

V. Operational Highlights

5.1 Business Activities

5.1.1 Business Scope

A. Business Scope

Business Scope	Sales %
Industrial Products	56%
Home Appliances	16%
Construction	6%
Others	22%
Total	100%

B. New products development

a. Industrial Products Business:

The development of the large sized motor with high pole for water circulating pump in power plant and water resource, the induction motor with the largest power, density and voltage, IE3 high-temperature exhausting motor, high voltage explosion-proof motor, JIS IE4 motor, GBI IM motor, CNS IE3 Exd T4, smart motor and auto motor.

b. Home-appliances business:

In the past time, the main products are energy saving, EER and with double green mark. In the future, the products will evaluate to EMS cloud function, and EMS Integrated Solution will be provided no matter when and where to joint residential school, hotel, city government of smart city. In addition,

- I. In the light of the restriction from government, CSPF, the technology and system of domestic and commercial air-conditioner will be upgraded and integrated.
- II. The technology of under frozen fridge, and occupy the market share from Japanese brands.
- III. Low temperature logistics (freezing, frozen storage, low temperature cage car, multi-temperature cage car) and related products.
- IV. VRF system of inverter machine in parallel outdoor to satisfy the demand of green building and advanced business office.

- c. The wind-turbine business focuses on large-scale 2MW wind-power generating units, in addition to covering 5MW and larger-scale offshore wind-power systems, KW-grade horizontal small-scale wind-power generating units, generators, power converters, solar energy-power converter, and self-consumption-system, for both products and engineering works. Furthermore, through TECO's core business, motor and system automation, cooperating with Industrial Technology Research Institute and transportation dealer, we began with the development, design, produce, test and sale of the electric vehicle with specific function.

5.1.2 Industry Overview

A. Industrial Product Business

With industrial motors featuring extensive applications and steady demand on the global market, Taiwan's industrial motor is a major export item for heavy-electricity products, thanks to the excellent evaluation it enjoys. Under the energy-conservation and carbon abatement policy of governments worldwide, the development of industrial motor centers on high efficiency, environmental protection, and low carbon emission. Due to the trend of energy conservation, carbon abatement, and green environmental protection, as well as the trend of automated industrial production, system automation focus in its development on products featuring high efficiency, energy saving, and precision system control.

System Automation products stand at the terminal in the development of the heavy-electricity industry, offering controlling components for products at the electricity-consumption end. They include control components for motors, including inverter, servo drive, and low-voltage devices for protecting peripherals, products essential to safety in industrial electricity consumption and products for automation and energy conservation.

B. Wind-power industry:

- a. Due to limited natural resources, soaring energy prices, and global warming, energy conservation and carbon abatement has become a global current. Governments worldwide have encouraged the development of renewable energy via legal means. It's estimated that current wind-power generation cost has been comparable to the cost of fossil fuel-fired power generation, making it most cost-effective renewable energy.
- b. There are two trends in the development of wind-power turbine: One is large scale and offshore models. 1.5MW and 2MW are mainstream on-shore models, 3MW models are of both on-shore and offshore usage, while over 3MW models are mainly installed offshore. Various system suppliers have been rolling out models with ever larger capacities. Secondly, 50KW and smaller models are mainly applied in buildings, farms, fishing ponds, and communities. The diversified power sources can greatly enhance the reliability of power grid and demand for wind-power generators has been on the rise, along with the settlement of wholesale prices for the purchase of wind-power electricity.
- c. In the recent two years, demand in China's wind-power market, among the fastest growing ones in the world, has been mainly for low-wind velocity models in the recent two years, which have been installed mainly central and southern China. Backed by rapid development of system products, wind power has become the third largest source of power supply in China, after thermal power and hydraulic power, in line with the Chinese government's policy of vigorously developing clean energies, in order to combat smog and alleviate air-pollution problem. In quality control, it emphasizes the certification for LVRT (low voltage ride-through) in linking to the grid, quality and quantity of electricity and type of wind turbines, as well as plans to strengthen the strength of power grid during the period of the 12th five-year economic development plan, so as to assure steady output of wind-power generation in northwestern and northern China. If Taiwanese firms can demonstrate their consistent quality control and long-standing overseas marketing experience, they will be able to obtain cost edge in penetrating the international market.
- d. Offshore wind power is also a development focus of various countries. Europe has an early start in this field and has achieved various concrete results. China, Korea and Japan is carrying out a number of items, mainly for R&D and demonstration. Taiwanese government also encourages domestic firms to develop exemplary offshore wind power generation. There are already two private companies and one government owned company won the projects. These demonstrated projects might bring hidden potential business opportunities domestically before 2019. In order to accelerate the achievement of the goal for the installation of wind turbines, the government has publicized zones for the development of wind farms.

C. Autotronics industry

Make inroads with electric cars with special functions into the Philippine market, which has the following needs:

- a. Modernization of Jeepney: To accelerate ouster of old transportation vehicles, the Philippine government issued a decree mandating replacement of old-type Jeepney aged over 15 years. Electric cars are expected to bring high economic benefit, as they don't need maintenance, in sharp contrast to the high repair and maintenance cost for old cars. The Philippines now has 350,000 old Jeepneys which need to be replaced, including 10,000 in Manila.
- b. Pollution problem of tricycle taxes: The Philippines has 3.5 million tricycles featuring traditional engines, 200,000 of which in Manila, which account for two thirds of the city's CO₂ emission. The Philippine government is joining hands with the private sector in removing the tricycles under a PPP (public-private-partnership) scheme.

D.Home-appliances industry

- a. Application of inverter technology in home appliances

Energy conservation and environment-protection is a major appeal in product development at present. The application of DC inverter duty technology and environment-friendly coolant in home appliances can lead to the achievement of high COP value, which embodies the care of enterprises for “energy conservation” and “environmental protection.” TECO is first domestic firm producing air conditioner featuring R32 coolant. In order to combat global warming, it takes advantage its experience in smart technology and energy conservation in developing energy management system and applies IOT in the entirety of its products successively, in line with the extent of market acceptance.

5.1.3 Research and Development

A. The company spent NT\$1,435,224 thousand on R&D in 2015

a. Industrial Motors Category

- 1.Pan American semi-sealed good-efficiency energy-saving motor passed CSA safety certification extends its certification to F#6812
- 2.High Voltage Ex na explosion-proof motor IEC/ATEX increases water-cooling large sized motor and extends its certification to F#900
- 3.The design of large sized motor passed the test of TUV IPX6
- 4.North American Low Voltage Motor UL extends its flame proof certification to F#5009
- 5.North American High Voltage Crusher Duty Motor passed CSA safety certification

b. System Automation Category

- 1.Development of Inverter E510 series
- 2.Development of small horse power F510 series
- 3.Development of IPM automatic adjustment technology
- 4.Development of PM weakening magnet technology
- 5.Dual sampling PWM technology
- 6.Soft-PWM technology
- 7.High-performance general purpose servo drive
- 8.High-Speed communication servo drive
- 9.E-CAM technology
- 10.Gantry control technology
- 11.On-line inertia/friction tuning technology

12. On-line controller tuning technology
13. Canopen communication technology
- c. Renewable energy- green energy
 1. SCADA System of generator for wind power
 2. 500 KW direct drive generator system for offshore wind power
- d. Freezing and Air-Conditioning Category
 1. Mobile Internet-of-things smart inverter air conditioner
 2. Air conditioner with grade-one energy performance exceeding 2016 national standards
 3. Dedicated smart inverter oil cooler
 4. Dedicated smart inverter water cooler for machine tool
 5. Three-door 43L inverter energy-saving refrigerator
 6. R32 first class refrigerant air conditioner
 7. Air conditioner for elevator
 8. VFR PACS-K280S heating and cooler machine and cooler are launched
 - Series of PW passed 2016 CSPF, the new standard of energy
 - R410A, water-cooled and scroll hermetic was launched
 9. Domestic inverter multi air conditioner
 10. Air conditioner with grade-one energy performance exceeding 2016 national standards
 11. Mobile internet controlled inverter air conditioner
 12. Dedicated smart inverter water cooler for machine tool (recipient of Taiwan Excellence Award)
 13. Whole-series refrigerators (90~605L) with national first-grade energy performance
 14. Two-door 600L inverter energy-saving refrigerator
 15. Development of smart cloud-end centrifugal chiller
 16. Launch of high efficiency VRF inverter air conditioner
 17. Launch of self-made air handling unit
 18. High efficiency centrifugal central air conditioning (recipient of Taiwan Excellence Award)

5.1.4 Long-term and Short-term Development

For industrial motor business, the company's long-term goal is to become the world's best motor manufacturer. In the short run, with the company's factories in Wuxi, Jiangxi, Qingdao, Fujian, Japan, Middle East and Turkey, gradually manifesting their benefits, the company will continue its global deployment, enhance manufacturing and cost-control capability, and accelerate the establishment of strategic alliances with partners in mainland China, Europe, the U.S., and Japan, so as to augment its global market share. In line with the government's promotion of alternative energy, the company has developed self-made wind-power generator and become a leading manufacturer of the product in Greater China.

For wind-power business, the company's long-term goal is become one of the world's 10 largest manufacturers. In the short term, rapidly obtain certification and highly reliable performance record, to pave the way for foraying into the Chinese market. Starting from low wind speed area, Teco set up the production facilities in Hunan province to take advantage of wind resource, then establish local supply chain for components and parts; seek cross-Taiwan Strait technological and business cooperation, for development of special requirements in

Asia Pacific area. TECO has obtained TFC2000 onshore wind-turbine certification. Test of LVRT (low-voltage ride-through) technology, a highly regarded technology in China, was already passed by Electric Power Research Institute. Meanwhile, the company will also start to develop and produce the offshore wind power system for adapting the wind condition in Taiwan. The company will continue conducting R&D on small renewable-energy equipment as part of decentralized power supply for smart grid and roll out related products, to meet the trend.

For home appliances, in the long run, the company aspires to become the leading brand in Taiwan and actively penetrate overseas market. Household refrigerators embrace TECO's patented variable-frequency technology, which has been applied to all models with 300L capacity or larger. Roll out performance-enhancement program for refrigerators, one step ahead of peers. For commercial air-conditioners, the company will horizontally integrate the largest domestic chiller OEM to raise the company's competitiveness from operating cooperation and productive integration. Meanwhile, the company will also expand the cooperation in business in south-east Asia and China market, and arrange air-conditioner's market in Turkey. For LCD TV, the short-term plan is to establish a cross-strait division-of-labor system for expanding its shares in the world and Taiwan. Due to enhancement of people's living standard, the emergence of the Internet and home-delivery businesses, the multiplication of low-temperature foods, and the concentration of urban population, cold-chain logistics and delivery has become an emerging industry. According to a study of the Industrial Technology Research Institute (ITRI), annual output value of low-temperature foods in Taiwan hit NT\$280 billion and that of cold-chain logistics NT\$50 billion, including over NT\$8 billion of low-temperature logistics and delivery. TECO Group boasts freezing/air-conditioning business, home-delivery business, and IT businesses, blending logistics, cash flow, and information technology in tapping the blue-sea market of low-temperature logistics, with promising potential.

In other aspects, backed by abundant experience of electric machinery of buildings, mass rapid transit system, and high-speed rail, the company will dedicate to winning large-scale businesses for office buildings, rapid mass transit system, and rail engineering. The company also took several projects of Data centers because of rapid growth in cloud computing. For high-voltage gas insulation switch, the company has sold to localization project of Taiwan Power Co., Ltd. In addition to continue seeking business from Taipower, the company will also actively explore the private market. Moreover, following installation of development platform for specific sample electric cars in Taiwan, the company will develop new-version electric car in line with market need. In recent years, TECO has landed businesses for building IDC central offices and large-scale data processing centers for cloud-end information businesses, which will generate new growth momentum for the company amid the thriving development of the cloud-end industry.

5.2 Market and Sales Overview

5.2.1 Market Analysis

A.Sales (Service) Region

The company is shipping industrial products to such major regions as America, Europe, Australia, Japan, China and Taiwan, and targets to extend the reach to the Middle East, India and Turkey. Home appliances are shipped mainly to the domestic market, with minor markets including Australia, Southeast Asia, Singapore, and Japan. The company plans to tap the home-appliances markets in China, Vietnam, Indonesia and Turkey. For wind-power products, in addition to the Chinese market, the company is set sight on the markets of Southeast Asia, New Zealand, and Australia, where awareness of clean energy has emerged. For electrical vehicle, Philippines would be the main market, and then extending to other Asean countries.

B.Market Share (%) of Major Product Categories

(1) Industrial Product

The company boasts 50% domestic market share in general purpose sector and also offers customers custom motor featuring special usage and specifications, with the capacity reaching 30,000 horsepower in induction motors, ranking Top 5 around the world.

(2) Wind-power business

The first wind-power turbine was erected in Inner Mongolia of China in 2010 and completed linkage with grid for power generation in March 2011. Also, the company completed wind-turbine certification, and arranged LVRT (low-voltage ride-through) certification in China, fulfilling many-year power generation under rigorous environment. Successfully forayed into Southeast Asian market in 2011 and obtained orders in Vietnam. Considering the demands of wind resource in the China market, the company will start to build factory in Hunan, and serve in nearby area. Backed by its terrestrial experience, the company has forayed into the realm of offshore wind farm and is scheduled to install the first offshore wind turbine in Taiwan, in conjunction with a number of domestic partners.

(3) Home Appliances and Air Conditioner

The company is one of the top three makers of home appliances and air conditioners in Taiwan, with market share reaching 9% for household air conditioners, 14% for refrigerators, 15% for washing machines, 10% for LCD, and 35% for commercial-use air conditioners.

C. Market Trend of Major Product Categories

(1) Industrial Products

TECO originated from motor production, which has remained a core part of the company's operation, offering the dynamism for Taiwan's industrial development. After years of effort since the company's inception, it has set up various production and marketing bases through the world. It ranks among the world's top five heavy-electrical equipment suppliers and has hit world-class level, in terms of quality, variety, production scale, and sales channel.

Due to the close association between motor business and the overall economic well-being, the recovery pace of the overall motor market has been slow, although the trend of the decline of demand has stabilized. Looking ahead, in addition to retaining the share of the original market, the company will actively tap water-resources and power markets. Meanwhile, to meet the demand for green energy, roll out high-efficiency motors and medium-voltage inverters. In addition, after acquiring Motovario S.p.A, extend product lineup to power transmission systems, stepping into the power-transmission industry and upgrading to the system-oriented sales mode. Moreover, the takeover can expand the global deployment and customer base of TECO products.

The aspect of heavy-electric products, the company will continue intensifying integration of marketing and production, in order to boost market share and cut cost, development new products, and develop, via concerted effort of domestic and overseas companies under the group, OEM markets and emerging markets, in addition to aggressively soliciting orders for domestic and overseas civil-engineering works, so as to achieve the high-growth target. To tap the global business opportunities related to energy conservation and carbon abatement, such as that deriving from the implement of carbon tax in the European Union, the company will develop various custom solutions featuring combination of motor and inverter.

(2) Wind-Power Business

Due to global warming and drastic climate changes, countries worldwide have begun to emphasize the use of renewable energy by setting up development goal for renewable energy, in order to cut emission of greenhouse gases. Among renewable energies, wind power is most cost-effective. Therefore, the European Union targets raising the share of wind power to 50% by 2030.

Despite its high entry barrier, TECO is ready to tap the market by integrating its solid R&D strength in the fields of machinery and electricity. The company has successfully made inroads into the wind turbine assembly market in the U.S. and has developed 2MW permanent-magnet wind-power turbine bearing own brand, the first such product made by Taiwan which boasts high local content rate. This wind turbine system boasts solid structure and complete lineup, capable for meeting the needs of areas featuring strong typhoon or cool climate, suits both 50/60Hz enabling global use, and can easily meet the rigorous demands for connection to grids of countries worldwide.

TECO will root its wind power business on Taiwan and set sight on China, combining Taiwan's advantage in quality control and China's huge market potential. It will establish wind turbine assembly plants near wind farms and foster local supply chains, so as to save on transportation cost and facilitate the management and maintenance for up to 20 years, thereby augmenting the utilization rate of wind turbine and maximizing profits. In addition, the company will integrate Asian supply chain and technology transfer from Europe in the joint development of next-generation 5MW offshore wind turbine which suits the Asian climate. In addition, the company has successfully developed 3kW horizontal-axis wind turbine for decentralized renewable-energy power generation system, which is indispensable for smart grid in the future. The product has started to be shipped to Japan, after becoming the first Taiwan-made horizontal-axis wind turbine to be certified by Japan's ClassNK, in time to board the bandwagon of the liberalization of Japan's power market, scheduled for inauguration in 2016.

(3) Autotronics products

E-Jeepney has allied with Manila car fleet and cooperated with auto-body firms. E-tricycle and local motorcycle dealers have joined hands with the government via PPP and hit the market via own sales network.

(4) Home Appliances

Growth of market demand for home appliances is limited, since they are mature products. In addition to existing products, the company will develop or introduce new products with high added value or key components/parts, such as smart appliance, full serial of large-size (39" ~65") 4k2k LCD TV, LED TV, inverter refrigerator with high EF value, multi-temperature-layer refrigerator, flexible multi-unit inverter air conditioner, remote-control SAA(Smart Appliance Alliance), energy-saving air conditioner with power consumption display, HEPA(air conditioner with medical level filter), and other home appliances with health appeal. The purpose is to expand sales channel and increase revenue and profit with differentiated products.

Meanwhile, the company has been constantly rolling out new models for industry-use air-conditioning and freezing products, such as package air conditioner, central air conditioning equipment, flooded water chiller, centrifugal water chiller, inverter multi-evaporator VRF air conditioner, and train air conditioner, thereby creating optimal and the most comfortable workplace for domestic and overseas industries. The company also offers various air-conditioning and freezing engineering service with cutting-edge technology, to help with industrial upgrading.

Along with the development of new technologies and the increasing convenience of the Internet, information products have integrated with home appliances, giving birth to information appliances. The company will marry its decades-long experience for home appliances with cutting-edge information technologies of the members of the group in developing information appliances suited to market needs, thereby creating even larger profits for shareholders.

Besides domestic market, the company has also made major inroads into the international market, following years of strenuous effort, especially for LCD TV and air conditioner which have enjoyed very good sales to Southeast Asia, Australia, and Europe. In the future, along with increase in national income and the advent of the information age, the company will continue to launch various even more human-friendly new products, so as to meet market demand.

D. Favorable and Unfavorable Factors in the Long-range Future and Countermeasures

(1) Industrial Product

The company's industrial product has won very good reputation, in terms of quality and function, in the industry. It has established a far-reaching operation network on both domestic and overseas fronts, including production and marketing bases in the U.S., China, and Southeast Asia, and marketing offices in Japan, Europe, and Australia. However, rapid change in the business climate and the transformation of economic conditions and industrial structure has posed major challenge to the company's future development.

Favorable and unfavorable factors for industrial product business, along with countermeasures follow:

a. Favorable factors

- Good brand image
- Higher production scale and market share than peers
- Solid market channel
- Reliable quality
- Complete product lineup
- Huge market potential of the greater China market, for which the company has established a firm foothold in China

b. Unfavorable factors

- Low-price competition from imported products in the domestic market due to WTO membership
- Market saturation leading to price competition among machinery firms and increasingly rigorous demand for price and delivery by buyers
- Transplantation of traditional machinery firms to China and other countries, due to their declining competitiveness and demand of emigrated downstream customers

c. Countermeasures

- Reduce cost, shorten delivery schedule, enhance competitive edge, and boost market share.
- Accelerate new-product development, develop products with high added value, and establish a production system featuring cross-strait division of labor.
- Increase overseas marketing offices and establish an effective service network.
- Strive for emerging business opportunities related to environmental production and energy conservation.
- Join hands with foreign engineering firms in soliciting project orders.

(2) Wind Power Business

a. Favorable factors

- The company has established good reputation for industrial product in the field of wind-power business, capable of achieving synergy effect readily by integrating the resources of the group.
- The U.S. subsidiary already has the experience for contract assembly of complete wind turbine, which can be copied in any other region of the world.
- The company boasts complete product lineup and cutting-edge technology, capable of meeting the rigorous demands for connection to grid in the future. Its products suit both 50/60Hz, facilitating logistics work and cost control.
- The company has sound communications channel with its affiliates worldwide, enabling it a firm grasp of the latest development in renewable-energy laws/regulations and demands of grids worldwide.

b. Unfavorable factors

- Insufficient domestic supply chain for components and parts of wind turbine, complicating the effort for cost/delivery control
- Shortage of domestic R&D talents for wind turbine, impeding technological development
- Saturation of domestic onshore wind power market and difficulty in obtaining the testing ground, which postpones certification schedule

- Chinese wind-power equipment firms resort to low-price competition to tap the overseas markets, thereby disrupting the market order.
- Taiwan's wavering policy is adverse to long-term decision-making.

c. Countermeasures

- Set up Asian supply chain by utilizing the wind-power production capacity of China, thereby gaining a local edge.
- Establish joint R&D team with Industrial Technology Research Institute, capitalizing on the latter's electrical-machinery talents to facilitate technological development, and solicit Chinese talents released from its tightening policy, to facilitate deployment in the Chinese market in the next stage.
- Seek legal testing grounds on both sides of the Taiwan Strait and tap the Chinese market via strategic alliance with China Datang Corp. and Xiang Tan Electric, and other non big five power generation group.
- Set up logistics team to strengthen local services and cut maintenance cost.
- Take advantage of Taiwan offshore model wind farm, tap technology transfer from Europe and integrate domestic component supply chain to develop the technology which can adapt to the unique environment in Taiwan Strait.

(3) Home Appliances and Air-Conditioning Business

a. Favorable factors

- TECO's home-appliances division has constantly rolled out innovative high-performance products, taking advantage of the company's good brand image, synergy resulting from resource sharing of the group, and its variable-frequency drive technology, which was transformed via re-platform from heavy-electricity variable-frequency drive technology. At the juncture of its 60th anniversary, TECO's home appliances have entered a new era.
- Roll out, one step ahead of peers, around-the-clock service and grasp channel, to augment competitive edge. Establish inverter common platform for products, enabling precision variable-frequency drive for various motor compressors and coordinate the control logics of different products, such as air conditioner, refrigerator, and washing machine, creating dynamism for innovation for the creation of new products and new functions. In addition, commit to the satisfaction of consumers in service quality and stock of materials.
- Dedicate to the pushing of R32 coolant and green manufacturing, becoming the only company producing R32 coolant in Taiwan, safeguarding Taiwan's carbon-repellant environment. For energy conservation and carbon abatement, pioneer the mapping of the blueprint of home-appliances green factory in Taiwan. Put in place a gold-medal dealership system, successfully augmenting the satisfaction of dealers.
- Join "smart home-appliances industry R&D alliance," integrating communications technology of smart home appliances and Internet digital-communications products of emerging products.
- Roll out, leading peers, models with first-grade energy performance conforming to MIT label.
- Pioneer the rollout of cloud-end smart air conditioners, in order to tap IOT (Internet of things) business opportunities.

b. Unfavorable factors

- To overcome the Japanese myth among Taiwanese people, TECO has no other choice but augment its product technologies and thereby compete with Japan's common models, boosting production cost.
- Home appliances/household air conditioning market has saturated, featuring acute competition and low margin.
- WTO membership entails tariff cuts, bringing in competition from renowned brands of Japan, the U.S., Korea, and China.

- The Taiwanese market is limited in scale and it's difficult to develop the global branding, due to high expense for marketing own brands and insufficient price competitiveness.
- Competition from supermarkets and chain sales channels impacts the traditional channel of agents.
- The current of bilateral or regional free-trade agreements in recent years has posed major challenge to Taiwan.

c. Countermeasures

- Make transformation in the direction of the Internet, expand online sales, develop high-performance IoT cloud-end fashion home appliances, dedicate to the pushing of marketing 4.0, so as to appeal to white-collar workers aged under 4.0.
- Expand the professional ability of research and marketing, keep innovation.
- Expand product lineup and cut cost via OEM (original equipment manufacturer) strategic alliance, thereby raising market share.
- Create the edge combining Taiwan's innovation and the large-scale cost advantage of mainland China's hardware, via SKD assembly in China.
- Grasp product development trend in domestic and overseas markets via the operation of product panel and new-product review sessions, thereby introducing innovative products timely.

5.2.2 The Production Procedures of Main Products

Industrial Products:

Products	Use	Production Process
High-efficiency motors, single-phase motors, low- and high-voltage 3-phase motors, synchronous motors, explosion-proof motors, brake motors, variable-pole motors, gear-reducing motors, crane motors, high-temperature exhaust gas fan motors, inverter-duty motors, high-thrust motors, steel-cased motors, aluminum-cased motors, eddy-current motors, wound rotor motors, submersible motors, DC motors, ventilation blowers, wind-powered generators.	Provision of power for industrial production	Casting, Stamping, Electrical Engineering, Mechanical Engineering, Design, Planning, Assembly, Integration
Electric vehicle power motioned permanent magnetic motor, Electric vehicle power motioned induction motor, permanent magnetic motor, AC/permanent magnetic servo motor,	Industrial and electric vehicle used	Stamping, Electrical Engineering, Engineering, Magnet, Design, Planning, Assembly, Integration

Wind Power Products:

Products	Use	Production Process
2.0MW PMSG (Permanent Magnetic Synchronous Generator) wind turbine	Energy supply Decentralized power application	Power, Control, System integration, Composite materials, Casting, Stamping, Electrical Engineering, Mechanical Engineering, Design, Planning, Assembly, Integration

Products	Use	Production Process
5.0MW offshore wind power system	Energy supply	Power, Control, System integration, Composite materials, Casting, Stamping , Electrical Engineering, Mechanical Engineering, Design, Planning, Assembly, Integration, Shipping, Marine engineering
KW level wind turbine	Decentralized power supply	Casting, Stamping , Electrical Engineering, Mechanical Engineering, Design, Planning, Assembly, Integration
5kW PV inverter/ PV Self-Consumption-System	Decentralized power supply	In-grid photovoltaic system, photovoltaic charging system, machinery-electricity integration, system design, power, site planning, assembly, service.
Wind-light supplementary system	Decentralized power supply	Wind-turbine charging system, voltaic charging system, mechatronics, system design, on-site planning, assembly, and service

Home Appliances & Air Conditioners:

Products	Use	Production Process
High EER air conditioner, new environment-friendly coolant inverter duty air conditioner (one to one and VRF type), smart air conditioner, energy-saving inverter duty refrigerator, high EF-value refrigerator, direct-drive inverter duty washing machine, dehumidifier, clothes dryer, small home appliances, home-delivery low-temperature table trolley, elevator air conditioner, cooling device for machine tool, low-temperature logistics freezer, heat-dissipation module for PC	Household, commercial, industrial use	Design, planning, assembly, and peripheral
LED TVs, DVD Players, Recordable DVD players, Stereo Systems	Home Entertainment	Design, Planning, Assembly
Chillers for centralized air-conditioning systems, package air conditioners, split-type air conditioners, inverter multi-evaporator VRF air conditioner, train air-conditioning systems, centrifugal chiller	Commercial, Industrial Applications; Transportation systems	Design, Planning, Assembly, Integration

5.2.3 Major Suppliers and Clients

A. Major Suppliers Information for the Last Two Calendar Years

None

B. Major Clients (each commanding 10%-plus share of annual order volume) Information for the Last Two Calendar Years

None

5.2.4 Production over the Last Two Years

Unit: Units; NT\$thousand

Output	Year	2014			2015		
		Capacity	Quantity	Amount	Capacity	Quantity	Amount
Major Products							
Motor		1,543,571	1,201,164	15,965,713	1,343,571	1,195,783	13,353,943
Compressor (Qingdao)		1,000,000	255,910	328,011	0	0	0
System Automation		12,958,413	8,691,044	5,617,344	12,315,637	7,324,716	4,776,765
Home Appliance		361,404	278,562	4,515,297	371,130	277,584	4,418,147
Others (TECOM)		814,679	814,679	1,483,574	784,112	784,112	1,851,416
Total		16,678,067	11,241,359	27,311,543	14,814,450	9,582,192	24,400,271

5.2.5 Shipments and Sales over the Last Two Years

Unit: Units; NT\$thousand

Shipments & Sales	Year	2014				2015			
		Local		Export		Local		Export	
		Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Major Products									
Motor & System Automation		1,461,374	6,657,971	3,394,766	22,560,409	1,444,261	6,068,272	3,101,482	21,191,035
Home Appliance & Air Conditioner		794,624	6,923,577	256,305	1,162,248	798,348	7,024,925	118,488	699,282
Construction			3,231,285				2,943,060		
Other			11,433,029		1,852,085		8,787,569		1,914,430
Total		2,255,998	28,245,862	3,651,071	25,574,742		24,823,826		23,774,747

5.3 Human Resources

Year	2014		2015		March 31 2016		
	TECO	Global	TECO	Global	TECO	Global	
Number of Employees	2,659	23,672	2,475	22,513	2,428	22,459	
Average Age	39.5	36.9	40.3	37.3	40.8	38.4	
Average Years of Service	12.8	6.6	13.5	8.4	13.8	7.5	
	Masters above	14.9	9.2	15	7.91	14.9	7.79
	Bachelor's Degree	49.5	53.4	50.8	49.94	51	49.36
	Senior High School	28.6	26.1	27.7	32.94	27.7	33.37
	Below Senior High School	7.0	11.3	6.5	9.21	6.4	9.48

5.4 Information on Outlays for Environmental Protection

Explain in the recent one year up to the publication of the yearbook, the total amount of the company's loss (including compensation) from pollution and fines, plus possible outlay from countermeasures.

5.4.1 Loss resulted from polluting environment

- A. The environmental bureau of Taoyuan county fined the company NT\$300,000 on March 13, 2015 for violation of item 2, article 24 of the Air Pollution Prevention Law. Countermeasure: Substitution of new prevention equipment for activated-carbon absorption equipment and plan abatement method from the source, thereby reducing emission of vaporized organic materials.
- B. The Department of Environmental Protection, Taipei City Government, inflicted a fine of NT\$36,000 on June 23, 2015, for violation of article 9-1 of "Noise Control Act" and article 6 of "noise control standards." Countermeasure: Move exhaust fan, the culprit for the noise, from first floor to first basement floor.

5.4.2 Countermeasures

A. Improvement measures planned

a. Improvement plan for environmental-protection equipment

Installation of new environmental-protection equipment, waste reduction by strengthening the maintenance of existing equipment and improvement of production process, improvement of workplace, promotion of energy conservation, recycle and reuse of waste water, and reuse of waste materials, so as to prevent emission of pollutants and comply with legal requirements

b. Plan for management improvement

Continue pushing ISO14001 environment management system, pinpoint sections in the operational process (covering the entire product life which includes production, sales, the usage of product, and its disposal) which produce impact on the environment and improve the emission of pollutants, thereby alleviating the environmental impact and augmenting environmental performance.

Continue pushing OHSAS 18001 vocational safety and hygiene management system and the passage of the certification of CNS 15506 by the Council of Labor Affairs; incorporate safety and hygiene management into the corporate management culture; regularly hold environmental-protection and safety/hygiene training, fire-fighting drill and drill emergency response; regularly inspect operating environment and physical examination of employees, so as to lower the hazards of risk of workplace and prevent the occurrence of vocational disaster.

c. Continue pushing the program for checking and reduction greenhouse-gas emission

In response to global climate change, the company began to check greenhouse-gas emission in 2005 and passed external greenhouse gas inspection (ISO 14064-1) in 2012. The company started to push energy-conservation and carbon-abatement program, in 2006, especially power usage in the second category, which has been participated all the factories and staff units. The company has also established energy-conservation task force and hired experts to help with diagnosis and offer advices for the execution of the program.

TECO has been dedicating to the materialization of the strategic vision of "TECO GO ECO," which calls for the production of energy-saving and environment-friendly products, via efforts in the fields of R&D, production, materials, process technology, and marketing. We also focus on green energy in business expansion and even organize various sci-tech and humanistic events via the foundation, in order to substantiate eco value and induce the company to develop in the direction of sustainability.

d. TECO Corporate Social Responsibility Report

Sustainable development for enterprise is an indispensable mindset for corporate management in the new century. At the time when enterprises are facing rigorous challenges, they need to rethink the direction and strategy for their sustainable development and manifest their management performance via report on corporate social responsibilities. The report covers information on the three major aspects of economy, society, and environment, so as to improve external image and help communicate with stakeholders. Corporate social responsibility is the fifth information report unrelated to financial performance publicized by TECO in 2014, with the purpose of manifesting the company's methods, achievements, and related strategies and goals of the company in fulfilling social responsibilities in a transparent and open manner for the social public and stakeholders. The report mainly covers various acts and performance figures concerning corporate governance, environmental protection, social participation, and concern for employees, clients, and consumers.

e. Projected capital outlay for environmental protection in the next three years

(a)Planned procurement of anti-pollution equipment and outlays

i. Plans in next three years

2015	2016	2017
Maintenance, improvement, or installation of air pollution-abatement equipment	Maintenance, improvement, or installation of air pollution-abatement equipment	Maintenance, improvement, or installation of air pollution-abatement equipment
Inspection and repair of gas tank and heavy-oil boiler and improvement of casting operation and environment	Replacement of the consumption materials of activated carbon, filtering net, and filtering ball	Replacement of the consumption materials of activated carbon, filtering net, and filtering ball
Replacement of the consumption materials of activated carbon, filtering net, and filtering ball	Elimination of Leakage	Improvement of Illumination
Installation of energy-saving light& light-absorpting shade	Installation of energy-saving light	Installation of energy-saving light
Improvement of separation of rain and waste-water	Improvement of waste-water equipment	Improvement of waste-water equipment

ii. Projected outlays (Unit: NT\$thousand)

2016	2017	2018
\$ 27,473	\$ 72,622	\$ 149,284

(b) Expected improvements

- i. Cut emission of air pollutants and waste water to the level in compliance with legal requirement.
- ii. Push cut on industrial waste by reducing output of waste materials, strengthening mechanism for the recycle of waste materials, implementing control for emission reduction.
- iii. Establish energy-conservation and carbon-abatement task force, which will pinpoint equipment with larger energy consumption and areas with higher power consumption, as well as formulate feasible energy conservation programs after consulting experts/scholars and push their execution, thereby slashing carbon emission.
- iv. Push to cut emission of greenhouse gas and dedicate to the development of energy-conserving environment-friendly products, to alleviate the impact on the environment and fulfill corporate social responsibility.
- v. Install high-efficiency power-saving lighting to enhance the efficiency of existing lighting equipment and adopt proper power deployment and control circuit to save power.

vi. Carry out risk evaluation for workplace, so as to assure the provision of a safe workplace.

f. Expected effect of improvement

(a) Effect on net profits

- i. Avoidance of loss from fines
- ii. Avoidance of loss from suspension of operation
- iii. Avoidance of disputes for environmental pollution
- iv. Cut production cost via reduction of environmental-protection outlays, thanks to waste abatement and pollution prevention.

(b) Effect on competitiveness status

- v. Augment the corporate image and meet the expectation of related parties.
- vi. Comply with the global environmental-protection current, avoid trade barriers, and boost sales opportunities.

B. Failure to adopt countermeasures

- a. Failure to adopt improvement measures: Nil
- b. State of pollution: Nil
- c. Possible loss and compensation amount: Nil

5.4.3 Workplace and Protection Measures for the Personal Safety of Employees

A. The safety and hygiene management system was verified and passage of performance certification.

The safety and hygiene management system of various plants (Plant Chung-Li, Plant Kuan-Yin, and Plant Hu-Kou) has passed the “OHSAS 18001,” “Taiwan Occupational Safety & Health Management System (CNS15506),” and its following check.

B. Special environmental-protection and safety/hygiene units are presented at the headquarters, every department, and factory.

Complying with “Enforcement Rules of the Occupational Safety and Health Act”, specialized units and staffers are instituted to handle affairs related to environmental protection and safety/hygiene and practices related to safety/hygiene affairs are carried out regularly, according to legal requirement.

C. Environmental-protection and safety/hygiene training are conducted regularly:

New employees and employees shifted to new positions must undertake safety/hygiene training courses, whose duration and contents comply with legal requirement. Only trained personnel with necessary licenses can operate dangerous machines or equipment, such as overhead traveling crane, forklift, organic solvent, boiler, and high-pressure gases. Specialized staffers or technicians all must undertake retraining regularly.

D. Workplace safety

In addition to the Occupational Safety and Health Act for machinery equipment and norms for use and safe utilization of personal protective gears, the company has managerial staffers carry out safety inspection regularly, to assure compliance by employees to safety norms in their operation and detect points of further improvement, thereby fostering the safety awareness among all employees and achieve safety protection better than legal requirement, to assure safety of workplace.

E. Pushing Globally Harmonized System of Classification & Labeling of Chemicals

To highlight dangerous and hazardous substances, safety labels for materials have been installed in workplaces, where updated information on safety data sheet (SDS) is available as reference for employees. Change in raw materials and production process cannot be made before the review, collection of information on safety data sheet (SDS), and completion of training of related employees in accordance with the company's management measures.

F. Detection of operating environment

According to "Enforcement Measures for Detecting Laborers' Operating Environment," detect the operating environment for chemical and physical elements, with the former including carbon dioxide, dust particle, and organic solution, and the latter including noise and overall temperature index. Entrust qualified operating-environment detecting institutions to carry out the detection periodically, to assure compliance of the operating environment with law/regulation.

G. Fire-fighting drill and emergency-response drill for special workplaces are held regularly:

Ordinary fire-fighting drill takes place every half a year and covers such training items as team organization, practice, response to emergency, and post-accident handling. Emergency-response drill for special workplaces is conducted every year, in order to train employees' capability in handling accidents.

H. Health care and management

Employee health is the largest assets of the company. The Company respectively exercised health examination for regular task and special dangerous task according to "Labor Safety and Health Act". Organize health classes, publicize health information and organize health-improvement activities. Continue pushing employees to stress self-health management and create a safe and comfortable working environment, so as to enhance employees' health and physical strength and further extend the concept to their families.

I. Carry out the event of environmental-protection and industrial-safety month

TECO carries out the event of environmental-protection and industrial-safety month in June and August every year, consisting of various activities, including hanging of event banners and posting of posters on environmental protection and industrial safety, holding of training on environmental protection and industrial safety and awarded answers for questions, a blending of education and fun for all staffers, so as to augment staffers' knowledge of environmental protection and industrial safety and arouse their awareness of environmental protection and industrial safety, on top of plant inspection by external experts, for enhancing the performance for the execution of environmental protection and industrial safety.

5.5 Labor Relations

5.5.1 The company's various employee welfare measures, advanced study, training, and retirement system, along with their execution, as well as labor-management agreements and various employee-benefit protection measures follow:

A. Employee welfare measures

The company has high regard for employee welfare and work safety constantly, as evidenced by the setup of employee welfare committee back in 1964, which handles various employee welfare measures, so that employees can share the profits of the company. The company's welfare measures follow:

a. Employee welfares provided by the company

(a) Marriage and funeral subsidy

- (b) Physical examination for employees
- (c) Company uniform
- (d) Dividend sharing and stock option
- (e) Year-end bonus
- (f) Pension fund
- (g) Meal subsidy
- (h) Labor insurance, health insurance, group insurance, pension hand over and accident insurance
- (i) Preferential rates for purchase of the company's products

b. Welfare measures provided by the employee welfare committee

- (a) Subsidy for travel, marriage, funeral, and hospitalization
- (b) Group parties
- (c) Birthday gift
- (d) Childbirth subsidy
- (e) Gifts for three major festivals
- (f) Scholarship for employees' children
- (g) Other employee welfares

B. Advanced study, education, and training

The company appropriates 0.1% of its annual revenue for employee training, which is included in the annual corporate plan, holding regular courses on professional and management knowledge for employees at various positions and cultivating excellent talents with aggressive working attitude and innovative concept, according to training plans for various stages for their career.

In 2015, the company held courses on executive training, common knowledge, professional capability, and company policy, which boasted 12,794 persons of attendance, on top of 247 persons of attendance for outside courses. Every employee received 15.95 hours of training on average.

C. Retirement system and its implementation

The company has formulated "measures for labor retirement," in compliance with legal requirements, according to which the company appropriate a certain amount of fund to be deposited into a specialized account at the Central Trust of China for care of employees after their retirement. For employees who embrace labor-pension system after July 1, 2005, the company appropriates a sum equivalent to 6% of their monthly pays, set according to an official pay scale, to their individual accounts at the Labor Insurance Bureau every month.

D. Labor-management agreements and protection measures for employee benefits

The company has enjoyed harmonious labor-management relationship, thanks to open-minded management style of executives and the understanding of company policy by laborers.

The company set up TECO employee welfare committee in April 1964, in charge of various employee welfare affairs, which was followed by the establishment of TECO labor union in July, 1974. In March 1980, the company's factories initiated labor-management meeting, in order to boost working efficiency, improve labor conditions, and bridge the opinions of management and labor. The company has reported to the regulator for the establishment of those organizations, which have been functioning normally over the past years.

To safeguard the interests of both labor and management and assure their harmonious relationship, the company signed a group contract with representatives of the labor union on December 28, 1981, which was then forwarded to and approved by the regulator.

In 1999, the company was granted the “national good labor-management relationship business award” and “exemplary labor-management meeting award” by the Council of Labor Affairs and the “good labor-management relationship award” by the Taoyuan County government. In 2009, it passed the certification for healthy workplace by the Bureau of Health Promotion and in 2010 it was granted the award of “national manpower innovation” by the Council of Labor Affairs and “excellent award for healthy workplace” by Taipei city government, in 2012 it was awarded “2012 Corporate Citizen Award” by Common Wealth and was awarded “Happy Corporate Award” by Taiwan City Government in 2013, as well as “Employment Award” by Taoyuan County in 2015, in acknowledgement of the company’s effort in achieving a harmonious and co-prosperous relationship between labor and management.

E. Guidelines for employee behavior or ethics

a. To uphold the working order at workplace and clearly define the rights and obligations of labor and management, the company has formulated “employee working rules,” which has been approved by the regulator and publicized as the guidance for the company in employee management. The rules set out clear regulations on employees’ position, title, employment, leave, service, salary, reward and punishment, evaluation, promotion, welfare, layoff, compensation for vocational injuries, and retirement. The company expects every employee to do his/her best to contribute to the achievement of the company’s business goal and enhance his/her ethical standard. It, therefore, has formulated “behavioral guidelines,” with major contents including:

- (a) The staff in the implementation of the company's business, should avoid by means of its position in the company as of to themselves, spouse, parent, child or any other person to obtain improper benefits.
- (b) The company’s internal information (or information related to the company’s interest or business), be it in the aspect of technology, finance, or business, is the company’s business secret, for which employees have the obligation of confidentiality and cannot leak it to any outside party. In addition, after leaving the company, employees still have to abide by the confidentiality obligation according to the principle of integrity and refrain from leaking the company’s secrets or utilize them in engaging in illegal competition.
- (c) Political donation: Employees should not donate to or sponsor via other means political candidates under the name of the company or its affiliated institutions.
- (d) Charitable donation: When making any charitable donation or sponsorship, staffers should check the outlet and purpose of such donation and sponsorship to make sure it doesn’t become bribery in disguise.
- (e) Obligation of reporting and informing: The company encourages open communication with staffers and third parties, who can report or inform management or human-resources unit for any question, finding, unfair treatment at worksites, or violation of the guidelines, without vicious fabrication, though. The company will handle such reporting or informing confidentially and protect those who take part in the investigation.

Subjects of the reporting or informing should not revenge or threaten the informants, who can report any revenge, threat, or harassment to human-resources unit upon which the company will act instantly.

5.5.2 Status of the company’s staffers related to financial-information transparency in securing certificates designated by the regulator.

License	Number of People	
	Financial Accounting	Auditing
CPA	3	
US CPA	1	
CFA	2	
CIA	0	3
Investment trust and consulting representative	4	

5.5.3 The company had not incurred any loss from labor-management dispute as of the date for the publication of the annual report and expects no such loss in the future.

5.6 Important Contracts

Agreement	Counterparty	Period	Major contents	Restrictions
1. Agency contract	Top-Tower Enterprises Co., Ltd. and others, totaling 617 companies	One year after the starting of shipment, should any party fail to notify contrary opinion three months before the ending of the contract, the contract will be extended by one year automatically, an arrangement which will be repeated afterwards.	Rights and obligations for agency for home appliances, electric motor, and air conditioners.	Nil
2. Investment Agreement	Management Board of New District, Wuxi Government	Since April 30, 2015 to December 31, 2016	Investment of Die-cast Center	Nil
3. AGREEMENT for the Sale and Purchase of No.18,010,000 shares	Motovario S.p.A	Effective Date: July 31, 2015 Deal Closed: Oct. 15, 2015	Purchase 100% Shareholdings of Motovario S.p.A	Nil