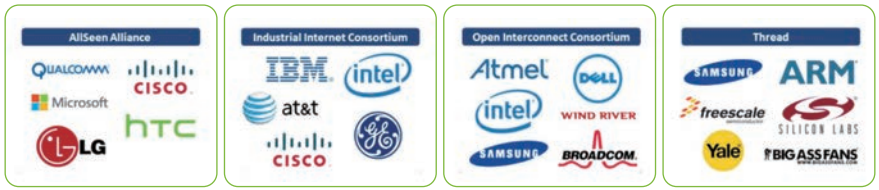
At the present, the issues associated with the development of smart home appliances are mainly surrounding production costs too high and unified standards not yet set, etc. So far, there has not been any low cost standard which is accepted by all enterprises in the home appliance industry; therefore, the smart home appliances manufactured by different brands are still conceptual products and not really mutually compatible with one another. Major home appliance companies are already aware of this problem, and more and more companies have started to seek win-win cooperations. The following directions will enable the smart home appliance industry to overcome the problems in the future and to achieve rapid and healthy development:

#### Smart Energy Conservation, Carbon Emission Reduction

Global warming and extreme weather are the issues, which require imminent solutions with people's joint effort around the world, and smart home appliances can automatically adjust working time and status according to their surrounding environment. Energy conservation can thereby be realized. For example, Smart air-conditioners can automatically adjust their working status to achieve the optimal performance according to different seasons, climates and user's geographic locations. They can help save as much energy as possible under the premise that people's needs are met. As the shortage of power supply is tensing up, energy conservation has become the key selling point for many home appliance brands. In addition, the environmental protection features of home appliances are bound to draw more and more of people's attention in the future.

#### Industry Compatibility

As the home appliances in one household may be made by different manufacturers, the smart home appliance platform shall also ensure compatibility. By the same token, there should also be a unified standard in the home appliance industry, so home appliance products made by different manufacturers may be mutually compatible. For example, with joint efforts from TECO, the Green Energy and Environment Laboratories of ITRI led and completed the first formulation of Smart Appliance Alliance Network (referred to as SAANet). The International mainstream alliances are as shown in the following figure:




#### Integrated Interactive Smart Control

Future smart appliances can connect with one another through the household area network abd can also connect with the manufacturers' service sites through the household network interface. For the classic example of people-to-object application, users can conveniently control appliances remotely through mobile devices; as for object-to-object application, home appliances can also realize active motion responses through various active sensors (such as temperature, sound, motion, etc.). Certainly, users can also receive feedback of the similar information through mobile devices in a specific object-to-people application. These integrated applications, including people-to-object, object-to-people and object-to-object modes, completely illustrate the spirit of ioT appliances.

## 3.4.2 Future Development Plans and Objectives for TECO's Smart Home Appliances

TECO is the first domestic manufacturer to integrate ioT with home appliances. Cloud-based A/C was first launched with customer-oriented practical functions, such as scheduling control, power visualization, remote control, shutdown reminder, etc. to lead the development of smart home appliancs. Even though, in the present, ioT functions, the first element of smart appliances, are already incorporated in TECO's various appliance technologies, "Content is King" is also TECO's core concept for its smart appliance development. This second core concept is to provide customers with valuable service content, so how to provide smart content to enhance customer value is not merely a basic function of ioT appliances any more. Therefore, in addition to the air conditioners with smart features, TECO is actively searching for applications to impress the customer with other single product. Take the washing machine as an example, TECO is constantly studying on how to remove stains through sufficient soaking, how to dewater laundry without disturbing the neighbors, and how to hang the laundry right after work and not worrying about clothes staying wet and being the breeding ground for bacteria.

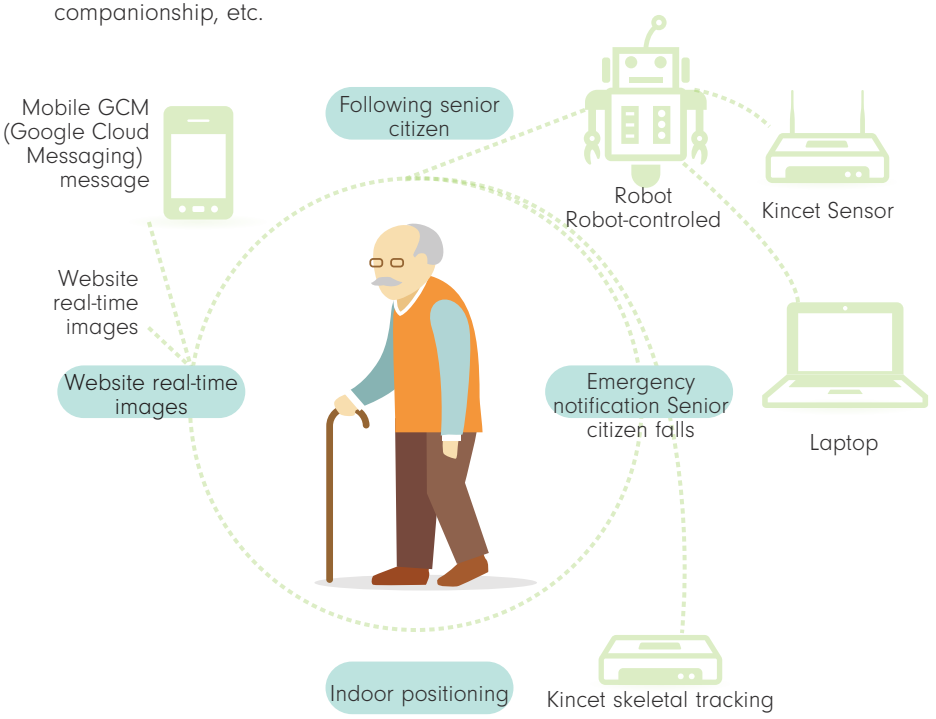
### Smart Air quality Management System

TECO integrated its existing air-conditioners, dehumidifiers, air purifiers, fans and heat exchangers to form a smart air quality management system to provide a comprehensive, comfortable and livable environment, with the applications of people-to-object, object-to-object and object-to-people modes. TECO integrated these applications with an A/C based air management platform with IoT capabilities, so each equipment will be able to collect data on the temperature, humidity and dust level of the air and transmit this information to the host air management platform for active air management. P2P (low cost) technology is adopted for the communication among appliances, so smooth exchange of ioT information is assured. With shared cloud servers and UltraVPN resources, each manufacturer's APP creates its own smart control situations to monitor the Content.


1 A/C 2 Ventilation (total heat exchanger) 3 Air Purifier 4 Dehumidifier
5 DC Fan 6 Wireless AP

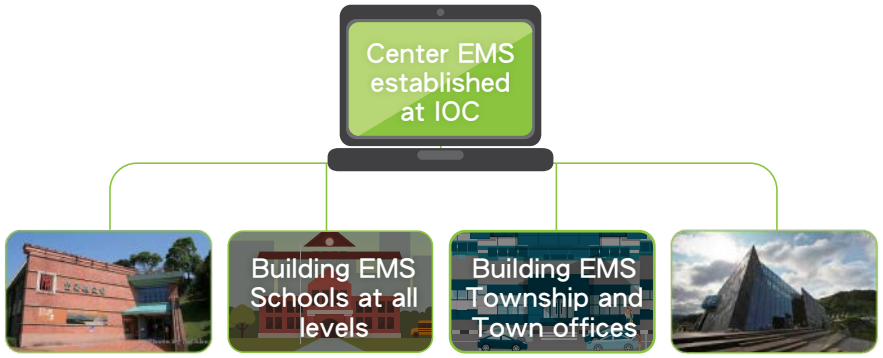
### Home Care System for Senior Citizens

Due to the fact that Taiwan is rapidly becoming an aging society, in response to the government's long-term care policy, the solutions, which are currently being studied on also include a variety of smart home appliances to provide senior citizens a health, safe, and convenient environment; this also includes the service robots, which are currently in planning, to provide security monitoring, fall prevention alerts, rehabilitation (to collaborate with the medical units), entertainment and companionship, etc.



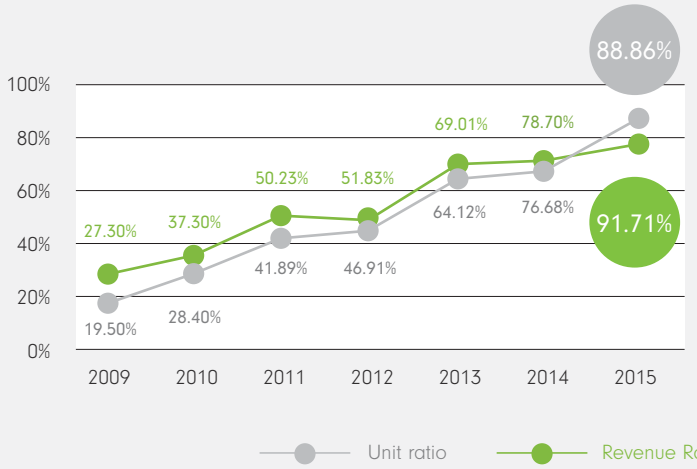
## Intelligent Energy Management System

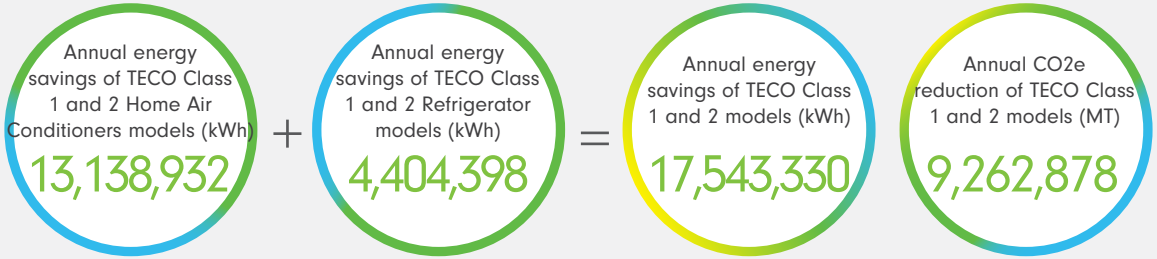
In response to the demand to conserve energy and reduce carbon emissions, an intelligent Energy Management System is provided to the government public buildings (such as schools) and commercial customers (such as chain stores), by integrating TECO's core competencies in A/C with high power consumption systems, such as lighting and elevators. Take the Yilan Country demonstration project as an example: the centralized management and decentralized control approach were adopted. Centralized management refers to completely grasping each branch institution's power consumption through the smart ioT capabilities; on the other hand, decentralized innovative smart control is developed to save electricity consumption by estimated 40% while maintaining the same comfortable level.




## 3.4.3 Energy saving performance of smart home appliance

• Ratio of Class 1 and Class 2 Energy-saving Models to TECO's Total Sales of Home Air Conditioners and Refrigerator in 2015



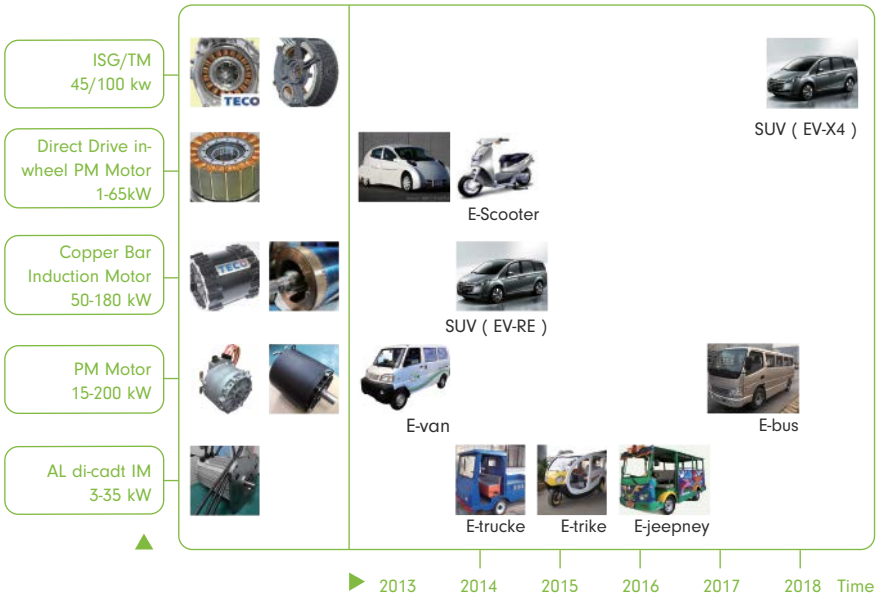




▶ Note1: Carbon emission: 0.528 kg CO2e/kW

## 3.5 New Green Energy

In 2015, a total of over 550,000 electric vehicles (EVs) were sold globally, up 72% from the same period the previous year. The power systems for electric vehicles have already matured, so there are more than 50 mass-produced electric vehicle models available in the market; however, the market acceptance for EV's endurance and prices remains limited; therefore, power battery technology and costs become the main development focuses for the mainstream electric vehicle manufacturers. In the meanwhile, all vehicle manufacturers are actively seeking breakthrough in lightweight design by adopting new materials, including high-strength aluminum alloy and carbon fiber reinforced plastic, etc.

### EV (electric vehicle) motor




The development of power modules for special vehicles has been TECO's focus, with reference to the new technologies adopted by the mainstream EV manufacturers and the prices acceptable by the market. So far, TECO has successfully rolled out models with specifications and prices the same as diesel cars, including tri-wheel cars and 21-seat buses.

### Future Development Roadmap for Vehicle Electricity

#### Expand Overseas Special EV Market

• The Philippines: To support the replacement of old transportation vehicles, in line with the Philippine government's policy, TECO embarks on the Philippines market with special functional electric vehicles. The law mandating the compulsory replacement of Jeepney more than 15 years old created business opportunities involving the imminent replacement of over 350,000 over-age Jeepney in the Philippines currently.Replace tricycle taxis in the Philippines with electric vehicles to solve the pollution: There are approximately 350,000 conventional engine tricycles in the Philippines, including 200,000 in the Manila metropolitan area alone, accounting for 2/3 of the total carbon dioxide emissions in the area, so the Philippine government and the private sector are collaborating on the Public-Private-Partnership (PPP) project to replace older vehicles with the aim to solve the problem once and for all.

• In 2015, due to the falling oil prices, the electric vehicle market indeed felt the pressure, yet there remains a great demand for tricycles in certain ASEAN countries, including India and Africa.  After TECO secures its firm foothold in the Philippine market, it plans to embark on its second overseas market to create a production supply chain with large parts imported and assembled locally. The development of electric air conditioning equipment is also underway for four-wheel Jeepney models to make entrance into the high-end market with miniBus specifications.

• TECO established a joint venture, ROTECO, with its Philippine partner Ropail, and organized a product launch event in Subic Bay Industrial Area in Philippines in November 10, 2015, actively vying for the special electric car market in Southeast Asia.

## 3.5.2 Wind Power Development

### Wind Power Overview

In response to global warming and severe climate change, the whole world has started to emphasize on the use of renewable energy. All countries have also clearly defined their own development objectives for renewable energy, aimed to increase the utilization ratio of renewable energy to reduce greenhouse gas emissions. Among the renewable energy alternatives, wind power is considered the most cost-effective approach, so the European Union has already set its own goal: in 2030, wind power shall account for 50% of its total power supply.

Typically, the barrier to enter into the wind power sector is high; however, with many years' research and development experiences and capabilities in the mechanical and electrical sector, after appropriate integration, TECO can rapidly make its inroad into the wind power sector. In the United States, TECO has successfully cut into the wind turbine assembly market. In Taiwan, TECO has successful launched its self-developed brand 2MW permanent magnet wind turbine unit, and this is the first model of wind turbine ever assembled domestically, as well as the wind turbine with the highest proportion of domestically produced components.

The structure of this wind turbine is complete and can meet the requirements of regions with strong typhoons and extreme climate, and, with its universal 50/60Hz, it can even easily meet the provisions of the stringent compliance protocol set out by all countries. Based in Taiwan, TECO looks to China as its target, using Taiwan's quality control advantages paired up with China's vast market demand, the wind turbine assembly plants are established nearby the wind farms to cultivate the supply chain locally; on the one hand, the transportation costs are reduced, and on the other hand, it is convenient to operate and maintain the wind farms in the next 20 years, so the utilization rate of the wind turbines is increased to maximize profits.

Moreover, TECO will also integrate with the existing Asian supply chains and transfer relevant technologies from Europe to develop the next generation 5MW large-scale offshore wind turbines suited to Asian climate.

In addition, with respect to the distributed renewable energy generation systems, which are indispensable for future smart grids, TECO has successfully developed 3kW horizontal axis wind turbines, which is Taiwan's first horizontal-axis wind turbine manufacturer to ever obtain Japan ClassNK certification and has since started its exports to Japan, while successfully embracing the opportunities that comes along with Japan's 2016 electricity liberalization.

| | Products / Status | Effects |
|---|---|---|
|  | **Inland 2MW wind turbine**<br>Obtained international GL certification<br>Passed low voltage ride-through testing | Drive the development of generators, gearboxes, castings, power cables, and bolts domestically  |
|  | **Offshore 5MW offshore wind turbinesystem**<br>Under development | The continuation of 2MW wind turbine is expected to directly drive several domestic industries into the realm of wind power, including generators, castings, medium voltage cables, bolts, wind turbine towers, inverters, transformers, fabric cloth, etc.; the industries which are expected to be driven indirectly include large-scale transport hoisting, maritime engineering fleet, exploration, wind farm O&M, anti-corrosion engineering, etc., and subsequent job creation is estimated to increase by thousands.  |
|  | **3KW small wind turbine**<br>• Obtained Taiwanese VPC certification<br>• Obtained Japanese NK certification | Mainly decentralized applications for remote townships, farms, fish farms, etc. to significantly reduce the transmission pressure and power grid costs  |

TECO has continued its efforts in the development of wind power, and made make new achievements continuously in 2015:

1・TECO's H3000 wind turbines were successfully exported to Japan: Taiwan's first domestically produced horizontal-axis wind turbines successfully exported to Japan.

2・TECO's H3000 wind turbines obtained Japanese NK certification: Taiwan's first domestically produced horizontal-axis wind turbine to obtain Japan NK certification.

3・TECO's H3000 wind turbines obtained VPC certification: Taiwan's first domestically produced horizontal-axis wind turbine to obtain VPC certification.

4・5kW Wind Inverter won 2014 Taiwan Excellence Award:TECO completed the development of its self-developed inverter, the world's only inverter specifically designed for wind turbines, successfully obtained VDE certification and won 2014 Taiwan Excellence Award.

5・New Energy Wind Power Co., Ltd. was established: TECO Group and China Steel Corporation (CSC) established a joint venture, New Energy Wind Power Co., Ltd., on August 14, 2015, vying for offshore wind power market.

## Wind Turbine Future Development Goals

There are two categories of wind power systems: inland and offshore.
1 • Inland wind power market: .Mainly 2MW wind turbine oriented, and the major markets are in China, Southeast Asia and Northeast Asia.

A・China market: A plant has been established in low wind speed region to accelerate the development of wind farm for China and to integrate the access to wind resources as well as assist the wind farm developers to speed up their business development.

B・Southeast Asian market: Mainly focus on Thailand and Vietnam with better wind resources, and the governments intend to promote renewable energy development and to join hands with Taiwan's banks interested in renewable energy investment, to achieve triple-win initiatives.

C・Northeast Asia market: Japan will adopt the electricity liberalization policy to encourage the development of wind power by implementing the electricity bulk purchase policy to promote growth of the wind power market. TECO will join hands with private developers, banks and local engineering teams to deliver bundled power supply, and actively strive for the opportunity to enter into the Japanese market.

2 • Offshore wind power market: Mainly typhoon and earthquake resistant 5MW wind turbines

Offshore wind power has been the development focus for many countries in the recent years. Europe made advanced progresses in this field earlier, and has quite a few achievements; there were also many projects ongoing in China, Korea, Japan, and United States, yet research and demonstration still prevail in this field for these countries; Taiwanese government also announced offshore wind power demonstration incentives; so far, two private manufacturers and one state-owned enterprise won the bid; these demonstration projects will drive the surging potential opportunities locally by 2019.

In addition, our government has also announced the practices for block development in advance, aimed to rapidly achieve the expected goals for wind power turbine installation; the government also plans to use the state power to build engineering vessels and wharfs dedicated to wind power and to strengthen the foundation for the development of the offshore wind power industry.

In response to the government's domestic production requirements for offshore wind power demonstration incentives, TECO established a joint venture, New Energy Wind Power Co., Ltd., with China Steel Corporation (CSC), to focus on Taiwan as its primary market, by introducing typhoon and earthquake resistant models demanded by Taiwan, with local assembly, local manufacturing, local verification and local supply chain established, aimed to drive the development of the industry and create jobs locally.

## 3.6 Products and Specifications

TECO places great emphasis on product quality, so all products are subject to rigorous development and verification processes, including functional testing, prototype testing, mass production testing, etc., to repetitively confirm the production feasibility of product designs and to verify that the product efficiency meets relevant inspection standards. After products are officially produced, TECO continues to track and confirm product quality stability with comprehensive quality management system by continuously making improvement and amendments, aimed to enhance quality and to provide customers with worry-free user experience.

### Rigorous product development process

**1 Development Plan**
- Identify customer demand trends to determine development plans.
- Confirm standards that need to be met (i.e. CNS, CE, UL, RoHS, etc.)

**2 Functional Prototype (EP) Phase**
- When breakthrough innovative technology is involved, first perform a feasibility assessment of the core technology. Otherwise advance directly to the SP phase
- Approval by the EP Review Meeting is required to advance to the SP phase.

**3 Sample Prototype (SP) Phase**
- Make development designs to meet the required product specification and produce samples to assess and verify properties, quality reliability, and safety to ensure the developed products meet the required specifications.
- Produce user manuals (including safety precautions), packaging, and sales catalog compliant with national commodity labeling laws to provide customers with accurate product information needed for purchasing and use in line with their needs.
- Approval by the SP Review Meeting is required to advance to the PP phase.

**4 Pilot Production (PP) Phase**
- Carry out small volume production in mass production mode (die development, etc.).
- Perform tests on a greater number of units relative to the SP phase to re-verify that products meet property, specification, operational safety, and other requirements
- Formulate SOP for mass production tools and processes
- Approval by the PP Review Meeting is required to advance to the MP phase.

**5 Mass Production (MP)**
- Ramp up to formal mass production with each finished product provided a health card recording test results and passage of qualification inspection before shipment to customers.
- Survey customers for usage issues, suggestions and quality problems as a basis for ongoing improvement.

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

All TECO factories and its subsidiary TESEN Electric Co., Ltd. have passed ISO9001 certification for manufacturing quality management system, with tools of the Chungli factory 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 TECO's possession of qualified testing equipment and technology, facilitating product development and technological enhancement:

Table of Quality Certification of TECO

| Kinds of certification/accreditation | Certified/accredited sites |
|---|---|
| ISO9001quality management system | • Chungli factory<br>• Hukou factory<br>• Power equipment of Kuanyin factory II |
| ISO/TS16949 quality management system | • Chungli factory<br>• Electric-control products of Hukou factory |
| laboratory accreditation of (DoE) NVLAP | Motor laboratory of Chungli factory |
| Laboratory accreditation of CSA ISO/IEC 17025 | Motor laboratory at Chungli factory |
| Laboratory accreditation of TAF ISO/IEC 17025 | • Motor laboratory of Chungli factory<br>• High-voltage switchboard laboratory of Hukou factory<br>• Calibration laboratory of Chungli factory |

## 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 | Product certification | Status for certification |
|---|---|---|---|---|
| 1 | U. S.<br>Canada | IE2<br>IE3 | | ○<br>○ |
| 2 | Europe (The Intemational Electrotechnical Commission | IE1<br>IE2<br>IE3<br>IE4 | CE | ○<br>○<br>○<br>● |
| 3 | Taiwan | 1E1+<br>IE2<br>IE3 | | ○<br>○<br>○ |
| 4 | Japan | IE3 | | ○ |
| 5 | Australia<br>New Zealand | IE2<br>IE3 | MEPS | ○<br>○ |
| 6 | China | GB2（IE3）<br>GB3（IE2） | Level 2<br>Level 3 | ●<br>○ |

## Product Safety, Labeling and Sales

To uphold the consumers' interests, TECO has formulated its 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 any record of legal violation in products, service information, advertisement, or promotion. A misstep was a 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 some customer information, 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://ww- w.a-ok-service. com.tw. The company aims to achieve the goal of full recall and repair. 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. TECO will continue to provid quality safe products to customers in a responsible manner.

In addition, 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.

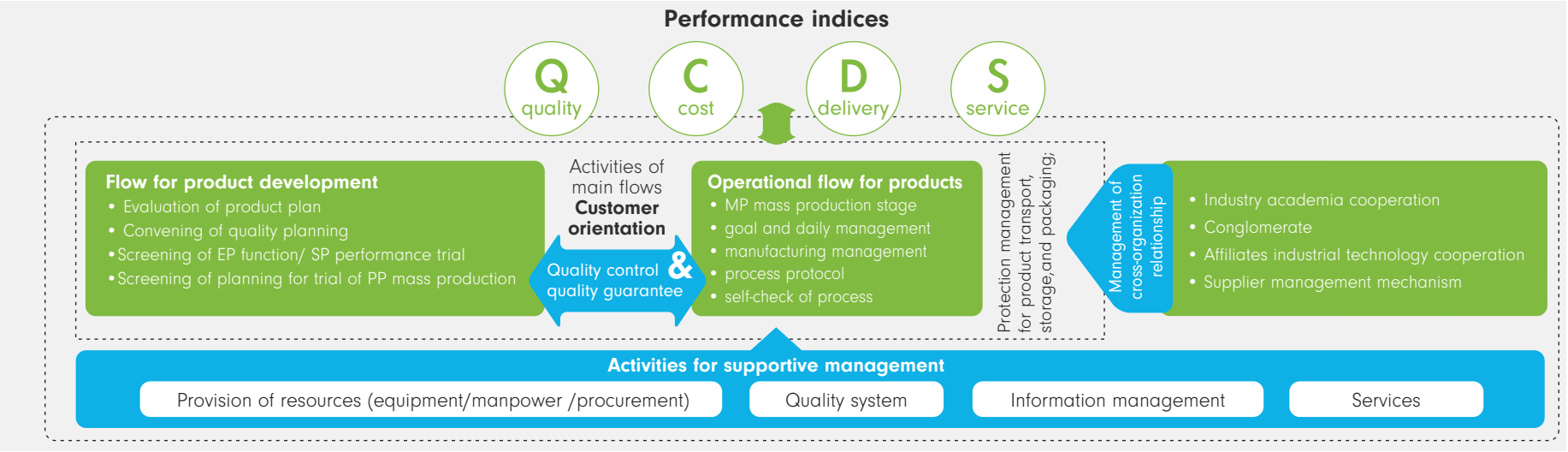
### TECO's initiative to recall dehumidifier models produced during 2003-2005

To safeguard consumer interests and security, in compliance with the announcement by the Bureau of Standards, Metrology & Inspection, M.O.E.A., certain dehumidifier products with safety concern will continue to be recalled on TECO's official website to ensure consumer safety and use security.

（http://www.tecohome.com.tw/NewsContent.aspx?Id=87）

## 3.7 Outstanding Quality Control

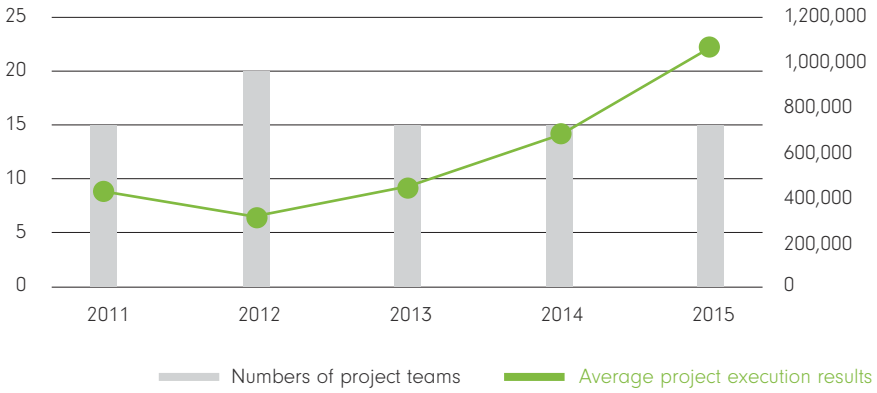
To ensure the efficiency of each process review and improvement activity, TECO convened meetings in 2015 to review and improve quality objectives. The meetings have helped the company to effectively track the progress and results of quality improvement activities and promptly amend strategies and programs.




| 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. | 2015/2/13 |
| Annual quality control review (quality control review meeting) | Assistant VP | Report business division's 2015 quality performance and review quality objectives for 2016. | • Heavy Industrial Systems Sector: 2016/2/1<br>• Green Electric Machine Sector: 2016/1/22<br>• Industrial Product and System Automation Sector: 2015/12/7<br>• Household Appliances Sector: ： 2016/1/27<br>• Power Business Sector: 2016/1/4<br>• ECO Energy Business sector: 2015/12/25 |
| 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 | Quality Supervisor | Convene internal production units to review quality standards of various production | Once per month for each business sector |

## II. Constant Improvement

The "project improvement teams", or formerly known as "first-class teams" have been promoted for more than 40 years since they were introduced in 1971, and their mission is goal-oriented autonomous management and capability enhancement. The teams are either formed either bottom up, consisting of base level staff, or top down, consisting of cross-departmental staff. With respect to the work related performance indices, including Productive, Quality, Cost, Delivery, Safety and Morale, etc., systematic and logical improvement steps and tool approaches are used to rotate the PDCA management cycle to conduct problem analysis and solving, through project improvement team activities, aimed to satisfy customers' demands, enhance company's operating efficiency and cultivate personal growth and autonomous awareness; a total of 15 improvement teams registered in 2015 to carry out project improvement operations producing NT$15,764K worth of improvement results.




Related competitions are held regularly every year to enhance employees' quality awareness and encourage their motivation for improvement.

There were a total of 10 factory representative teams participating in the competition held in 2015, and total of NTD21,342K improved results were realized; in addition to the company's internal representatives participating in the competition, overseas production bases also delegated representatives to observe the competition.

## III. Quality Awareness

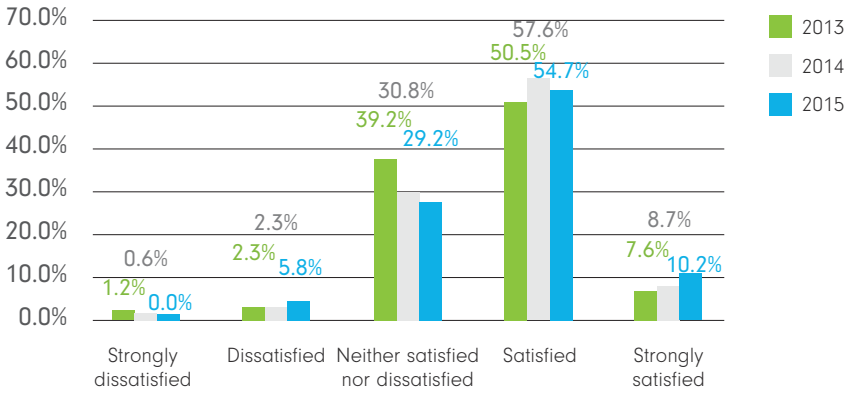
In addition, in line with the promotion of ISO 9001:2015's latest version of quality control system, the planning for education & training and revision operation were also conducted, so company's employees in the relevant business units can grasp the spirit and requirements of the latest version of standards as well as how to use process management and how to implement strategic risk analysis in order to implement goal planning and quality control.

TECO organizes annual Environmental Safety Quality Month activity to inspire quality awareness among employees, and the theme for 2015 was"Energy-conserving Green Life, Occupational safety zero accident, Operational TQM". The program included a cross-factory improvement proposal contest, as well as quality education & training, quality awareness enhancement Q & A activities, and factory process verification and diagnosis activities, etc. The program attracted over thousands of participants from TECO's Nangang Head Office, Zhongli plant, Guanyin plants I and II, Hukou plant, and overseas production bases, with comprehensive activities and promotions to encourage employees' quality awareness.

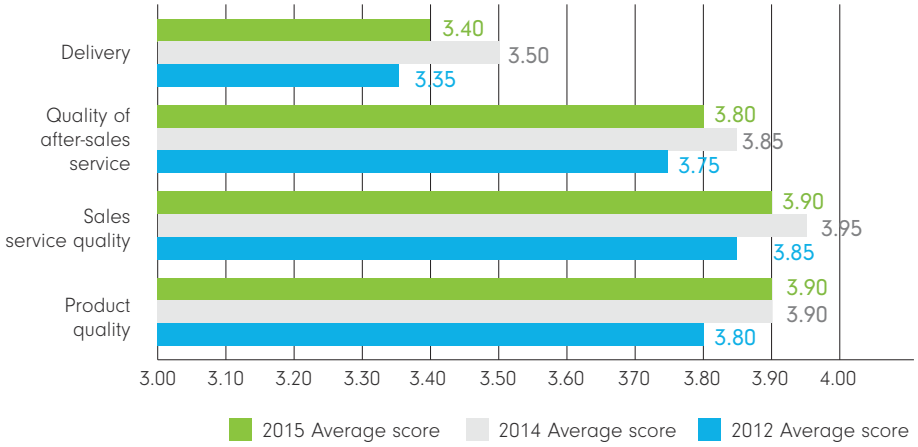
## 3.8 Customer Satisfaction

### 3.8.1 Motor Product Customer Satisfaction

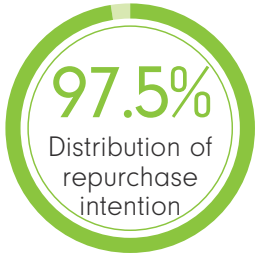
• TECO's Motor Product Customer satisfaction comparison over 2013-2015

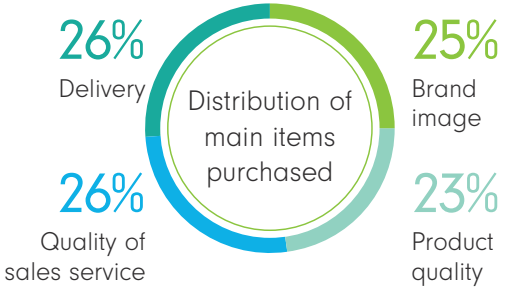



• Distribution of customer survey items over 2013-2015




• 2015 Annual TECO brand image (domestic)




• Delivery Improvement Measures

A・In 2015, delivery remained the major source of customer dissatisfaction.

B・Delivery improvement measures:

1・Design workload is divided through Mod shop project stream and internal improvement, aimed to reduce delivery time to 14 days

2・Factories to initiate 4cycle project and MES information improvement to effectively reduce wait time and production differences over the same period, aimed to complete plant delivery in 42 days, expected to complete in 6/E.

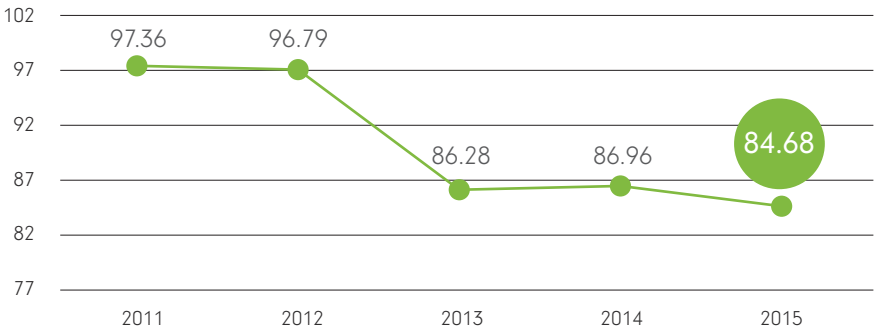
3・Overall objective is targeted at 56 days after taking orders.

4・Introduce Mod shop production system to effectively divide workload between design and factory.

5・Design organizational re-structuring to re-plan operational processes according to order structure to expand order processing capabilities, scheduled to complete in 2015/Q2.

## 3.8.2 Home Appliance Customer Satisfaction

Customer satisfaction over 2011-2015




### Customer satisfaction improvement measures

The service of home appliance and A/C in 2015 was analyzed and the customer satisfaction was down 2.28% from 2014, mainly for the following reasons: increased product defect rates and inability to respond to service inquiries in time during peak season (May to August) causing poor time satisfaction; TECO actively discussed these two reasons for customer dissatisfaction and proposed the following solutions:

A • Increased product defect rates: reason: the major reason for this type of complaints is not component-related poor quality (rather, due to poor installation/incompatible environment), and the proposed improvements are:

1. 1: Poor wiring installation for split type A/C
→ In addition to continuing education and training, place additional reminder labeling on the A/C body: remind customers' complaints regarding the prevention of signal anomalies caused by wiring errors.

1. 2: Customers' complaints for the discrepancy between room temperature and preferred temperature shown on the temperature display on the A/C body due to special installation environment (short circuit)
→ Amend designs to add special environmental active compensation function to prevent this type of complaints.

1. 3: Complaints for doors not aligned evenly due to the fact the refrigerator doors need to be removed and re-assembled at the customers' homes.
→ Take the market demand into consideration, so the design is amended to allow convenient positioning of door to avoid mis-alignment issues.

1. 4: Customers' complaints for poor quality were not component-related and request for services.
→ The company amended the repair reporting system in May 2015 to break down this type of problems into segments, and discussed measures to rapidly respond to this type of complaints through a monthly project review, in order to reduce the waste of resources arising from service adjustments or explanations at the client end.

B • Inability to respond to service inquiries in time during peak season: Increase the direct line service staff to 103 from 97 to effectively reduce customer wait time; after the number of direct line service staff was increased, 2016 Q1 average satisfaction was 86.8%, up 2.12% from same period previous year.

# 04

# Corporate Governance and Risk Management

## 4.1 Corporate Governance Strategy and Objectives

### 4.1.1 Corporate Governance Strategy

- **Corporate Culture**

TECO's commitment to "managing with integrity, implementing corporate governance, fulfilling social responsibility, and pursuing sustainable operations" is aimed to reinforce and incorporate the practices of integrity into its corporate culture, so all employees can eventually internalize integrity to be part of their own belief and action guideline and the pursuit of corporate governance enhancement can become autonomous.

- **Action Guideline**

In accordance with the latest standards of "Corporate Governance Evaluation" implemented annually by Taiwan Stock Exchange, TECO reviews and improves all aspects of its business practices according to the evaluation index items, and thereby fully enhances its quality of corporate governance.

- **System and Specifications**

Through pursuing outstanding results in "Corporate Governance Evaluation" and with the information provided by competent authorities and external consultants, TECO makes applicable adjustments to its internal management mechanism, aims to incorporate the latest corporate governance trends into its daily operational procedures.

### 4.1.2 Corporate Governance Performance and Future Development Goals

#### 2014

- Significant performance improvements with a big leap on Corporate Governance Evaluation of Public and OTC Companies, scored rating A in the previous year → A++ rating in 2014.
- Ranked among the top 5% of enterprises in the First "Corporate Governance Evaluation".
- All candidates for directors were nominated.
- Formulated regulations on the "Selection and Assessment of Certified Public Accountants" and conducted annual assessment of CPA's independence and suitability.

#### 2015

- Recognized to be the top 5% of enterprises in "Corporate Governance Evaluation" for two consecutive years.
- Formulated "Board Performance Evaluation Measures" to reinforce the relevance between the Board's compensation and its Corporate Social Responsibility (CSR) performance.
- Approved CSR Codes of Practice to reinforce the linkage between enterprise operations and CSR.
- Established a Corporate Governance Center to promote establishment of a Corporate Governance Platform to monitor TECO's progress in corporate governance more systematically.

#### 2016 and Future Development Plans

- Continue pursuit of excellent results in top 5% of enterprises in "Corporate Governance Evaluation".
- Conduct performance self-evaluation in accordance with "Board Performance Evaluation Measures" and link Board's compensation with evaluation results; starting in 2018, an external professional and neutral organization will be appointed to conduct performance evaluation at least once every three years.
- Select material CSR issues and incorporate the reporting of selected issues into the Board meeting agenda to reinforce the linkage between company's business strategy and three dimensions of ESG (environment (E), society (S), and governance (G)).
- Select material CSR issues and incorporate the reporting of selected issues into the Board meeting agenda to facilitate the formulation of company's business strategy and policy.
- Incorporate corporate governance related indicators into managerial staffers' performance evaluation scope to link managerial staffers' compensation with their performance in corporate governance.
- Develop optimal governance framework according to company's characteristics and unique conditions: establish two functional Committees at the Board level to specifically oversee the implementation effectiveness of corporate governance.

Guided by TECO's vision "TECO GO ECO Green TECO, Green Technology" and its business concept of "managing with integrity, implementing corporate governance, fulfilling social responsibility, and pursuing sustainable operations", TECO aims to achieve the goal of sustainable development while fulfilling its corporate-citizen responsibilities at the same time. TECO's management is highly committed to implementing corporate social responsibility through adopting excellent and advanced corporate governance system to actively promote corporate governance, aimed to meet the governance level of international companies and be in line with international standards.

### Establishment of Cross-Functional CSR Committee to Oversee and Implemente Sustainability Effectiveness

In addition, in 2014, TECO established a specialized cross-functional unit, "Corporate Social Responsibility (CSR) Committee", to specifically oversee the implementation effectiveness of sustainability-related issues and to integrate ESG (environment (E), society (S), and governance (G)) considerations in the company's business decision-making process. These efforts are aimed at helping the company grow sustainably and fulfill its corporate social responsibilities of social inclusion and green economy.

### Establishment of Corporate Governance Platform to Supervise Corporate Governance Performance

To ensure corporate governance advances with time, 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 addition, the company further established "Corporate Governance Center" in 2015 to plan 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 Taiwan Stock Exchange Corporation's (TWSE) "Corporate Governance Evaluation" index items. It provides a framework to regularly review corporate governance related matters with relevant units, formulate corporate governance goals, and regularly track the corporate governance implementation status and results by units in charge of corporate governance, to oversee TECO's sustainable performance.

TECO's implementation of corporate governance was recognized through winning numerous significant awards in recent years. TECO also ranked among the top 5% of enterprises in the First and Second Corporate Governance Evaluations conducted by the Taiwan Stock Exchange Corporation (TWSE); "Taiwan Corporate Sustainability Awards - Large-Scale Corporate Gold Award and Social Inclusion Award"; since 2012, TECO has also won "Common Wealth Magazine's Corporate Citizenship Awards" for four consecutive years, and these awards underscore TECO's achievements in corporate governance, transparency and integrity. In the future, TECO will continue to strengthen its standards and quality of corporate governance through ongoing improvements.

- Corporate Governance Management Platform Process

01 Verify the corporate governance evaluation task indices to be achieved

02 Organizing unit distributes task index to responsible units and specifies expected date of completion

03 Responsible units fill in estimated completion schedule and content

04 Regular follow-up is conducted through the management platform after the completion date

05 After responsible units fill in actual completion content, organizing unit verifies accuracy and closes case

Ranked among **Top 5%** of enterprises in the Second Corporate Governance Evaluation

Full score on **41** indicators, including protecting shareholder equity, treating shareholders equally, protecting stakeholder interests, and CSR

## 4.1.3 Strengthening Functions of the Board of Directors

In 2014, TECO's Board of Directors passed the resolution to revise the "Corporate Charter" and "Regulations Governing the Election of Directors" through the full adoption of a nomination system for the election of directors (including independent directors) to strengthen the information transparency associated with director nomination reviewing process, to safeguard shareholders' rights and to improve TECO's corporate governance.

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's shareholders convened shareholders' meeting and re-elected 15 directors, with a three-year term, in 2015. Among the 15 Directors, there were one female and one Japanese, with only two directors undertaking managerial posts and external directors accounting for 67% of total seats. The Board members actively attended Board meetings; the actual attendance rate, excluding proxy, reached 87% in 2015. The Board of Directors earnestly oversaw and understood the implementation of the company's operational plans. Two functional committees: Auditing Committee (established in 2012) and Compensation Committee (established in 2011) were established under the Board to help directors fulfill their supervisory responsibilities. The Auditing Committee consists of all of the independent directors, while the Board of Directors appoints independent directors and experts (three) in relevant fields to form the Compensation Committee.

With the committee's' organizational charters being approved by the Board of Directors, the two committees regularly report their activities and resolutions to the Board of Directors.

| Voter turnout rate of Electronic Voting System | |
|---|---|
| 2012 | 44% |
| 2013 | 56% |
| 2014 | 68% |
| 2015 | 63% |

Director Attendance Rate at Shareholder Meetings (2012-2015):

| | |
|---|---|
| 2012 | 80% |
| 2013 | 93% |
| 2014 | 87% |
| 2015 | 80% |

Avg.: Approx 85%

The reason for a decline in director's attendance rate in 2015: Some directors' term of service expired, and directed are re-elcted based on the nomination principle. As some of the directors were not nominated for re-election and hence did not attend the meeting, the attendance rates in that year were, as a result, lower than the previous year. That was exactly the same reason, which explained what happened in 2012.

### • 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 meetings, attracting a 44% voting rate (36% attendance rate). The voting rate rose to 56% (42% attendance rate) in 2013 and reached 68% (48.66% attendance rate) in 2014, and voting rate was 63% (52% attendance rate) in 2015, effectively protecting shareholders' interests.

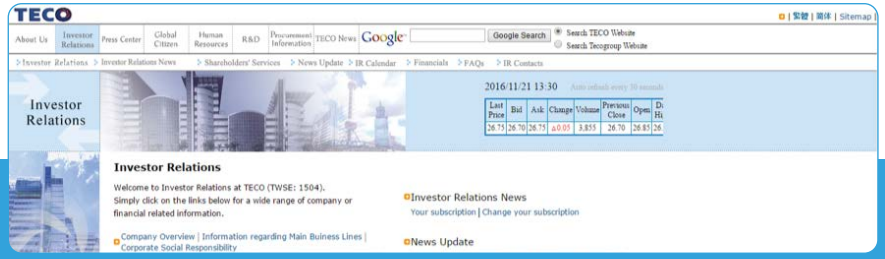
In addition, all of TECO's Board members actively participated in regular shareholders meetings, with the attendance rate reaching about 80% in 2015

### • Communications with Stakeholders and Information Disclosure

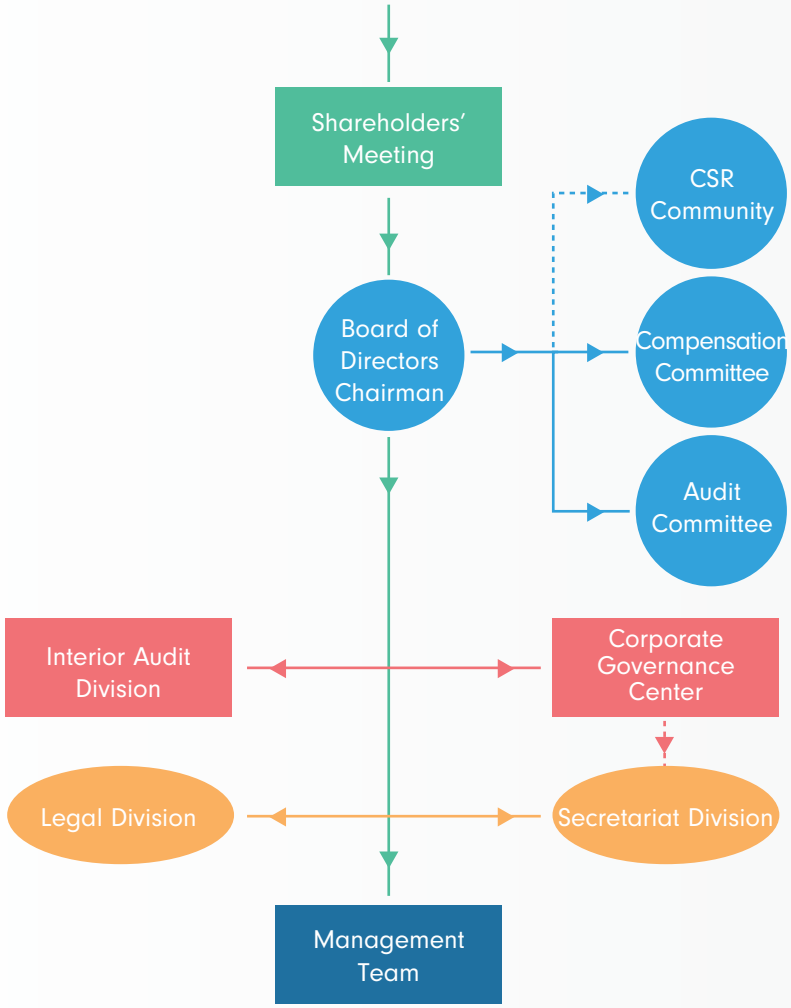
TECO takes communication with stakeholders and information disclosure transparency very seriously, so communication channels with stakeholders in various fields are readily available, on top of regular/irregular information announcements and direct communications with the stakeholders.

The company has instituted special sections for Investor Relations and Corporate Governance on its company website (www.teco.com.tw), available in both Chinese and English, allowing investors to make real-time inquiries, download the company's financial reports, annual reports, or major financial information, and browsing information on the company's share prices and shareholders' meetings. In addition, investors can communicate with the company via e-mail, which will be handled by designated unit, as well as a spokesperson system to further implement stakeholder communication mechanism. 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 to explain the company's business status, financial performance, strategic development, and business direction for investors.

The reason for a decline in director's attendance in 2015: Some directors' term of service expired, and all candidates for directors were nominated. Some of the directors were not nominated again, so the annual attendance rates were lower than the previous year, exactly the same reason applied to what happened in 2012.



TECO Governance Framework




## 4.1.4 Board of Directors

TECO's Board of Directors is its supreme institution of governance, responsible for selecting and nominating high-ranking managerial staffers and formulating the company's strategy for social responsibility, corporate citizenship, and sustainable development.

In 2015, the Board of Directors approved the formulation of "Corporate Social Responsibility Codes of Practice", which provide guidelines for the implementation of corporate governance, the development of sustainable environment, sustaining social welfare, strengthening corporate social responsibility information disclosure to specifically practice corporate social responsibility.

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, in order to achieve the goals of corporate governance.

### Operation of the Board of Directors

In accordance with the stipulation of its corporate charter, TECO's Board of Directors convenes at least once every quarter, supervising and understanding the execution of the company's business plans, the expression of financial reports, auditing reports, and tracking related affairs.

In 2015, the Board of Directors convened ten meetings, with the average rate of attendance reaching 87% (excluding proxy). In addition, he Board of Directors invites the certified public accounts to attend its meetings to discuss auditing operation related to annual report, so as to keep posted on the company's financial conditions.

Significant resolutions by the Board of Directors are posted on the Market Observation Post System of Taiwan Stock Exchange and the Investor Relations 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.

## Milestones in Strengthening Corporate Governance

| | |
|---|---|
| 2008 | • Formulation of "guidelines for corporate governance," according to the "guidelines for corporate governance of listed firms<br>• Revision of corporate charter<br>• Revision of "measures for election of directors and supervisors"<br>• 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<br>• Grade A for evaluation of information disclosure by listed firms |
| 2011 | • Institution of "Compensation Committee" and formulation of "charter of Compensation Committee"<br>• 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"<br>• Revision of "corporate charter"<br>• Revision of "measures for selection of directors and supervisors," which was renamed as "measures for selection of directors"<br>• Grade A for evaluation of information disclosure of listed firms |
| 2012 | • Institution of three independent directors<br>• Institution of Audit Committee and formulation of "organizational charter for Audit Committee<br>• Pushing e-balloting for shareholders´ meeting |
| 2013 | • Revision of "guidelines for corporate governance"<br>• 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).<br>• Revising company internal control systems according to the Regulations Governing Establishment of Internal Control Systems by Public Companies.<br>• Formulating Ethical Corporate Management Best Practice Principles according to the Ethical Corporate Management Best Practice Principles for TWSE/GTSM-Listed Companies.<br>• 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. |
| 2014 | • A++ rating in the Information Disclosure Evaluation of Public and OTC Companies.<br>• Ranked among top 5% of enterprises in the TSEC's First Corporate Governance Evaluation. |
| 2015 | • Formulation of "Guidelines for Corporate Governance" according to the "Guidelines for Corporate Governance of Listed Firms".<br>• Formulation of "Corporate Social Responsibility Codes of Practice".<br>• Revision of company's "Code of Ethics for Directors and Managers".<br>• Formulation of "Board Performance Evaluation Measures" according to regulations in Article 37 of "Guidelines for Corporate Governance of Listed Firms".<br>• Formulation of "Job Description Table".<br>• Re-election of Board of Directors.<br>• Promoting establishment of Corporate Governance Platform.<br>• Ranked among top 5% of enterprises in TWSE's Second "Corporate Governance Evaluation" |

2016 Goal: Conduct 2015 Annual Board Performance Evaluation report

### • Avoiding Board Member Conflicts of Interest

To avoid conflict of interests, all new directors have to sign an agreement to abide by the regulation of Article 23 of the company charter, faithfully executing their duties and fulfilling 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 Act, Article 32 of the company's Guidelines for Corporate Governance, and Article 17 of the Meeting Rules of the Board of Directors. In 2015, board members raised nine motions on avoidance of conflicts of interest involving 35 directors.

### • Abiding by Guidelines for Ethical Behaviors

To assure strict abidance of behavioral norms 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, in accordance with the "Reference Samples 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, with the hope to establish a system for corporate governance and sound supervisory mechanism, 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 2015, all TECO directors met the CPE requirements, with a total education time of 102 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).

## • Purchase of Director and Supervisor Liability Insurance

In order for directors to exercise their rights and fulfill their obligations, as well as lower the individual liabilities and financial loss of directors from law suits filed by a third party for affairs related to their duties, 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 renewing the insurance policy.

## • Social participation

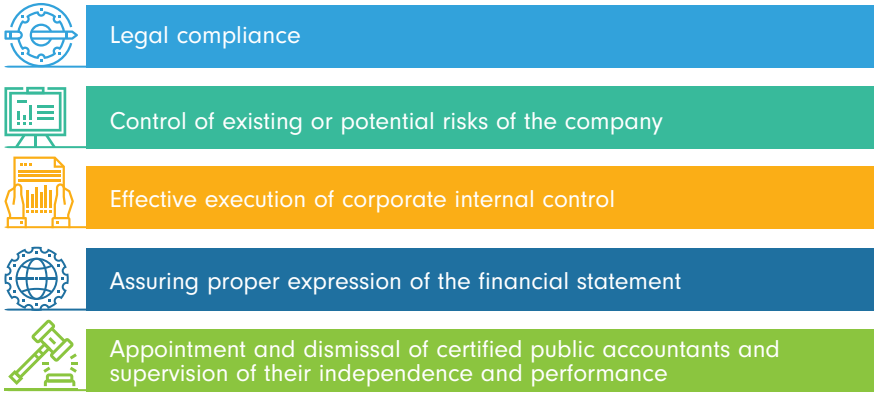
In adhering to the concept of "giving back what one takes from the society to the society," TECO set up the "TECO Technology Foundation" in 1993, for dedication to the causes of "contribution to sci-tech and humanities,"" education of creativity " " sustained education for aborigines," highlighting the 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 2015, 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."

## 4.1.5 Auditing Committee

## • Auditing Committee Work

TECO established the "Auditing Committee" in 2013 as a substitute for the system of supervisors. The committee consists of three independent directors, who elect one of them to serve as the convener and chairman of the committee's meetings. The current committee's convener is independent director Chen Tien-Chih. The committee is in charge of ensuring proper expression of the financial statements, appointment and dismissal of certified public accountants as well as their independence and performance, effective execution of corporate internal control, legal compliance, and management of existing or potential risks. In accordance with the "Organizational Charter for Auditing Committee," the key corporate affairs reviewed by the committees include financial statements, the company's policy and procedure for auditing and accounting, corporate internal control system, transactions and raising of major assets or derivatives, issuance of securities, appointment, dismissal or compensation of certified public accountants, and appointment and dismissal of financial, accounting, or internal auditing chiefs, etc. The Auditing Committee meets at least once per quarter. In 2015, the committee met eight times, with an average actual attendance rate (excluding proxy) of 97%.

### Responsibilities of the Auditing Committee




## • Communications Conducted by Independent Directors

TECO's independent directors can directly contact the internal auditing chief and certified public accountants, thereby conducting regular auditing of the company's finance and business before communicating directly with management and governance units. After completing auditing semi-annual or annual financial statements, certified public accountants would report the results to 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 independent reports on specific issues upon the requirement of independent directors. Internal auditing report is also presented at the quarterly meeting of the Auditing Committee to fully communicate the implementation status and effectiveness of auditing business.

## 4.1.6 Compensation Committee

In order to provide a sound compensation system for directors and managerial staffers, the company established the “Compensation Committee” in Aug. 2011. The committee members were appointed by the Board of Directors. There should be three committee members at least, including the minimum of one independent director, and the committee members elect one independent director to serve as the convener and chairperson of its meetings, and it is currently 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 for directors and managerial staffers. In accordance with "Organization Rules of the Compensation Committee", the committee should convene at least two meetings per year. The Compensation Committee held three meetings in 2015, with an actual average attendance rate of 100%.


### • Compensation Policy for Directors

In addition to reference to the pay levels of its industry peers, TECO offers compensations to directors according to their individual performance, company’s business performance, and future risks. In 2015, "Board Performance Evaluation Measures" was formulated. In addition, The Company also regularly evaluates comprehensive performance indicators, including both financial and non-financial indicators, such as director's awareness of their duties, level of participation in company's operations, management of internal relations and communications, director's professional and continuing education, internal control, corporate social responsibility, etc. The total compensation for directors is set at 1-5% of the remainder of finalized net earnings after taxation deduction, making up for loss, and 10% provision for legal retained earnings. The director's performance evaluation and actual payout are also in accordance with the “Measures for Allocation of Compensations for Directors.”

The comprehensive considerations for managerial staffer's compensation include multiple ESG indicators, such as departmental business performance, development of energy-conserving products, and talent cultivation, etc

### • Compensation Policy for Managerial Staffers

The compensation for managerial staffers consists of fixed and variable components, with the variable component being directly linked to the result of Key Performance Indicator (KPI). According to the focus of the company’s annual development plan, each department would formulate its own KPI every year, covering its performance goal, environment-related indicator, such as development of energy-conserving products and production line optimization, and talent cultivation, including global power development, cultivation of key talents, and passing of experience. The business unit's Key Performance Indicators are expanded from top down for all relevant divisions and departments to implement.

KPI's are reviewed quarterly, for full reflection of individual and team performance. The result is submitted to the Compensation Committee for review and to be 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 the linkage between compensations for directors and managerial staffers and the company’s business performance. The company regularly reviews the rationality of its internal compensations and the general pay levels in the market, to assure competitiveness of the company’s compensation, thereby achieving the goal of talent recruitment, motivation, and retention.

### Compensation bracket

| Bracket | Directors | Managerial Staffers |
|---|---|---|
| Under NT$ 2,000,000 | 4 | |
| NT$2,000,000 ~ Under NT$5,000,000 | | 1 |
| NT$5,000,000 ~ Under NT$10,000,000 | 9 | 6 |
| NT$10,000,000 ~ Under NT$15,000,000 | 3 | |
| NT$15,000,000 ~ Under NT$30,000,000 | | 1 |
| NT$30,000,000 ~ Under NT$50,000,000 | | |
| NT$50,000,000 ~ Under NT$100,000,000 | | |
| Over NT$100,000,000 | | |
| Number of Directors/Managerial Staffers | 16 | 8 |

Unit: NT$ K

| Year | Total compensation paid to the company's Directors, General Manager and Deputy General Manager | Percentage of net income after tax (%) the total compensation accounts for |
|---|---|---|
| 104 | 194,118 | 4.77% |
| 103 | 230,042 | 5.66% |

The company's compensation policy is determined based on the industry salary level in the market, the scope of the position's rights and responsibilities within the company as well as the specific position's contribution to the company's business objective achievement. The procedures for compensation formulation is based on the company's performance compensation implementation guidelines, and the guidelines are in reference to the company's overall operating performance as well as the consideration of future business risks; reference to the individual performance achievement and contribution to company's performance are also considered to determine a reasonable compensation. Year-end bonuses are paid according to a provision of fixed percentage of net operating income, and any changes to the payout percentage should be passed by the Board of Director's resolution.

## 4.2 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.

### • Internal Control Items

**Control Environment - Overall Level**

External environment

Economic growth rate, exchange rate, interest rate, political, price index

Corporate governance

Board of directors membership structure and professional degree, independent director system / audit committee, information transparency

Sustainable operations

Green products, green operations, green supply chain, social responsibility, legal risk

**Operational Risk Assessment - Business Division Level**

Sales

Operations, demand, surplus and other risks

Management

Strategic, manpower structure, supply, procurement, RD, productivity and other risks

Financial

Operating profit margin, return on assets, cash flow, inventory turnover days, days sales in accounts receivable and other risks

### Control Operations

**2015 audit results:**
Confirm the effectiveness of the company's internal control system design and operations.

**2015 assess results:**
Environmental indicators all controlled to low risk

**2015 audit result:**
All business divisions maintained low or very low risk, with the exception of the moderate risk wind turbine division

### Communication of Information

**2015 audit results:**
Information timely, accurate, complete, protected and verifiable; barrier-free internal and external communication

### Supervisory Operations

**2015 audit results:**
Supervisory operations duties were stratified and executed

## • Audit System Implement Process:


In 2015, 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.

## • Financial Risk Management

In addition, various functional units carry out risk management in different aspects according to their professional division of work, so as to cut the company's operating risk. In order to effectively control financial risk, the company has formulated procedural measures for related operations covering capital loaning, endorsement and guarantee, and acquisition and disposal of assets. Meanwhile, the company has also set up a mission-oriented Unsecured Loan Auditing Committee, to assure safety of the company's accounts receivables and notes payables, as well as the appropriateness for quota of unsecured loans. In addition, the company regularly evaluates status of market capital and banking interest rates, aside from embracing risk-hedging measures against fluctuation of exchange rate, so as to minimize the effects of interest rates and exchange rates on the company. Every quarter, the financial unit reports the status of 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

A legal office is established under the Board of Directors to be in charge of screening various contracts for the company and its affiliates and providing legal consultations, to safeguard the interests of the company and its affiliates, in addition to helping business units handle matters related to patents, trademarks, and other intellectual properties. The legal office regularly formulates company's internal regulations to serve as the basis for business operations. So far, the legal office has also formulated guidelines for handling legal cases, measures for patent management, and measures for trademark management, etc., as well as the "Management Measures for Safety and Maintenance of Personal Data", which are executed by a panel for protection and management of personal data. In addition, 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. During 2015, the legal office regularly posted electronic newsletters on the company intranet, so the employees are made aware of the latest development or revision of legal regulations and case studies to facilitate relevant units in real time responses. The legal office also conducted relevant legal education and training to ensure employees' compliance with laws and risk reduction. In 2015, the legal office has also continued to formulate various standard contract templates for all business units with the aim to control transaction risks in advance and minimize the probability of damages occurring to the company.

## • Risk Management Related to Environment, Safety and Health

Adhering to the concept of "pollution-free environment and accident-free work," TECO has dedicated to upholding the physical and mental health of employees, creating a friendly environment, fulfilling social responsibilities, and promoting sustainable development. In view of the involvement of professional knowledge, TECO has set up a dedicated unit for environment, safety, and health, and established the company's management system, and related measures and norms for environment, safety, and health, on the basis of ISO 14001, OHSAS 18001, and CNS 15506 (Taiwan's occupational safety and health 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 Measures for Emergencies," as well as conducting drills on the measures annually.

# 05 Green Supply Chain and Environmental Sustainability

"Under the "TECO GO ECO" vision, TECO is dedicated not only to ongoing development of green energy products and promotion of energy conservation and carbon emission reduction at the user-end, but also to reviewing its supply chain and product life cycle to also taking green economy and environmental sustainability into consideration while making all efforts in business development."

## 5.1 Green Supply Chain

TECO's devotion to greening its supply chain prompts the company to adopt a rigorous supply chain management approach. In addition to evaluating new suppliers, the company conducts a monthly delivery and quality assessment of its existing suppliers. To ensure that TECO's suppliers continue to pay attention to the issues related to environment, human rights, etc. the company incorporates environmental and human rights assessment indicators into its new vendor evaluations and re-evaluates suppliers every three years to confirm their suitability.

### Strategic Development for Supply Chain

1. Promote integration of TECO's global suppliers to improve procurement efficiency
2. Incorporate human rights and environment indicators into supplier management and create a green supply chain jointly with the suppliers
3. Strengthen localized procurement to reduce environmental footprint and promote the economic development of local communities

**2014**

- Formulated supplier evaluation measures and regular assessment approaches
- Incorporated social and environmental indicators

**2015**

- Comprehensive survey of suppliers on human rights and environmental issues (supplier's self-assessment)
- Added CSR Clause in the "Supplier Transaction Contract" and required the suppliers to sign for their consent

**2016 and Future Plans**

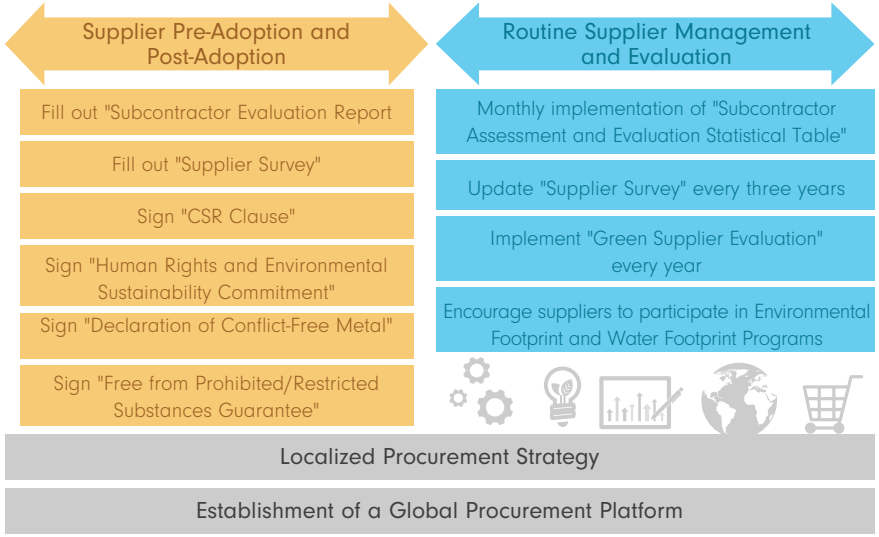
- Publicize "Human Rights and Environmental Sustainability Commitment" and require suppliers to sign for participation
- Implement environmental footprint and water footprint of motor products jointly with suppliers for mutual growth
- Strengthen localized procurement ratio
- Create TECO's global procurement platform

## 5.1.1 Supply Chain Management Framework (see Figure I)

TECO's supply chain management covers supplier pre-adoption and post-adoption implementation items as well as routine supplier performance evaluation and status tracking. Upon adoption, new suppliers are required to fill out a "Supplier Survey" for the company to obtain supplier's basic information; subsequently, relevant business units are asked to form an Evaluation Panel to conduct on-site inspection and visit following the items on "Subcontractor Evaluation Report". After suppliers pass the evaluation and become TECO's qualified suppliers, they are asked to sign "CSR Clause", "Human Rights and Environmental Sustainability Commitment", "Declaration of Conflict-Free Metal" and "Free from Prohibited/Restricted Substances Guarantee".

As part of routine operations, a monthly review on quality and delivery is conducted through "Subcontractor Assessment and Evaluation Statistical Table"; a "Green Supplier Evaluation Form" is implemented every year to examine the supplier's potentials; and a "Supplier Survey" is updated every three years to track supplier status. In addition, TECO applied for Environmental Footprint and Water Footprint Programs in March and May 2016. TECO also encourages its suppliers to participate in these programs to realize the spirit of mutual growth. Strategically, TECO follows two directions: The principle of localized procurement and the establishment of a global procurement platform (ONE TECO).

Figure I: supply chain management

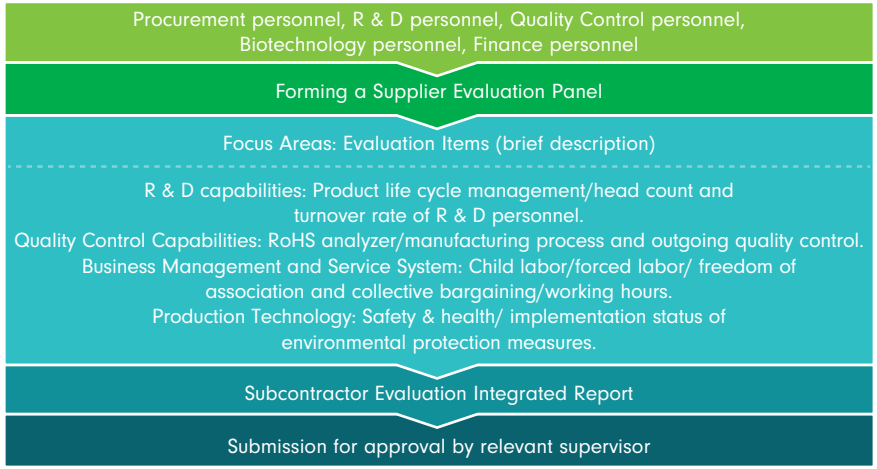



## Pre-Adoption New Supplier Evaluation Mechanism (See Figure II)

A "Supplier Survey" is formulated based on TECO's "Subcontractor Evaluation Procedure". Suppliers are required to fill out the survey for the company to have a preliminary understanding of their operations, organization, business scale, type of operation, products, clients and production as well as whether they are certified for quality (ISO9001、ISO/TS16949), environment (ISO14001) and occupational health and safety (OHSAS18000 and TOSHMS), etc.

Following the above procedure, a complete "Subcontractor Evaluation Report" is developed based on four focus areas in supplier adoption evaluation: R & D capabilities, quality control capabilities, business management and service system, and production technology. The evaluation sub-items include child labor, forced labor, safety and health, freedom of association, collective bargaining, working hours, implementation status of environmental protection measures, etc. The evaluation is implemented through the procurement department leading and gathering relevant personnel from R & D, Quality Control, Biotechnology and Finance departments to form an Evaluation Panel and conduct on-site inspection and visit to evaluate the supplier's performance in these four focus areas. In summary, the suppliers' capabilities and potentials to become part of TECO's green supply chain are already reviewed as early as the supplier adoption phase, with a"Subcontractor Evaluation Integrated Report" compiled and submitted to the competent supervisor of relevant department for approval.

Figure II: New Supplier Evaluation Mechanism



## Pre-Adoption Signing of "CSR Clause

To ensure suppliers' implementation of corporate social responsibility, TECO publicized the addition of CSR Clause in Article 41 of "Supplier Transaction (raw materials) Contract" on September 1, 2015, and the clause content stating: Party B (Supplier) must faithfully conduct business transactions, takes its share of corporate social responsibility, should not damage Party A's (TECO) interests or image; Party B also promises not to engage in private transfer of benefits to Party A's employees or their family or relatives, or providing loans, leases or investments, etc. which are not required as part of business transactions. In the event of violation, if the circumstances are deemed to be material by Party A, Party A may cancel or terminate the contract.

TECO has started to send the updated version of contracts with CSR Clause to its suppliers since October 2015, and requested the suppliers to sign. The suppliers who have signed the CSR Clause are given priority for procurement orders.

## Pre-Adoption Signing of "Human Rights and Environmental Sustainability Commitment"

To practice CSR in a even more focused manner, in the aspects of human rights and environment, TECO invited the suppliers to contribute joint efforts to safeguarding human integrity and basic human rights by formulating the following three corporate objectives: (1) Fulfill corporate social responsibility and highlight excellent corporate image; (2) Ecological balance of economy, society and environment; (3) Environmental sustainable development. In view of the foregoing, TECO's Legal Office also formulated "Human Rights and Environmental Sustainability Commitment" and had it publicized in January 2016. TECO also started sending out the commitment letters in the same month and requested its suppliers to sign for their consent.

## Pre-Adoption Signing of "Declaration of Conflict-Free Metal"

To tackle the issues related to conflict metal management, TECO formulated the "Declaration of Conflict-Free Metal"and required its suppliers' commitment to thoroughly inspecting their supply chain of gold (Au), tantalum (Ta), tungsten (W), cobalt (Co), and tin (Sn) to ensure these types of metals were not obtained through anarchy legions, illegal groups, mining areas within the conflict regions in the Democratic Republic of the Congo or illegal smuggling channels; in addition, metals exported from the following countries were deemed to be not "Conflict-Free"compliant by the United Nations Security Council: the Democratic Republic of Congo (DRC), Rwanda, Uganda, Burundi, Tanzania and Kenya. TECO's suppliers of metal raw materials, such as copper and aluminum, etc. are required to purchase their materials from London Metal Exchange (LME); as for steel materials, they are mainly purchased from China Steel Corporation (CSC) and Nippon Steel & Sumi-tomo Metal Corporation, and their sources of iron ore are from Australia and Brazil.

## Pre-Adoption Signing of "Free from Prohibited/Restricted Substances Guarantee"

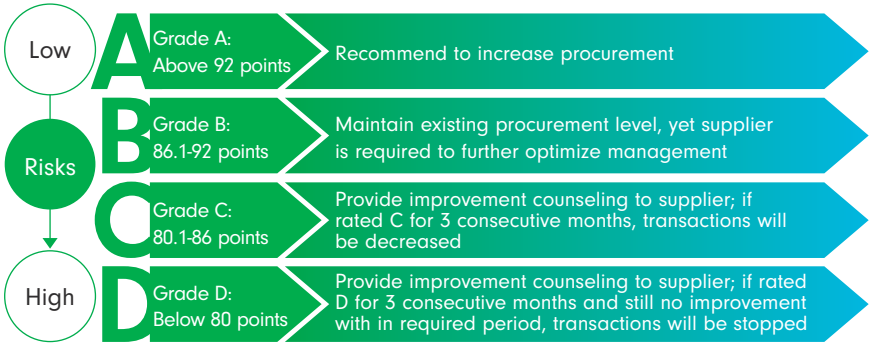
TECO formulated the "Free from Prohibited/Restricted Substances Guarantee" ("Guarantee") within its "Prohibited/Restricted Substances Procurement Control Measures", which requires TECO's suppliers to guarantee that the production, packing, storage and transportation of their goods, at the time when the goods are deliveries, are in compliance with the domestic laws and regulations, the hazardous substance control standard in TECO's regulations, the EU REACH (Registration, Evaluation, Authorisation, and Restriction of Chemical) Act, and the International Environmental Code, etc. In addition, the "Guarantee" specifies that, in the event of violation of above-mentioned substance control laws and regulations/specifications/standards by the suppliers, the suppliers are required to provide a Controlled Substance Testing Report notarized by a third-party notary to TECO, within 20 days after receiving the notification from TECO. The suppliers are also responsible for all expenses arising from this event (such as, materials, domestic and overseas travel and hourly wages for product exchange, and emergency air freight, etc.)

## Routine Supplier Management and Evaluation

### Monthly Quality and Delivery Review and Risk Assessment

Each supplier's delivery and quality review is conducted monthly in accordance with TECO's "Subcontractor Assessment and Reward Implementation Procedure", so not only each supplier's performance in quality and delivery are reviewed, but also the evaluation results are rated in four grades: A, B, C, and D. This can also be used as reference indicator for risk assessment. For suppliers, which are rated below C for three consecutive months, transactions with them shall be decreased and the suppliers should take improvement counseling from the company; transactions with the suppliers, which are rated D for three consecutive months and are unable to make improvements within the required period, will be stopped (see Figure III). In addition, for cases of abnormal quality, the suppliers are required to provide analysis reports and improvement strategy.

Figure III: Quality and Delivery Review Rating and Countermeasures



## Routine Supplier Management and Evaluation

### Regular Supplier Status Review

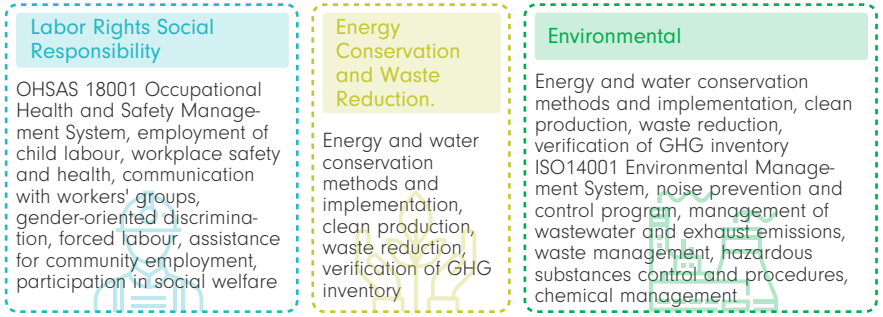
To fully understand and monitor suppliers' operating conditions, a "Supplier Survey" is formulated according to TECO's "Subcontractor Evaluation Procedure". The suppliers are required to fill out the survey to provide the company a preliminary understanding of their operations, organization, business scale, type of operation, products, clients and production as well as whether they are certified for quality (ISO9001, ISO/TS16949), environment (ISO14001) and occupational safety and health (OHSAS18000 and TOSHMS), etc.; and the suppliers are required to update the survey completed earlier in the adoption phase in order for the company to track the latest status of the above-mentioned items.

## Routine Supplier Management and Evaluation

### Green Supply Chain Assessment Ranking Mechanism

In line with the global trend towards promotion of corporate social responsibility (CSR), even though the spirit of CSR has already been incorporated into TECO's existing supplier evaluation system and management contents, a CSR-focused ranking system is not yet available; in view of this, to further prompt the suppliers to pay more attention to CSR-oriented management concept for enhancement of green performance of overall supply chain, TECO publicized a new formulation of "Green Supplier Evaluation" in "Subcontractor Evaluation Procedure" on October 21, 2011, with evaluation items (see Figure IV) designed surrounding three areas of focus: "Labor Rights Social Responsibility", "Environmental" and "Energy Conservation and Waste Reduction.

Figure IV: Three Focus Areas of "Green Supplier Evaluation"




Starting from 2014, TECO ranked its Taiwanese suppliers with domestic production (excluding agents and foreign manufacturers), and a total of 332 supplier assessments were completed. Based on the evaluation scores, the suppliers were classified as "Qualified", "Needing attention", and "Unqualified", and for the suppliers assessed the percentages of different rankings were 92.8%, 7.2% and 0%, respectively. In addition, the suppliers found to have employed child labor or be not compliant with Wastewater / Gas Emissions Regulation on the "Green Supplier Evaluation" are disqualified for procurement transactions; whereas the suppliers which are certified with ISO14001 or OHSAS 18001 are given priority for further business cooperation.

## Routine Supplier Management and Evaluation

### Mutual Growth with Suppliers - Environmental Footprint and Water Footprint Programs

The heightened wave of carbon reduction is ushering in a new green revolution around the globe, and the related issues are bound to create new rules for the industrial chain in the future. The products without carbon eco-label or eco-mark will have a difficult time in the market; while countries around the globe, including Japan, UK, USA, Canada, Thailand, Australia, etc., were promoting implementation of carbon eco-label programs, Taiwan's Environmental Protection Administration (EPA) also stringed along and publicized to be the world's 11th country implementing product carbon eco-labeling system. Recognizing the future trends, TECO applied with the Industrial Development Bureau for the Environmental Footprint and Water Footprint Counseling Programs in March and May 2016. TECO also encourages its major suppliers to participate in the program.

▶ Note 1: carbon Footprint: The amount of GHG emission of products or services, throughout their life cycles, from raw materials, production, transportation, consumption to waste.
Note 2: The calculation standards for the carbon footprint of products (i.e. ISO 14067) formulated by the International Organization for Standardization (ISO) was completed in 2011, and the content structure was mainly based on the reference from PAS2050.

## Supplier Management Strategy - Localized Procurement

### Localized Procurement

Localized procurement plays a major role in TECO's procurement strategy to achieve the establishment of close partnership relationships with local suppliers and the promotion of local economic development, as well as reducing the environmental footprint arising from procurement process. Except for purchasing sliding bearings from suppliers with advantages of technologies and certain specialty raw materials of which the main production bases remain overseas, TECO tries to comply with the principle of localized procurement. Localized procurement accounts for up to 90% TECO's current purchase amount; continued efforts will be placed on increasing the ratio in the future.

## Supplier Management Strategy

### Establishment of a Global Procurement Platform

TECO embarks on its ONE TECO plan by establishing a procurement platform with Global Supplier Chain functions. Through this platform, TECO can integrate its domestic and overseas plant information to achieve consistency, circulation and information sharing. The integration of TECO's global suppliers also enables the reviewing and monitoring of each raw material's global sources as well as cost comparison for further enhancement of TECO's procurement performance. The priority objective of 2016 was to implement the purchase of castings and welding parts through the procurement platform.

## 5.2 Environmental Sustainability

TECO highly regards the issues of climate change and environmental protection; therefore, to cope with the intensifying impacts of climate change on the world, TECO not only adapts its core technologies to reduce energy consumption at user-end by actively researching and developing high efficiency products and green products, but also proactively reviews product life cycles and adopts the "zero environmental pollution" policy to direct its corporate environmental protection measures. Without compromising either product performance or ease of use for customers, TECO is committed to reducing the environmental impacts in the aspects of product development, material input, production, warehousing and transportation, etc. throughout product life cycles. Simultaneously, in 2016, TECO also tackled energy management for the whole plant's production. With IoT technology, the entire plant is monitored and analyzed to enhance plant energy management accuracy and to achieve economic performance, thus the vision and goals of environment protection and sustainable development are accomplished coherently.

### Environmental Strategy and Vision

1. In response to climate change related issues and actively formulate countermeasures.
2. Propose achievable objectives in regards to three major action items "energy-conservation, water consumption reduction, pollutant reduction"
3. Review product life cycles and consider lessening environmental impact as one of the major focuses for each phase of product life cycle activities.

### 2015

The overall energy efficiency in 2015 was over 1.2%.
- Volatile organic compounds (VOCs) in motor manufacturing process reduced by 34.1%.
- Incorporated the affiliates - TESEN Electric Co., Ltd. (TESEN), Taian Technology (Wuxi), and TECO-Westinghouse (TWMC) - as the targets for environmental inventory verification.

### 2016

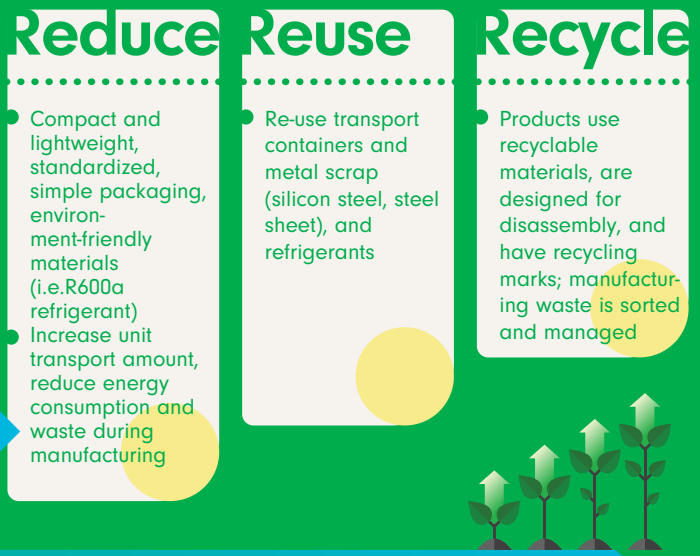
- Assessed and implemented green energy purchase.
- Reviewed Environmental footprint and water footprint of products to facilitate discovery of product life cycle environmental footprint for planning of subsequent improvement countermeasures.
- Optimized energy management system of Chungli plant and reviewed overall energy consumption, and formulated specific improvement objectives for high energy-consuming projects/facilities.

### Future Plans

- Energy-Conservation: Chungli and Guanyin plants, TECO's two major manufacturing facilities, to reduce an average of 1% annually during 2015-2019.
- Water Consumption: Implement water footprint inventory of products to facilitate discovery of water footprint hotspots in product life cycle and formulate improvement countermeasures.
- Pollutants: Reduce volatile organic compounds (VOCs) in motor manufacturing process by 20% annually, with goal to reduce a total of80% during 2015 - 2018.
- Risks and opportunities arising form climate change: Continue to conduct risk and opportunity analysis, assess and propose countermeasures.

### 5.2.1Green 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 by485 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.



Description of the impact of each stage of product life cycle on climate change and the environment, and the objectives formulation and practices to reduce the impacts in some of the stage are described as follows:


**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 andweight:

Copper use:

| Model | Average Reduction Per Unit (Tons) | Reduction in 2015 (Tons) | Reduction in 2014 (Tons) | Reduction in 2013 (Tons) |
|---|---|---|---|---|
| Steel case | 0.223 | 10 | 13 | 16 |
| Cast iron case | 0.044 | 3.1 | 2.1 | 2.0 |

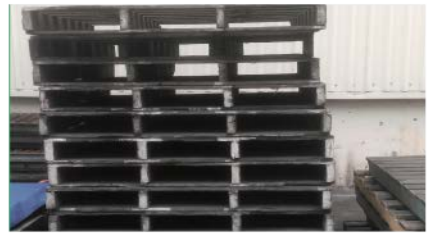
Steel use:

| Model | Average Reduction Per Unit (Tons) | Reduction in 2015 (Tons) | Reduction in 2014 (Tons) | Reduction in 2013 (Tons) |
|---|---|---|---|---|
| Steel case | 1.059 | 48 | 61 | 75 |
| Cast iron case | 0.389 | 27 | 19 | 17 |

**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 TESEN, are not located near ecological reserves or biodiverse habitats. These operations have a small impact on the environment and no impact on protected species. TESEN 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 TESEN. 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 TESEN 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

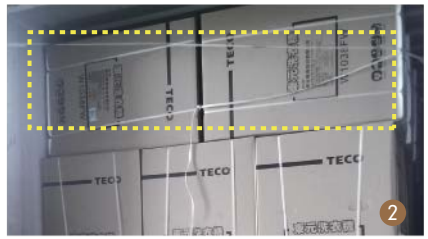
Unit: Ton

| Year / Item | 2015 | 2014 | 2013 |
|---|---|---|---|
| Silicon steel scrap | 14,215.70 | 13,134.11 | 12,240.34 |
| Plant recycling volume | 13,082.05 | 12,735.66 | 11,475.78 |
| Recycling ratio | 92.03% | 96.97% | 93.75% |

Note: • Only Chungli factory was included in the original data, and since 2015, the data of Hukou factory and Taian Technology (Wuxi) was also included.
• In the recent years, there has been less demand for melting and casting of silicon steel within the factory, so the wastes were sold to external parties instead; however, the scraps were almost entirely reused.

**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.



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

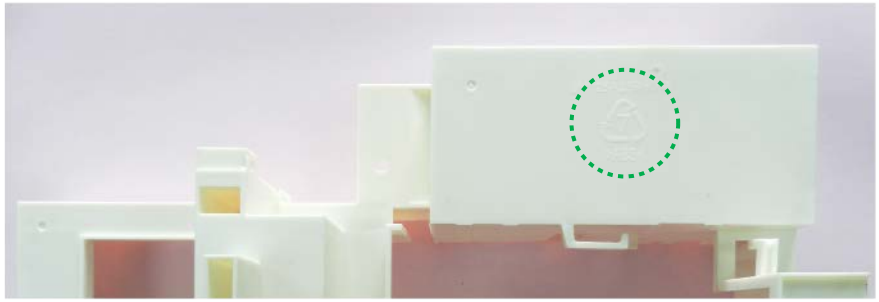
**5. Impacts of product usage stage on the environment:** Mainly energy/resources consumption.

TECO is dedicated to the development, production, and sales of energy-saving products in order to lessen the impacts of power and water consumption on the environment: for example, the current domestic standard for motors is IE1+, yet TECO already has a full series of IE2~IE4 energy-saving motors available. The global sales of TECO's energy-efficient motors can help clients save 485 million kilowatts/hour of power consumption and cut $CO_2$ emission by 253,000 metric tons a year. TECO's variable-frequency drives also enable industrial motors to reduce power consumption by over 35%. Home appliances with Class 1 energy-efficient performance with certifications of environmental protection, energy conservation, and water conservation are also available. Thanks to TECO's core energy-saving technology, the company has considerably boosted the energy-consumption efficiency for the use of its products, thereby lessening the impacts on the environment.

### 6. Impacts of scrapping and recycling stage on the environment:

Mainly environmental pollution.

TECO takes the "resource recycling and reuse perspective" into its product design, so products are designed for easy-dismantling and easy-recycling; recyclable and reusable materials are also used as much as possible and recycle labels are attached to plastics for easy treatment identification. An average of over 90% of TECO's product materials can be recycled or reused, so the impacts of waste on the environment are significantly reduced.



Note: All plastic items have recycling marks

### Impact Assessment of Product Life Cycle on Climate Change and Environment

For further understanding of impacts of product life cycle on climate change and the environment, TECO will perform environmental footprint and water footprint of products to understand its product manufacturing process and even identify usage hotspots as well as the opportunities to lessen relevant impacts. In addition, TECO has performed the risk and opportunity analysis related to climate change, and initially assessed and proposed the countermeasures by disclosing the results in the CDP survey (https://www.cdp.net/en-US/Pages/HomePage.aspx) with the aim for sustainable development as well as fulfilling the obligations and responsibilities of a global corporate citizen.

## 5.2.2 Environmental Safety and Health Management System

### Policy and Organization

TECO has set up an Environmental Safety and Health Panel under the General Manager's office, as well as factory-level environmental safety and health units overseen directly by Directors of business departments, responsible for formulation of environmental safety and health policy, program management, and internal inspection. The company embraces an environment safety and health policy featuring:

**1 Compliance with international norms**

Compliance with international norms, in line with global environment protection trends, so as to meet the demand and expectation of stakeholders

**2 Sound environmental safety and health management system**

Sound environmental safety and health management system, so as to protect the environment and prevent damages

**3 Strengthen risk assessment**

Strengthen risk assessment and education /training and implement intensified inspection of environmental safety and health, so as to uphold a safe, healthy and clean working environment and augment performance in workplace safety and environmental protection

**4 Dedication to energy conservation**

Dedication to energy conservation, better utilization of resources, and pollution abatement, so as to lower impacts on the environment and augment ecological benefits

**5 Development of green technologies**

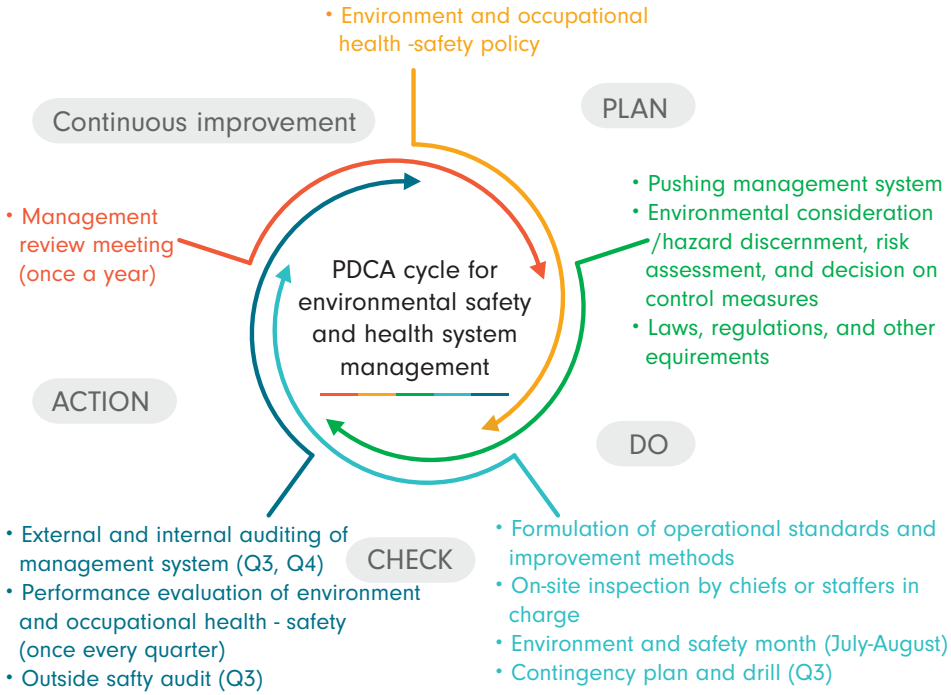
Development of green technologies and promotion of green products, so as to attain economic and environmental goals simultaneously

**6 Fulfillment of corporate-citizen responsibilities**

Fulfillment of corporate-citizen responsibilities by encouraging staffers and contractors to take part in environmental protection, safety, and health events through enhanced communication and coordination

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

- ISO 14001 Environmental Management System
- OHSAS 18001 Occupational Health and Safety Management System
- CNS 15506 Taiwan Occupationalm Safety and Health Management System
- ISO 14064-1 Greenhouse Gases emissions




Prize Q&A activity during Environmental Safety Month


ISO 14001 Environmental safety management system certificate


On the basis of ISO 14001, OHSAS 18001, and CNS 15506 (Taiwan Occupational Safety and Health Management System), TECO has established and implemented an environmental safety and health 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 ISO 14064-1 review and verification of greenhouse gas emission inventory since 2013, to assure accuracy of statistics, which are then used as the basis for promoting energy conservation and carbon abatement. Via complete management system and PDCA (plan-do-check-action) management cycle, the company has aimed to achieve environmental protection and reduce impacts on environment, at an extent better than the regulatory level.

TECO holds the environment and safety month events every July, by posting banners and posters at workplaces and conducting training program and Q&A sessions with awards, so as to augment the knowledge and awareness of environmental protection and safety among employees. External experts are also invited for on-site auditing at the same time to really enhance the actual environment and safety implementation performance.

## 5.2.3 Environment-Related Achievements and Performance

### Energy Consumption and Management

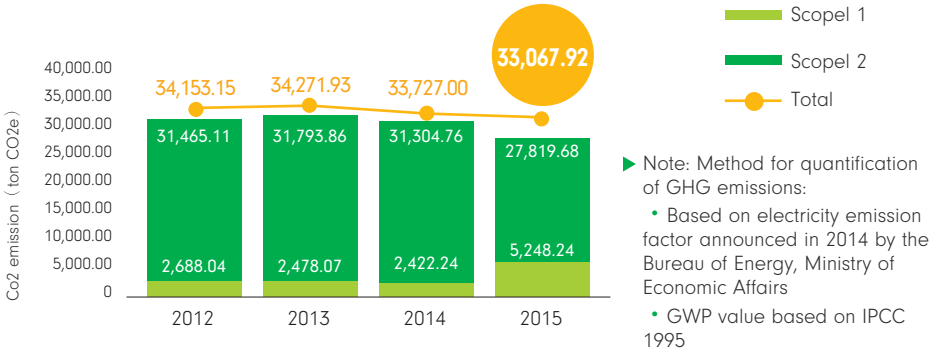
#### 1 GHG inventory

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 TESEN. 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 1,085.23 mt from 34,153.15 mt. The improvement was achieved mainly by reducing the filling amount of high pressure sulfur hexafluoride ($SF_6$) 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.

Table: GHG Emissions in 2015 by Category

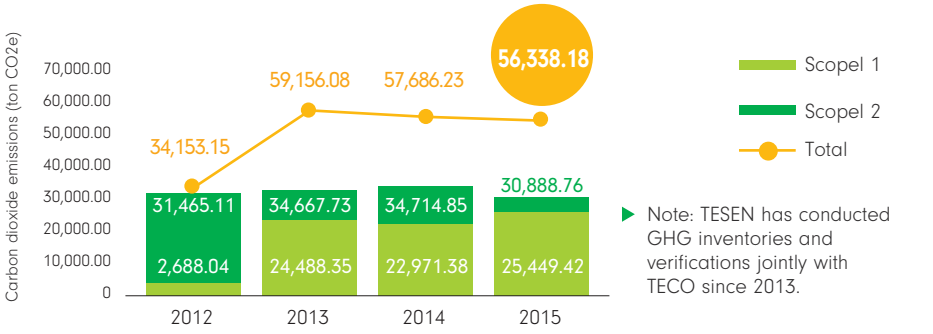
| GHG Emission Type | Direct Emissions (Scope 1) | | | | | | | Indirect Emissions (Scope 2) | Total |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Energy indirect emissions | |
| | $CO_2$ | $CH_4$ | $N_2O$ | $HFCs$ | $PFCs$ | $SF_6$ | $NF_3$ | Electricity | |
| GHG amount (CO2e MT/year) | 1,977.83 | 212.19 | 5.89 | 26.58 | 0.00 | 3,025.74 | 0.00 | 27,819.68 | 33,067.92 |
| Ratio of total emissions (%) | 5.98% | 0.64% | 0.02% | 0.08% | 0.00% | 9.15% | 0.00% | 84.13% | 100.00% |
| | 15.87% | | | | | | | | |




Note: Method for quantification of GHG emissions:

- Based on electricity emission factor announced in 2014 by the Bureau of Energy, Ministry of Economic Affairs
- GWP value based on IPCC 1995

Chart: GHG Emissions by TECO in 2012-2015




Note: TESEN has conducted GHG inventories and verifications jointly with TECO since 2013.

Chart: GHG Emissions by TECO and TESEN in 2012-2015

**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 2015 GHG investigation


Opinion Statement on TESEN's 2015 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.

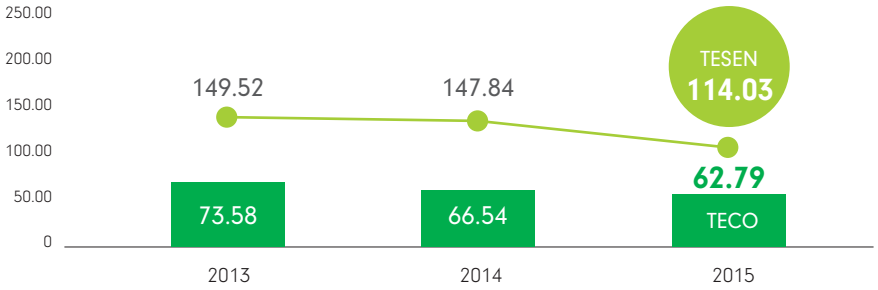
TECO is devoted to the implementation of energy conservation and emission reduction practices specifically in the manufacturing process, through energy-saving measures and investment of high-efficiency equipment, and both Chungli and Guanyin plants aim to achieve goals of an annual reduction of 1% during 2015 - 2019, as well as targeting the power consumption to reach 95% of 2014 consumption level after 5 years. The energy saving effect of over 1.2% was achieved in 2015 through the input of high-efficiency lighting, high-efficiency motors and manufacturing equipment.

In 2016, TECO's major manufacturing facility, Chungli plant, was the first plant ever to implement the intelligent energy management system. Through the use of intelligent technologies, an inventory verification and analysis of the plant's overall energy consumption were performed; further monitoring and control management was also implemented in the key energy-consuming equipment to maximize energy conservation under the premise that the plant operations were not affected.

Continuing the aforementioned energy-saving measures, in the future, TECO will implement green energy purchase with a target over million kWh, and aims to increase year by year to reduce the impacts on climate change and environment.

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


- **Liquefi roleum gas (LPG):** TECO's total LPG usage from 2013 to 2015 is shown in the figure below. LPG was used mainly for plant cafeteria operations and on-site manufacturing.




▲ Chart: LPG consumption by TECO and Dongsheng in 2013-2015 Unit: KL

- **Electricity:** TECO's total electricity usage in from 2012 to 2015 is shown in the figure below. Indirect emissions from electricity in 2015 accounted for 84.13% of total GHG emissions for the year, with Scope 1 direct emissions accounting for the remaining 15.87%.

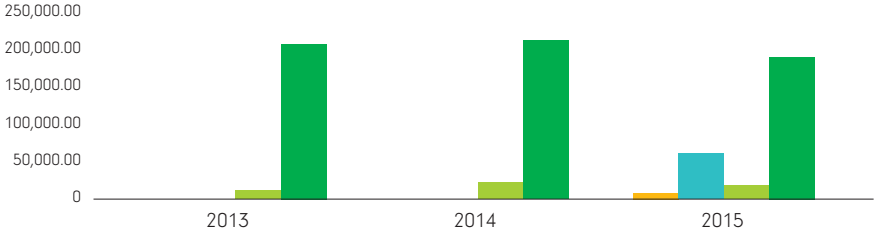
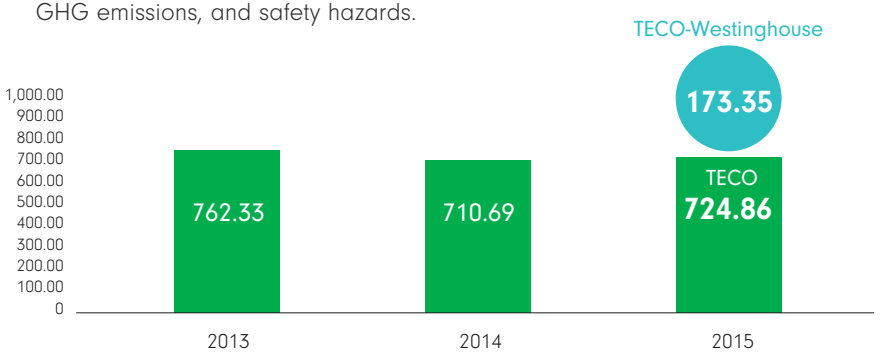



Chart: 2012~2015 TECO and Affiliated Companies Unit: Million joulen

| | 2013 | 2014 | 2015 |
|---|---|---|---|
| Taian Technology (Wuxi) | 0.00 | 0.00 | 14,234,907.00 |
| TECO-Westinghouse | 0.00 | 0.00 | 68,188,860.00 |
| TESEN | 19,447,229.16 | 23,517,864.00 | 21,206,714.00 |
| TECO | 215,145,000.000 | 215,894,880.00 | 192,267,018.00 |

▶ Note: • Including TECO-Westinghouse and Taian Technologyn (Wuxi) electric usage from 2015.
• 1 kWh=1 kWt-hour=3.6*10$_6$ joule
• Website: http://content.edu.tw/vocation/control/tp_nh/ee/tp_nh/1/3.htm

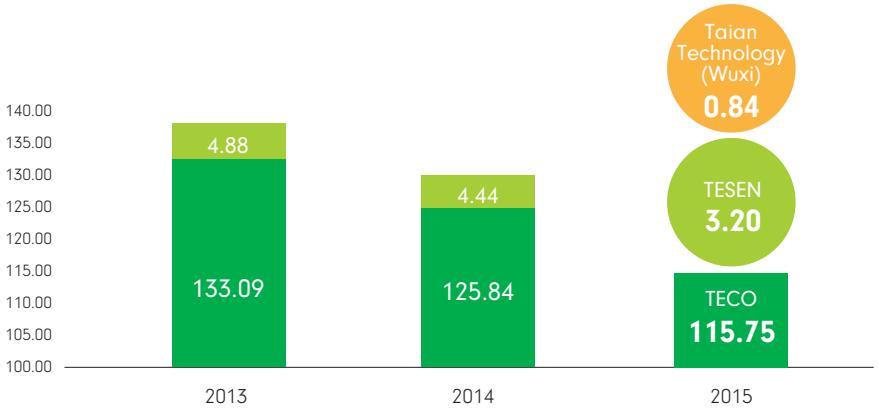
- **Liquefied natural gas (LNG):** In 2008, TECO's Zhongli plant replaced LPG with LNG, mainly for aluminum melting furnace and paint baking, to reduce cost, GHG emissions, and safety hazards.




▲ Chart: LNG consumption by TECO in 2013-2015 Unit: kW

▶ Note: TESEN does not use LNG

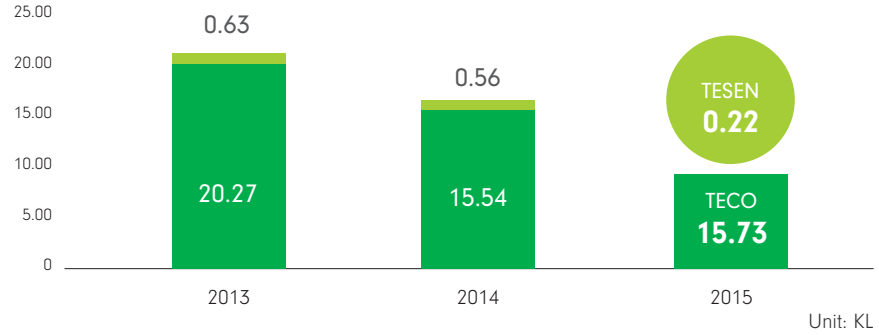
- **Diesel fuel:** TECO's total usage of diesel fuel from 2013 to 2015 is shown in the figure below. The main usages were for diesel forklifts, dormitory hot water boilers and power generators at Chungli, Guanyin 1 and 2, and Hukou plants.




▲ Chart: Diesel consumption by TECO and Affiliated Companies in 2013-2015 Unit: KL

▶ Note: Stating in 2015, statistical data of Taian Technology (Wuxi) was included

- **Gasoline:** TECO's total usage of gasoline from 2013 to 2015 is shown in the figure below. The main usages were for company commercial vehicles (excluding private cars used for company business) at the company's Chungli, Guanyin 1 and 2, and Hukou plants.




▲ Chart: Gasoline consumption by TECO and affiliated companies in 2013-2015

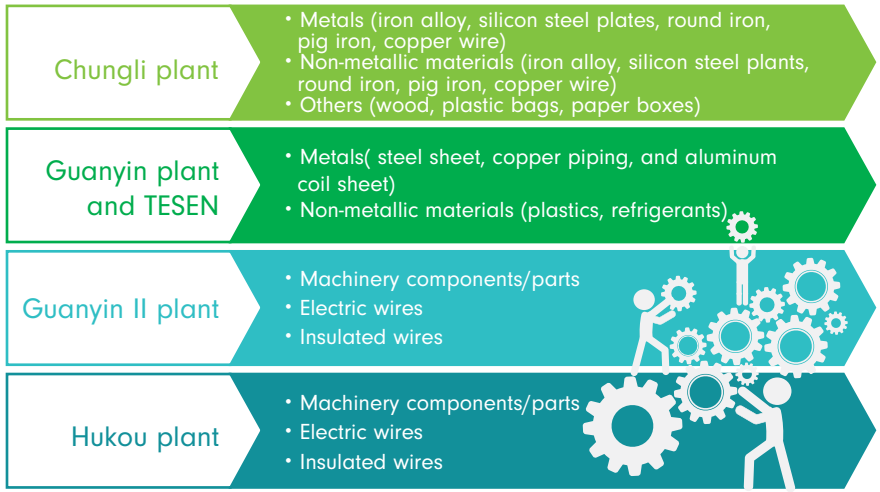
## Resource Consumption and Management

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

- **Hukou plant,** under the jurisdiction of electrical control department, mainly produces switchboards and variable-frequency drives, and its main materials include machinery components/parts, electric wires, and insulated wires.

- **Guanyin plant,** is the base of TECO's Consumer Appliance department, whereas TESEN Co., Ltd. produces and provides home and commercial A/C, refrigerators and other products to the Consumer Appliance department for sales. Guanyin plant is also in charge of human resources for product development and other activities. Raw materials can be divided into two categories: metals, including steel sheet, copper pipes, and aluminum coil sheet, and non-metallic materials, including plastics, refrigerants (with 0 ozone depletion potential [ODP]), etc.

- **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 insulted wires.



A worth mentioning achievement in TECO's resource usage is recycling silicon-steel scraps from manufacturing process as materials for producing motor cases, as a result of the manufacturing process improvement at Chungli plant in 2008; the recycling rate of silicon-steel plates topped 89% during 2013-2015.

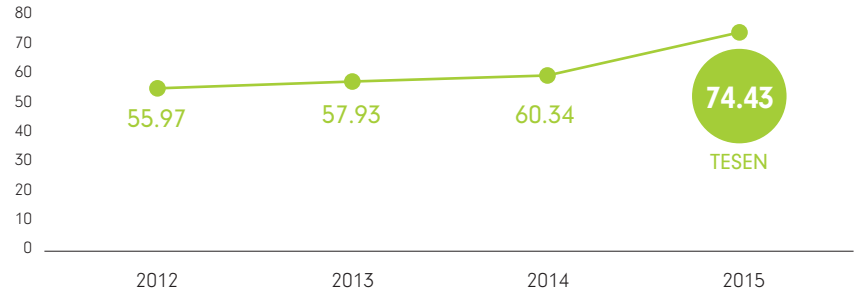
As a gesture to express TECO's emphasis on ecological benefits, the company will continue its endeavor to raise the reusable rate of other materials. Meanwhile, TECO does not use ODP (ozone depletion potential) materials in its manufacturing activities.

## Water Resources Management

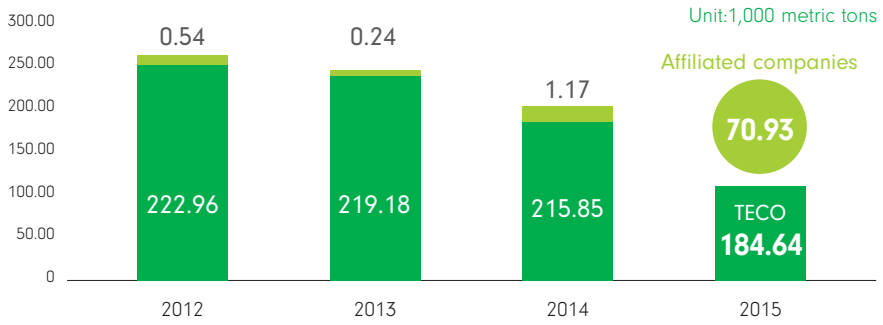
TECO uses tap water throughout its operations, with the exception of TESEN, which relies on groundwater. Even though TESEN is not located in an industrial area, a sewage treatment facility was established and it is regularly tested to ensure the wastewater complies with regulatory standards.

Use of tap water by TECO (including head office and all plants) and TESEN decreased by 38.86 MT in 2015, compared with 2012.

TECO will continue to take water-saving measures, including installation of water-saving devices, water-saving toilets, etc. The company's water use intensity (1,000 mt / NT$1 million output value) in 2015 is shown in the following table:

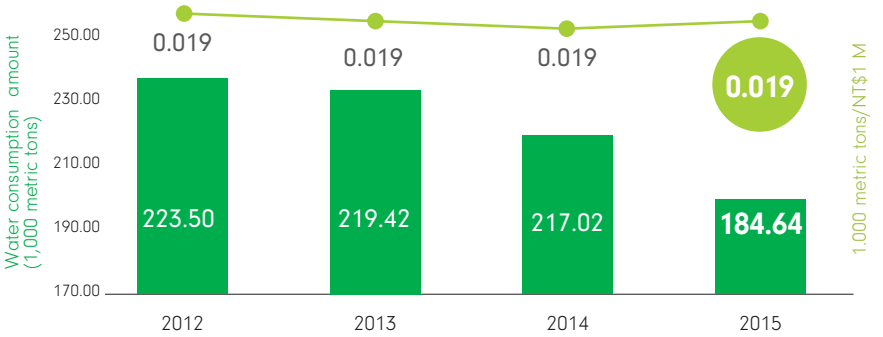



▲ Chart: Groundwater consumption at TESEN, 2012-2015 Unit:1,000 metric tons




▲ Figure :Teco and Affiliated companies tap water usage in 2012-2015

▶ Note: Affiliates include TESEN Electric Co., Ltd., TECO-Westinghouse (TWMC), and Taian Technology (Wuxi)




▲ Figure: Water Use Intensity of TECO and TESEN, 2012-2015

▶ Note: Starting in 2014, the calculated amount included water consumption by TECO head office and TESEN

To calculate wastewater volume, TECO estimates its wastewater discharge amount by 80% of its water consumption. TESEN wastewater discharge amount is based on wastewater from its manufacturing activities. The wastewater discharge amounts during 2012 - 2015 are shown in the following table. All of TECO's plants have had water quality tests performed by qualified third-party testing vendors. After confirming their compliance with standards, the plants discharge wastewater to the wastewater treatment plant in the industrial zone. After the wastewater is treated at the wastewater treatment plant, the quality of water discharge is confirmed to be in line with regulations.

Wastewater from TESEN is treated at inspected sewage facilities to ensure that the quality of discharged water conforms to regulations. Chungli plant, TECO's only facility with painting operations, recycles water. However, the recycling ratio is quite low, so the utilization ratio of reclaimed wastewater is just slightly over 0%. Additionally, TECO's three plants and TESEN are not located anywhere near environmental protection zones, habitats or high biodiversity area, therefore they impose little impacts on the environment and ecology.

Table: Waste-water amounts at various factory premises, 2012-2015

| Year | TECO | | | | | Subsidiary | TECO Total | TECO and TESEN Total |
|---|---|---|---|---|---|---|---|---|
| | TECO Headquarter | Chungli factory | Chungli factory II | Guanyin factory II | Hukou factory | TESEN | | |
| 2012 | 28.74 | 28.74 | 129.76 | 4.86 | 0.95 | 12.98 | 193.05 | 206.03 |
| 2013 | 28.38 | 28.38 | 131.16 | 1.64 | 0.77 | 9.75 | 190.33 | 200.08 |
| 2014 | 27.80 | 37.36 | 127.37 | 4.12 | 0.67 | 8.33 | 197.32 | 205.65 |
| 2015 | 27.34 | 104.22 | 1.74 | 0.44 | 13.96 | 9.29 | 147.70 | 156.99 |

Unit:1,000 metric tons

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 | TESEN | Waste-water discharge after treating at inspected sewage facilities to ensure the quality of discharged water quality conforms with regulations | Dajue Stream |

## Waste and Pollution Treatment

### 1 Waste management

For implementation of waste reduction, TECO and its affiliates have formulated management measures for waste storage and disposal under its environmental safety and health management system. Unified waste storage areas were established in the factory premises, and the tracking and recording of waste disposal and treatment procedures were implemented; the records are kept for three years. Total amount of general industrial wastes produced by TECO and its affiliates during 2012-2015 is shown in the following table, which shows that the 2015 amount is 204.97 tons less than 2012. All plants will continue to endeavor to reduce waste.

Table: Waste and resources recycling (sale) 2012-2015

Unit: metric tons

| Year / Item | | Company | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| General business wastes | | TECO | 4,152.28 | 4,613.99 | 4,161.94 | 3,938.41 |
| | | TESEN | 92.95 | 70.64 | 108.99 | 101.85 |
| Total | | | 4,245.23 | 4,684.63 | 4,270.93 | 4,040.26 |
| Hazardous business (waste electric wire) | | TECO | 11.53 | 13.41 | 17.08 | 12.51 |
| | | TESEN | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | | | 11.53 | 13.41 | 17.08 | 12.51 |
| Recycling of resources (resell) | Scrap iron | TECO | 2,337.20 | 2,142.70 | 1,677.16 | 1,636.85 |
| | | TESEN | 28.55 | 36.02 | 152.36 | 116.86 |
| | | Taian Technology (Wuxi) | — | — | — | 8.59 |
| | Total | | 2,365.75 | 2,178.72 | 1,829.52 | 1,762.30 |
| | Scrap copper | TECO | 60.64 | 81.64 | 63.17 | 69.83 |
| | | TESEN | 0.31 | 0.47 | 3.287 | 28.27 |
| | | TECO-Westinghouse | — | — | — | 25.01 |
| | | Taian Technology (Wuxi) | — | — | — | 0.46 |
| | Total | | 60.95 | 82.11 | 66.46 | 123.57 |
| | Scrap paper | TECO | 49.53 | 58.06 | 61.89 | 40.71 |
| | | TESEN | 17.67 | 21.29 | 7.08 | 47.14 |
| | | TECO-Westinghouse | — | — | — | 28.31 |
| Total | | | 67.20 | 79.35 | 68.97 | 116.16 |

TECO's and TESEN's major waste disposal methods include reuse, incineration, physical waste treatment, offshore processing, and landfill. The major waste streams handled by offshore processing mainly include waste wires and waste cables shipped to Mainland China for processing. TESEN relies mainly on reuse, incineration, physical waste treatment and landfill, as shown in the following figure and table.

Chasrt: Waste Treatment at TECO and TESEN from 2012 to 2015

| Year<br>waste treatment | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|
| Reuse | 3,265.97 | 3,929.93 | 3,543.61 | 3,471.48 |
| Incineration | 850.59 | 615.45 | 649.25 | 539.64 |
| Physical treatment | 106.38 | 121.63 | 69.64 | 51.97 |
| Offshore processing | 11.53 | 13.41 | 15.58 | 10.44 |
| Landfill | 22.29 | 17.62 | 9.93 | 8.65 |
| Total | 4,256.76 | 4,698.04 | 4,288.01 | 4,082.17 |

Unit: metric tons

## 2 Air pollution management

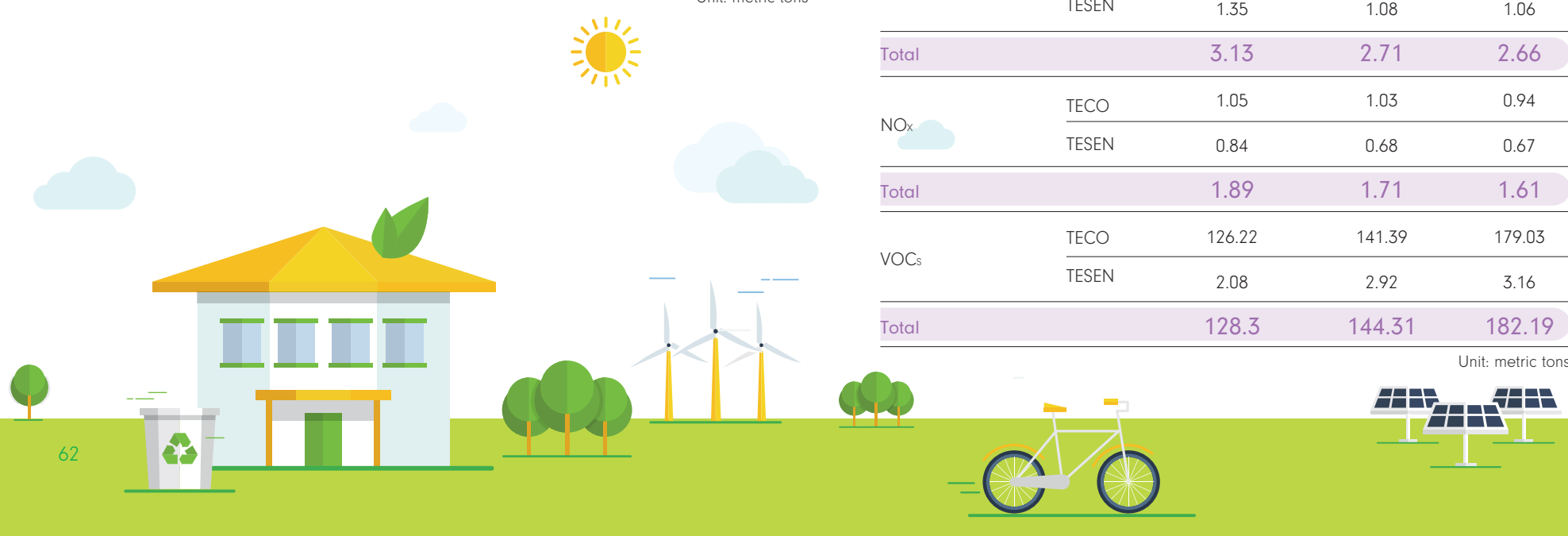
Air pollutants generated in the motor manufacturing process are dealt with strategy of design management at source, assisted with investment of appropriate equipment to set the goal to reduce air-contaminating Volatile Organic Compounds (VOCs) by 20% per year and to decrease down to below 20% (reduction by 80%) of the 2014 level in four years (2018); the input will be long-term to continuously lower the emission. The method of design management at source adopted in 2015 has reduced the air pollutants to 65.9% of 2014 level (reduction by 34.1%), better than the annual reduction goal of 20%.

Air pollutants are produced at TECO's Chungli plant and at TESEN. In compliance with regulations, both facilities have installed qualified air pollution control equipment operated by specialists in accordance with relevant environmental regulations. TECO is also dedicated to reducing the concentration of pollutants to meet air pollution standards. Air pollutants at TECO and TESEN include sulfur oxides, nitrogen oxides, and volatile organic compounds. Emissions of these contaminants during 2013 - 2015 is shown in the following table.

Table: TECO and TESEN Emission amount of air pollutants, 2012-2015

| Pollutant | Companys | 2013 | 2014 | 2015 |
|---|---|---|---|---|
| $SO_x$ | TECO | 1.78 | 1.63 | 1.60 |
| | TESEN | 1.35 | 1.08 | 1.06 |
| Total | | 3.13 | 2.71 | 2.66 |
| $NO_x$ | TECO | 1.05 | 1.03 | 0.94 |
| | TESEN | 0.84 | 0.68 | 0.67 |
| Total | | 1.89 | 1.71 | 1.61 |
| VOCs | TECO | 126.22 | 141.39 | 179.03 |
| | TESEN | 2.08 | 2.92 | 3.16 |
| Total | | 128.3 | 144.31 | 182.19 |

Unit: metric tons



## 5.2.4 Compliance with Environmental Rules

TECO will continue to invest in and improve air pollution control equipments, 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:

**1** The Environmental Protection Bureau of Taoyuan City, by law, levied a fine of NT$300,000 on March 13, 2015, in accordance with provisions in Article 24 Paragraph 2 of the Air Pollution Control Act.

### Air Pollution Emission Improvement Project

TECO's first approach is to change the original design of products to reduce pollutant emission (change the material) at the very source. If this is still difficult to achieve the desired emission reduction, necessary equipments will be purchased to handle the implementation. Review the new material and new manufacturing process adopted at the design end again and conduct application environment simulation test to determine the feasibility.

### Implementation Timetable and Approach

This project's VOCs emission treatment timetable for primer in casting operations, varnish in electrical operations, and topcoat in assembly operations started in 2015 and will complete in 2017 (three-year period). The implementation will run in stages as continuous reviews and improvements will be implemented as necessary. The plan is as shown in the following table:

VOCs Teatment Timetable

| Item | Description | Timetable | Proposed approach |
|---|---|---|---|
| **A** | Oil-based casting primer emission improvement | 2015 | Change to water-based primer (reduce emission at source) |
| **B** | Electrical varnish emission improvement | 2016 | Introduce new material (reduce emission at source) and/or invest in equipment |
| **C** | Assembly topcoat emission improvement | 2017 | Introduce water-based topcoat (reduce emission at source) and/or invest in equipment |

### Emission Reduction Goal

Ideally, zero emission is the optimal goal; nevertheless, practical implementation has its difficulties. The overall (primer/varnish/topcoat) VOCs emission was set to decrease 50% from the existing 8,029 kg/month to 4,015 kg/month as the project's initial goal, and through the project's overall implementation of PDCA (Plan-Do-Check-Action) management cycle, the emission reduction goal shall be gradually increased over time.

### Project Performance

The goal of 50% emission reduction was achieved: reduce VOCs emission by modifying product design at source has significantly improved the use and emission of VOCs hence lowering the back-end processing costs. Thanks to the implementation of this project, VOC emissions from primer in casting operations reduced from 2,880 kg/month (total emissions of primer/varnish/topcoat are 8,029 kg/month, approximately 35.9%) to 17.3 kg/month with the reduction rate reaching 99%, so the single-item emission reduction performances is much greater than the original goal of over 50%.

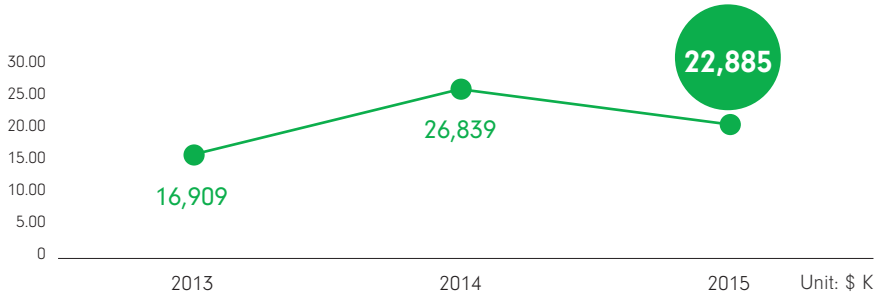
**2** The Environmental Protection Bureau of Taipei City, by law, levied two fines of NT$ 36,000, respectively, on April 30, 2015 and July 21, 2015, in accordance with provisions in Article 9 Paragraph 1 Subparagraph 4 of Violation of Noice Control Act and provisions in Article 6 of Nose Control Standards, a total of two penalty cases.

### Future Countermeasures

The reason for noise was due to the location of fans on 1st floor and affecting the residents nearby. The fans are currently relocated to the appropriate location in the basement, so the noise is controlled and improved.

## 5.2.5 Environmental Protection Outlays

To prevent potential pollution during production, TECO has intensified its 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 2013- 2015 shown in the figure below.




▲ Figure: Environmental Protection Spending by TECO from 2013 to 2015

▶ Note: TESEN leases all of its equipment from TECO therefore TECO bears all environmental protection expenses

# 06

# Shaping TECO - Best Company to Work for

## 6.1 Human Resources Policy

People are TECO's most important asset, as well as the foundation for the company's sustainable development. 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 of "Ambition, Customer Focus, Teamwork, Integrity, and Innovation" to inspire individual potential and build organizational cohesion.

TECO's Human Resources Center conducts employee satisfaction survey annually and reviews the company's strategy and internal and external situations before formulating its annual HR strategy for the coming year. TECO focuses 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"". The company also helps employees to develop and realize their full potentials and contribute to TECO's sustainable operations, creating a win-win outcome for both employees and the company.

**Human Resources Strategy Focus**

**Strengthening Talent Development**

- A differentiated talent cultivation strategy
- Strategic planning for a Comprehensive reward package
- Focusing on the application of recruiting channels
- Optimizing learning-working unified training system

**Integrating Group Resources**

- Setting a group-oriented development strategy
- Promoting a global resource integration plan
- Integrating talent cultivation resources within group

**Enhancing Employee Well-Being**

- Promoting workplace security and health management
- Establishing a best-employer brand image
- Improving employee relationships and enhance team morale
- Upgrading Human Resources service performance

## 2015

- Enhance overall management capacity 6% through promoting managerial staffers' management and leadership capability enhancement programs and potential first-line managers' workshop study.
- Signed up for industrial-academic cooperation and engaged in Chung Yuan Christian University employment curriculum program from 2015 to 2016 Q2 to narrow gap between learning and working as well as cultivate new talents for company.
- In response to employees' reactions and suggestions, promoted company's new meal system favored by up to 70% employees.

## 2016

- Planned domestic and foreign talent exchange mechanism and provide them alternative job and training opportunities.
- Cooperated with Industrial Vocational High Schools to recruit and cultivate excellent technical talents by providing scholarships.
- Implemented Entrepreneurial Seed Team Cultivation Program to promote the entrepreneurship spirit and cultivation of physical skills and knowledge within the company.
- Established overtime forecasting electronic system for managerial staffers to effectively monitor overtime situations to improve work efficiency and to promote work-life balance

## Future Plans

- Plan group talent exchange mechanism
- Establishing international information exchange platform
- Expand industrial-academic cooperation and plan new talent systematic cultivation mechanism
- Safeguard labor regulations/labor rights norms through standard process and electronic system to ensure labors' interests

## Objectives and Results

- Broaden personnel's international perspective, provide personnel international career development opportunities and cultivate personnel into international talents.
- In line with company's production technology upgrade, establish industrial-academic cooperation mechanism, introduce professional and technical personnel, and complete a systematic talent cultivation mechanism to narrow the gap between learning and working and to provide a sound career development environment.
- Establish nursing/maternity protection/working hours/job rotation systems and electronic systems to safeguard employees' interests

# 6.2 Human Resources Management

After TECO's latest venture into the power sector with its wind-turbine business department established in 2010, TECO's highly diversified operation already spanned heavy electric, electric control, home appliances, wind power, electronics, and infrastructural engineering, etc. TECO's development into diversified sectors and setting its foothold in Taiwan and all over the world, during the past 60 years, have posed major challenges to the company's human-resources management. As the company strives to recruit and cultivate talent needed for its global deployment and development, diversified human resources strategy and practice are the company's current focuses. TECO's existing organization and personnel structures are as follows (Data from Dec. 31, 2015) :

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 year by year, with 64% (64% in 2014) of its staffers owning college or higher degree, offering critical support to its continuous and stable development.
3. Employees age 41.5 on average, with 13.3 average service years. A focal point of the company's personnel development is passing of experiences and knowledge as well as cultivation and retention of key talent.

## 6.2.1 TECO's Manpower Structure

TECO recruits talents through a variety of channels. The company has annually recruited 5 to 12 college students for summer internships. Industrial Master's programs were also set up successively via cooperation with National Cheng Kung University, National Taiwan University of Science and Technology, National Taipei University of Technology. As of 2015, there were already 18 students in the Industrial Mater's programs. Through hiring interns and establishment of Industrial Mater's programs, the company not only cultivates suitable potential talents, but also helps young people put their knowledge to work.

In full compliance with the Labor Standards Law, the company abstains from employing laborers aged under 15, and offers complete job development courses and care for interns aged under 16. To safeguard the natives' job opportunities, the company employs mainly natives and only 24 foreign staffers. In line with the company's policy to offer suitable jobs to the underprivileged group, there are currently 34 handicapped people and 28 aborigines on the company's payroll, higher than the government's fixed requirement of 1%.

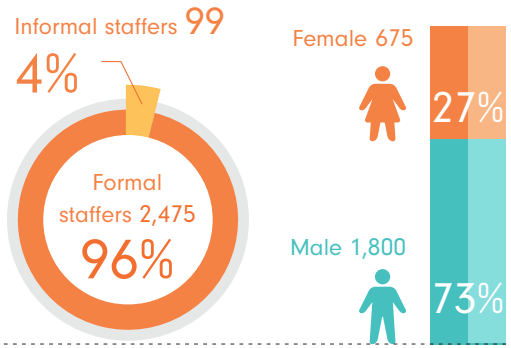
## Statistical data

Formal / Informal staffers

Male Female

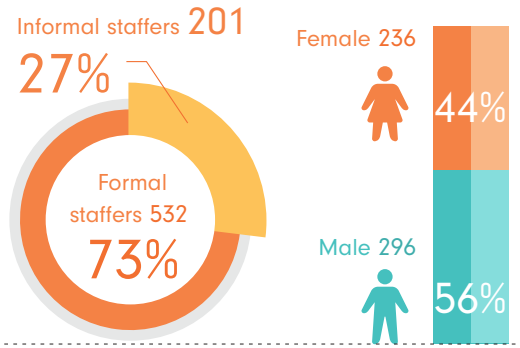
### TECO Electric and Machinery Co., Ltd.

To ensure stable employment, TECO hires mainly formal staffers, so its informal staffers (less than one year short-term contracted staffers, work-study students, dispatched and temporary staffers, etc.) account for only 4%. The subsequent staffer statistical data is mainly based on formal staffers.



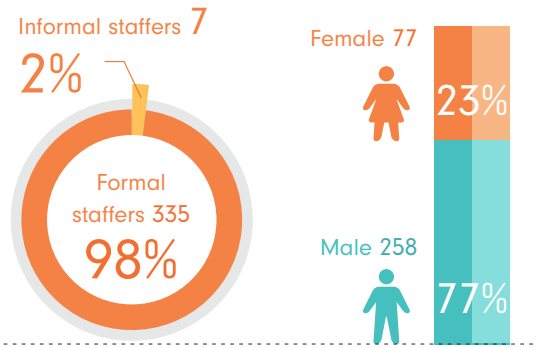

### Taian Technology (Wuxi)

Due to its production patterns, Taian Technology's formal staffers account for 73%, and informal staffers (less than one year short-term contracted staffers, work-study students, dispatched and temporary staffers, etc.) account for 27%. The subsequent staffer statistical data is mainly based on formal staffers.




### TECO-Westinghouse (TWMC)

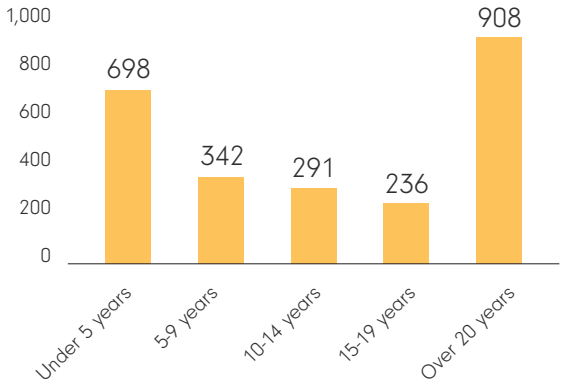
To ensure stable employment, TECO-Westinghouse hires mainly formal staffers, so its informal staffers (less than one year short-term contracted staffers, work-study students, dispatched and temporary staffers, etc.) account for only 2%. The subsequent staffer statistical data is mainly based on formal staffers.




## Service-year structure of staffers

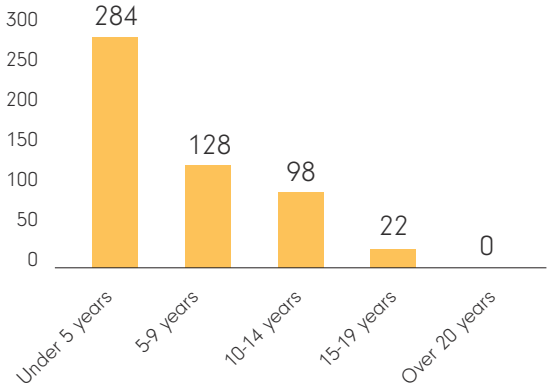
TECO Electric and Machinery Co., Ltd

Average year 13.3



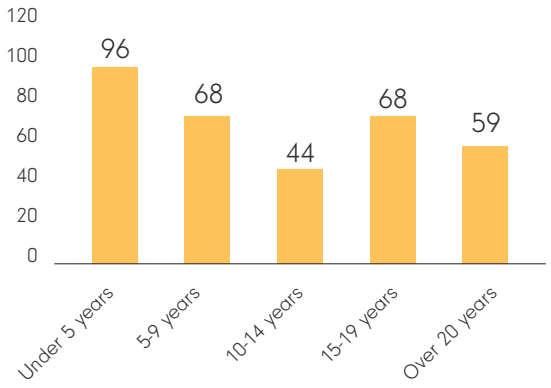

Taian Technology (Wuxi)

Average year 5.6




TECO-Westinghouse (TWMC)

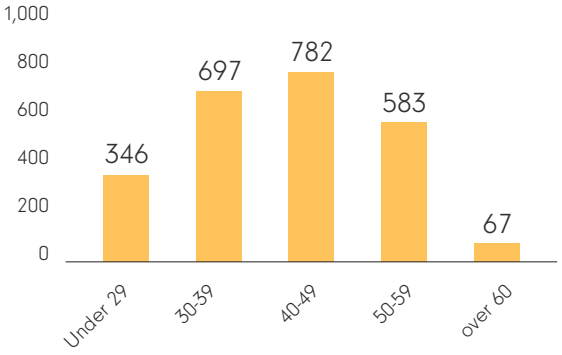
Average year 11.6



## Age structure of staffers

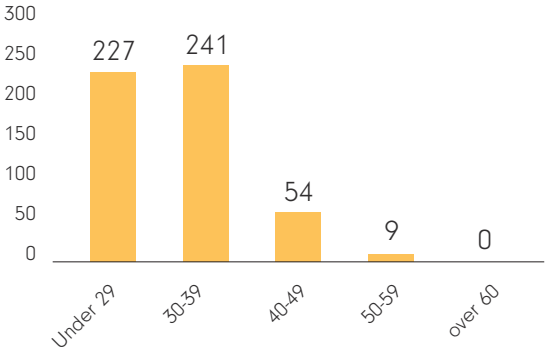
TECO Electric and Machinery Co., Ltd

Average age 41.5



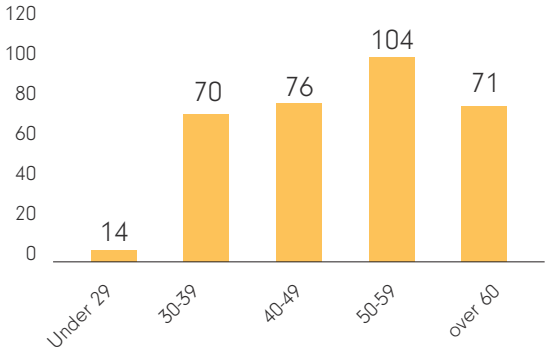

Taian Technology (Wuxi)

Average age 31.6



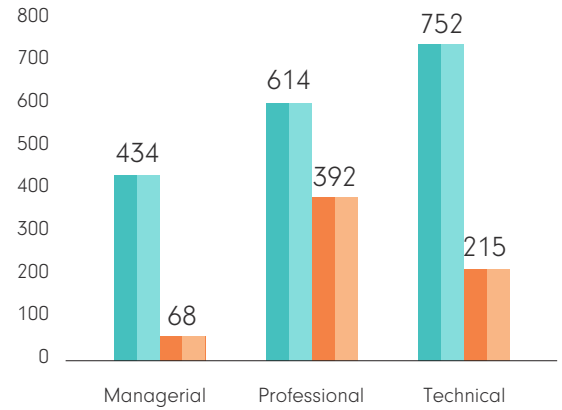

TECO-Westinghouse (TWMC)

Average age 47.5

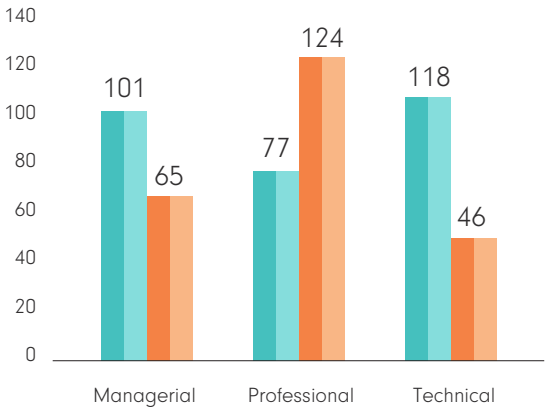



## Employment in different lines of jobs

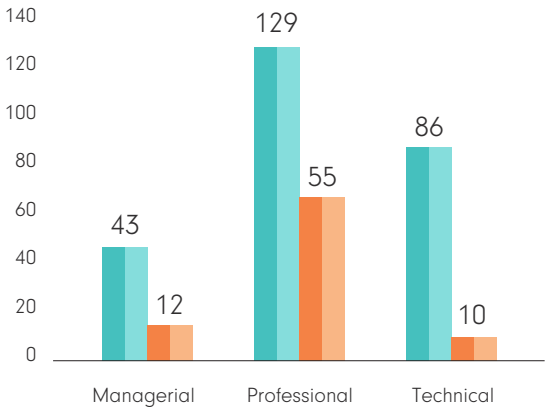

TECO Electric and Machinery Co., Ltd.




Taian Technology (Wuxi)



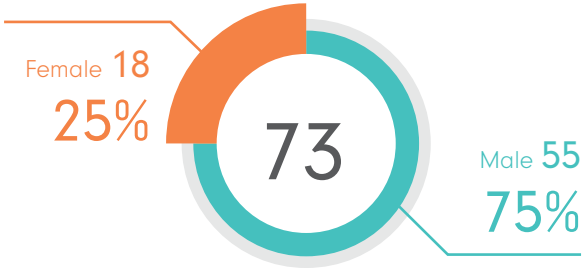

TECO-Westinghouse (TWMC)



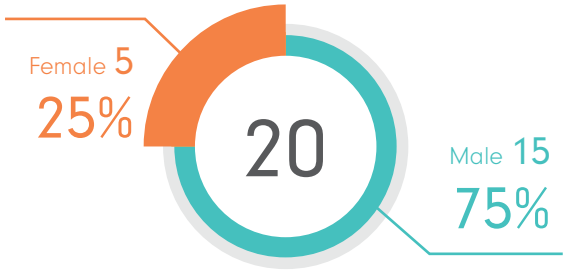
## Gender structure of new staffers

TECO hired 115 new employees at 2015


Taian Technology (Wuxi) hired73newemployees at 2015

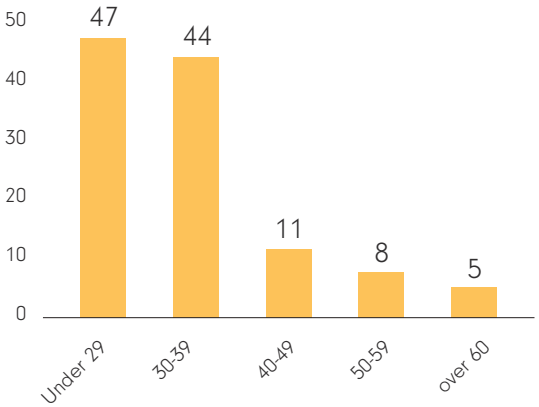



TECO-Westinghouse (TWMC) hired 20 new employees at 2015

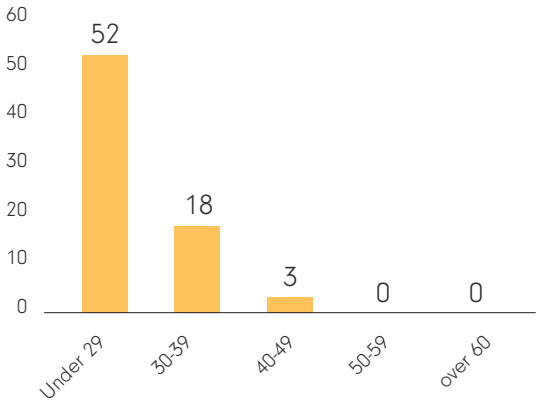



## Age structure of new staffers

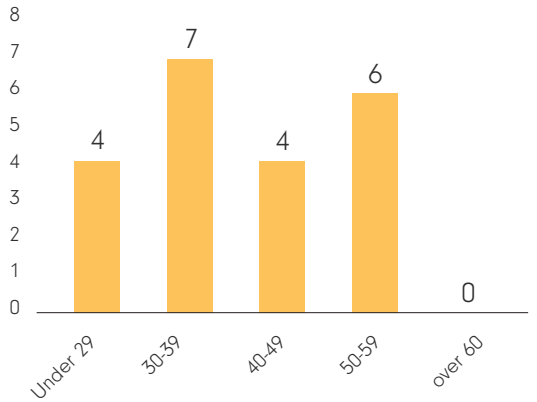
TECO Electric and Machinery Co., Ltd




Taian Technology (Wuxi)



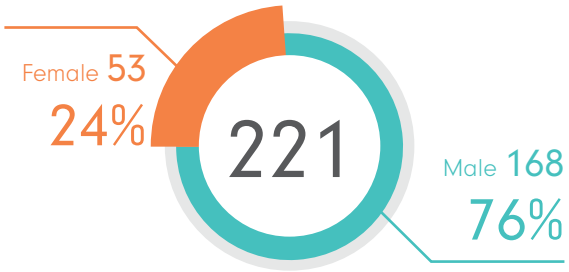

TECO-Westinghouse (TWMC)



## Gender structure of quit employees

### TECO Electric and Machinery Co., Ltd

In 2015, 221 employees left TECO, representing a turnover rate of 8.9%, 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.

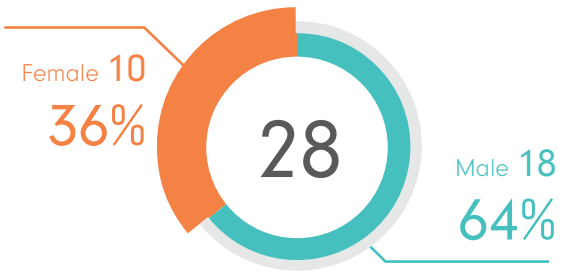



### Taian Technology (Wuxi)

100 employees left Taian technology (Wuxi) in 2015, representing a turnover rate of 18.8%.


### TECO-Westinghouse (TWMC)

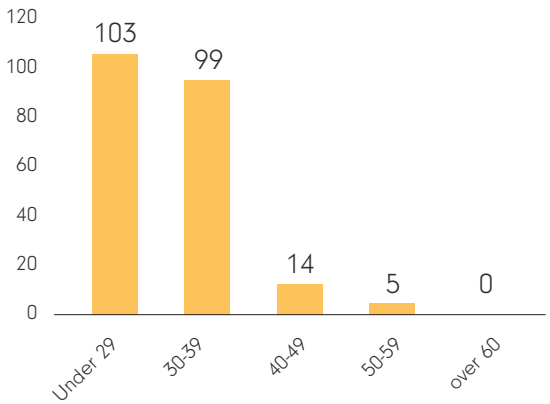
28 employees left TECO-Westinghouse in 2015, representing a turnover rate of 8.4%.



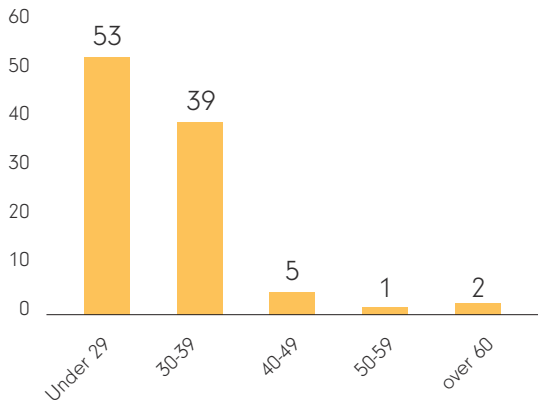

▶ Note：Turnover rate= total number of dismission in 2015 / total number of employees number at 2015/12/31

## Age structure of quit staffers

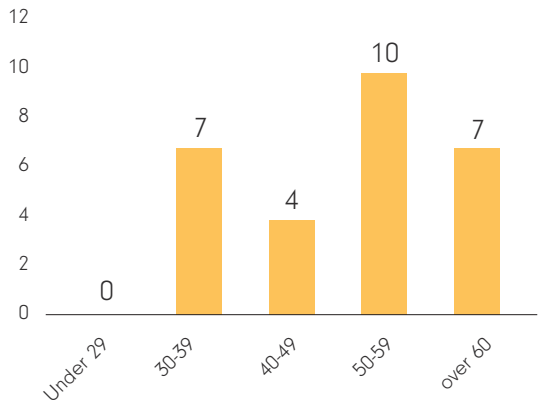
TECO Electric and Machinery Co., Ltd.




Taian Technology (Wuxi)




TECO-Westinghouse (TWMC)



## 6.3 Communication Channels

TECO actively establishes communication channels with employees, including quarterly events for employees at headquarters and morning meetings at factories, enabling senior managers to explain the company's current business achievements and challenges directly to the employees, in addition to complimenting staffers for their outstanding performance.

1 Labor Union and Management-Labor Meeting: For higher working efficiency, better labor conditions, and closer labor-management coordination, TECO set up labor union in July 1974; in order to protect 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, hence all employees are protected by this agreement. The labor union holds an annual plenary meeting, wherein members elect representatives as well as 11 directors and four supervisors of the union. The union directors and supervisors 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 representative any time. The company also holds semi-annual conferences for communications between the general manager and union directors and supervisors. The company holds election of exemplary laborers, at a rate of one for every 100 employees, and gives them proper rewards. In 2015, there were 24 exemplary laborers elected. The company strictly abides by the Labor Standards Law in its operation and would give employees notices seven days in advance for all major changes 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

| Committees | Ratio of Labor Representatives |
|---|---|
| Factory Labor-Management Meeting | 1/2 |
| Occupational Safety and Health Committee | 1/3 |

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 of Labor Affairs and "Award for Enterprise with Good Labor-Management Relationship" granted by Taoyuan county government in 1999. TECO's ranking on 11th place on the list of Large Enterprises as Good Corporate Citizens, compiled by Commonwealth magazine in 2013, has proven that the company's promotion of communication between labor and management, the concept of labor and management as a unified entity, and co-existence and co-prosperity between labor and management was highly praised.

2 Quarterly Employees' Meeting and Factory Morning Meeting Quarterly employees' meetings are held every quarter at the headquarters with approximately 200 employees participating and the Chairman conveying the company's quarterly operating status and major strategic directions. Employee satisfaction survey is conducted after the quarterly employees' meeting. In 2015, the average satisfaction scored 88 points, and which shows this communication channel indeed has achieved the goal for the employees to understand the company's strategy and operating status. Factory morning meeting is held quarterly at the premises of the factories every quarter with approximately 950 people participating for the promotion of environmental protection and occupational safety as well as briefing the employees on the company's sales and operational performance.

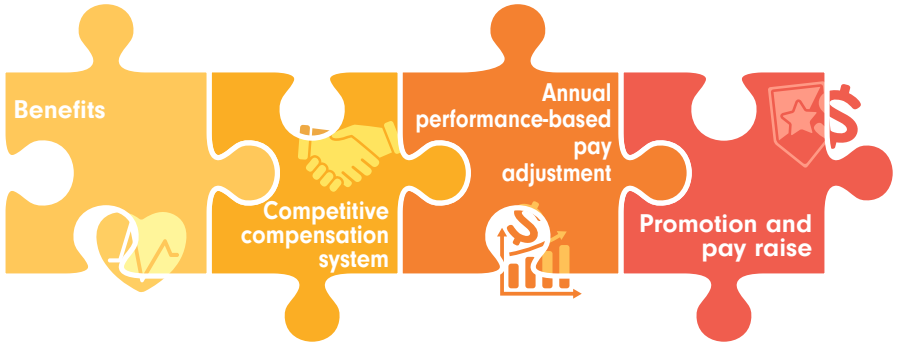
3 Overseas Affiliate Meeting Overseas affiliate meeting is held once a year with participating of the company's middle and high ranking managerial staffers and overseas affiliates' high-ranking managerial staffers. This meeting serves as a communication channel within TECO group for the communication and conveying of the company's annual operational status and explanation as well as the group's strategy for the future. Awards will also be given to the affiliates' employees with outstanding performance as a glorious sign of appreciation from the company.


4 Employee Satisfaction Survey Annual employee satisfaction survey is conducted every year on the company's managerial staffer and all employees. Through anonymous questionnaires, the response rate is higher than 40% of all employees and the survey results are then shared with the employees. According to the 2015 survey results, it was evident that employees hope to understand more about the company's career development alternative as well as more involvement in planning the company's welfare or employees' activities. To response to the results, since 2016, the company has planned regularly career development information sessions to assist employees plan their own career paths. As for the company's important policies or systems, interesting video clips which are easy to follow were created for employees to view online. For those employees who wish to participate in the Welfare Committee are invited to plan activities in order for the benefits proposed by the Welfare Committee and the relevant activities organized to be better tailored to the employees' needs.

## 6.4 Compensation and Benefits

TECO offers employees compensations somewhat above the median level in the market. There is no gender discrimination in determining starting salaries for new hires and the basic salary is higher than the government's requirement. The company embraces a merits-based compensation system, including pay raise and the provision of variable bonuses and dividend sharing, etc., on top of a complete system for job classification and ranking, which is applied impartially to both male and female employees. In addition, 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 as well as for their joint efforts to achieve the company's operational goals.

Overall, the various incentives are divided into four categories as follows




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 levels on the market and regularly reviews the company's compensation policy, to facilitate recruitment and retention of excellent talents. Subsidies are available for jobs with rigorous working environment, and employees work overtime on holidays are entitled to overtime pays (1.5 times regular pays) as stipulated in the Labor Standards Act. 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 talents 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:** in Line with Market Standards: When considering pay raises, the company takes into account the general market level, living-cost index, and company's finance capability, in accordance with the "Measures for Compensation Management". In principle, approved pay hikes take effect on April. 1 every year and employee's pay-hike scale varies according to each individual's annual performance. In 2015, the company implemented an overall meal allowance increase of NT$ 600 for all employees every month.

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" to ensure the company sustain its compensation competitiveness in the market.

**Statistics for pay differential, based on average pays for male and female staffers with different job ranking and nature are shown in the following table:**

| Job ranking | TECO | Taian technology (Wuxi) | TECO-Westinghouse |
|---|---|---|---|
| Rank-and-filers (first-6th job ranking) | ♂: 1.09 ♀: 1 | ♂: 1.14 ♀: 1 | ♂: 1.03 ♀: 1 |
| Section director (7th-8th ranking) | ♂: 1.06 ♀: 1 | ♂: 1.07 ♀: 1 | ♂: 0.99 ♀: 1 |
| Manager (9th-10th job ranking) | ♂: 0.92 ♀: 1 | ♂: 1.4 ♀: 1 | ♂: 0 ♀: 0 |
| Factory management, department chief, and jobs with higher ranking (11th job ranking and above | ♂: 0.61 ♀: 1 | ♂: 1.05 ♀: 1 | ♂: 0.95 ♀: 1 |

## 6.5 Career Development

TECO has put in place a complete system of career development paths for its employees. From the very first moment when new hires report to their new posts, they are guided to attend various training courses, including company orientation, occupational health and safety training, and anti-corruption instruction, etc. before undertaking a half year long new hire orientation program, on top of the handy assistance from senior staffers as their buddies. In addition, the company has formulated function-based training roadmaps and conducts survey of training needs among employees annually, as well as helping staffers formulate their own Individual Development Plan (IDP), via consultation with superiors. Moreover, the company holds nomination and evaluation for promotion every half a year, thereby granting promotion to the employees with good performance and potential. It is the goal of our continuous efforts to establish comprehensive career development paths.

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

In 2015, TECO provided training courses for a total of 12,794 person-sessions, averaging 20.43 hours of training per person.

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 the needs of the following dimensions: strategy/organization, work, and personal needs.

2 In accordance with the company's "Enforcement Rules for Talent Development, "annual training courses focus on four categories, including management capabilities, professional capabilities, general knowledge, and corporate policy. For the company's sustainable development, the cultivation of key talent and internationalized talents is also one of the key training focuses:

Training for Management Capability: To strengthen the management capability of potential talent, the company regularly holds training courses for first-line/middle managerial staffers, annual high-ranking managerial staffers, new managerial staffer mentoring program, benchmark learning and talent cultivation project, etc.

First-Line/Middle Management Training: Problem exploration and solving, seed lecturer training, and leadership workshop

Key Personnel Training:

- Augmenting the magnitude of the capabilities of high-ranking managerial candidates
  - Planning the development paths of high-ranking key talent
  - Arranging overseas visits by high-ranking managerial staffers to help them understand topnotch technological standards and practices in the world
  - Holding forums on high-level political and economic trends
  - Completing high-ranking managerial staffer training and BU strategy briefing


High-Ranking Managerial Staffer Training: Industry 4.0 Forum (speech given by Jonq-Min Liu, President of Industrial Technology Research Institute (ITRI)), high-ranking managerial staffer training and strategy presentation

- 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 8% of all employees. In 2015, there were 45 key personnel picked for grade promotion, management assignment, rotation or overseas assignment, representing 35% of all key personnel. This ratio was significantly higher than the company-wide ratio.

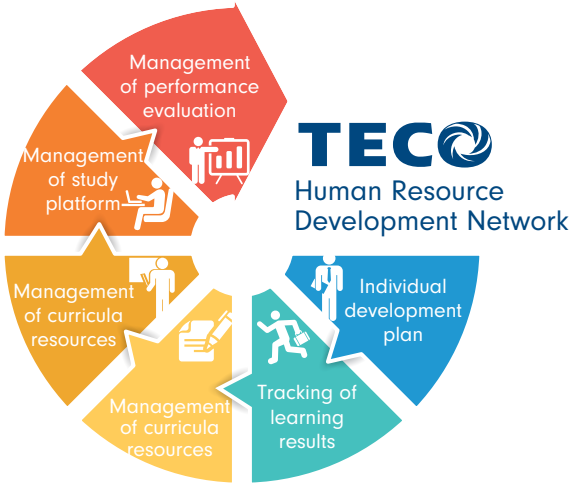
- Deepen key technology
  - Arrange certifications of key trade skills.
  - The Craftsmanship Award was presented to three people in 2015.

International talent cultivation project:

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

### Mechanism for integrated personnel training effectiveness tracking and improvement

Effectiveness tracking results are strengthened through systematic management,




### Cross-division professional associations for in-depth professional exchange

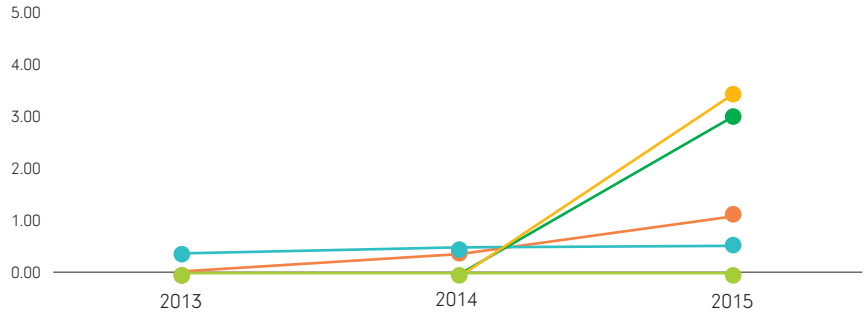
The company has also established cross-division professional associations for biotech, R&D and sales personnel to expand opportunities for exchanges and learning among employees in these professional fields, as well as to incentivize colleagues to learn and grow.


## 6.6 Workplace Safety and Health

### Promoting a safe and healthy work environment

In accordance with OHSAS 18001 and CNS 15506 (Taiwan Occupational Health & Safety Management System), the company has established a management system to promote safety and health related affairs in a systematic manner. In addition to internal auditing and monitoring, the company's management system is also certified by external professional organizations to ensure law compliance and effective implementation of the management system. Additionally, in order to reduce occupational accidents, managers in charge carry out monthly safety field check and the company conducts education and training on safety regularly, as well as holding environment and safety monthly events, spreading safety and health related information, and posting safety related information on 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 ensure 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 of initiatives that have dramatically heightened safety awareness among employees. In 2015, the company significantly lowered the frequency of occupational accidents resulting in disabilities to just nine such incidents (including TECO, TESEN, TECO-Westinghouse (TWMC) and Taian Technology (Wuxi)). The frequency and severity of disabling injuries are presented in the future below (excluding commuting accidents). TECO and its affiliated make joint efforts to ensure both equipment and personal safety protection are compliant with standards and improved constantly. As analysis shows that failure to abide by the operational norms has been responsible 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 team leaders and directors. Meanwhile, TECO has also set up an Occupational Health and Safety Committee, headed by the General Manager and attended by union representatives and business department directors and factory managers, with the mission to review the results of continuous safety improvement, in order to achieve the goal of zero occupational accident.

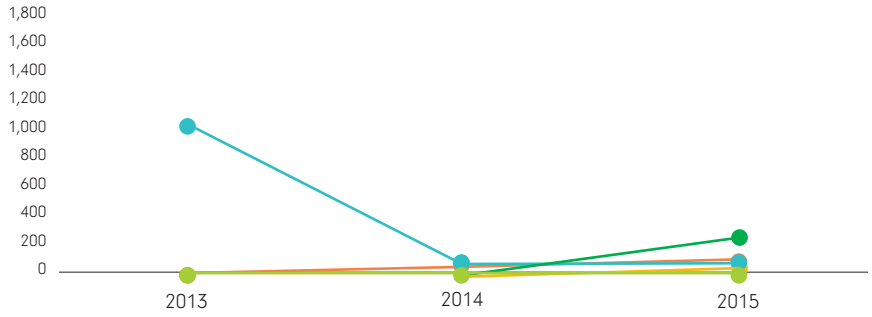
2013~2015 TECO's disabling injury frequency rate (excluding commuting accidents)




| | 2013 | 2014 | 2015 |
|---|---|---|---|
| TECO Group Overall | 0.00 | 0.36 | 1.20 |
| TECO | 0.36 | 0.37 | 0.38 |
| TESEN | 0.00 | 0.00 | 0.00 |
| TECO-Westinghouse (TWMC) | 0 | 0 | 3.03 |
| Taian Technology (Wuxi) | 0 | 0 | 3.42 |

Note: Disabling injury Frequency Rate (FR) =Number of disabling injuries/total working hours x 1,000,000 (the figures vary according to different formulas; in Taiwan the figure is five times the value of 200,000 set by the International Labor Organization.)
- TECO Group Overall: The Headquarters, Taiwan factories and affiliates (TECO, TESEN, TECO-Westinghouse (TWMC) and Taian Technology (Wuxi))
- TECO: The Headquarters and Taiwan factories
- Description for TECO Group Overall Data: The statistics data of affiliates were not included in 2013, and TECO and TESEN were in 2014 statistical data

2013-2015 TECO's disabling-injury severity rate (excluding commuting accidents)




| | 2013 | 2014 | 2015 |
|---|---|---|---|
| TECO Group Overall | 0 | 72 | 127 |
| TECO | 1,096 | 74 | 118 |
| TESEN | 0 | 0 | 0 |
| TECO-Westinghouse (TWMC) | 0 | 0 | 370 |
| Taian Technology (Wuxi) | 0 | 0 | 62 |

Note: • the disabling injury severity rate (SR) = total days lost/total work-hours X1,000,000 (difference formula, Taiwan SR numerical values defined for the International Labour Organization (x200,000) 5 times)
- TECO Group Overall: The Headquarters, Taiwan factories and affiliates (TECO, TESEN, TECO-Westinghouse (TWMC) and Taian Technology (Wuxi))
- TECO: The Headquarters and Taiwan factories
- Description for TECO Group Overall Data: The statistics data of affiliates were not included in 2013, and TECO and TESEN were in 2014 statistical data
- Up to December 31, 2015, there was still a Chungli factory employee in recuperation and rehabilitation at home since 2014, so the 2014 disabling injury severity rate value would vary accordingly.

Award for cumulative accident-free hours at TECO plants

Plant environmental safety area

## 6.7 Employee Assistance Program (EAP) and Employee Work-Life Balance

TECO was given a Two-Star Award of the "Third Blissful Enterprise Awards" by the Department of Labor, Taipei City Government for its outstanding performance on five items of indicators, including working environment, compensation and cultivation, benefits and rewards, friendly workplace and social care, etc. The specific examples of TECO's excellent performance are: comprehensive welfare and care, complete care measures, well-planned employee development.

TECO established an Employee Benefit Committee in 1064 to jointly promote benefit 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 the society. For this, TECO established an Employee Assistance Program (EAP) Platform to help employees find the assistance needed. The company has also planned a series of EAP programs to help employees improve family relations, enhance their abilities, and boost job performance. The overall plan of TECO's EAP program is shown in the figure below.

- Establishment of EAP platform: One-stop shop for employees to seek work, health, and life related assistance.
- A "workplace stress analysis" conducted in 2015 showed that all indicators were above standards.

### Health

To take good care of employees' physical and mental health, TECO has set up medical units staffed with professional nurses, offering outpatient-treatment services by contracted physicians regularly every week to cater to the employees' medical needs. TECO spares no effort in creating a good and health work environment to assure its employees' health. Take the Chungli factory as an example, in addition to banning smoking at the entire premise of factory, except for the designated outdoor smoking areas, in accordance with the "Tobacco Hazards Prevention Management" implementation measures, TECO was also certified for its self-management of independently designated smoking areas in 2013.

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

Fitness class Health seminars Healthy diet seminars

In addition, annual physical examinations are conducted on staffers whose work operations contain special health hazards (such as dust, noise, toluene diisocyanate, free radiation, hexane operation, etc.). Medical staffers at factories would track the results of such activities for instant improvement of abnormal indicators. Coordination with environmental safety units is also reinforced to check compliance of various working units with related laws/regulations and norms on safe operations, such as requiring the operators to wear various protective gears and ensure operational safety, for a safer workplace for all staffers. TECO's outstanding performance in promoting healthy workplace has won various awards from Taipei City Government, Taoyuan County Government, etc. In addition, the "Award for Happy and Healthy Staff" was also granted to Hukou factory by outperforming 1,969 enterprises in a national workplace health competition; the headquarters in Nangang also passed the "Health Promotion Certification" in 2014 by implementing health promotion measure and establishing good working environment. The awards granted recently are as shown in the table below:

Healthy workplace certificated by Ministry of Health and Welfare

| 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 |
| Chungli factory | Chungli | Health promotion | 2015.12.31 |

TECO also provides health and medical facilities and services to help employees maintain personal health and improve their quality of work and life. The result of a workplace health study conducted by Department of Psychology, National Chengchi University in 2015 showed that, among the 1,047 respondents (response rate 72%), all indicators are above standards, indicating the diversified health promotion activities can conduce to the enhancement of employees' health at workplace. TECO regularly reviews its employees' health condition and nature of

work to prevent them from physical damages caused by overwork or ergonomic factors by implementing "Overload Hazards Prevention Program" and "Ergonomic Hazards Prevention Program", so the relevant prevention mechanism would be triggered whenever abnormal circumstances occur.

## Family

Understanding that employees are motivated at work by family, TECO offers general scholarship grants, group insurance and other benefits for employee dependents. In 2015, the company arranged employee sports competitions to build team spirit and provide a chance to relax outside work. These activities attracted 685 participants and earned an average employee satisfaction score of 8.07 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 1,385 participants during the year.TECO also provides comprehensive maternity and family care measures which include maternity leave superior to what is required by the Labor Standards Act. In 2015, a total of 17 people requested parental leave: 10 returned to work and 3 quit their jobs after the leave (4 people are still on leave).

Family day

TECO basketball tournament

TECO sports competition

Factory run

## 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 2015, attracting 360 participants.

Baking master successful story seminar

Retirement finance courses

Workplace image and etiquette seminar

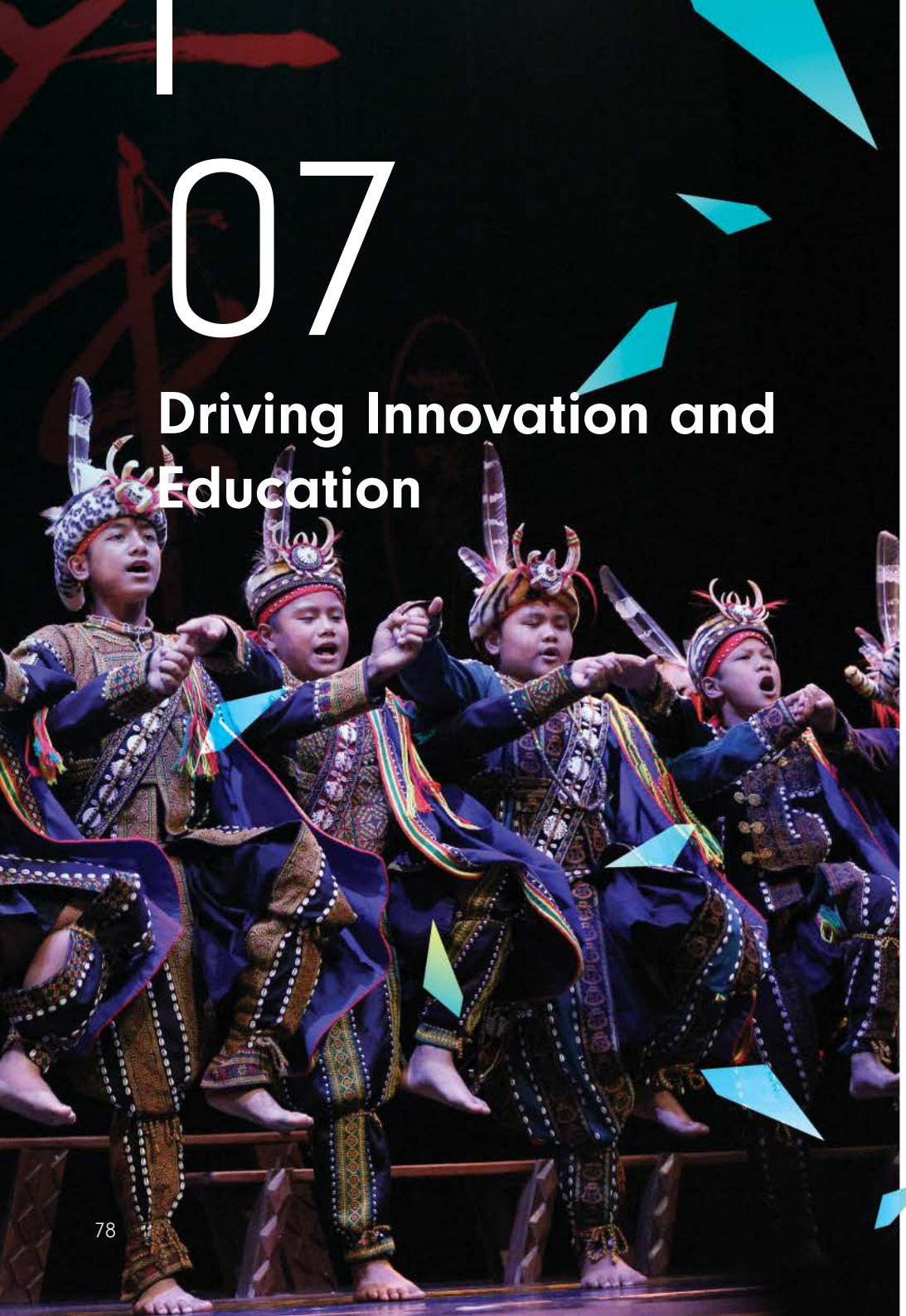
Travel seminar

Taian Technology (Wuxi) - Team cohesion building activities


TECO-Westinghouse (TWMC) - birthday activities

# 07

# Driving Innovation and Education



## 7.1 Caring for Society

Responsible corporate citizenship is the central tenet in TECO's operations. In the spirit of "giving back to the society what one takes from it", the company actively put this spirit into action by doing its part in caring for society through various initiatives. TECO established the "TECO Technology Foundation" in 1993 to support and sponsor activities consistent with TECO's commitment to "cultivating science and technology talents, promoting forward thinking and social progress". For 22 years, TECO has persisted on its devotion to promoting a society with "co-prosperity of science and humanities". Through the creation of technology and humaities themed awards, such as "TECO Award", "Green Tech", etc., TECO has heightened public attention to energy conservation and environmental protection related issues as well as inspired involvement of young people in green technology R&D and ultimately highlighted Taiwan's "Green Energy Tech" on the global stage.

In addition to professionaly and constantly strengthening its achievements in innovation, energy conservation, indigenous sustainable development, etc., TECO aims to nurture more seeds of goodness from within the company, with the enterprise's efforts, and foster employees' awareness of caring for society. TECO also started providing its employee with public benefit leaves and opportunities to contribute to the community through a company volunteer team established in 2014. In addition, through Donghui Club activities, the company hopes to encourage employees to personally express their care for the society in actions guided by the company's leadership and provision of incentives.

Whether it is the company’s continuous contribution to TECO Technology Foundation to influence the society through overall social environment and global trends, or from within the company to subtly influencing each individual employee and implementing caring for society step by step, TECO's caring for society encompasses both forward-looking vision and practical actions, aiming to nurture seeds of goodness, bringing innovation and vitality to the society overall and driving positive cycles of goodness.

## 7.2 TECO Technology Foundation - Lifelong Learning · Co-Prosperity of Science and Humanities

Creative TECO · Co-Prosperity of Science and Humanities

Engaging in Science and Humanities Activities
Creating Lifelong Learning Society With Co-Prosperity of Science and Humanities

### Strategy and Plan

**Mission**

Technology · Foresight · Progress

**Mission / Strategy**

Support a cultural Taiwan with technology
1. Reward new talent in scientific, cultural and creative fields
2. Establish an international reputation through green energy competitions

Enrich humanities in Taiwan with creative education
1. Arrange teacher development courses
2. Enrich campus cultural life
3. Consolidate basic education in remote areas
4. Support education for the disadvantaged

Foster a cultural society with heritage education - Support sustainable development among disadvantaged groups
1. Appeal for resource support
2. Establish a resource supply and demand platform
3. Promote the development of heritage education in tribal communities
4. Provide technical support
5. Foster mutual support in indigenous communities

Help Taiwan indigenous groups with no written language to sustainably develop and thrive

**Program Plan**

TECO Technology Award and Humanities Award

TECO Green Tech International Competition

Serving teachers
- Expeditionary learning (EL) teaching workshop
- EL international symposium
- EL campus counseling

Serving disadvantaged teenagers Life, Art and Creativity Experience Activity

Serving children in remote areas Program to deeply cultivate creative science education in remote areas

Business, government, academia and NPO strategic alliance program

Heritage education teacher development plan

Traditional song and dance heritage education plan

Achievements of the heritage education program
- Indigenous Children's Night Tribal concert
- Guandu Arts Festival
- "Exclamation" music and dance charity performance
- Year-end performance (in Hualien, Taitung, and Pingtung)

International cultural exchange
Performances in Japan, Singapore, and the U.S
- TECO creative teaching lesson plan workshop
- Paper Windmill creativity teacher choreography workshop
- Sustainable Taiwan creative teaching lesson research
- Creative Experience Workshop

**Vision**

Build a progressive society where "science and culture thrive together."

## Project I - 22nd "TECO Award"

### Universe Rewards the Industrious to Be Champion

As the TECO Foundation has held the TECO Award for 22 years, the number of elites, from a variety of sectors, recognized for their contributions and achievements by the TECO Award in the past 22 years has reach 119, and they are all highly respected and admired members in their own fields. This year's winner of Science category is one of the youngest in age (44 years old); and, for Humanities category, the winner has unique education background and experiences yet with the greatest contribution to mankind.

In line with the spirit of "the TECO Award", those who have specific contribution deeds, regardless of their origins or fields, whether science or humanities, as long as they insist on the right paths of good value creation, the ancient's wise reminder shall be proven to be true, and their achievements are bound to be discovered and they are bound to be recognized as "the Champion".

The Humanities category was established in the sixth year of the TECO Award.

As TECO Award entered into its 22nd year, the Humanities category award was also reaching its 17th year. In the beginning of every year, for the theme-setting of the awards, the Board of the Foundation engaged in serious discussions as usual, including environment related issues as major as global warming, homeland security, ecological rehabilitation, colony collapse disorder, and as minor as garbage classification, simple environmental protection, etc.

The theme setting for this year's "Humanities Award" was one of the largest in scale and most far-reaching - "Forest Restoration Project".

A Selection Committee was established by the Jury in May, with Director Chang Long-Sheng serving as the award Jury convener. Relevant scholars and experts were invited to make nomination lists, and after numerous and repetitive discussions and voting, two co-winners were finally chosen.

### I. The 22nd "TECO Award" is presented to support the humanistic Taiwan with "Technology"

### II. Proposal Motivation

The TECO Award was established to encourage scientific and technological research and its application to support industrial development. It also seeks to inspire insighted people in the humanities and social science fields to find synergies with technology and develop their creativity to support social progress.


### III. Project Approach:

1 Awards are designed in the spirit of "Co-Prosperity of Science and Humanities"

- Both Science and Humanities Awards are equally important, and the various fields for the Science category are as shown in the table.
- 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. This award aims to encourage ongoing environmental protection work by people who have made outstanding contributions in this field.

2 Establishment of Professional Jury

- General Convener: Former ITRI/Institute for Information Industry Chairman, Mr. Chintay Shih
- Jury Members: Highly respected professionals in the fields of industries, government, academic research, etc.

| 類　別 | 得獎人 | 貢獻事蹟 |
| --- | --- | --- |
| Electrical Engineering/ Information/ Communication Technology | Dr. Tei-Wei Kuo | Prof. Kuo devotes himself to the research and development of non-volatile memory software and embedded operating systems for years, where he is widely recognized as a leading researcher in the areas. The visibility of Taiwan in the research area of cyber-physical systems (CPS) dramatically increases because of his leadership as an Editor-in-Chief of the ACM journal on CPS. Prof. Kuo also has been making great contributions to the government agencies with his strategic planning and reviewing services and the industry in various ways. |
| | Dr. Chih-Jen Lin | contributions were made to the machine learning community by making SVM a useful technique for data analytics. The developed LIBSVM software is widely applied in industry and has a significant impact to the advancement of machine learning research. |
| Mechanical Engineering/ Energy/ Environmental Technology | Dr. Keh-Chyuan Tsai | Continued working on the development of experimental and analytical techniques for seismic evaluation of buildings. Developed and implemented several types of buckling restrained brace members on more than 100 buildings in Taiwan and New Zealand. Received several awards on science-and-technology achievement. |
| | Dr. Zhang-Hua Fong | Professor Fong dedicate himself to the gear related researches such as gear cutting tool, gear manufacturing machine tools, gear design and simulation software, etc. His work had been applied by industry and earn a revenue of 5 billion NT dollars per year. His achievement is also recognized by several awards such as the award for outstanding contributions in science and technology, Executive Yuan, 2013. |
| Chemical Engineering/ Material Technology | Dr. Hsing-Wen Sung | Has been dedicated to Biomedical Engineering Research, significantly enhancing the international academic status of local society. Developing drug delivery platforms, beyond the current level of technologies. Excellence in technology transfer performance as well as in academic services. |
| | Dr. Yu-Min Peng | Dr. Peng has been dedicated to bringing together electrochemical engineering technology with materials technology, which greatly enhanced added-value and international competitiveness of electrolytic capacitors and lithium battery industries. In particular, STOBA material for suppressing internal short-circuit inside a lithium battery is a remarkable achievement and a global breakthrough technology. |
| Biology/ Biomedical Engineering/ Agricultural Technology | Dr. Chih-Hsin Yang | He has a significant contribution to the development of second generation lung cancer targeted therapy, consequentially, provided the evidence that the clinical drug development in Taiwan is now in parallel with western countries; and in some special areas even leads the world. This contribution is very important to current biotechnology industry in Taiwan. In addition, his expertise in lung cancer clinical research is well recognized in the world. |
| Humanities Human Service | Mr. Pei-Yuan Lai | Mr. Lai has been dedicated to tree planting for 30 years, entirely with his own resources. His effort has made tremendous contribution in slowing climate change and adjusting strategies for the enhancement of natural capital development. It results in considerable amount of reforestation, inspires broader societal response and has meaningful impact in educating whole society. |
| | Dr. Rui-Xiang Huang | Dr. Huang has made outstanding contribution through his focus on the restoration of rare local species. He also has devoted to greening a former quarry of Asia Cement Co. and helped to give birth to Guandu Nature Park. Either serving in the private sector or government sector, he has used up his personal time to restore stout camphor trees; it sets a very good example for others to follow. |

## Significance to TECO

### 1 Awards are designed in the spirit of "Co-Prosperity of Science and Humanities"

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.

### 3 Service spirit of "giving back to the society what one takes from it"

TECO Technology Foundation was established embracing the spirit of "giving back to the society what one takes from it". As TECO Award's spirt of serving the society is deep rooted in TECO's corporate culture, the award winners are also proud to be chosen.

## 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. 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.
2. 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.
3. Awards were added in the humanities, energy technology, and environmental protection technology fields to heighten public attention to and involvement in environmental protection.
4. 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.

| Time | Resources invested | Results | Social impact |
|---|---|---|---|
| 2015 | TECO invested as much as NT$ 6.45 million in award related activity, and also invited MR. Yuan Tseh Lee, Honorary President of Academia Sinica of Taiwan, to present the awards.<br><br>the International Friendship Ambassador of National University of Science and Technology also served as reception volunteers, so the standards and quality of the award ceremony were greatly enhanced. | As many as 783 people participated in the activity (as the event was held in Eslite Performance Hall with limited number of seats, only a small number of tickets were open to and available for general public), and mainstream media, including Liberty Times and China Times, were competing for event coverage. | It is of particularly great educational significance that Mr. Lai Pei-Yuan, the Humanities Award winner, spent 30 years and countless amount of money for his long-term dedication to the restoration of forest.<br><br>A total of 7 winners of Technology category award, in 4 different fields, had great contributions in assisting Taiwanese manufacturers of flash memory storage devices taking firm footing in the highly competitive global market, facilitating the flourish development of machine learning Open Source software, making Taiwan an important global exporting country of gear manufacturing machine tools, creating values for Taiwan's biomedical industry, and making Taiwan's clinical drug research known to the global lung cancer research community, respectively. |
| Project overall: Starting from inception year (1993) to date | Up to the 22nd TECO Awards (2015), a total of 119 elites has won the awards, with a total of 164 scholars and experts serving as the jury, and a total of NT$ 58.2 million was awarded as prizes. | Elites in various fields have worked hard quietly over the 22 years, and those who had made outstanding contributions specifically promoted the development in the fields of science and Humanities, and fostered positive energy in the society. | The award winners provided models for the society, and served as learning benchmarks for TECO for employees. They formed the TECO Award Winner Association to help the development of industrial environmental protection and energy-saving technologies; their service spirit of "giving back to the society what one takes from it" also helped shape the corporate culture of caring for society and volunteer services. |

Project II

## 2015 TECO "Green Tech" International Creativity Competition Finals

### Forty-four Energy-Saving Works from Nine Countries - Europe, Asia and America -Gathered in Taiwan, Signifying International Green Energy Creativity

The TECO "Green Tech" International Creativity Competition encourages involvement of young people in green technology R & D; Taiwan university teams competed in the "Main Competition" with a total of 112 pieces of works, while a total of 22 top university teacher-and-student teams from 9 countries, including USA, UK, Germany, Sweden, Japan, Russia, Singapore, Mainland China and Taiwan, participated in the "International competition".

More than 300 international creative youths representing 44 domestic and foreign teams from around the world competed in the finals, representing a record turnout and illustrating Taiwan's emphasis on the development of "Green Tech".

The spirit of "Green Tech" is to advance with times and heighten public awareness to environmental protection issues and action, as well as foster the cultivation of R & D talents in "Green Tech" related fields, to further provide strategy and resources for Green Tech development.


### I. Continuously holding TECO "Green Tech" international competition for eight consecutive years

### II. Proposal Motivation:

It is the mission of Green Tech science creativity competition to encourage involvement of young people in the R & D of energy conservation and carbon reduction technology.

### III. Description of competition categories:

- Main Competition: Twenty-two elite teams were shortlisted from 100 Taiwan college and university teams to compete for the awards

- International Competition: A total of 22 top university teams from USA, Japan, UK, Russia, Singapore, Germany, Taiwan, Sweden and Mainland China were invited to participate in this category.

### IV. 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.

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

In 2015, the Green Tech Competition expanded on the 2016 event with nearly 20 teams participating from 6 countries, including the U.S., Japan, Germany, Singapore, 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 Awards draw very much attention and attracted active participation internationally: One of the Jury members, Professor Takashi Matsuyama, from Kyoto University, Japan, affirmed the competition and encouraged Kyoto University teacher-and-stident team to participate in 2016 "Green Tech" competition; diplomatic envoys of Ministry of Foreign Affairs, Ministry of Science and Technology representatives based in Germany, ITRI representatives based in Japan and USA, etc. all offered to actively invite top university teams from Japan, Germany, Switzerland and Austria to participate

## 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 themes of the awards will continued to be set in such a way to emphasize the urgency and significance of the issues

As the Humanities Award entered into the 8th year in 2015, the urgency and significance of issues were conveyed to the general public through continuous long-term actions to set the award themes and relevant investment of resources.

In line with the "Paris Agreement" passed in the Paris Climate Summit at the end of 2015, a Special Feature Award established in 2016 competition - Low Carbon Technology Award - not only responded to the international consensus but also encouraged and rewarded the teams dedicated to the research of low carbon and carbon reduction.

| | |
|---|---|
| Time | 2015 |
| Resources invested | Thanks to the generous supports from ITRI, ROHM Semiconductor, Teco Image Systems, Creative Sensor Inc., Friends of LEKO and various sectors; Mr. Hsu Jue-Min, Minister of Ministry of Science and Technology, and Mr. Hu Yao-Zu, Head of Green Energy and Environmental Research Laboratories, were invited to present the awards. The total funds utilized for award activities reached NT$ 7 million, and a total of 19 awards were given away with prizes valued at NT$3.26 million. |
| Results | Competitions were divided into two categories: international competition and main competition.<br>The contestants of International Competition came from nine countries, with a total of 22 of the world's top schools.<br>A total of 100 domestic college and university teams were attracted to participate in the Main Competition, and after the initial review, 22 teams were shortlisted to enter into the finals.<br><br>Approximately over 800 people participated in the finals, including contestants, observing venture capital firms and general public, etc. |
| Social Impact | As far as the society is concerned, public attention was heigntened to environmental protection related issues and actions, emphasizing the urgency and importance of the issues and encouraging younger generations' commitment to "Green Tech" research and development, promoting the talent cultivation in R & D of technologies in the relevant fields at universities, and contributing to strategies and resources for green energy technology development. |

| | |
|---|---|
| Time | Project overall: Since inception year (2008) to date |
| Resources invested | Since 2008, the focus has been placed on the issues surrounding energy depletion, global warming and human sustainability; while setting "Green Tech" as the main theme, the trend of scientific research of energy conservation and carbon reduction by teachers and students of domestic university and technical vocational school was hence started.<br><br>As the trend also enticed the attention of international academic and education community, in 2010, the "International Competition" was added and international top university teacher-and-student teams were invited to participate; thus, an international technology and academic education exchange platform was herby actively and successfully established in Taiwan. |
| Results | Since 2010, the International Competition was added, and as this competition was gaining more international reputation gradually, the number of schools and countries invited to compete also increased year by year; even though the contestants were usually by invitation, in recent years, there were also some international top schools that took the initiative to register for the competition. |
| Social Impact | Industry:<br>1. An average of over 80 pieces of green energy technology works are produced for the competition per year, and the related work information is published on the Foundation's Web site for viewing and reference of various sectors, enhancing the opportunities of industrial-academic cooperations.<br>2. Venture capital firms were also invited to the competition for their feedback and possible investments in works with potential for manufacturing of commercial products derived from the innovative Green Tech inspirations to further benefit the society.<br><br>Government sectors:<br>Actively created the image of Taiwan with a focus on "Green Tech" development and promoted the communication and exchange between the top schools and Taiwan offices in overseas countries by inviting international top schools to compete and international experts and scholars to serve as jury members every year.<br><br>Academic and research institutions:<br>1. The competition actively matches the winning entries with research institutions and industries for possible cooperations every year; for example, it facilitated the cooperation between Huazhong University of Science and Technology and Taiwan's Academia Sinica.<br>2. Each year, both international and domestic experts and scholars are invited to serve as the Jury members, so the participating teams can get to know the current status of the Green Tech related research by industries, academic and research communities as well as receive useful advice.<br>3. The competition inspires the young generations to engage in "Green Tech" R & D and encourages universities to foster technology R & D talents in related field to contribute strategies and resources to the development of green energy technology.<br><br>General public:<br>The competition entries can effectively make the current green technology and related development trends known to the general public as well as raise public awareness of environmental protection related issues. |

Project III

## Enriching Cultural Attainment through Creative Education

In view that"creativity" is long proven an indicator of cultural attainment as shown in government policy, technological development, art creation, industrial management, education design, etc., efficiency enhancement in all fields requires creative capability, therefore, "creative education" is considered the foundation of national strength. In 2002, the Ministry of Education announced the "Creativity Education White Paper". "TECO" also takes the promotion of "creativity education" upon itself as its own responsibility; hence TECO has turned a new page of creativity education promotion throughout Taiwan. Professor Hong Lan of National Central University proposed: "The brain is like a bustling network, so the effectiveness of network connection determines our wisdom. To be creative, we need to have closely connected neural network that leads to all direction, because, after the lightwave, captured by the eyes, and the sound waves, captures by the ears, enter into the brain, they are converted into brain waves, and the brain waves can trigger the activation of other neural circuits and stimulate the connections to other neural circuits. The denser one's neural circuits are, the more ideas one has and the stronger ones's creativity is. As seen in the study of neurology, experiences can affect the nerve connections, the density of neural connections is related to creativity comprehended by analogy and learned by analogy, and experiences are gained through one's own experiences, learning or reading and internalizing predecessor' experiences. The theoretical foundation of creativity education Foundation proposed by Professor Hong Lan of National Central University has been our Foundation's basis for promoting creativity education throughout Taiwan in the past decade. And we continued to achieve our vision through three projects:

### I. Expeditionary Learning (EL) Education Promotion Plan:

### Realizing practical education - "Apply what you have learned"

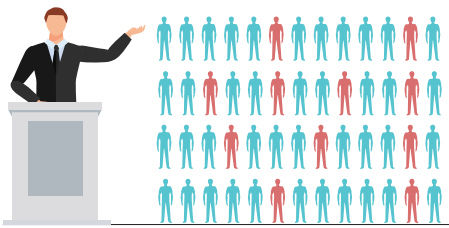
Merging the concepts of experiential education, corporate education training, philosophy basis and guiding approach, a five-day course is broken into two stages, to promote the enhancement of over 100 teachers' teaching capabilities in "self-awareness","problem exploration", "drive energy", "problem solving", etc., and to coach the teacher to adopt the "subject integration" approach to gradually modify their teaching design. For those teachers who actually apply "Expeditionary Teaching" when they are back at schools, they would be given assistance and supports in the course planning, design and practice, so the "Apply what you have learned" effect of education can really be achieved.

| Time | Resources invested | Results | Social Impact |
|---|---|---|---|
| 2015 | Cash<br>NT$701,015 | Number of people reached directly<br>642<br>people | Trained at least 300 expeditionary seed teachers to change the learning approach of 10,000 students from 100 schools. Each school should establish its own expeditionary learning-teaching teams to urge at least 4,000 teachers to learn and participate in the expeditionary learning-teaching approach. |
| Project overall: Since inception year (2014) to date | Cash<br>NT$1,523,016 | Number of people reached directly<br>820<br>people | • Provided problem-solving approaches in classrooms, and boosted teachers' determination to accomplish their mission by assisting 300 expeditionary seed teachers in the design and development of student-oriented teaching activities.<br>• Through deepening campus counseling, guided the entire school, including teachers and students, to design and develop school-wide expeditionary learning system and realize the transformation to Expeditionary Learning School. |

## II. Life, Art and Creativity Experience Activity:
## Humanities education in the deepest part of Central Mountain Range

" Life, Art and Creativity Experience Activity " is an annual art and humanities feast, including professional concerts, ballet dances, drama, art lectures, etc. and traditional ballad dances of various ethnic groups, presenting inspiring creativity and meaning of life. As a part of the Foundation's implementation of "Humanities-Oriented" creativity education program, it is a service of art and humanities appreciation, which the Foundation provided to nearly 3,000 teenagers in remote counties and cities, including Nantou, Taitung, Pingtung, Hualien, ...etc. and it is also humanities education in the deepest part of Central Mountain Range.

| Time | Resources invested | Results | Social Impact |
|---|---|---|---|
| 2015 | Cash<br>NT$1,626,997 | Number of people reached directly<br>1,942 people | Effectively enhanced 1,942 tribal students' art and creativity learning capabilities. |
| Project overall: Since inception year (2005) to date | Cash<br>NT$21,009,939 | Number of people reached directly<br>29,541 people | • Facilitated broadening of tribal students' horizons and enhancement of cultural attainment.<br>• Inspired tribal students' interest in various kinds of art and culture and opened up infinite possibilities for the future.<br>• Effectively inspired tribal teachers' teaching capabilities in the fields of art appreciation, life experiences and creativity enhancement, etc.<br>• Heightened public attention to art and culture education in remote areas and sustained the flames of art and culture all year round.<br>• Prompted government to recognize the lack of art and culture education resources in remote areas and re-consider and re-steer its resources allocation.<br>• Attracted more non-profit organizations to take part in the art and culture education activities in remote areas. |



## III. Program to Deeply Cultivate Creative Science Education in Remote Areas:
## Science education in the deepest part of Central Mountain Range

" Program to Deeply Cultivate Creative Science Education in Remote Areas" is a lively and interesting science experience course designed by Teacher Snakeking Wang (known as "Pastoral Teacher"), known as the most creative and interesting teacher in the country, aimed to make 9,781 students, from 174 schools in remote counties, understand "total reflection of light" and "specific gravity". It adopts the demonstration teaching method with open observation hoping to inspire teachers to make their teaching methods livelier. In 2016, the number of students participated in the program increased to 9,891 students from 177 schools, and the program heance became the science education in the deepest part of Central Mountain Range.

| Time | Resources invested | Results | Social Impact |
|---|---|---|---|
| 2015 | Cash<br>NT$675,612 | Number of people reached directly<br>9,781 people | Provided truly effective science learning curriculum to 9,781 students, and sparked their interest in science courses. |
| Project overall: Since inception year (2010) to date | Cash<br>NT$2,115,268 | Number of people reached directly<br>29,541 people | • Opened up students' learning horizons, set the science-learning trends, and enhanced learning effectiveness.<br>• Integrated various resources, prompted public support with investment of resources, and enhanced learning resources for tribal students in remote villages.<br>• Provided teachers with different ways of teaching and thinking by assimilating creativity into teaching.<br>• Initiated the Foundation's plan to popularize "science education" and "creativity education" at schools in remote villages and tribes.<br>• Heightened government attention to science education in remote villages.<br>• Drove government and private groups to support and invest resources. |

Project IV

## Enriching the Humanistic Society with Heritage Education

### I. 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

### II. Project motivation：

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.

More sustainable education programs for aboriginal ethnic groups：
http://www.tecofound.org.tw/aboriginal/song.html

### III. Project Approach:

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

The “Exclamation” program materializes the vision of “helping tribes without written systems for their languages achieve sustained prosperous development,” via the strategy of integrated resources, inheritance of skills, and professional teachers, funding 42 teams of tribal schools and supporting tribal sustainable education plan by rallying the forces of 36 NPO/NGO units, 50 enterprises, 21 urban schools, six private social groups, over 100 individuals, and four government sectors.

#### 2 Implementation programs and contents for strategic alliances

1. Encouraged strategic alliances to take part in "Lifelong Education Learning Circle organized by the Ministry of Education "

2. Visited tribal teams: Promoting resource exchange and integration among adopters, identifying supply and demand for performance guidance, budgeting, encouraging and supporting the collection, editing, creation of field research.

3. Nurtured traditional music and dance teachers (courses + idea exchange + workshops)

4. Called on the strategic alliances to support domestic and overseas performing activities

5. TECO recruited and hired heritage teachers to station in tribal community to provide assistance

6. Recruited and hired professional art consultants to station in tribal community to guide heritage teams

7. Joint marketing operations via delivery of audio and video recordings, brochures, Web pages, "Exclamation Times", etc.

### 3 Supporting heritage education via integration of domestic and foreign resources

In 2015, "Exclamation" travelled across eight counties for continuing support and development of 10 tribes. More supporting partners of heritage education continued to emerge, from 2014 to 2015, including 11 NPO/NGO units, 15 enterprises, 2 private social groups, 3 government sectors, etc.Heritage education's path to sustainable development is made passible via the outstanding effectiveness of rolling resources, through the combination of heritage teams, tribal community and associations, of schools, communities and tribes, as well as the students of heritage education broadening from tribal children, to teenagers and adults.

### 4 Innovative Work in 2015

1. Recruited heritage teachers to station in tribal community and teach field research.

2. Heritage teachers practiced cross-team and cross-ethnic group teaching and idea exchanges.

3. Recruited professional managers, directors and indigenous heritage teachers for planning of performance production and presentation:

4. Implemented programs through small strategic alliances.

5. Participation in fund-raising platforms to raise funds for sub-groups.

6. Added exclusice local performances (such as Kuan-Du Arts Festival, Tree Valley Charity Concert) to enrich the humanistic life of underprivileged groups in the southern part of Taiwan.

7. Supported professional indigenous theaters and dances, etc.

8. Designated personnel revising and enriching "Exclamation" exclusive Web page, actively promoting the support model "Exclamation" to sectors and attracting more investment of resources in "Exclamation" to secure the resources required to foster 42 heritage teams and 24 education service programs.

9. Promoted cooperations between heritage teams and professional string orchestras and connected the aboriginal art with international arena, to ensure the ancient ballad of aboriginal tribes "without written systems for their languages or music" will continue to circulate, pass down and prosper.

10. Made heritage teams capable of collaborating with international string orchestra for joint performance, to make Taiwan's precious indigenous art known to the international community.

## IV. Impact Evaluation on Enterprise and Society

### Impact on TECO

1. TECO's corporate image in caring for humanities and science was established through its participation in strategic alliances and supporting development of "Exclamation" by investing in humanities development while focusing on technology development.

2. TECO's efforts in leading the social sectors to support Taiwan's aboriginal art and culture heritage education program gained affirmation and recognition from various social sectors.

3. Not only TECO's charitable image of caring for sustainability of minorities and passing of precious cultural heritage was successfully established, but also TECO's employees were offered the opportunities to learn and appreciate the elegance and value of Taiwan's aboriginal culture and art.

4. Owning a public benefit platform successfully integrating social resources, professional operated, and making excellent performance.

5. Prompted employees' participation in performing activities and volunteer services as well as their identification with TECO's corporate responsibility and culture of " giving back to the society what one takes from it"; through heightening employees' attention to the issues related to Taiwan's aboriginal culture and education, the employees would voluntarily invest their time and resources in the development of the relevant programs.


| Time | Resources invested |
|---|---|
| 2015 | • Financial resources: Calling on enterprises and government sectors for their investments of NT$ 22,154,214 in "Exclamation" project.<br>• Material resources: Calling on all sectors to raise shoebox gifts for 1,836 children of "Exclamation" schools.<br>• Volunteers and manpower: Calling on nearly 200 volunteers to contribute their skills to the children of "Exclamation" project.<br>• Six aboriginal heritage teachers were continued to be employed by TECO, with monthly salary paid, so they could remain with the tribes to guide and teach the "Exclamation" teams' performing, exhibiting, choreography, rehearsal, etc. to assure the result of heritage passing. |
| Project overall: Since inception year (2014) to date | 1. Financial resources: A total of NT$ 39,590,574<br>2. Material resources:<br>• 4,387 shoebox gifts<br>• 19 pairs of snow boots<br>3. Volunteers and manpower: Nearly 200 volunteers were called on to participate<br>4. TECO continued to employ six aboriginal heritage teachers<br>5. Integrated supports from professionals in theater industry to gather energy and resources required for "Exclamation" performing activities, including the creation of "Indigenous Children's Night" and "Audio & Video Collection" in 2016. |

| Time | Results | Social Impact |
|---|---|---|
| 2015 | • Supported 18 traditional folk-song teams in developing traditional folk-song education<br>• Supported 17 traditional dancing teams in developing traditional dance education<br>• Supported 1 traditional crafts team in developing traditional crafts education<br>• Supported 2 physical competition teams in developing physical training<br>• Supported 2 crafts learning teams in developing potential cultivation education<br>• Continued holding learning courses for heritage teachers<br>• Domestic performances - Eight professional performance halls were arranged for the teams to showcase their performance.<br>• Overseas performances - Six performances were arranged for the teams to perform with their international peers (performances in France, USA, Germany, Australia, Poland, Austria, Japan, etc.). | • A wide range of professional services were provided to 41 tribal education teams which were adopted and supported by the joint efforts of 36 foundations, 50 enterprises, 6 private social groups, 21 urban schools, over hundreds of kind individuals and 4 government sectors, through integration, mutual assistance, cooperation and respect.<br>• After aboriginal children and teenagers from remote areas showcased and presented their learning results of folk-songs, traditional dances, and drafts, their performance was applauded and recognized by general public, and their self-confidence was boosted; and the trial community would then actively and voluntarily mobilize heritage learning within the community.<br>• Through heightening public attention to the passing and development of tribal culture and art and the results of the heritage program, the tribes without written systems for their languages were able to develop their art and culture with propsperity and let them spread far and wide.<br>• Compiled complete records of traditional tribal culture and art (audio and video recording of performances) and made ancient ballad song arrangements for Rukai, Paiwan, Amis, Tsou tribes.<br>• When the aboriginal heritage teams were invited to perform abroad, the international community would have the opportunity to learn and appreciate Taiwan's unique aboriginal culture and its innate enriching, delicate and profound characteristics, so international community's attention would also be heightened to cherish Taiwan and Taiwan's aboriginal traditional culture and art through supporting the sustainable development and passing of Taiwan's aboriginal heritage, so as to spread the achievement of Taiwan's culture and art education and heritage education. |
| Project overall: Since inception year (2014) to date | • Promotion of science education curriculum for youths benefited up to 9,781 students in 174 schools.<br>• A full day event, an art and culture feast, was organized for 4,861 youths in Nantou, Pingtung, Hualien and Taitung Counties.<br>• Fund-raising for 41 heritage teams and 21 education programs was implemented.<br>• Tribal students learned 183-214 traditional folk-songs, 59-70 traditional folk dances, 2 traditional drafts, 2 crafts and 2 sports. | As of 2015, the tribal schools or group receiving supports covered 10 tribes throughout eight counties, including Nantou, Pingtung, Chiayi, Hualien, Taitung, Ilan, Miaoli, Kaohsiung; and the education programs adopted and developed included the 41 sub-projects in traditional folk-song, dance, musical instruments, traditional crafts and crafts cultivation, physical talents and health, etc.; other implementations also include indigenous children's night, charity concerts, domestic and overseas exclusive performance, year-end performance, traditional dance heritage teacher cultivation curriculum, science creativity teaching deepening programs in remote villages, etc.<br><br>A full range of adoption resources included 36 NPO/NGO units, 50 enterprises, six private social groups, 21 urban schools, over 100 kind individuals, and four government sectors, and via the strategy of integrated resources, the talent cultivation and development of aboriginal new generations, passing and spread of tribal culture and art, as well as the growth and competitiveness enhancement of knowledge and traditional crafts were assured. |

# 08
# Report Summary and Annex

## 8.1 Report Summary and Annex

In 2015, TECO compiled its sixth issue of Corporate Social Responsibility Report since publishing its first report in 2010. It is also the 4th report ever verified by an external third party. This year's report summarized the strategic objectives, 2015 actual results, and future plans for each major issue so as to provide easier access for stakeholders to the contents. Development of each major issues is also more detailed in each section, in hopes that the communications with stakeholders are more clear with respect to TECO's concepts and development practices in all areas, including governance, economy, environment and society.

In 2015, TECO's Corporate Governance Center was established to lay the cornerstone for more systematic implementations of corporate governance strategies; economically, TECO integrated the capabilities within the group via incorporating its core technologies with technological innovation by launching a full range of smart green products, including smart motors, smart air-conditioners, etc. These economical type of smart products are the optmal smart green solutions provided to clients, while driving industry upgrade as well as laying the energy foundation for TECO's sustainability development.

Environmentally, TECO not only commited to development of energy-saving products for reducing energy consumption and carbon emissions at user-end, but also proactively reviewed its product life cycles, verified inventory, and formulated policies for reducing environmental impacts; in 2015, the company further rolled out a series of green supplier policies, aimed to prompt the suppliers' joint efforts in promoting development of green supply chain. Socially, while embracing the vision of "creating a blissful enterprise and a society with co-prosperity of science and humanities", TECO actively strengthened talent development by providing a better stage for TECO's employees to shine and formulating more employee care policies, aimed to take work-life balance into consideration while employees putting their best efforts at work; TECO also extended its care for employees into caring for society by continuously supporting TECO Technology Foundation for development of innovative technologies and humanities education in achieving the vision of creating a society with co-prosperity of science and humanities.

In 2016, TECO embraced its 60th year anniversary; in the future, while continuing to take roots on its solid developments in all dimensions, including E (Environment) S (Society) G (Governance), TECO will promote corporate social responsibility more comprehensively, aimed to play company's influences on steering upgrade of overall industry and society, while pursuing enterprise sustainable development.

## 8.2 GRI G4 Index

| Indicator # | GRI and Indicators | Sections on issue disclosure | Pages | External Assurance (Yes/No) |
|---|---|---|---|---|
| Strategy and Analysis | | | | |
| 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. | 1 | 6-8 | |
| G4-2 | Provide a description of key impacts, risks, and opportunities. | 4.2 | 46-47 | |
| Organizational profile | | | | |
| G4-3 | Report the name of the organization. | 3.2.1 | 19 | |
| G4-4 | Report the primary brands, products, and services. | 3.3、3.4、3.5 | 20-31 | |
| G4-5 | Report the location of the organization's headquarters. | 3.2.1 | 19 | |

| Indicator # | GRI and Indicators | Sections on issue disclosure | Pages | External Assurance (Yes/No) |
|---|---|---|---|---|
| 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. | 3.2.1 | 19 | |
| G4-7 | Report the nature of ownership and legal form. | 3.2.1 | 19 | |
| G4-8 | Report the markets served (including geographic breakdown, sectors served, and types of customers and Beneficiaries). | 3.2.1 | 19 | |
| G4-9 | Report the scale of the organization | 3.2.1、6.2 | 19、65-69 | |
| G4-10 | Report the total number of employees by statistics on the classification | 6.2 | 65-69 | |
| G4-11 | Report the percentage of total employees covered by collective bargaining agreements. | 6.3 | 70-71 | |
| G4-12 | Describe the organization's supply chain. | 5.1 | 48-51 | |
| G4-13 | Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain. | 3.2.1 | 19 | |
| G4-14 | Report whether and how the precautionary approach or principle is addressed by the organization. | 4.2 | 46-47 | |
| G4-15 | List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses. | 3.2.1 | 19 | |
| G4-16 | List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization | 3.2.1 | 19 | |
| Identified Material Aspects and Boundaries | | | | |
| G4-17 | A. List all entities included in the organization's consolidated financial statements or equivalent documents.<br>B. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report. | Report Scope and Boundary、32 | 3、17-18 | |
| G4-18 | A. Explain the process for defining the report content and the aspect boundaries.<br>B. Explain how the organization has implemented the reporting principles for defining report content | 2.2 | 11-13 | |
| G4-19 | List all the material Aspects identified in the process for defining report content. | 2.2 | 11-13 | |
| G4-20 | For each material Aspect, report the Aspect Boundary within the organization, | 2.2 | 11-13 | |
| G4-21 | For each material Aspect, report the Aspect Boundary outside the organization | 2.2 | 11-13 | |
| G4-22 | Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements. | About the TECO Corporate Social Responsibility Report | 2 | |
| G4-23 | Report significant changes from previous reporting periods in the Scope and Aspect Boundaries. | Report Scope and Boundary | 3 | |
| Stakeholder engagement | | | | |
| G4-24 | Provide a list of stakeholder groups engaged by the organization. | 2.3 | 14-15 | |
| G4-25 | Report the basis for identification and selection of stakeholders with whom to engage. | 2.3 | 14-15 | |
| 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. | 2.3 | 14-15 | |
| 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. | 2.3 | 14-15 | |
| Report profile | | | | |
| G4-28 | Reporting period (such as fiscal or calendar year) for information provided. | Report Scope and Boundary | 3 | |
| G4-29 | Date of most recent previous report (if any). | Report Scope and Boundary | 3 | |
| G4-30 | Reporting cycle (such as annual, biennial).<br>SEE IMPLEMENTATION MANUAL | Report Scope and Boundary | 3 | |
| G4-31 | Provide the contact point for questions regarding the report or its contents. | Report Scope and Boundary | 3 | |
| G4-32 | A. Report the 'in accordance' option the organization has chosen.<br>B. Report the GRI content index for the chosen option (see tables below).<br>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. | Report Scope and Boundary | 3 | |

| Indicator # | GRI and Indicators | Sections on issue disclosure | Pages | External Assurance (Yes/No) |
|---|---|---|---|---|
| G4-33 | A. Report the organization's policy and current practice with regard to seeking external assurance for the report.<br>B. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assuranceprovided.<br>C. Report the relationship between the organization and the assurance providers.<br>D. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report. | About the TECO CorporateSocial Responsibility Report | 2 | |
| Governance | | | | |
| G4-34 | Report the governance structure of the organization, including committees of the highest governance body.<br>Identify any committees responsible for decision-making on economic, environmental and social impacts. | 4.1.4 | 42 | |
| Ethics and InteGRIty | | | | |
| G4-56 | Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics. | 4.1.4 | 43 | |
| Category: economic | | | | |
| Aspect: economic performance | | | | |
| G4-DMA | Disclosures on Management Approach | 3.1 | 16 | |
| G4-EC1 | Direct economic value generated and distributed | 3.2 | 17 | |
| G4-EC2 | Financial implications and other risks and opportunities for the organization's activities due to climate change | 3.3-3.5 | 20-31 | |
| G4-EC3 | Coverage of the organization's defined benefit plan obligations | 6.4 | 71-72 | |
| G4-EC4 | Financial assistance received from government | 3.2 | 17 | |
| Aspect: market presence | | | | |
| G4-EC7 | Development and impact of infrastructure investments and services supported | 3.2.1 | 19 | |
| Aspect: procurement practices | | | | |
| G4-EC9 | Proportion of spending on local suppliers at significant locations of operation | 5.1 | 48-51 | |
| Category: environmental | | | | |
| Aspect: materials | | | | |
| G4-DMA | Disclosures on Management Approach | 5.2 | 52 | |
| G4-EN1 | Materials used by weight or volume | 5.2 | 52 | |
| Aspect: energy | | | | |
| G4-DMA | Disclosures on Management Approach | 5.2.3 | 56 | |
| G4-EN3 | Energy consumption within the organization | 5.2.3 | 56-59 | * |
| G4-EN7 | Reductions in energy requirements of products and services | 5.2.3 | 59-60 | |
| Aspect: water | | | | |
| G4-DMA | Disclosures on Management Approach | 5.2.3 | 60-62 | |
| G4-EN8 | Total water withdrawal by source | 5.2.3 | 60-62 | |
| G4-EN9 | Water sources significantly affected by withdrawal of water | 5.2.3 | 60-62 | |
| G4-EN10 | Percentage and total volume of water recycled and reused | 5.2.3 | 60-62 | |
| Aspect: emissions | | | | |
| G4-DMA | Disclosures on Management Approach | 5.2.3 | 57 | |
| G4-EN15 | Direct greenhouse gas (GHG) emissions (scope 1) | 5.2.3 | 57 | Please refer to BSI certificate |
| G4-EN16 | Energy indirect greenhouse gas (GHG) emissions (scope 2) | 5.2.3 | 57 | ★Please refer to BSI certificate |
| G4-EN17 | Other indirect greenhouse gas (GHG) emissions (scope 3) | 5.2.3 | 57 | |

| Indicator # | GRI and Indicators | Sections on issue disclosure | Pages | External Assurance (Yes/No) |
|---|---|---|---|---|
| G4-EN19 | Greenhouse gas (GHG) emissions intensity | 5.2.3 | 57 | |
| G4-EN20 | Emissions of ozone-depleting substances (ODS) | 5.2.3 | 60 | |
| G4-EN21 | Nox, Sox, and other significant air emissions | 5.2.3 | 64 | |
| Aspect: Effluents and Waste | | | | |
| G4-DMA | Disclosures on Management Approach | 5.2.3 | 63 | |
| G4-EN22 | Total water discharge by quality and destination | 5.2.3 | 61 | |
| G4-EN23 | Total weight of waste by type and disposal method | 5.2.3 | 63 | |
| G4-EN24 | Total number and volume of significant spills | 5.2.3 | 63 | No such circumstances in 2015 |
| 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 | 5.2.3 | 63 | |
| Aspect: Products and Services | | | | |
| G4-EN27 | Extent of impact mitigation of environmental impacts of products and services | 5.2.1 | 52-55 | ★ |
| G4-EN28 | Percentage of products sold and their packaging materials that are reclaimed by category | 5.2.1 | 55 | |
| Aspect: compliance | | | | |
| G4-DMA | Disclosures on Management Approach | 5.2.4 | 63 | |
| G4-EN29 | Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce | 5.2.4 | 63 | ★ |
| 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 | 5.2.1 | 52-54 | |
| Aspect: supplier environmental assessment | | | | |
| G4-DMA | Disclosures on Management Approach | 5.1 | 48 | |
| G4-EN32 | Percentage of new suppliers that were screened using environmental criteria | 5.1 | 50 | |
| Category: social | | | | |
| Sub-category: labor practices and decent work sub-category: labor practices and decent work | | | | |
| Aspect: employment | | | | |
| G4-DMA | Disclosures on Management Approach | 6.1 | 64-65 | |
| G4-LA1 | Total number and rates of new employee hires and employee turnover by age group, gender and region | 6.2 | 65-69 | ★ |
| G4-LA2 | Benefits provided to full-time employees that are not provided to temporary or parttime employees, by significant locations of operation | 6.4 | 71-72 | |
| G4-LA3 | Return to work and retention rates after parental leave, by gender | 6.7 | 78 | ★ |
| Aspect: labor/management relations | | | | |
| G4-DMA | Disclosures on Management Approach | 6.1 | 6.4 | |
| G4-LA4 | Minimum notice periods regarding operational changes, including whether these are specified in collective agreements | 6.3 | 70-71 | |
| Aspect: Occupational Health and Safety | | | | |
| G4-DMA | Disclosures on Management Approach | 6.6 | 75 | |
| 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 | 6.6 | 76 | |
| 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 | 6.6 | 76 | ★ |

| Indicator # | GRI and Indicators | Sections on issue disclosure | Pages | External Assurance (Yes/No) |
|---|---|---|---|---|
| G4-LA7 | Workers with high incidence or high risk of diseases related to their occupation | 6.7 | 76 | |
| G4-LA8 | Health and safety topics covered in formal agreements with trade unions | 6.7 | 70 | |
| Aspect: Training and Education | | | | |
| G4-DMA | Disclosures on Management Approach | 6.5 | 73 | |
| G4-LA9 | Average hours of training per year per employee by gender, and by employee category | 6.5 | 73 | |
| G4-LA10 | Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings | 6.5 | 73-75 | |
| G4-LA11 | Percentage of employees receiving regular performance and career development reviews, by gender and by employee category | 6.5 | 73-75 | |
| Sub-category: human rights | | | | |
| Aspect: Non-discrimination | | | | |
| G4-DMA | Disclosures on Management Approach | 6.1 | 64 | |
| G4-HR3 | Total number of incidents of discrimination and corrective actions taken | | | No such circumstances in 2015 |
| Aspect: Freedom of Association and Collective Bargaining | | | | |
| G4-DMA | Disclosures on Management Approach | 6.3 | 70 | |
| 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 | 70-71 | |
| Aspect: child labor | | | | |
| G4-DMA | Disclosures on Management Approach | 5.1 | 48 | |
| 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 | 5.1 | 50 | No such circumstances in 2015 |
| Aspect: Forced or Compulsory Labor | | | | |
| G4-DMA | Disclosures on Management Approach | 5.1 | 48 | |
| G4-DM6 | 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 | 5.1 | 48 | No such circumstances in 2015 |
| Aspect: supplier human rights assessment | | | | |
| G4-DMA | Disclosures on Management Approach | 5.1 | 48 | |
| G4-HR10 | Percentage of new suppliers that were screened using human rights criteria | 5.1 | | |
| Sub-category: society | | | | |
| Aspect: local communities | | | | |
| G4-SO1 | Percentage of operations with implemented local community engagement, impact assessments, and development programs | 2.3、5.2 | 48 | |
| Aspect: Anti-corruption | | | | |
| G4-DMA | Disclosures on Management Approach | 4.2 | 46 | |
| G4-SO3 | Total number and percentage of operations assessed for risks related to corruption and the significant risks identified | 4.2 | 47 | |
| G4-SO4 | Communication and training on anti-corruption policies and procedures | 4.2 | 47 | |
| G4-SO5 | Confirmed incidents of corruption and actions taken | 4.2 | 47 | |
| Aspect: Anti-competitive Behavior | | | | |
| G4-SO7 | Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes | 4.2 | 47 | No such circumstances in 2015 |
| Aspect: compliance | | | | |

| Indicator # | GRI and Indicators | Sections on issue disclosure | Pages | External Assurance (Yes/No) |
|---|---|---|---|---|
| G4-DMA | Disclosures on Management Approach | 3.6 | 32 | |
| G4-SO8 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations | 3.6 | 32 | |
| Aspect: Supplier Assessment for Impacts on Society | | | | |
| G4-DMA | Disclosures on Management Approach | 5.1 | 48 | |
| G4-SO9 | Percentage of new suppliers that were screened using criteria for impacts on society | 5.1 | 50 | |
| Sub-category: product responsibility | | | | |
| Aspect: Customer Health and Safety | | | | |
| G4-DMA | Disclosures on Management Approach | 3.6 | 32 | |
| G4-PR1 | Percentage of significant product and service categories for which health and safety impacts are assessed for improvement | 3.6 | 33 | |
| 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 | 3.6 | 33 | No such circumstances in 2015 |
| Aspect: Product and Service Labeling | | | | |
| G4-DMA | Disclosures on Management Approach | 3.6 | 32-33 | |
| 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 | 3.6 | 32-33 | |
| 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 | 3.6 | 32-33 | |
| G4-PR5 | Results of surveys measuring customer satisfaction | 3.8 | 36 | |
| Aspect: marketing communications | | | | |
| G4-DMA | Disclosures on Management Approach | 3.6 | 32 | |
| G4-PR6 | Sale of banned or disputed products | 3.6 | 33 | |
| 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 | 3.6 | 33 | No such circumstances in 2014 |
| Aspect: customer privacy | | | | |
| G4-DMA | Disclosures on Management Approach | 3.6 | 33 | |
| G4-PR8 | Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data | 3.6 | 33 | No such circumstances in 2014 |
| Aspect: compliance | | | | |
| G4-DMA | Disclosures on Management Approach | 3.6 | 33 | |
| G4-PR9 | Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services | 3.6 | 33 | No such circumstances in 2014 |

## 8.3 Summary of information assured

| No | Assured item | Pages | Reporting criteria |
|---|---|---|---|
| 1 | Sales proportion of high energy saving motors with capacity below 300HP (224kW) in 2015 (in sales value and volume). | 21 | Total 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. |
| 2 | Power saving statistics of high energy saving motors with capacity below 300HP (224kW) in 2015. (conversion of power saving, in terms of kilowatts/hour, to CO2 emission amount) | 21 | • IE2 motors refer to those with capacity below 300HP, classified as or above the IE2 criteria under IEC60034-30-1:2014.<br>• IE3 motors refer to those with capacity below 300HP, classified as or above the IE3 criteria under IEC60034-30-1:2014.<br>• Power saving, expressed in kilowatts/hour, was calculated by multiplication of separate and total annual sales volume of motors under the above classification by the difference between the power consumption with that of IE1 motor, using 5,000 operating hours per year. |

| No | Assured item | Pages | Reporting criteria |
|---|---|---|---|
| 3 | Sales proportion of first- and second-grade energy-saving household air conditioners and refrigerators in 2015. (in sales value and volume) | 28 | 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 | Statistics of power saving for first- and second-grade energy-saving household air conditioners and refrigerators in 2015. (conversion of power saving, in terms of kilowatts/hour into CO2 emission amount) | 28 | IMultiplying annual sales volume of first- and second-grade household air conditioners and refrigerators, 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. |
| 5 | Sales proportion of each product in 2015. | 17 | Annual sales proportion of each product on a stand-alone basis. |
| 6 | Performance highlights in 2015 (revenue, earnings per share, return on equity, net profits, cash dividends, income tax expense, and investment tax credits). | 17 | Revenue, earnings per share, return on equity, net profits, cash dividends, income tax expense, and investment tax credit, on a stand-alone basis. |
| 7 | Number of meetings of Board of Directors and average rate of attendance in person by all directors, in 2015. | | Number of meetings of Board of Directors and average rate of attendance in person by all directors, in the year. (excluding proxy) |
| 8 | Number of meetings of the Audit Committee and average rate of attendance in person by all committee members, in 2015. (excluding proxy) | 44 | Number of meetings of the Audit Committee and average rate of attendance in person by all committee members, in the year. (excluding proxy) |
| 9 | Number of meetings of the Compensation Committee and average rate of attendance in person by all committee members, in 2015. (excluding proxy) | 45 | Number of meetings of the committee and average rate of attendance in person by all committee members, in the year. (excluding proxy) |
| 10 | Number of courses relating to CSR operational policies in 2015. | 72 | Number of CSR operational policy courses as defined and announced in accordance with the Company's educational system. The above information comprises data of TECO Electric and Machinery Co., Ltd.. |
| 11 | Number of non-compliances with environmental regulations resulting in monetary fines in 2015. | 63 | Number of non-compliances with environmental regulations resulting in monetary fines during 2015. The above information comprises data of TECO Electric and Machinery Co., Ltd, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 12 | Structure of employees' seniority as of December 31, 2015. | 66 | 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, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 13 | Age structure of employees as of December 31, 2015. | 67 | 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, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 14 | Number of employee under each defined category as of December 31, 2015. (managerial job, professional job, and technical job) | 67 | 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, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 15 | Number of Quality Improvement Team in 2015. | 35 | Number of Quality Improvement Teams which complete the application of "2015 Registration Form for QIT" and "2015 Quality Improvement Reports" in the year.<br>Quality Improvement Team is the operating unit used to report to the management on the ISO 9001 performance of TECO Electric and Machinery Co., Ltd. |
| 16 | Number of applicants for parental leave in 2015. | 77 | Number of applicants for parental leave in the year. The above information comprises data of TECO Electric and Machinery Co., Ltd, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 17 | Number of courses relating to anti-corruption and Code of Conduct in 2015. | 72 | Number of courses on anti-corruption and Code of Conduct, defined and announced according to the Company's educational system. The above information comprises data of TECO Electric and Machinery Co., Ltd. |
| 18 | Disabling Frequency Rates (FR) in 2015. (excluding traffic accidents) | 75 | 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, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 19 | Disabling Severity Rate (SR) in 2015. (excluding traffic accidents) | 75 | SR as set by the Minister of Labour equals to Total 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, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 20 | Statistics on natural gas consumption in 2015. | 58 | 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, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. |
| 21 | Statistics on power consumption in 2015. | 58 | Statistics on total power consumed in the year. Only the power consumed by TECO Electric and Machinery Co., Ltd, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd. 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. (For Tai-an: an average $1.356/ kilowatts was used.) |

## 8.4 Limited Assurance Report of Independent Accountants

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**會計師有限確信報告**

資會綜字第 16002818 號

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 2015 年度企業社會責任報告書（以下稱「社會責任報告書」）所報導之績效指標執行確信程序。本會計師業已確信竣事，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 2015 年度社會責任報告書所報導之績效指標（以下稱「確信標的資訊」）及其報導基準詳列於　貴公司 2015 年度社會責任報書告第 98 至 99 頁之「確信項目彙總表」。

**管理階層之責任**

貴公司管理階層應依據適當報導基準編製及報導 2015 年度社會責任報告書及其績效指標，並應建置相關流程、資訊系統及內部控制以防範 2015 年度社會責任報告書及績效指標有重大不實表達之情事。

**執業人員之責任**

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工作，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 2015 年度社會責任報告書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。

**執業人員之獨立性及品質管制規範**

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。

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」，因此維持完備之品質管制制度，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。

資誠聯合會計師事務所 *PricewaterhouseCoopers, Taiwan*
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**所執行確信工作之彙總說明**

本次確信工作依確信標的資訊，以 貴公司、東勝電氣股份有限公司、美國西屋馬達有限公司及台安科技(無錫)有限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書
- 對參與提供績效指標的相關人員進行訪談，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，對績效指標進行分析性程序，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確信案件所取得者。

**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。

**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工作之責任。

資　誠　聯　合　會　計　師　事　務　所

會計師　李宜樺 李宜樺

2　0　1　6　年　8　月　1　5　日

# 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 2015 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 98 and 99 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 Statements of Assurance Engagements Standards No. 1 (SAES No. 1): Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by Auditing Standards Committee in Taiwan, to identify whether any material amendments that need to be made to the aforementioned information to be in accordance with respective reporting criteria in all material aspects, 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.

### Compliance of independence and ethical principles and quality control requirement

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.

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

### Summary of work performed

We conducted our assurance work on the Selected Information from TECO Electric and Machinery Co., Ltd, Dongsheng Electric Company, TWMC and Tai-an Technology (Wuxi) Co., Ltd.. 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 the accuracy of data are subject to individual assumptions and judgments.

### Limited assurance conclusion

Based on the procedures performed and evidence obtained, we are not aware of any material amendments that need to be made to the Selected Information referred to in the second paragraph to be in accordance with their respective reporting criteria in all material aspects.

## 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 15, 2016

For the convenience of readers and for information purpose only, this report 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.


smart home / city
smart motor
TECO
IoT4.0
Smart application
smart grid