

TECO Motors Take on the World: 65 Years Since Founding, SDGs Spur New Trends in Manufacturing

industry_ Manufacturing of motor

TECO ELECTRIC & MACHINERY CO., LTD.

Founded in 1956 as a specialized manufacturer of industrial motors, TECO has since expanded its business to include heavy electrical equipment, home appliances, information technology, telecommunications, civil engineering, and more—in the pro-

cess, becoming a global company spanning five continents. Today, TECO's products can be found around the world, including motors, drive control systems, e-houses, smart factory solutions, and energy storage systems. All of these products



reflect the company's vision of "energy conservation, CO₂ emission reduction, intelligence, and automation."

TECO has received numerous ESG and global business-related awards, and has been widely praised for its commitment to ESG. Specifically, the company was selected for inclusion in the Dow Jones Sustainability Index (DJSI)'s Emerging Markets index in 2020, and was ranked in the top 50 for its CSR report in the Taiwan Corporate Sustainability Awards (TCSA), winning the Platinum Award for six consecutive years. The company has also been ranked in the top 5% for corporate governance by the Taiwan Stock Exchange Corporation, and has been selected as a constituent of the Taiwan Stock ESG Investment Index (FTSE4Good TIP Taiwan ESG Index), achieving outstanding performance in corporate sustainability.

TECO set a goal of reducing greenhouse gas emissions by 20% in the 10 years from 2015, and by 2019, it had already reduced emissions by 18%, or 90% of the target. This was achieved through the development of high-performance energy-saving motors and the streamlining of manufacturing through smart production lines established in Taiwan, Vietnam, and India. The company is also expanding into fields related to electric vehicles and offshore wind power generation.

An annual competition held by the TECO Science and Education Foundation—established in 1993—provides opportunities for young people to excel in science education and innovation, while also serving as a forum for international exchange. TECO also actively supports Taiwanese indigenous people in

Industry Trend

Motor

TEC0 is a global company with more than 100 affiliated companies in about 50 countries. They are active in a wide range of fields, from motor manufacturing to heavy electric machinery, home appliances, basic construction, real estate, and food service. In the motor industry, TEC0 boasts one of the world's largest market shares.



establishing their ethnic identity and preserving their traditional performing arts. These activities are important aspects of corporate responsibility in Taiwan, where diversity is valued highly.

"Finding the right way to change in response to a crisis is what drives innovation. Smart production lines have played a major role in keeping our company competitive in the face of adversities such as the US-China trade war and the COVID-19 pandemic. TECO's AI team has also been working hard to implement a flexible development process, with food delivery robots, Autonomous Mobile Robot (AMR) robots, and disinfection service robots being introduced to production sites earlier this year," says Chairman Sophia Chiu.

Through a single-minded search for sensible ways to develop their business, TECO set their eyes on the same horizon as SDGs—perhaps this is the company's greatest strength.



TECO holds events that support the preservation of indigenous performing arts. In 2020, 1,637 employees participated in the events, drawing a total of 8,565 spectators for five events.



○ CO MPANY *PRODUCTS*

WINTERVIEW

Excellent Products

What a high-powered motor



TECO is currently the only domestic company manufacturing both electric vehicle motors and drive control units. The electric motor series of products was jointly developed with the Industrial Technology Research Institute (ITRI) in response to the government's policy of promoting logistic digitalization. At the factory in Zhongli, Taiwan, a "Motor Stator Automation Production Center" has been set up to operate D-vision robot arms and connect unmanned vehicles and automatic winding machines with the cloud. This facility is said to represent the cutting edge of smart industrial motor manufacturing in Asia.

According to Ms. Chiu, Chairman of the Board, "T Power winning the Taiwan Excellence Gold Award is a testament to the hard work of the TECO team, and a great source of personal satisfaction. The "T" in the product's model name "T Power" stands for both TECO and Taiwan

TECO's pride and joy using patented permanent magnet motor technology

Next-Gen Powertrain System for Electric Vehicle

model number : T Power

This is a one-of-a-kind product from a Taiwanese manufacturer that combines a drive control system with an electric vehicle motor. Its unique compact design makes it more than 15% lighter than other traction motors, and its volume has been reduced by more than 25% despite 1.8 times higher output. It can be used in a variety of passenger cars and commercial vehicles, and is aimed at the electric vehicle market in Asia/Pacific region countries, including India and ASEAN. The electric motor series, which utilizes ultra-efficient IE4 and IE5 motor technologies special rotor design using new permanent magnet motor technology—embodies TECO's manufacturing philosophy, which has expanded around motor product development



TECO developed a high-efficiency motors for buses. It has the same durability as conventional diesel vehicles, with a full load range of 260~320km, but has succeeded in eliminating the disadvantages of air pollution and poise



In compliance with FU environmental protection directives, the production plant is IATE 16949, ISO 9001, ISO 14001, OHSAS 18001 and TOSHMS-certified

The IP67 dustproof and waterproof design and high endurance to the environment make it suitable for a variety of riding applications



er's degree in accounting from National Chenacl



In the 1970s, TECO began developing refrigerators and other home appliances in response to the changing lifestyles of Taiwanese people as the economy grew. Since then, TECO has entered into clean energy businesses such as offshore wind power and solar power generation, aiming to achieve "smart manufacturing, smart energy, and smart cities." No

matter the era, one thing that is unchanged is that we are always closely connected with people's lives.

It is often said that TECO's corporate culture is similar to that of Japan, and when I went there to visit Mitsubishi Electric Corporation, I observed one common thread: that there are extremely few female employees. In terms of SDGs, "gender equality" is

a very difficult issue to tackle in this industry, because rate Sustainability Awards (TCSA) the denominator of women in this industry is very small Receiving this award has helped me to realize that to begin with. Therefore, in recent years, we have been pursuing environmentally friendly business from a manproactively determining how and to what extent to inagerial perspective can lead to substantial profits, and crease the ratio of women, as well as promoting the create a positive development cycle for our company. Going forward, we intend to continue to pursue SDGs in appointment of women to management positions. Particularly in the production line, the percentage of female accordance with TECO's vision.

interview **Pursuing Sustainability** to Create a Positive Corporate **Development Cycle**

employees has increased to 53%.

From my perspective, improving corporate governance and sustainability is a vital part of our management strategy. In 2020, TECO was incorporated into the DJSI (Dow Jones Sustainability Index) component companies, and has been recognized with "Industry Mover" status in

the United States' S&P Global Sustainability Yearbook 2021, which is awarded to the company with the highest score compared to the previous year within the industry. Not only is TECO being recognized for its contributions to corporate sustainability, but also I personally was awarded the Outstanding Corporate Sustainability Professionals Award, the highest individual award of the Taiwan Corpo-