



2018  
Delta Group CSR  
Report



[www.deltaww.com](http://www.deltaww.com)

Delta Electronics AKO Energy Park receives LEED CI Gold certificate





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Contents

About the CSR Report 03

A word from the Management 04

3 Communication with Stakeholders 23

3.1 Communication with Stakeholders and Response 24  
3.2 Materiality Assessment 27

6 Employee Relations and Social Participation 87

6.1 Key Performance Indicators 88  
6.2 Talent Attraction and Retention 90  
6.3 Labor Rights and Labor Relations 98  
6.4 Talent Management and Learning Development 105  
6.5 Social Participation 109  
6.6 General Issues 117

1 Delta Group Overview 08

1.1 Delta Electronic Organizational Structure 10  
1.2 Global Success Stories 11  
1.3 Enhance brand value 12

4 Corporate Governance 31

4.1 Key Performance Indicators 32  
4.2 Innovation 34  
4.3 Information Security Management 37  
4.4 Customer Relationship Management 39  
4.5 Supplier Sustainability Management 42  
4.6 General Issues 51

7 Appendix 120

7.1 Screening Criteria of the Reporting Boundaries 121  
7.2 Environmental Data 122  
7.3 Index of GRI Standards Indicators 124  
7.4 Summary of Information Assured (ISAE3000) 135  
7.5 External Assurance Statement and Report 140

2 Sustainable Management 14

2.1 Sustainable Key Performance 15  
2.2 Commitment and Promotion 18  
2.3 Responding to Global Sustainable Development 20

5 Environmental Protection and Energy Conservation 57

5.1 Key Performance Indicators 58  
5.2 Proactive Response to Climate Change 60  
5.3 Energy Management 67  
5.4 Water Resources Management 73  
5.5 Waste Management 77  
5.6 Green Product Liability 80  
5.7 General Issues 86



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

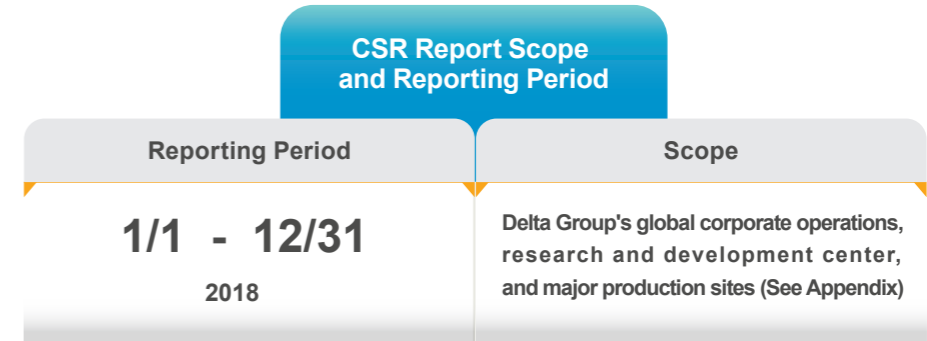
Appendix

## About the CSR Report

Since 2005, the Delta Group has published an annual corporate social responsibility (CSR) report that compiles and describes the company's corporate governance, environmental protection and energy savings, employee relationship, community and social participation, and related CSR activities, progress, and substantive performance for the given year. Delta supports the 17 Sustainable Development Goals (SDGs) established by the United Nations. Delta works to achieve the SDGs through various projects, as stated in the Chapters on Corporate Governance, Environmental Protection and Energy Savings, and Employee Relations and Social Participation in this CSR Report.

In addition, Delta's stakeholders, through the materiality analysis, identified thirteen major issues. From the economic aspect, issues include Innovative R&D, Information System Security Management, Customer Relationship Management, and Supplier Sustainability Management. From the environmental aspect, issues include Climate Change, Green Product Responsibility, Energy Management, Water Resources Management, and Waste Management. From the social aspect, issues include Talent Recruitment and Retention, Labor Rights and Labor Relations, Talent Cultivation and Education and Training, and Social Engagement. These major issues specifically explain the results of Delta's investment in action plans and key development direction for the future based on "Alignment with SDGs", "Strategic Policies", "Commitment", "2020 Vision", "Key Initiatives for the Alignment with SDGs", and "Future Plans".

The structure of this report follows the Global Reporting Initiative's (GRI) "GRI Sustainability Reporting Standards (2016)" (GRI Standards), GRI 303 (2018), and GRI 403 (2018) and is prepared in accordance with the Taiwan Stock Exchange Corporation's Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies. The date of the most recent report is June 30, 2018. The materiality analysis results, disclosure, and feedback are described in the following chapters.



If you have any comments or suggestions regarding the Delta Group CSR Report, please contact us at [CSR@deltaww.com](mailto:CSR@deltaww.com). We will reply to you as soon as possible. Thank you.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## A Word from the Management

### The Founder

According to the book Factor Four, jointly published by Amory B. Lovins, Chief Scientist of the Rocky Mountain Institute in the United States, and Ernst Ulrich von Weizsacker, President of the Wuppertal Institute for Climate, Environment and Energy in Germany in 1995, excessive natural resources are wasted in current production and consumption processes. Research conducted by the United States National Academy of Sciences indicate that 93% of the resources invested in production in the United States failed to become final products on the market, and 80% of the products were discarded after only one use. If natural resources are used effectively and fully, the same natural resources could produce four times more output than currently produced. In other words, full and effective utilization of natural resources could avoid exhausting these resources and prevent devastating consequences for the future of mankind.

Delta has long recognized that tin-lead solders used in electronic products cause harm to the environment. The company introduced production lines with processes that are free of tin-lead solders as early as 2000. When Delta entered the field of energy technology (ET) from the field of information technology (IT), it focused more attention on the prevention and control of air, water, and soil pollution as well as reduced its consumption of natural materials. Delta is deeply aware of the importance of environmental capital and we initiated environmental profit and loss assessments in 2017 to focus on four main types of environmental capital including greenhouse gases, air pollution, water withdrawn, and waste. We compiled the environmental impact caused by Delta's production activities in a list and converted this impact into monetized values. Delta's carbon intensity in 2018 decreased by 16.8% from the baseline year of 2014 and Delta attained its science-based target (SBT) for this stage. Delta also focused on water resources and used its innovative 8K projection technology for an exhibition tour of its "Water with Life" documentary. These are Delta's specific actions for implementing energy conservation, carbon emissions reduction, and caring for the environment.

In October 2018, the United Nations "Intergovernmental Panel on Climate Change" (IPCC) issued the "Special Report on Global Warming of 1.5°C" which pointed out that global warming is expected to exceed 1.5°C between 2030 and 2052 if current carbon emissions trends continue. By then, the Arctic would be ice-free during the summer and existing coral reefs would decline by 70%–90%. In addition, more than 100 million people will suffer from water shortages that will affect the earth's ecology and even human survival.

The World Economic Forum's "Global Risks Report 2019" pointed out that the top five risks related to the environment include the failure of mitigating climate change and



Bruce Cheng, Founder and Honorary Chairman of Delta Group

adjustment measures, extreme weather events, water resources crises, and severe natural disasters. Climate change has become the top issue of concern to experts and decision makers around the world for the past three years.

Data from the international science organization "Global Carbon Project" showed that global carbon emissions reached record heights in 2018 and increased by 2.7% from 2017. It was the year with the highest increase in the previous seven years. Although nations across the globe had passed a series of guidelines for the implementation of the "Paris Agreement" in the 2018 United Nations Climate Change Conference (COP24) of the United Nations Framework Convention on Climate Change (UNFCCC), actual global carbon emissions had not decreased, but had increased for almost all nations. Faced with the continuous rise of climate risks, reducing carbon emissions remains the most urgent task for everyone.

According to IPCC estimates, if global warming is to be confined to 1.5°C, global carbon emissions must be reduced by 40%-60% from 2010 before 2030 and reach the goal of zero-carbon emissions by 2050. Among the numerous methods for reducing carbon emissions, buildings and transportation remain the two key factors to reducing carbon emissions and the key to restricting global warming to within 2°C. Companies



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

have the most flexible resources and they can actively and rapidly initiate carbon emissions reduction plans. Delta plays the role of corporate citizen and actively contributes to carbon emissions reduction. In addition to setting global carbon emissions reduction targets through scientific methods, Delta also set 2014 as the baseline date to reduce carbon intensity by 56.6% by 2025. With regard to green buildings, Delta has used green building and energy conservation plans to promote building energy conservation. We have built 27 green buildings around the world. Delta's America Headquarters has adopted the mature ground source heat pump system technology, bi-directional radiant heating and cooling, and energy-saving variable frequency drives as well as solar PV systems and it will soon achieve the goal of "net zero energy consumption". Namasia Minquan Elementary School was rebuilt with assistance from Delta. Its energy use intensity (EUI) per square meter amounted to only 1kWh in 2018. With solar PV power generation and the use of an energy storage system, it has become an environmentally-friendly, "net zero energy consumption" campus. It is also a testament to the boundless potential of building energy conservation.

Reducing greenhouse gas emissions from transportation is another important task for carbon emissions. Many countries have set targets for carbon emissions for the year 2050. By then, 70% of the world's new cars must be electric. Infrastructure such as charging stations plays a key role in the rapid expansion of electric vehicles, which is one of the solutions for low-carbon cities. It is also a key sector for rapid development by Delta. Delta has worked with major vehicle manufacturers in recent years and the energy conversion rate of vehicle-mounted chargers has reached 96.5%. Electric vehicle charging solutions must now be integrated with charging station management systems and optimized electricity loads. We have many achievements in this field. Delta responded to the EV100 initiative of the Climate Group in 2018. We became the first member to provide energy infrastructure for electric vehicles in Taiwan and across the globe. We pledge to expand electric vehicle charging facilities before 2030 and provide employees and customers with charging services. We also use electric buses as transportation vehicles in plants to reduce the carbon emissions of employee commuting, as well as accelerate the low-carbon transformation of transportation and reduce its impact on the environment.

Delta actively implements carbon emissions reduction measures and actively participates in related international climate activities. At the 2018 COP24 in Poland Delta

organized side events as an official organizer for the United Nations to discuss the role of distributed energy in the transformation and resilience of urban energy. Delta organized and planned side events as a technology provider along with world-class think tanks and opinion leaders such as the C40 Cities Climate Leadership Group, U.S. Green Building Council (USGBC), American Council for an Energy-Efficient Economy (ACEEE), and Renewable Energy Institute.

The Delta Electronics Foundation collaborated with the ACEEE for the first time in 2018. Together we produced the Local High-Impact Energy Efficiency Strategies Toolkit to explore how American cities establish building energy conservation and transportation data disclosure policies as well as the detailed benefits of policies, resources for execution, and policy design elements. We sought to expand the government's imagination for policies, promote dialogue between different stakeholders, and develop guidelines for establishing an energy efficiency governance framework suitable for local governments in Taiwan.

As the impact of extreme weather on the distribution of water resources grows larger, two billion people around the world now live in countries with severe water shortages. As global warming becomes increasingly severe, the Foundation used Delta's advanced 8K projection technologies to raise people's awareness of the importance of water resources. The impact of the "Water with Life" documentary allowed people to immerse themselves in stunning 8K images and view the impact on the ecology caused by extreme rain fall, the rise in seawater temperature, the over-extraction of groundwater, and other human activities. We encourage the general public to increase their concern on the issues of global warming and water resources.

By the end of the 20th century scientists confirmed that the cause of global warming is the excessive emissions of CO<sub>2</sub> and other greenhouse gases due to human activities. Excessive greenhouse gas emissions are caused by the burning of fossil fuels. We must adequately control the emissions through the initiatives of companies, countries, and regions, as well as rely on the actions of each individual. Delta encourages its employees to contribute to the development of energy conservation solutions and to actively implement CSR in daily operations. Besides company operations, we shall use our influence as an international corporate citizen and work with all sectors to conserve energy, reduce carbon emissions, and build a low-carbon and sustainable future.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## A Word from the Management

### The Chairman and the CEO

For Delta, 2018 was a productive year for sustainable development and the implementation of corporate social responsibilities, and we received recognition from many external entities. In 2018, Delta continued to win international recognition for its business accomplishments and the achievements of all of its employees. Delta was listed as an Industry Leader in the Global Electronics Equipment category for the third time and awarded gold class in the Sustainability Yearbook 2018 published by RobecoSAM. We received both the Climate Change Management Level and Water Security Management Level from the CDP, formerly the Carbon Disclosure Project, and won national recognition with the “Presidential Innovation Award” and “National Talent Development Award”. We won “Global Views Monthly” Annual Corporate Special Responsibility Awards, the “Annual Honorary Award”, the “CommonWealth Magazine CSR Award”, and the Taiwan Corporate Sustainability Award. Delta was honored with the “Leadership Award” and “Industry Pioneer” Award from Greenbuild China, and “Most Influential Enterprise of the Year” honorary awards from Southern Weekly. Delta also received NEC’s “2018 Partner - Environment Award” which affirmed Delta’s outstanding leadership in implementing environmental management and supply chain carbon emissions. The U.S. Environmental Protection Agency (EPA) presented Delta with the ENERGY STAR Partner of the Year award for the outstanding energy conservation performance of its Breez ventilation fan. It was Delta’s fourth such award and the second consecutive year of winning the EPA’s Sustained Excellence Award. In addition, the IT Data Center of Delta Taipei Headquarters became the world’s first green data center with USGBC LEED V4 ID+C Platinum certification.

Delta follows its corporate mission “To provide innovative, clean and energy-efficient solutions for a better tomorrow” and has incorporated the United Nations’ Sustainable Development Goals (SDGs). Delta focuses on climate action, industrial/innovative infrastructure, global partnership, sustainable cities and communities, affordable and clean energy, quality education, and responsible consumption and production. Delta’s actions not only prove the consistency of its long-term CSR strategy and the United Nations’ goals, but also allow the Company to review its sustainable development plans for operations, products, supply chain, and society to uncover new business opportunities to change international trends and maximize overall synergy.



Yancey Hai, Chairman of Delta Electronics, Inc.

Delta continues to improve corporate sustainability in terms of corporate governance, environmental protection and energy savings, employee relations, and social engagement. For corporate governance, we enhanced the functions of the Board of Directors, improved supervision, and improved management functions. In response to the impact of climate change on the world and increasingly severe loss of life and property, Delta understands that the aforementioned risks have a financial impact on our operations. We have therefore evaluated the risks and opportunities of climate change and the financial impact in accordance with the “Recommendations of the Task Force on Climate-related Financial Disclosures” in regards to operations. In addition, we established the Supply Chain ESG Committee to implement supply chain ESG risk management. We initiated full ESG audits in 2018 and established targets for 2025 to reduce greenhouse gases emissions, water usage, and waste in the supply chain to respond to the impact of climate change.

For environmental protection and energy savings, Delta signed the We Mean Business initiative for climate change in 2015. In addition to committing to “corporate self-motivated carbon reduction”, “disclosure of climate change information”, and



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

"participation in climate policy", Delta joined the EV 100 global initiative in 2018 and set up electric vehicle charging stations in main plants and regional headquarters to provide employees and customers with a friendly EV usage environment. We also expanded our use of electric buses to reduce the impact on the environment. In addition, Delta actively participated in international initiatives for carbon emissions reduction. We adopted science-based targets for carbon emissions reduction and set goals to reduce carbon concentration by 56.6% in 2025 from 2014. We continued to install renewable energy equipment in 2018 by adding PV systems in plants and purchasing renewable energy certificates to achieve our science-based targets for reducing carbon intensity by 16.8% and to demonstrate Delta's resolve for reducing carbon emissions.

Delta continued to invest in plant management, product energy conservation, and green building energy conservation. We implemented energy and water conservation and waste reduction management in more than thirty main production plants across the world. A total of 1,846 energy conservation projects were implemented in our main production plants from 2011 to 2018, and we reduced approximately 186,000 tons of carbon emissions. The status of water productivity intensity and waste intensity in 2018 declined by 19.8% and 2.5% respectively from the baseline year of 2015, and it fully exemplified Delta's commitment to environmental sustainability. In regards to conserving energy through our products, Delta continuously invests in innovative R&D and has vigorously enhanced the energy conversion efficiency of all of our product lines over the years. Delta's high-efficiency, energy-saving products have helped our global customers save nearly 28.1 billion kWh of electricity between 2010 and 2018. This is equivalent to reducing approximately 15.06 million metric tons of emissions. In terms of energy conservation for green buildings, the Zhongli R&D Center and multi-purpose building in Ako Energy Park in Japan were added in 2018. Both buildings received LEED Gold certification and used many of the latest energy-saving products and solutions developed by Delta. In addition to our green building plants and offices, Delta's Wujiang Data Center received the world's first LEED v4 ID+C Gold certification. Certified green buildings saved a total of 17.82 million kWh of electricity and reduced 11,235 tons of carbon emissions in 2018. These were Delta's contributions to reduce carbon emissions for the earth.

With regard to employee relations and social engagement, talent cultivation remains the core driving force for our corporate sustainable development. Delta



Ping Cheng, CEO of Delta Electronics, Inc.

is committed to building a top employer brand, and we have transformed our business development strategy to that of a total solution provider. Our business scope encompasses power and electronics, automation, and infrastructure. In this transformation process, demand for talent has changed from hardware research and development in the past to talents that specialize in the integration of hardware and software. Delta continues to invest in innovative talent development plans and build a culture and work environment conducive to learning to attract outstanding talents. We shall create competitive advantages for all talents, help the Company achieve continuous growth, and fulfill our corporate social responsibilities.

Sustainable development is the ultimate goal of every company, and Delta continues to improve and fulfill its targets. We shall also use our core competencies to fulfill the UN Sustainable Development Goals. Delta makes full use of our advantages of regional operations across the globe to actively participate in international initiatives, improve sustainability, and promote cross-border and cross-sector cooperation. We shall consolidate these powers and use our influence to construct a low-carbon and sustainable future for future generations.





CHAPTER / **1**

## Contents

About the CSR Report

A word from the Management

**Delta Group Overview**

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### **Delta Group Overview**

- 1.1 Delta Electronics Organizational Structure
- 1.2 Global Success Stories
- 1.3 Enhancing Brand Value



## Delta Group Overview

Established: 1971

Delta Electronics's Consolidated Revenue<sup>\*1</sup>: **7,717** MUSD

Delta is a leader in power supplies and thermal management solutions, as well as in energy-saving and new energy solutions with customers around the world. Delta has integrated its software and hardware system products in recent years and is focused on strategic markets such as industrial automation, building automation, energy infrastructure facilities, ICT infrastructure, and electric vehicles to create smart and energy-efficient solutions for customers. Delta is headquartered in Taipei, Taiwan, and has major sales offices throughout the world, including nearly 40 countries in Europe, Asia, America, and Africa. With our corporate mission "To

provide innovative, clean and energy-efficient solutions for a better tomorrow", Delta is Climate Savers Computing Initiative's (CSCI)'s first member from Taiwan.<sup>\*3</sup> Delta participates in sustainability related associations such as The Green Grid (TGG), Business Council for Sustainable Development-Taiwan (BCSDTW), Taiwan Corporate Sustainability Forum (TCSF), Taiwan Corporate Governance Association (TCGA), Chinese Business Ethics Education Association, and the Taiwan Electrical and Electronic Manufacturers' Association (TEEMA). We are also members of associations in China, such as the China Power Association, Chinese Association of Automation, China Textile Machinery Association, and China Renewable Energy Society. We achieve Delta's CSR goals through sound corporate governance, balancing stakeholder interests, and supporting social progress.

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

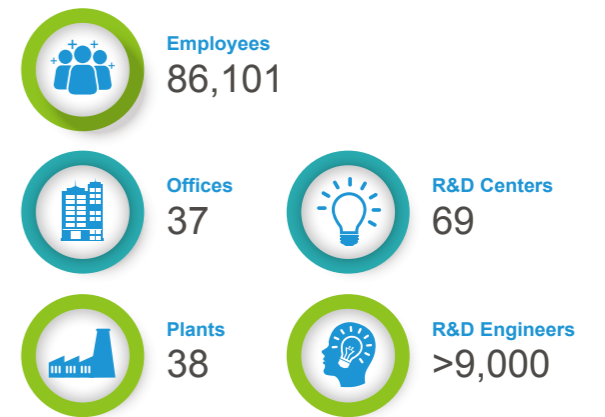
Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Delta Group's Global Reach

- Main Sales Offices
- Main Plant Sites
- Main R&D Centers



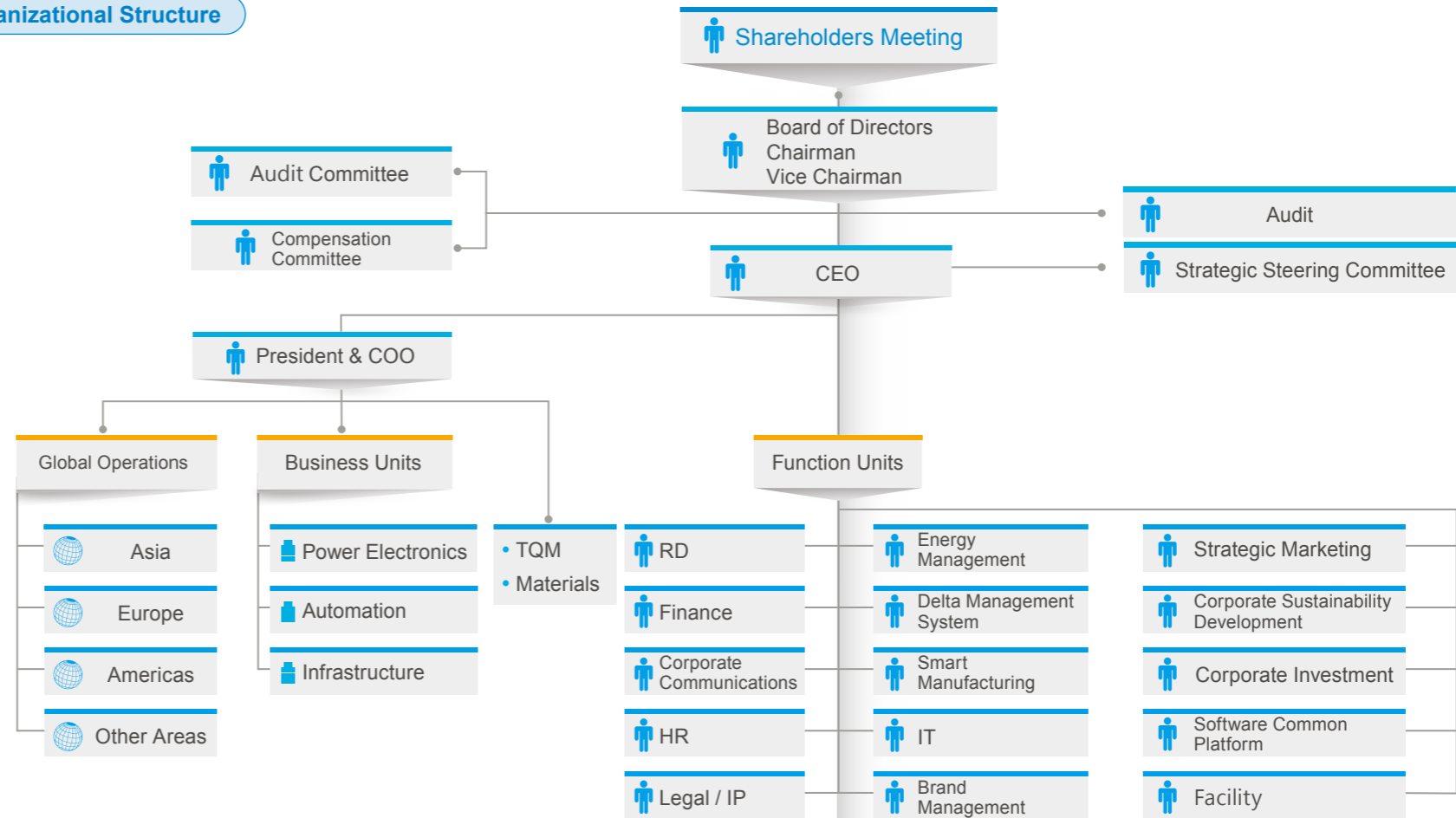
\*1. Refer to the 2018 Delta Electronics, Inc. (DEI) annual report revenue boundary.  
 \*2. 2018 Delta group global revenue: 9,081 MUSD. Delta Electronics (Thailand) Public Co., Ltd. revenue is also included. Delta and Delta Thailand are publicly listed companies in Taiwan and Thailand, respectively. Delta owns over 20% of Delta Thailand's equity. Each company has their own Boards of Directors and operating teams under respective policies of corporate governance. Delta and Delta Thailand work hard to create greater value for shareholders.  
 \*3. CSCI was incorporated into The Green Grid (TGG) in September 2012.



# 1.1 Delta Electronics Organizational Structure

Delta's corporate governance framework and highest governance unit is the Board of Directors. To strengthen corporate governance, the Board of Directors includes Independent Directors. We established functional committees, such as the Compensation Committee and Audit Committee, to improve performance targets and compensation structure for Directors and managers of the Company. We implement effective internal controls and risk management to respond to potential crises and risks for the Company.

**Organizational Structure**



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



## 1.2 Global Success Stories

By leveraging our core competence in power electronics, Delta has developed innovative technologies in both hardware and software based on the needs of our clients. We provide innovative, clean, energy-efficient solutions and system integration services while striving to promote our brand and enhance our corporate image. From 2012 to 2018, Delta has successfully completed 739 cases all over the world. These projects cover areas such as industrial automation and control

systems, building automation, data center infrastructure, telecom power systems, intelligent monitoring & management systems, electric charging systems, and renewable energy. Not only have these projects assisted clients in saving operations costs and improving their global competitiveness, they have helped reduce global warming.

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

LED display for the Space Shuttle Atlantis attraction at NASA's Kennedy Space Center

DALI lighting systems provided by subsidiary LOYTEC for Manchester Airport in the UK

PV inverters for 75.4MW solar energy project in Denmark

EV charging solutions installed all across Europe

Modular UPS systems and InfraSuiteManager DCIM systems for cloud services provider in the Netherlands

4.6 MW distributed solar power system with energy storage system in Ako, Japan

Energy Storage Solution for green energy charging station in Chia-Yi, Taiwan

Solar tracking systems for a power plant in the U.S.

Building management solutions provided by subsidiary Delta Controls for more than 180 buildings at a university in the eastern U.S.

Outdoor telecom power solutions with integrated PV systems for a telecom operator in Africa

Renewable energy solutions featuring subsidiary Eltek's Rectifier for 104 Hospitals in Zimbabwe under the UNDP's program

Modular containerized data center solution for a submarine cable landing station in Myanmar

Smart streetlight total solution including 21,000 LED streetlights for smart city project in Jakarta

One of the world's largest video wall with 324 LED DLP 80" cubes and DVCS system in China

High-power UPS solutions for Alibaba

Articulated robots applied for function tests for SCARA robots to shorten testing time

Open building management platform for YiliGroup

Industrial automation solutions for a large notebook manufacturer to enable a smart and green production

High-power UPS solutions for Alibaba

Articulated robots applied for function tests for SCARA robots to shorten testing time



# 1.3 Enhancing Brand Value

Our target is to align brand value with corporate social responsibility



## Brand Positioning

Delta's brand emphasizes innovation and energy conservation and features a combination of business development and corporate social responsibility. As a provider of electronics, power, and energy management solutions faced with global climate and environmental changes, Delta continues to invest in product R&D and technological innovation to provide more efficient and reliable energy-efficient solutions and to create sustainable low-carbon cities. This is the commitment of the Delta brand and specific achievements of our corporate social responsibility.

"To provide innovative, clean and energy-efficient solutions for a better tomorrow"—This is our corporation mission and our commitment to environmental protection. From our core competencies to product development, Delta commits to the brand promise of "Smarter. Greener. Together." This not only embodies Delta's demands for itself, it is a commitment to investors, customers, and employees alike. We deeply believe in bringing together leading technology and customer cooperation to continuously create highly efficient, reliable power and component products, industrial automation, energy management systems, and consumer products. Delta is dedicated to providing industry customers and consumers alike with a variety of products and services that support a smart, environmentally-friendly world for the future.

## Top 20 Best Taiwan Global Brands

Delta has been listed on Interbrand's brand valuation of the Top 20 Best Taiwan Global Brands for eight consecutive years since 2011. In 2018, Delta's brand value rose 6% compared to that of 2017, and reached 266 MUSD. Delta was the large-scale industrial brand with the most significant growth.

## International Corporate Citizen

Delta's brand features a unique combination of business development and corporate social responsibility. We continue to innovate and provide solutions for building sustainable cities. Delta was invited to official side events organized by renowned international think tanks in the 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24) held in Katowice, Poland at the end of 2018. Delta led discussions in key issues and invited the C40 Cities Climate Leadership Group, American Council for an Energy-Efficient Economy (ACEEE), Renewable Energy Institute (REI) and other world-class opinion leaders and think tanks to discuss their perspectives on practical measures for urban energy transformation and how distributed energy can strengthen energy resiliency. Delta also participated in the Sustainable Innovation Forum (SIF) and exchanged ideas with opinion leaders across the world on how to achieve sustainability through innovative technologies.



Michal Kurtyka (center), president of COP24, greeted Mr. Victor Cheng (left), senior vice-president and ICTBG's GM, and Ms. Shan-Shan Guo, the executive director of the Delta Electronics Foundation, at the Sustainable Innovation Forum.

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



Ms. Shan-Shan Guo, Delta's Chief Brand Officer and Vice Chairman of the Delta Electronics Foundation, discussed how distributed energy technology enhances energy resilience in an official peripheral meeting at COP24.

Delta has built and donated 27 green buildings and a certified green data center over past ten years. We use practical experience to accumulate energy conservation technologies and we sponsor green building design contests, organize large-scale exhibitions, and publish green building books to promote building energy conservation to the public. The U.S. Green Building Council invited Delta to attend Greenbuild China 2018 to share our experience in promoting green buildings and presented Delta with their "Leadership Award" and "Industry Pioneer" honorary awards.



Delta's Chief Brand Officer Ms. Shan-Shan Guo, Spokesperson and CSO Mr. Jesse Chou, and other staff introduce Delta's green buildings at Greenbuild China.

## Pushing for Corporate Social Responsibility in External Brand Communications

To create a consistent brand image, Delta Group mobilized its resources to include all clients and distributors worldwide at important global expos. We aim to promote our brand positioning and commitments to the global market. Delta shared its initiatives for green buildings, energy saving, and carbon reduction at various global exhibitions and international press conferences. Delta enhances our international brand reputation through comprehensive, wall-to-wall broadcasting at exhibition events. We also invite corporate guests, customers and distribution partners to personally experience Delta's corporate culture and energy conservation efforts. We hope that everyone will jointly promote and increase the impact of this cause and help us achieve Delta's brand commitment.

## Internal Brand Communication: Achieving a CSR Consensus among Employees

In the past few years, Delta has organized the Delta Talk platform and invited the CEO and COO to communicate Delta's direction and strategies for its organizational transformation. The Chief Brand Officer also shared her involvement with Delta's brand development, brand positioning, and CSR for employees to understand that CSR is more than just a part of the corporate culture. It is instilled into our lives to become a part of who we are so everyone at Delta is a spokesperson for the Delta brand.

Since 2011, Delta has issued its Brand News bi-monthly to encourage the development of a brand consensus, and to share Delta's branding practices and operations in various regions of the world. We launched the digital version of our newsletter a few years ago, and we have also enhanced video and social media connections. These creative measures enrich our employees' reading experience and allow us to share the achievements of the Delta brand to a broad range of external partners.



## Contents

About the CSR Report

---

A word from the Management

---

Delta Group Overview

---

Sustainable Management

---

Communication with Stakeholders

---

Corporate Governance

---

Environmental Protection and  
Energy Conservation

---

Employee Relations and  
Social Participation

---

Appendix

### Sustainable Management

---

2.1 Sustainable Key Performance

2.2 Commitment and Promotion

2.3 Responding to Global Sustainable  
Development



## 2.1 Sustainable Key Performance

### 2.1.1 Key Indicators

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix







# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 2.1.2 Honors and Recognition

### Dow Jones Sustainability Indices (DJSI) and industry leaders



Delta has been listed in the Dow Jones Sustainability World Index for eight consecutive years, and in 2018, it was listed as an Industry Leader in the Global Electronics Equipment category for the third time. Delta has also been awarded gold class in the Sustainability Yearbook 2018 published by RobecoSAM. Delta has been listed in the Dow Jones Sustainability Emerging Markets Index for six consecutive years since its launch in 2013.

### CDP Climate Change Management Level



Delta has received Climate Change Management Level, Water Security Management Level, and Supply Chain Climate Change Management Level in the CDP (previously known as the Carbon Disclosure Project).

### Energy Star Partner of the Year

Delta has been awarded the ENERGY STAR Partner of the Year from the U.S. Environmental Protection Agency (EPA) for three consecutive years. Delta has won the Sustained Excellence Award for two consecutive years.

### Corporate Governance Evaluation Ranked in Top 5% of Listed Companies

Delta was listed by the Taiwan Stock Exchange as one of the top 5% companies for outstanding performance in Corporate Governance Evaluation for four consecutive years.

### Top 20 Best Taiwan Global Brands

Delta has been listed on Interbrand's brand valuation of the Top 20 Best Taiwan Global Brands for eight consecutive years. Our brand value has increased for six consecutive years. In 2018, Delta's brand value rose by 6% compared to that of 2017 and reached 266 MUSD. Delta had the most significant growth for the large-scale industrial brand.

### Presidential Innovation Award

Delta was awarded the third Presidential Innovation Award for its achievements on the global stage and its innovation in the industry.

### "Global Views Monthly" Annual Corporate Special Responsibility Awards Honor Roll

Delta received awards in each of the 14 editions of the "Global Views Monthly" Corporate Special Responsibility Awards and won the Honor Roll for a second time since 2008.

### "CommonWealth Magazine" Excellence in Corporate Social Responsibility Awards

Delta won the Top Excellence award for Large Enterprises at the "CommonWealth Magazine" CSR Awards for the sixth time and for the third consecutive year since 2016.

### National Talent Development Award

Delta won the 2018 National Talent Development Award organized by the Ministry of Labor.



3rd Presidential Innovation Award



2018 "Global Views Monthly" Annual Corporate Special Responsibility Awards Honor Roll



2018 "CommonWealth Magazine" CSR Award Top Excellence award for Large Enterprises



2018 National Talent Development Award



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## The Taiwan Corporate Sustainability Award 5

Delta received five major awards in the Taiwan Corporate Sustainability Awards held by the Taiwan Institute for Sustainable Energy including: Ten Most Sustainable Companies Award, the Climate Leadership Award, the Supply Chain Management Award, English CSR Report Award, and the Top 50 Corporate Sustainability Report Award in the field of electronics and information industry.

## Greenbuild Leadership and Industry Pioneer Awards 6

Delta received the Leadership Award at Greenbuild China 2018 from the U.S. Green Building Council (USGBC) and received the Industry Pioneer Award for creating the world's first LEED v4 ID + certified data center.

## "Xinhua.net" CSR Award - Environmental Protection 7

Delta was awarded the CSR Award - Environmental Protection at the 11th China Corporate Social Responsibility Summit, the 2018 China Corporate Social Responsibility Charity Event organized by Xinhua.net and the Chinese Academy of Social Sciences.

## Stock Exchange of Thailand Sustainability Award and Thailand Sustainability Investment Award 8

Delta Electronics (Thailand) Public Co., Ltd. received the 2018 Outstanding Sustainability Award from the Stock Exchange of Thailand (SET) and won the Thailand Sustainability Investment (THSI) Award for the fourth consecutive year.

## "Research Report on CSR of China" Top Ten Foreign Companies

Delta was ranked among the Top Ten Foreign Companies in the "Research Report on CSR of China" and ranked fifth in the "Top 100 Foreign Enterprises with the Best Corporate Social Responsibility Reputation in China". Delta has ranked among the top ten for four consecutive years.

## "IR Magazine" Best ESG Communications Award

For the first time, Delta won the Best ESG Communications Award presented by "IR Magazine".

## Listed in the ESG Index

Delta was listed in the MSCI Emerging Markets ESG Leaders Index and the FTSE4Good TIP Taiwan ESG Index of the FTSE4Good Index Series.

## Others

Delta was selected as one of the "Top 100 Most Desirable Companies Among the Young Generation" organized by "Cheers Magazine" for seven consecutive years and in 2018, its ranking improved to 27th.



2018 Taiwan Corporate Sustainability Award



Greenbuild China 2018 Leadership and Industry Pioneer Awards



Xinhua.net CSR Award - Environmental Protection



2018 Stock Exchange of Thailand Sustainability Award



## 2.2 Commitment and Promotion

### 2.2.1 CSR Commitment

Since its founding, Delta has been devoted to its corporate mission: "To provide innovative, clean and energy-efficient solutions for a better tomorrow". With the Delta brand promise "Smarter. Greener. Together." the company commits to promoting economic, environmental and social sustainable development in various aspects of operation. These include providing energy-saving products and green solutions, improving corporate governance, taking stakeholders' benefits into account, protecting the environment, focusing on energy conservation education, promoting environmental education, and more.

#### Corporate Social Responsibility Commitment and Principles

As an international corporate citizen, Delta echoes international labor and human rights standards including the Responsible Business Alliance Code of Conduct, Universal Declaration of Human Rights, International Labor Office (ILO) Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, United Nations Global Compact, United Nations Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multinational Enterprises. Delta also maintains an emphasis on corporate governance. By means of continuous innovation, the development of high value-added products, and a working environment that empowers our employees to fully realize their potential, Delta provides benefits to our employees, our shareholders, and society as a whole.

Delta's Board of Directors has clearly defined four major principles through "the Delta Corporate Social Responsibility Best Practice Principles" to implement corporate social responsibility. The four principles are: implement corporate governance, develop a sustainable environment, safeguard public welfare, and enhance the disclosure of corporate social responsibility information.

### Our commitments

- 1 Maintain good corporate governance and adhere to business ethics
- 2 Adhere to laws and regulations
- 3 Create company value and improve shareholders' rights
- 4 Invest in innovative R&D, develop intellectual property rights, and do our best to improve technology for humanity's social and economic development, and sustainable development of the global environment
- 5 Develop environmental protection and energy saving products and implement environmental protection to reduce our impact on the environment
- 6 Provide a safe and healthy work environment for employees, space to develop their full talents, and reasonable compensation and benefits
- 7 Actively participate in environmental protection and energy conservation education, and encourage employees to participate in social welfare activities
- 8 Promote the concept and practice of corporate social responsibility to Delta's supply chain and jointly pursue better performance

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

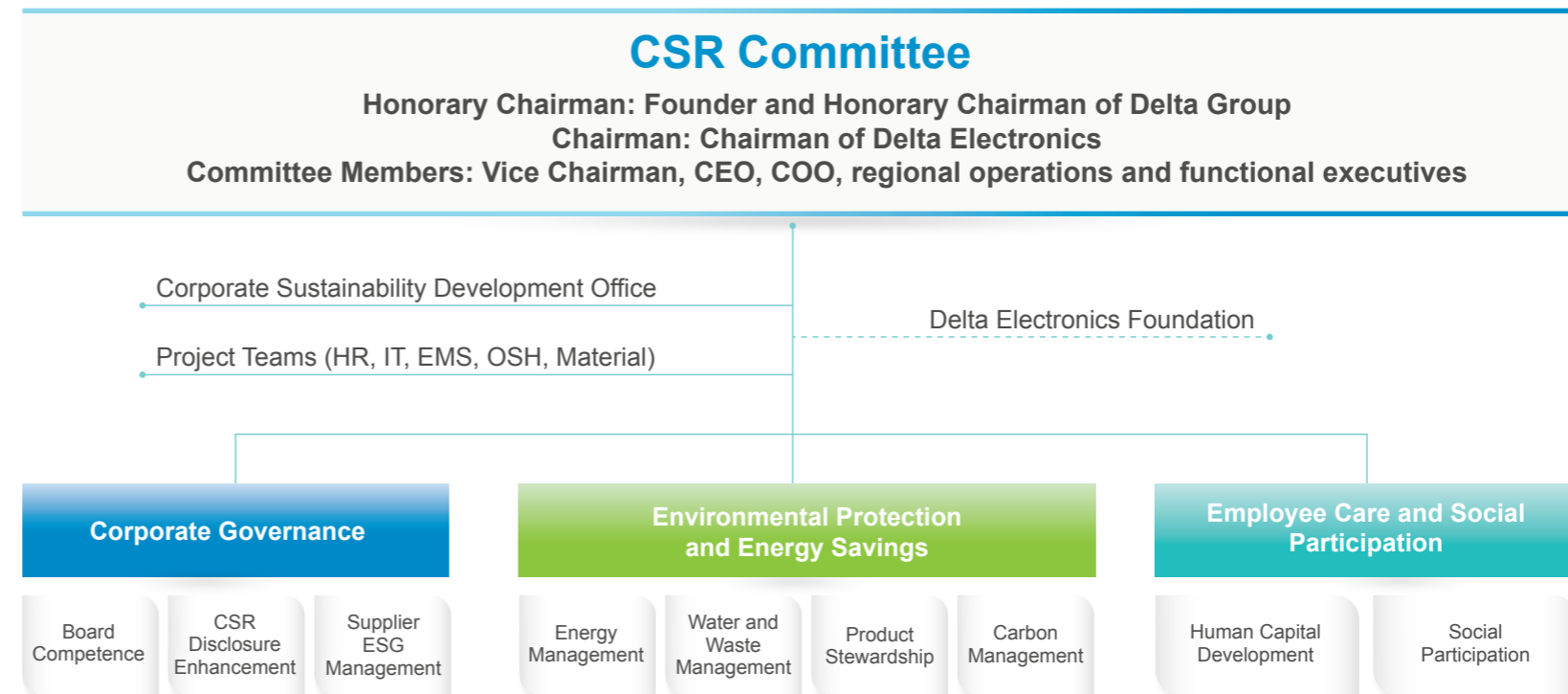
Employee Relations and Social Participation

Appendix

## 2.2.2 CSR Committee

The top CSR organization within Delta is the CSR Committee. Mr. Bruce Cheng, founder and honorary chairman of Delta, serves as honorary chairman of the committee, while Delta Chairman Mr. Yancey Hai acts as the chairman. The committee is composed of the following members: vice chairman, CEO, COO, and top regional operations and functional executives. It is the responsibility of the board to define Delta's CSR strategies, review the policies set by the functional committees and supervise overall execution. The annual CSR achievements are reported to the Board in the following year. The CSR Committee includes staff organizations and execution units. The "Corporate Sustainability Development Office" serves as the secretariat for analyzing international trends in sustainable development and understanding stakeholder expectations to identify risks and

opportunities for Delta on relevant issues and climate change that may impact business operations and carry out mitigation and adaptation. It also drafts the CSR Report each year and submits it to the CSR Committee for issuance. To effectively implement the areas in corporate governance, environmental protection, and employee and social participation, the CSR Committee is made up of heads from the business groups, region directors, and department directors. The committees have the responsibility to formulate policy, define indicators, develop tools/processes, and report on implementation performance. The Committee includes nine project work groups, which promote the integration and implementation of related cross-department efforts.



## 2.3 Responding to Global Sustainable Development

### UN Sustainable Development Goals

The United Nations passed its Sustainable Development Goals (SDGs) in 2015, which set up 17 targets related to global sustainable development. In 2016, Delta's CSR committee decided to focus on six SDGs. In 2018, as part of Delta's key development direction, Delta added sustainable cities and communities to focus on seven SDGs.

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

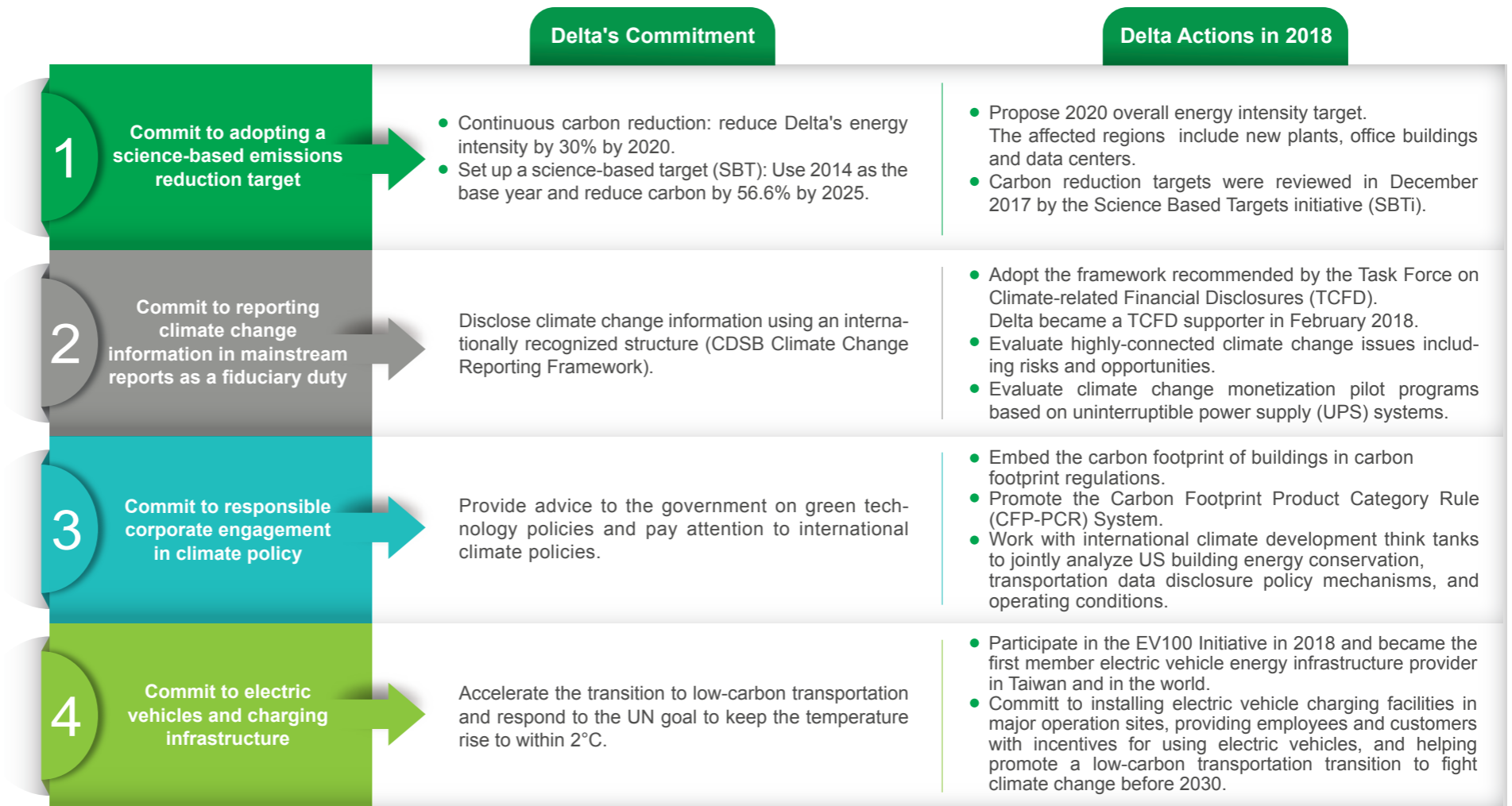
Employee Relations and Social Participation

Appendix

## Delta's Major Commitments for Climate Change

Delta has focused on climate change for a long time. Dealing with climate change is an extension of Delta and our corporate social responsibility commitments. Delta is a leader in publishing the 2015 Delta Climate Action Plan. We signed the "We Mean Business" initiative. We are committed to adopting a science-based

emissions reduction target, to reporting climate change information in mainstream reports as a fiduciary duty, and to engaging in a responsible corporate climate policy. In 2018, Delta furthermore committed to electric vehicles and charging infrastructure.



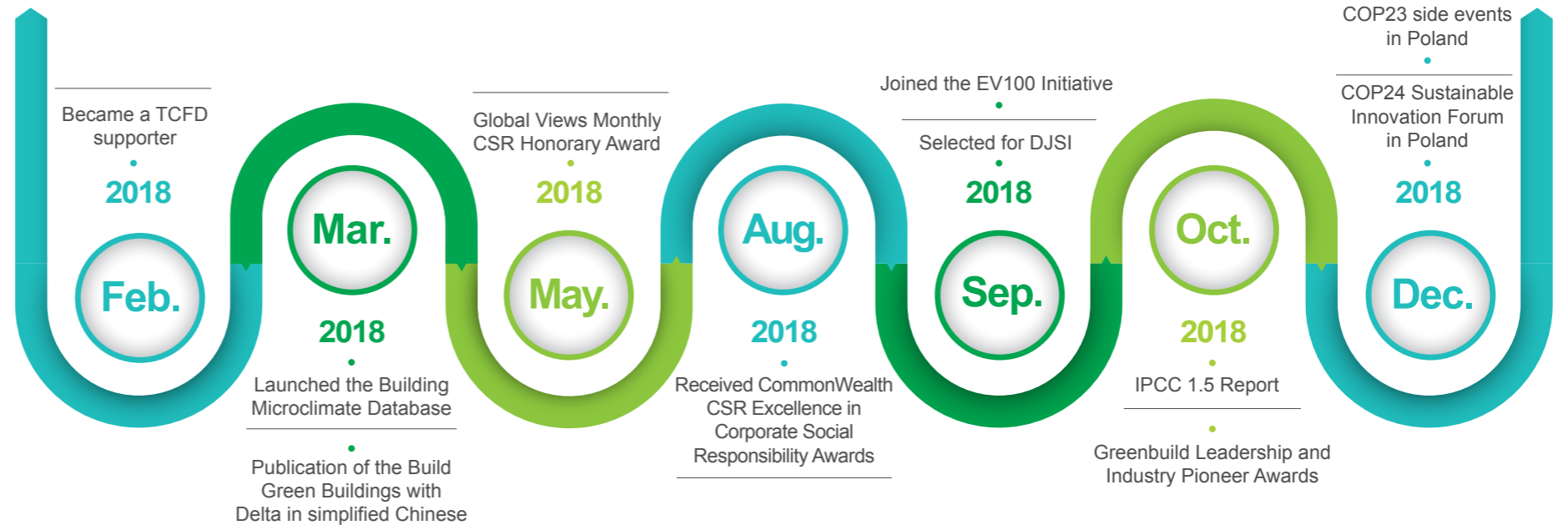


### Delta's Climate Actions in 2018

Delta is dedicated to maintaining a continuous focus on climate change issues. Delta introduces the latest news from international research reports to stakeholders, provides tools and channels for professionals to implement the

concept of low carbon, and participates in international initiatives to influence the public. In 2018, Delta was honored to receive several CSR awards.

#### Opinion leader in climate change



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



## Contents

About the CSR Report

---

A word from the Management

---

Delta Group Overview

---

Sustainable Management

---

Communication with Stakeholders

---

Corporate Governance

---

Environmental Protection and Energy Conservation

---

Employee Relations and Social Participation

---

Appendix

### Communication with Stakeholders

3.1 Stakeholder Communication and Response

3.2 Materiality Assessment





## 3.1 Stakeholder Communication and Response

Active and positive communication with stakeholders is an important strategy in Delta's long-term cultivation and promotion of corporate social responsibilities. We can only receive feedback and opinions from stakeholders by delivering and disclosing correct, objective, and updated information. To pursue corporate sustainability, we seek to revise and adjust our practices whenever necessary, respond to the expectations of the public, demonstrate our social impact, and become a world-class leader in sustainability.

communities, governments, industry associations, non-profit organizations, research institutions and key business partners ( including Subsidiary, joint venture partners, etc.) Delta's CSR Committee, pursuant to the AA1000 Stakeholder Engagement Standard (AA1000 SES), defines our major stakeholders based on local and international trends in sustainable development as well as the needs of business operations. These include employees, customers, suppliers, investors/shareholders, the media, and communities. Delta adopts diverse channels to communicate with stakeholders. We identify key issues of concern to stakeholders through materiality analysis and take the necessary actions to enhance the content of our information disclosures.

Delta's operation stakeholders include employees, customers, suppliers (including outsourcing partners and contractors), investors/shareholders, the media,

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

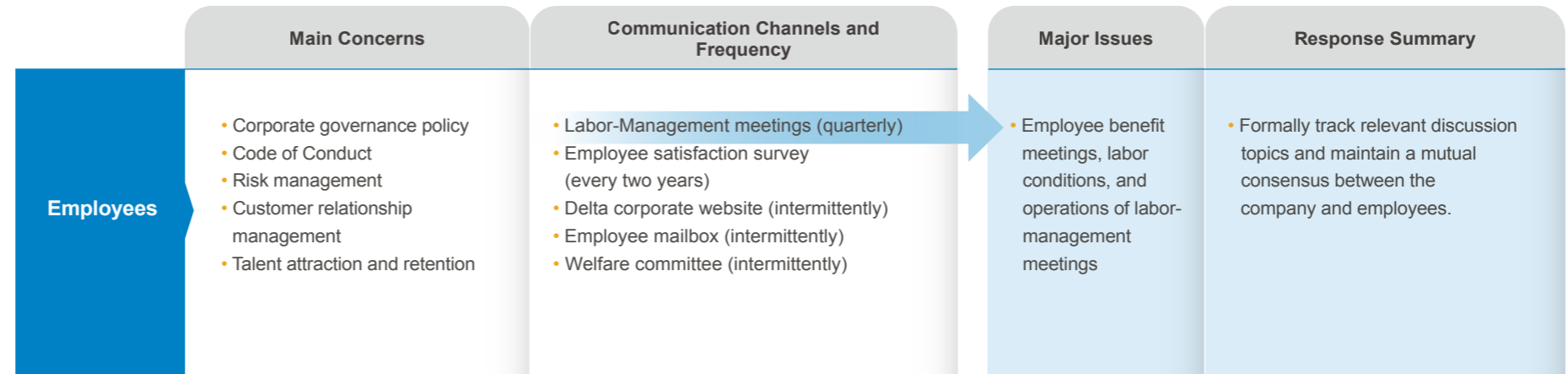
Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Communication with Major Stakeholders





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

	Main Concerns	Communication Channels and Frequency	Major Issues	Response Summary
Customers	<ul style="list-style-type: none"> <li>Customer relationship management</li> <li>Code of Conduct</li> <li>Brand image</li> <li>Occupational health and safety</li> <li>Talent management and learning development</li> </ul>	<ul style="list-style-type: none"> <li>Customer audits (intermittently)</li> <li>Delta CSR website &amp; CSR report (annually)</li> <li>Regular customer review meetings (annually)</li> <li>Channel partner meetings and business platform (annually)</li> <li>Customer satisfaction surveys (every two years)</li> <li>Brand News (every two months)</li> <li>Delta website (intermittently)</li> </ul>	<ul style="list-style-type: none"> <li>Schedule and result of third-party audits with RBA (RBA VAP)</li> <li>Working hour management in China</li> <li>Labor rights management</li> </ul>	<ul style="list-style-type: none"> <li>Strive for one day off every seven days at Delta's plant in China, gradually improve time management, and become a friendlier workplace.</li> <li>Comply with RBA regulations and implement human</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Customer relationship management</li> <li>Code of Conduct</li> <li>Corporate governance policy</li> <li>Occupational health and safety</li> <li>Labor rights and labor relations</li> </ul>	<ul style="list-style-type: none"> <li>Supplier ERS &amp; ESG audits (annually)</li> <li>Delta CSR website (annually)</li> <li>Supplier training program (annually)</li> <li>Supplier e-commerce system (monthly)</li> </ul>	<ul style="list-style-type: none"> <li>Supply chain CSR Policy and Code of Conduct</li> <li>Supplier ESG questionnaire survey and high-risk identification mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>Establish management measures for a green supply chain in accordance with international trends and customer requirements</li> <li>Identify high risks through a supplier ESG survey, and conduct audits and coaching by the PDCA method to reduce the risk of a broken chain</li> </ul>
Investor/ shareholders	<ul style="list-style-type: none"> <li>Corporate governance policy</li> <li>Customer relationship management</li> <li>Innovation and R&amp;D</li> <li>Labor rights and labor relations</li> <li>Green product liability</li> </ul>	<ul style="list-style-type: none"> <li>Institutional investors' conference (quarterly)</li> <li>Delta CSR website &amp; CSR report (annually)</li> <li>Delta website, financial report (annually)</li> <li>Investor forum (intermittently)</li> <li>Annual shareholder meeting (annually)</li> <li>Institutional investor visits (intermittently)</li> <li>Investor services mailbox (intermittently)</li> <li>Meetings with institutional investors (intermittently)</li> </ul>	<ul style="list-style-type: none"> <li>Future growth strategy</li> </ul>	<ul style="list-style-type: none"> <li>Increase growth through M&amp;A</li> <li>Continue R&amp;D research and new business development</li> </ul>



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

	Main Concerns	Communication Channels and Frequency	Major Issues	Response Summary
Media	<ul style="list-style-type: none"> <li>• Corporate governance policy</li> <li>• Occupational health and safety</li> <li>• Customer relationship management</li> <li>• Innovation and R&amp;D</li> <li>• Brand image</li> <li>• Green product liability</li> </ul>	<ul style="list-style-type: none"> <li>• Press releases (intermittently)</li> <li>• Media interviews (intermittently)</li> <li>• Press conferences (intermittently)</li> <li>• Delta PR contact (intermittently)</li> <li>• Major activity participation (intermittently)</li> </ul>	<ul style="list-style-type: none"> <li>• Delta's operational strategy, restructure organization and future strategic development</li> <li>• Delta CSR commitment and results</li> </ul>	<ul style="list-style-type: none"> <li>• Strive for the goal of "IoT-Based Smart Green Solutions to Nurture Energy Efficiency in Cities" and actively promote smart building and microgrid energy infrastructure.</li> <li>• Openly support the Task Force on Climate-related Financial Disclosures (TCFD) Commit to joining the EV100 initiative.</li> </ul>
Communities	<ul style="list-style-type: none"> <li>• Corporate governance policy</li> <li>• Social engagement</li> <li>• Labor rights and labor relations</li> <li>• Green product liability</li> <li>• Customer relationship management</li> </ul>	<ul style="list-style-type: none"> <li>• Low-carbon residences, transportation and education (intermittently)</li> <li>• Delta CSR website &amp; CSR report (annually)</li> <li>• Delta Electronics Foundation website (intermittently)</li> <li>• Public welfare organizations (intermittently)</li> <li>• Volunteer activities (intermittently)</li> <li>• Delta website (intermittently)</li> </ul>	<ul style="list-style-type: none"> <li>• Popularize green building and transportation and promote energy and climate education</li> </ul>	<ul style="list-style-type: none"> <li>• Continue developing the "Green BIM Building Microclimate Database" for architects to consider microclimate data to building sites during design and reduce future building energy consumption.</li> </ul>



## 3.2 Materiality Assessment

"Specific achievements" is the core to Delta's promotion to corporate sustainability. We have a materiality analysis methodology to identify Delta's material sustainability issues, formulate long-term sustainability goals, regularly review the implementation progress, and actively disclose the results of our implementation to the public. Delta complies with the GRI Standards for sustainability reporting and

AA1000 Stakeholder Engagement Standard and follows identification, analysis, and validation steps to develop a materiality analysis framework for identifying Delta's material sustainability issues. Delta uses the framework to plan our sustainability strategy and as a reference for Delta's CSR Report.

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

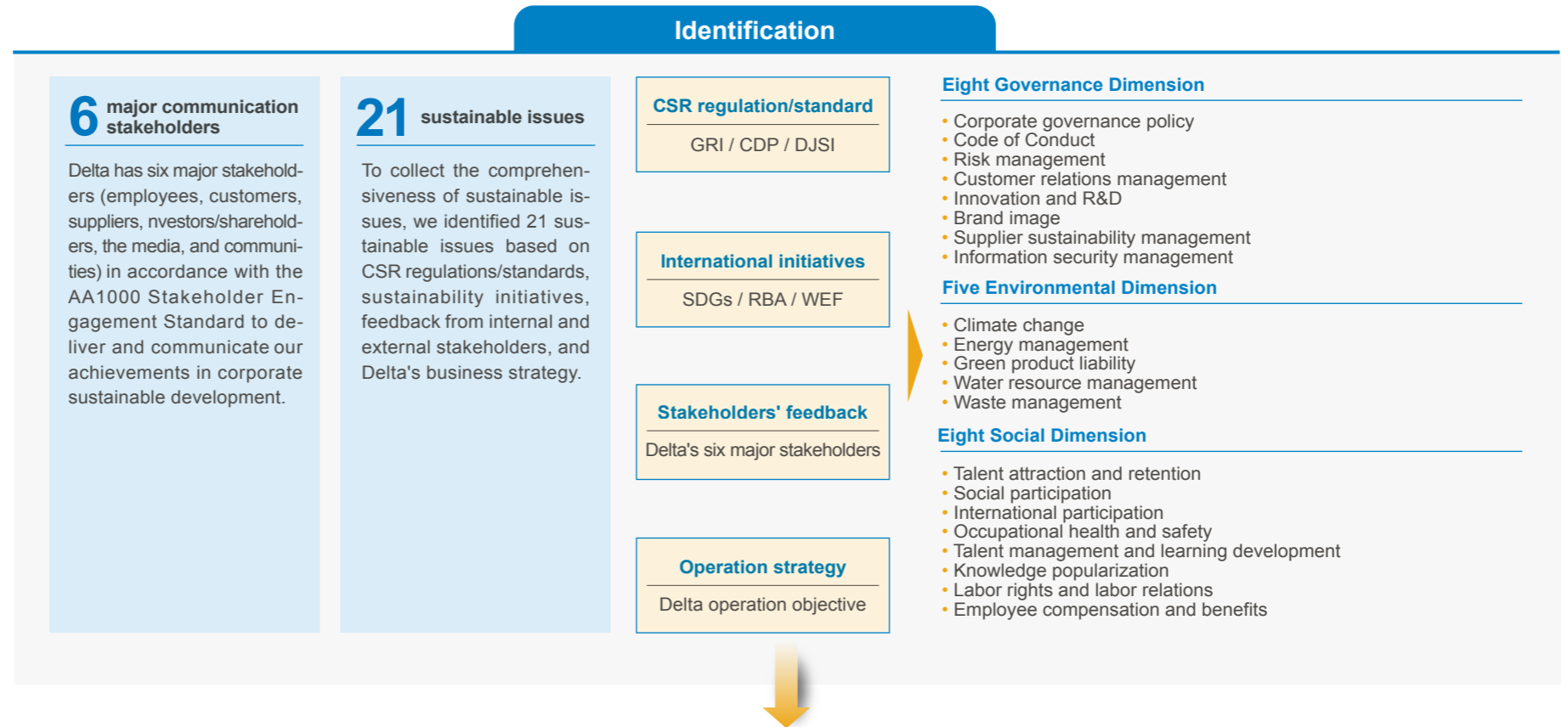
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

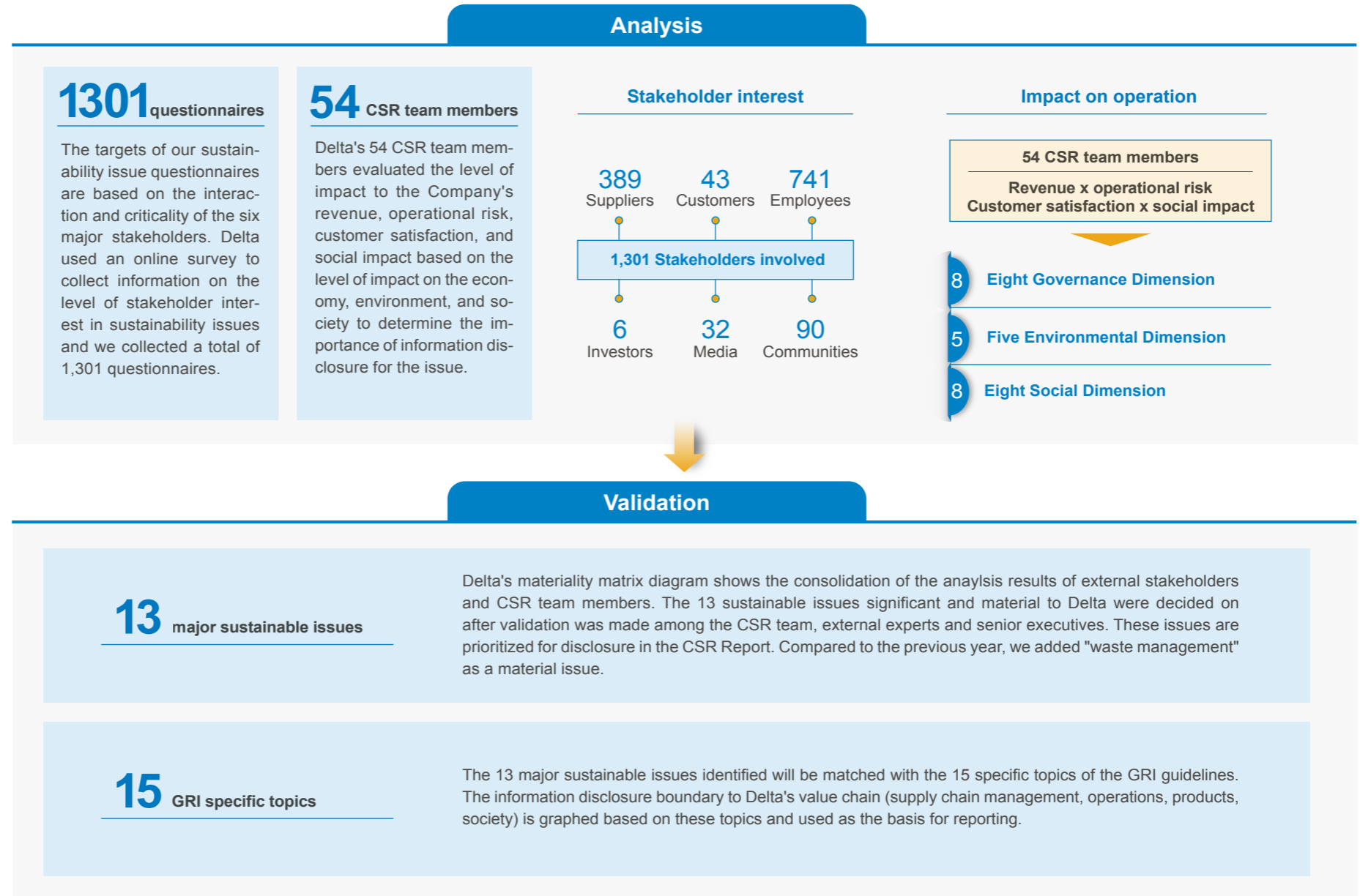
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

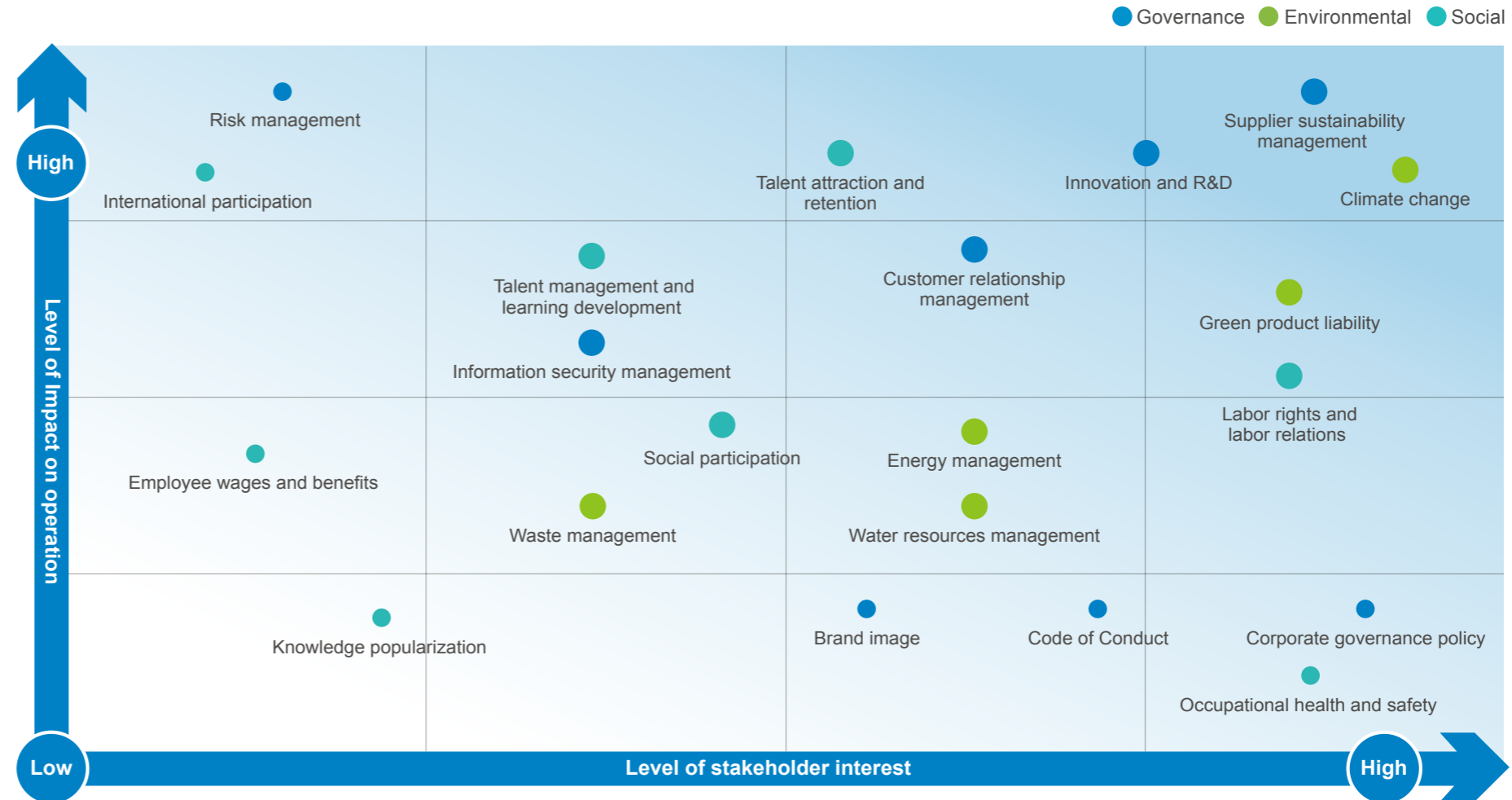
Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Stakeholder Materiality Analysis



The results of stakeholder materiality analysis showed that the 13 most important issues of stakeholder and Delta concern: Supplier sustainability management, Climate change, Talent attraction and Retention, Innovation and R&D, Customer relationship management, Green product liability, Labor rights and labor relations,

Talent management and learning development, Information security management, Energy management, Social participation, Water resources management and Waste management.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Delta's Materiality Issues and Value Chain

Aspect	Materiality Issue	"GRI Standard" Topic	Supply Chain Management	Operation	Product	Society
Governance	Innovation and R&D	Energy		●		
	Information security management	Customer privacy		●	●	
	Customer relationship management	Customer privacy, marketing and labeling		●	●	
	Supplier sustainability management	Procurement practices, supplier environmental assessment, supplier social assessment, materials	●	●	●	
Environmental	Climate change	Emissions, economic performance		●	●	●
	Energy management	Energy	●	●	●	
	Water resource management	Water, effluents and waste		●		
	Waste management	Effluents and waste		●		
	Green product liability	Customer health and safety, energy		●	●	●
Social	Talent attraction and retention	Market presence, economic performance, labor relations, diversity and equal opportunities			●	●
	Labor rights and labor relations	Human rights assessment, non-discrimination, freedom of association and collective-bargaining, forced or compulsory labor, child labor, labor management relations	●	●		●
	Talent management and learning development	Training and education		●		●
	Social participation	Indirect economic impacts, local communities				●



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Corporate Governance

4.1 Key Performance Indicators

4.2 Innovation

4.3 Information Security Management

4.4 Customer Relationship Management

4.5 Supplier Sustainability Management

4.6 General Issues





## 4.1 Key Performance Indicators

### Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

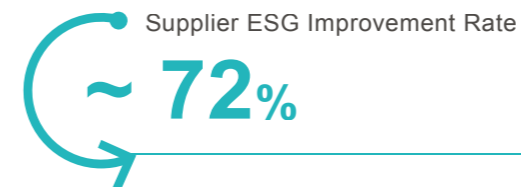
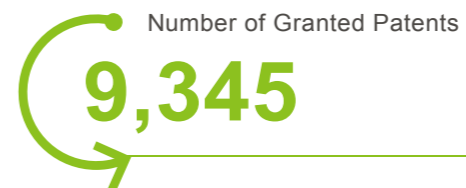
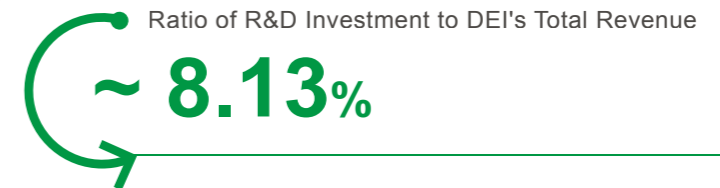
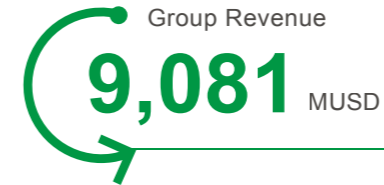
Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

#### Key Performance Indicators

- Implemented Carbon Emissions Information Disclosure and Reduction: Selected for CDP Climate Change Management Level
- Proactively Committed to Innovation: Ranking No. 253 globally and No. 4 in Taiwan respectively for the Global Innovation 1000 of PwC
- Implemented Corporate Governance: Won the Taiwan Stock Exchange Corporate Governance Assessment Award for four consecutive years, ranking in the Top 5% of companies
- International Corporate Citizen: Delta listed in the Dow Jones Sustainability Indices (DJSI) for eight consecutive years and listed as an Industry Leader in the Global Electronics Equipment industry for the third time



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

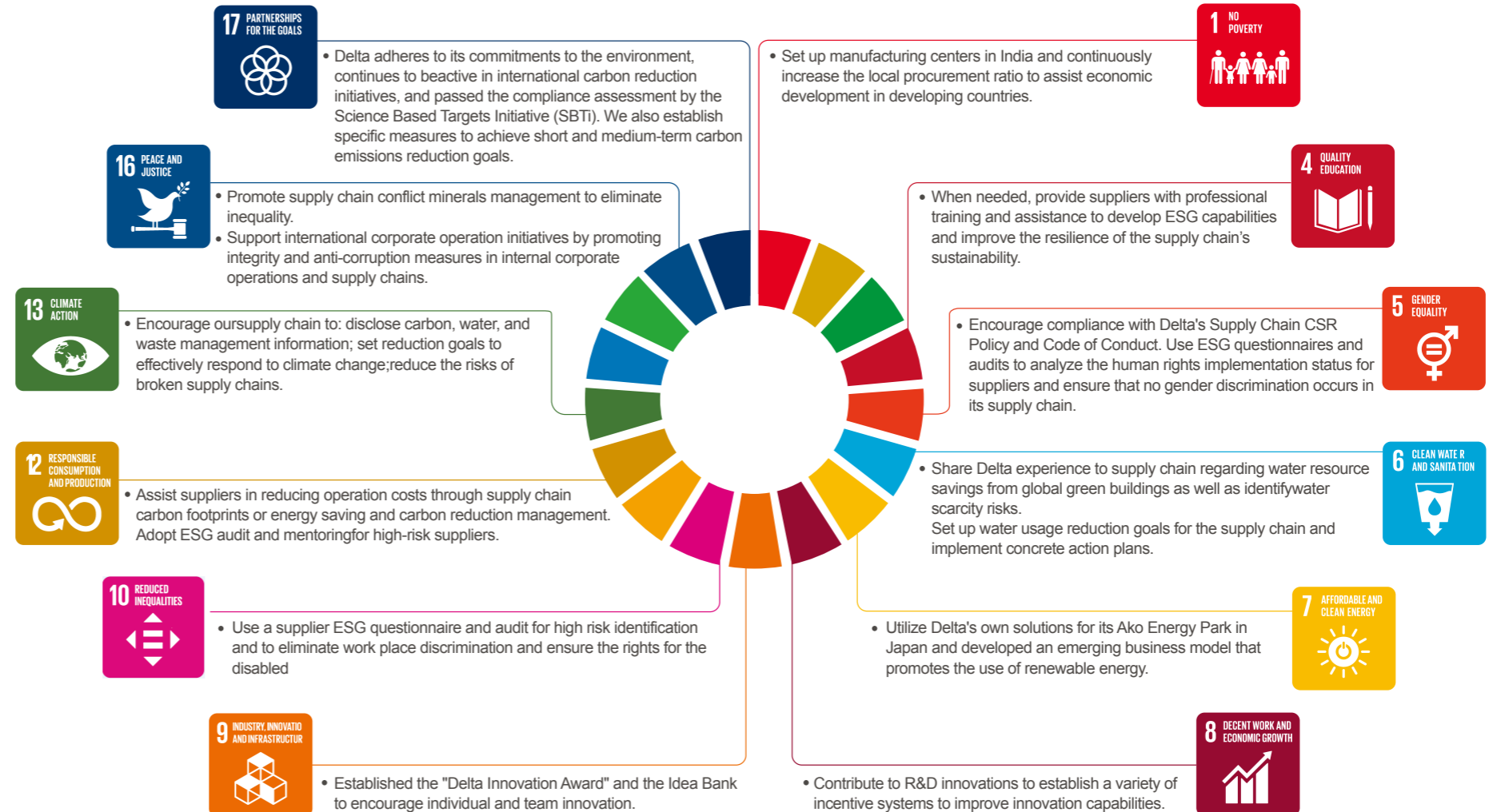
Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Aligning with UN Sustainable Development Goals





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

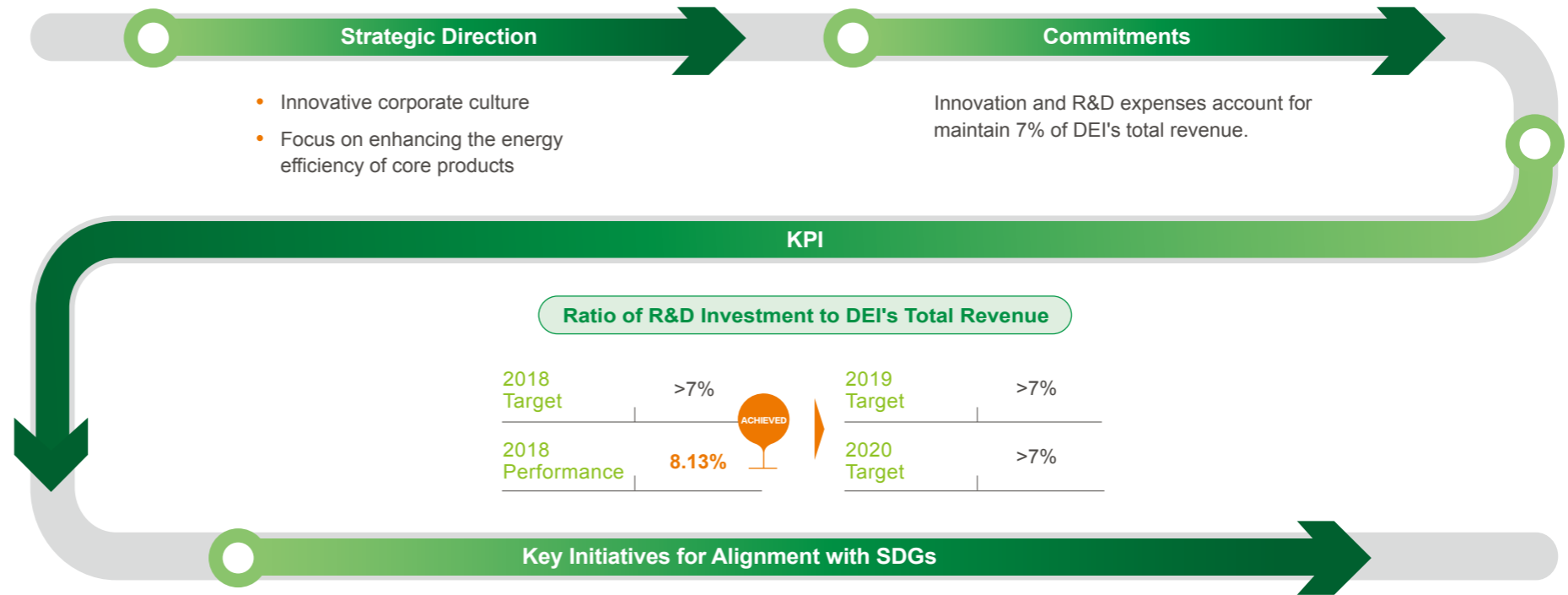
Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Material Topics

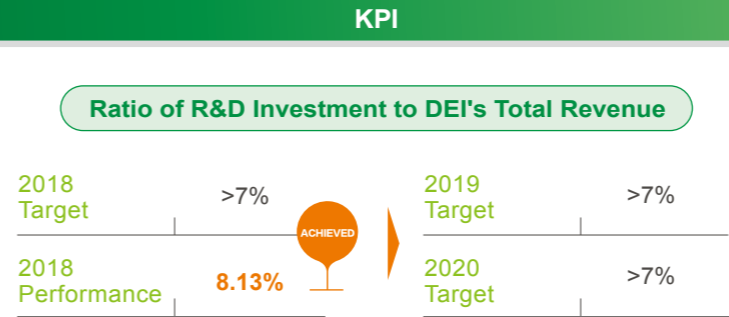
### 4.2 Innovation



- Strategic Direction**
- Innovative corporate culture
  - Focus on enhancing the energy efficiency of core products

**Commitments**

Innovation and R&D expenses account for maintain 7% of DEI's total revenue.



- Key Initiatives for Alignment with SDGs**
- The innovation and energy efficiency for Delta's high-performance products and the scientific carbon emissions reduction goals and commitments have received recognition from Xinhua.net. Delta was ranked amongst the "First Group of the Most Influential Green Enterprises in 2018" and is included in the "2018 Green Development Model Case Compilation". Delta is committed to long-term innovation and implements sustainable development business models. We contribute to both local and international socioeconomic development and in 2018, won the 3rd Presidential Innovation Award — the highest honor for diversity and innovation in Taiwan.
- Delta Innovation Awards
  - Delta Research Center
  - Idea Bank
  - Cultivating Professional Talents in Power Electronics
  - Patent Applications and Awards



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Delta Innovation Awards

To reward outstanding accomplishments and to cultivate a culture of innovation, Delta established the Delta Innovation Awards in 2008 with the management team serving as members of the judging committee. The annual awards encourage and reward employee innovation across the globe. In addition to the three grand prizes for "New Products," "Production," and "New Business Models and Processes," Delta, in 2017, created a "Patent Award". This award encompasses an "Outstanding Contribution Award," "Excellent Patent Planning," and an "Elite Designer Award." These awards are designed to recognize individual and team development and to establish patent planning for commercial value. Employees from across the globe submitted 40 projects to the 10th Delta Innovation Awards. Competition was intense and demonstrated Delta's sustained commitment and capabilities for "innovation" across the world. In the final round, the judges presented the highest awards to five teams and 10 individuals. At the end of 2018, 55 teams and 22 individual awards have been presented with over 1.56MUSD in incentives.

## Delta Research Center (DRC)

DRC was established in 2013. It is committed to big data analyses and the development and integration of IoT applications and solutions to expedite the successful transformation of companies. It actively collaborates with industries, government, academia, and research ecosystems and adopts an open innovative model to create an ecosphere for mutual prosperity. The Company established R&D Centers, Integration Centers, and Test & Verification Centers in Beijing, Xi'an, Wuhan, Taipei, Tainan, and Singapore. We adopt the concept of "being close to industrial centers, production sites, and ecosystems" to expedite the development and integration of innovative applications and solutions. In addition, DRC actively participates in the ecosystem and works with renowned universities across the world in R&D programs and talent cultivation. Delta establishes industrial chains through collaboration projects with the government and actively participates in industry associations and standard organizations to build leading innovative applications with like-minded companies.

## Idea Bank

Beyond energy saving improvements, our main plants also continue to implement green production measures in the processes of optimization, automation, process simplification, jig optimization, and logistics improvements. At the same time, Six Sigma projects work together to actively advance R&D and process innovation. For example, the Idea Bank was set up at Delta's Wujiang Plant in China to encourage the proposal of innovation improvements, which increases overall productivity. A total of 3,947 innovative ideas were proposed in Wujiang in 2018 and rewards totaling 5,024 USD were distributed.



The 10th Delta Innovation Award

With regard to proposed improvements for Delta's main plants in China, 1,105 proposals were submitted in 2018 and 1,080 cases were completed. The implementation rate was 97.7% and overall benefits amounted to 39 MUSD. The following table provides statistics for green production benefits\* in main production plants in China from 2016 to 2018.

Project Type	Improvement Measure	Explanation of Increase in Performance in 2018 from 2017	2016	2017	2018
Process Optimization	Optimization of existing production processes	ECRS & UPH upgrade project	1.86	6.3	18.3
Automation Control	Adoption of automation control systems for labor intensive production stages	Introduction of Delta Smart Manufacturing	2.29	9.9	16.4
Process Simplification	Simplification of traditional or complicated procedures	ECRS	0.35	0.3	2.5
Tool Optimization	Optimization for jig design	NA	0.51	1.3	0.9
Logistics Improvements	Improvement of delivery and storage methods	Smart logistics and smart scheduling	0.11	0.5	0.9
Total benefits (MUSD)			14.8	18.3	39.0

\* The benefit calculation includes manpower, wages, and cost savings before and after the implementation of improvements.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

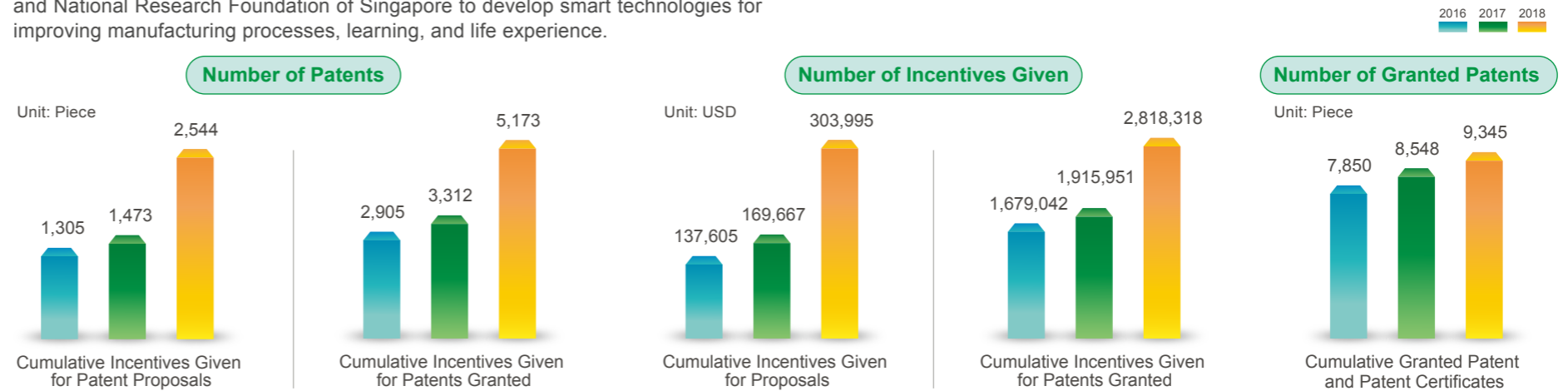
Appendix

## Cultivating Professional Talents in Power Electronics

Delta actively collaborates with 11 renowned global educational institutions such as MIT, Peking University, National University of Singapore, Nanyang Technological University, and national universities in Taiwan. Delta dedicated 2.87 MUSD towards industry-academic collaboration to cultivate professional talent in power electronics and to expedite innovative product development and talent recruitment. Delta expanded joint research programs with Nanyang Technological University and National Research Foundation of Singapore to develop smart technologies for improving manufacturing processes, learning, and life experience.

## Patent Applications and Awards

To encourage employees to focus on R&D and proactively apply for patents from patent offices in Taiwan and other countries of the WTO, Delta established patent incentive system procedures and assisted its businesses in compiling a risk map for IP rights. As of 2018, a total of 9,345 patents have been approved.



## Technology Strategy Meetings and Forums

Type	Event	Purpose	Attendees	Rounds/Duration
Technology Strategy Meeting	Technology Strategy Meeting	Communicate and discuss the latest technologies and strategies with internal departments of the DRC	130	Each round: 2 days
Technology Strategy Meeting	NCKU Delta Day	Announce results of Delta-NCKU collaborations and introduce the latest development results of the DRC	300+	Each round: 1 days
Technology Forum	Technology Forum / Technology Talk	Invite celebrated professionals from academia and industry to Delta to give speeches or seminars on their respective fields, inspiring innovative thinking and partnership opportunities	400+	3 rounds

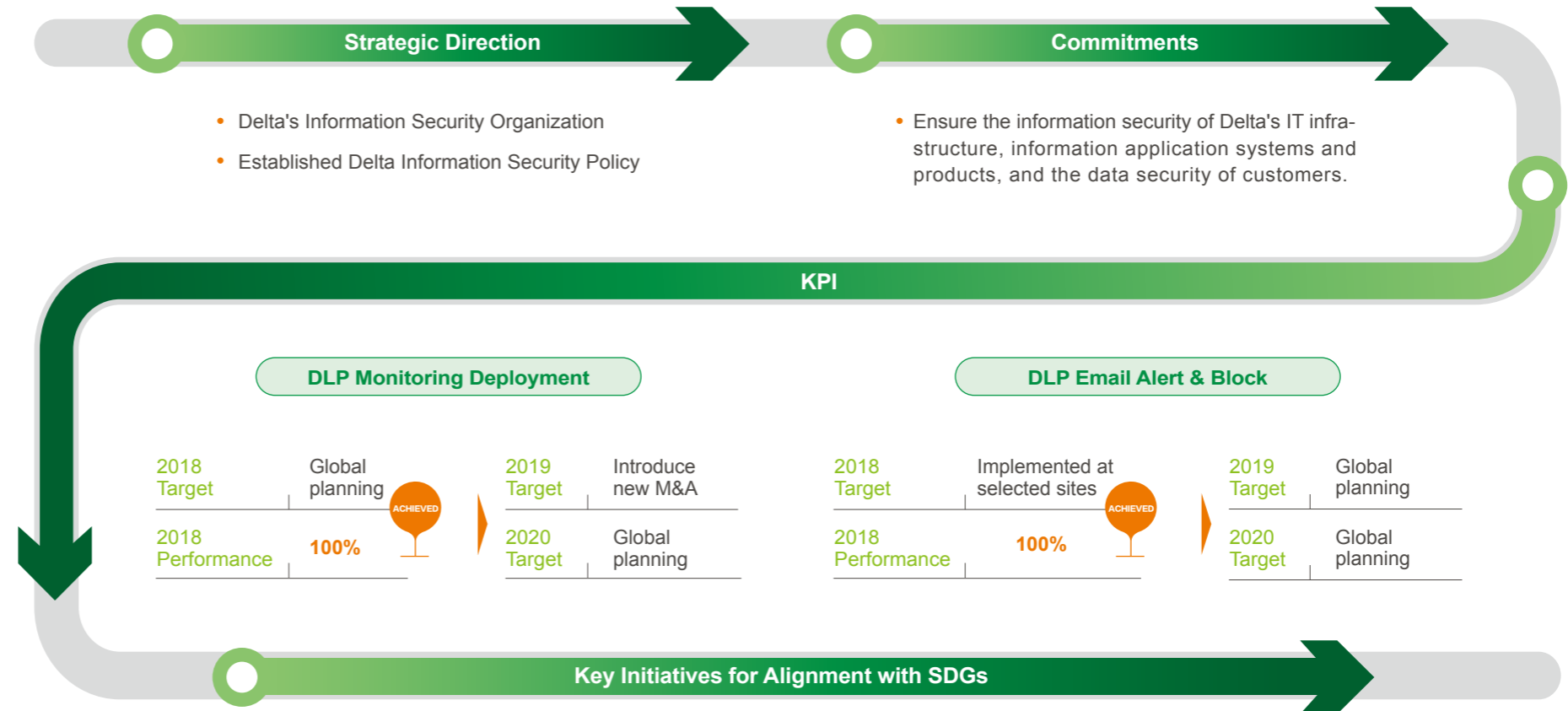
## Future Plans

- Expand smart manufacturing, automotive electronics, smart building, IoT, power industry, biotechnology disease detection, and other R&D sectors and continue to be an innovation pioneer in the market
- Enhance corporate interdepartmental cooperation and innovation
- Adopt mergers and acquisitions as the Company's organic growth strategy



## Material Topics

### 4.3 Information Security Management



Delta Information Security Team was established in November 2013. Currently the team's main tasks include: drafting information security policies/principles, reviewing information security, applying information security technology, implementing information security plans/projects, applying tools for information security, organizing educational training for information security, reporting and handling of information security incidents, updating and managing the information security system, detecting vulnerabilities in the information system, and producing information security statements.

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Delta's Information Security Policies

The Information Security Team began formulating Delta's information security policies in November 2013. After months of hard work, Delta's global employees received educational training regarding IT security policies and promotions. Delta's information security policies are primarily about what employees should pay attention to and avoid doing for information security. The policies include: Internet Usage Policies, Company Email Usage Policies, Computer Usage Policies, Data Loss Prevention (DLP) System Setup and Usage Policy, Handling and Security Procedures for Storage Media, Password Principles, Policies for Data Backup and Restoration, Incident Management Principles, Acceptable Use of Mobile Devices, Encryption and Encryption Policies, Equipment Use and Handling Policies, Mobile Computing and Remote Working Policies, and Remote Access Policies. These IT security policies have been established in accordance with ISO 27001.

### Data Loss Prevention (DLP) system

Delta has introduced a Data Loss Prevention (DLP) system to protect the Company's sensitive information from leaking. Currently, Delta's information security team and Delta's global business units collectively inspect and review reports produced by the DLP system, and handle and rectify information security incidents to protect sensitive information. We chose specific units to test email blocking and warning functions in 2018. The functions were fully deployed across the world to prevent leaks of confidential and sensitive information.

### Future Plans

### Parallel Introduction Project for the Information Security Management System

We duplicated our success in introducing the Information Security Management System and receiving ISO 27001 verification for other business groups and affiliate companies. We provide business groups with information security management system training and conduct IT asset labeling and classification to effectively control operational risks and ensure information confidentiality, integrity, and availability. We continue to improve customers' trust in outsourcing information and implement information security management and continuous business operation ideals to provide secure and efficient services.

### Vulnerability Management System

Delta has implemented a Vulnerability Management System (VMS) to ensure the security of networking products and services from the Company. Before Delta's networking products or services go online, the VMS ensures the security of sensitive information for both the Company and its clients, and ensures that the system is not vulnerable to hacker attacks or information theft.

### iDelta Collaborative File Management System

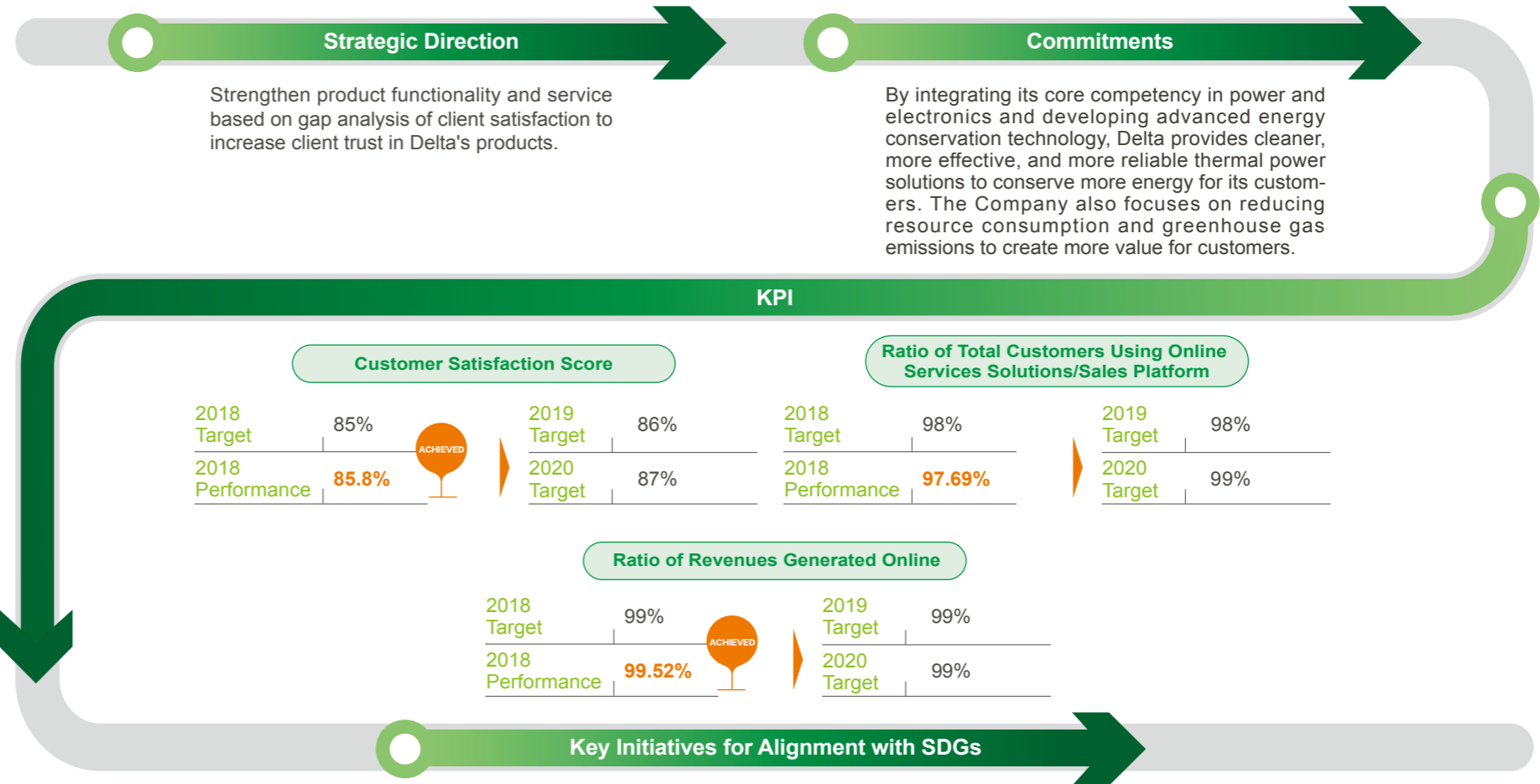
Delta has introduced the iDelta Collaborative File Management System (iDelta) that enables collaboration and management of files and documents between Delta employees. To ensure the security of sensitive documents from each business unit, each Delta business has different levels of authority and management rights to prevent unauthorized data storage (confidentiality). The iDelta system provides 24/7 service and an automatic backup system (availability). Any amendment to any data or file is recorded, and a version control mechanism is included to prevent inappropriate operations (integrity).

### ISO 27001 Information Security Management System

Delta introduced the Information Security Management System (ISMS) with a scope encompassing New Product Introduction (NPI), IT data centers, the Internet, and enterprise resource planning (ERP). We also obtained ISO 27001: 2013 international standard verification through inspections conducted by an independent verification institution in 2018. We led the industry in becoming the first company to adopt both NPI and IT verification. Delta shall continue to rigorously implement Plan-Do-Check-Act (PDCA) management ideals and continue to improve information security management and technologies to protect customers' data.

## Material Topics

# 4.4 Customer Relationship Management



### Strategic Direction

Strengthen product functionality and service based on gap analysis of client satisfaction to increase client trust in Delta's products.

### Commitments

By integrating its core competency in power and electronics and developing advanced energy conservation technology, Delta provides cleaner, more effective, and more reliable thermal power solutions to conserve more energy for its customers. The Company also focuses on reducing resource consumption and greenhouse gas emissions to create more value for customers.

### KPI

#### Customer Satisfaction Score

2018 Target	85%	ACHIEVED	2019 Target	86%
2018 Performance	85.8%		2020 Target	87%

#### Ratio of Total Customers Using Online Services Solutions/Sales Platform

2018 Target	98%	ACHIEVED	2019 Target	98%
2018 Performance	97.69%		2020 Target	99%

#### Ratio of Revenues Generated Online

2018 Target	99%	ACHIEVED	2019 Target	99%
2018 Performance	99.52%		2020 Target	99%

### Key Initiatives for Alignment with SDGs

- Customer Satisfaction Survey
- Customer FAQ
- Customer Confidential Information Protection
- Customer Knowledge Platform

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

Delta uses efficient power management solutions, cooling system solutions, and green data center solutions to attract customers to its brand and to jointly develop next-generation energy-saving products. For instance, Delta assisted Dell in the development of the 80 Plus titanium-grade server power supply that has a 96% average efficiency level. Delta participated in Facebook's "Open Compute Project" for research in 227V power supply with 94.5% efficiency. We also participated in several international exhibitions such as the Hannover Messe, China International Industry Fair (CIIF), Consumer Electronics Show (CES), and COMPUTEX. We interact closely with customers to promote Delta's latest energy-efficient products, solutions, and innovative technologies and to help enhance their competitiveness in the industry. Delta also fully utilizes the advantages of our green energy and energy-saving products for full system integration. Our environmental exhibitions and green buildings attract customers to come for consultation regarding energy-saving and carbon reduction business opportunities. For instance, Delta took part in the construction of a 6.48 million square meter concentrated solar power plant in the Nevada desert in the United States. We provided high precision solar tracking systems for more than 10,000 mirrors, which help generate 500 million kWh of electricity each year. Delta assisted the Campana Group in creating its Submarine Cable Landing Station in Myanmar with a 200kW modularized container data center solution. The solution is used to create the largest high-speed data corridor between Singapore and Myanmar and advance digitalization in Southeast Asia. Jakarta initiated its smart city blueprint in 2014 to build a low-carbon, smart, and modern city. Energy efficient LED street lights were defined as prime infrastructure in the city's transformation. Delta took part in Jakarta's smart city construction project in 2018 and used smart street lights to build and fulfill the blueprint for a smart city. We hope to promote green energy ideals and smart LED street lights to countries in Southeast Asia and do our part in protecting the Earth's environment.

## Customer Satisfaction Survey

Delta has sought to achieve a deep understanding of customer requirements and issues through the observation of user operating environments and usage habits, seeking constant improvement to find the most appropriate solutions. We gather the responses of customers and end users through focus groups, individual interviews, and online questionnaires. After an in-depth analysis of their needs and expectation, the results are used to improve technology research and development, system design, and program development. We also accept

our customers' quarterly business reviews (QBR) and take initiative to issue questionnaires on customer satisfaction. We make our improvements based on customer feedback. Delta engineers are encouraged to communicate directly with customers. This allows engineers to understand customer issues at the product design phase, gain an accurate understanding of end-market demands, and exceed customer expectations through consultations and recruiting experts from a variety of industries. To achieve an in-depth understanding of customer satisfaction with Delta's products and services, we organize annual customer satisfaction surveys and use the results of the evaluation and surveys to improve customer relations. We analyze surveys for intensive interactions with customers to explore potential market opportunities and improve product design to meet customer demands, build win-win cooperation, and exceed client expectations.

In 2018, Delta's major operating units investigated the satisfaction levels of 159 major customers, receiving 155 responses for a questionnaire return rate of 97.5%. The average satisfaction score was 85.8 points and 96% of the customers responded with satisfaction scores of higher than 70 points. It fully demonstrated customers' satisfaction with Delta's products and services. To better understand customer suggestions for the direction of Delta's products and services, we also actively participate in third-party customer satisfaction surveys conducted either online or through talks with experts. In China, for example, Delta actively participated in the "UPS Power Supply System Technical Development and Innovation Forum, the 15th UPS and Power Supply System User Satisfaction Survey" and China UPS User Satisfaction Program Award for six consecutive years. We also perform Quarterly Business Reviews for suppliers in collaboration with our customers. These inspections and in-depth interactions with our customers allow Delta to precisely match customer needs and enhance service quality accordingly.

To gain a full understanding of the impact of our sales policy, services before, during, and after sales, as well as product quality, performance on channel operators, and improving customer satisfaction, Delta's subsidiary Delta Greentech appoints a third party to conduct a channel operator satisfaction survey. The survey encompasses key sectors such as infrastructure facility solutions, video displays, building automation, and industrial automation. The targets of the survey are the main persons in charge of channel operators. The questionnaire was designed to obtain information on products, market, brand promotion, personnel, services, and sales policies. We issued the questionnaire to 357 companies and received



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

responses from 310 companies. The recovery rate was 86.8% and we completed research and analyses in April, 2019. Among the key indicators, the operators were more satisfied with "personnel", "products", and "services" and they proposed recommendations for improving the "sales strategy" and "market and brand promotion". We organized the recommendations based on their importance and instructed business units to implement improvement measures in order to improve channel operators' satisfaction with Delta's overall services.

### Customer FAQ

To maintain customer interest, Delta provides a variety of communication channels to customers. This includes our official website, service hotline, and email. To provide customer feedback and access quality websites, Delta's business units have implemented administrative mechanisms to process the issues appropriately. For example, in China, the Delta Group subsidiary Delta Greentech has already opened 48 subsidiary offices and service centers, which allows our technical personnel to respond to customer inquiries within two hours and provide required services within 48 hours.

### Customer Confidential Information Protection

To ensure effective customer information management through a single system, we implement strict authorization management and control strategies and procedures for customer access. We have deployed related DLP software across the world and executed related measures required by ISO 27001. We obtained ISO 27001 Information Security Information Verification in 2018.

### Future Plans

- Conduct customer satisfaction surveys using diverse methods to improve gaps in service and enhance customer satisfaction
- Segment retailers by service competency and provide service quality training for retailers to enhance their customer service quality

### Customer Knowledge Platform

To provide customer service personnel with even more comprehensive professional capabilities, we have established a customer knowledge platform that accumulates technical product information, project opinions, accident analyses, and professional repair experience information, and provides employees with reference exchanges. Realizing the strong market potential of China and India, Delta established an ERP customer relationship management system. This system utilizes previous efficient, effective, and high-quality customer interactions to anticipate customer demands and exceed their expectations.

Our distribution partners across the world have become Delta's global market vanguard. With our industrial automation products, we have over 700 distributors across five continents that help provide customer business consulting services, product installation, technical support, product training, and other services, all of which effectively convey Delta's brand value and corporate mission. We regularly meet with our distributors, including those in India, North America, South America, China, and Europe. To maintain close relationships, we share with our distributors overall market trends, product planning, and after-sales service, and reward our outstanding sales partners. No major client grievances or complaints occurred for Delta in 2018.

## Material Topics

# 4.5 Supplier Sustainability Management



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

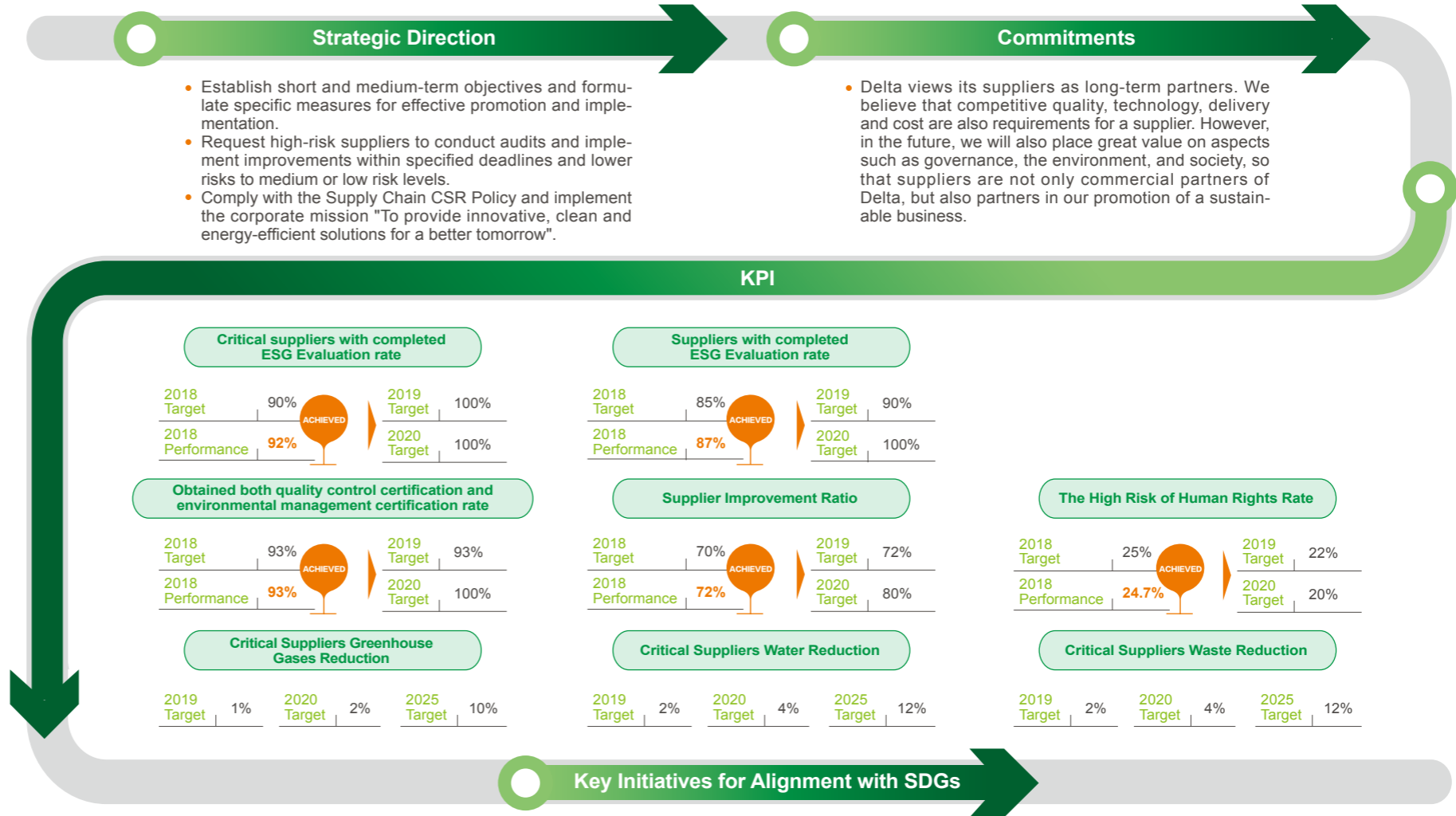
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



### Strategic Direction

- Establish short and medium-term objectives and formulate specific measures for effective promotion and implementation.
- Request high-risk suppliers to conduct audits and implement improvements within specified deadlines and lower risks to medium or low risk levels.
- Comply with the Supply Chain CSR Policy and implement the corporate mission "To provide innovative, clean and energy-efficient solutions for a better tomorrow".

### Commitments

- Delta views its suppliers as long-term partners. We believe that competitive quality, technology, delivery and cost are also requirements for a supplier. However, in the future, we will also place great value on aspects such as governance, the environment, and society, so that suppliers are not only commercial partners of Delta, but also partners in our promotion of a sustainable business.

### KPI



### Key Initiatives for Alignment with SDGs

- Localized Management
- Supplier Verification and Risk Management
- Supplier Sustainability Engagement



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 4.5.1 Localized Management

Localized management is primarily focused on procurement, materials, conflict minerals, and human rights:

### Localized Procurement Management

Delta's products and services cover three major areas including Power Electronics, Automation, and Infrastructure. Delta's suppliers are divided into three types: production-related direct materials, non-production-related indirect materials, and labor. For historical purchasing expenditures, direct materials constitute the major proportion accounting for 94% in 2018. There are three types of direct material suppliers: raw material/component suppliers, agents, and outsourced suppliers. Raw material/component suppliers make up the highest proportion of up to 81%.

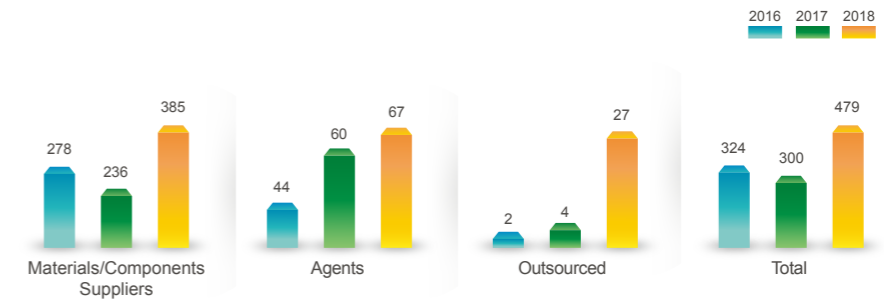
Types and Procurement Ratio of Direct Material Suppliers



Delta proactively gives priority consideration to the green purchase of raw materials not related to production, and promotes sustainability at each of our manufacturing facilities. In 2018, green purchasing of raw materials in the non-production category was 22%. The increase is from purchasing energy-conserving equipment including large-scale chillers and LED lights. In recent years, Delta has focused on R&D and innovation of core technology and products. The Company has rapidly expanded its role as a solution provider through M&A and by integrating its own professional competencies. The scale of Delta's supply chain continues to expand. In 2018, 479 new suppliers joined Delta's supply chain system. They have passed environmental and social evaluations for environmental material evaluation, signed the Declaration of Non-use of Conflict Minerals, as well as comply with the Responsible Business Alliance Code of Conduct, latest environmental protection laws and technical standards, fair competition and antitrust clauses, and the Integrity Declaration. Starting in 2019, new suppliers shall be required to pass the

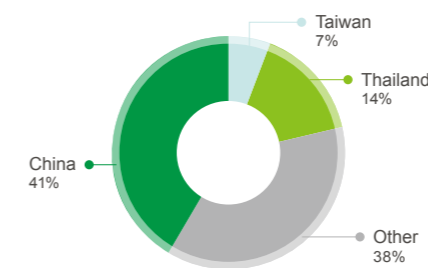
supplier ESG questionnaire survey. Suppliers that fail to meet self-evaluation score requirements shall be required to make improvements within a specified time and be reevaluated before becoming qualified suppliers.

Number of New Suppliers

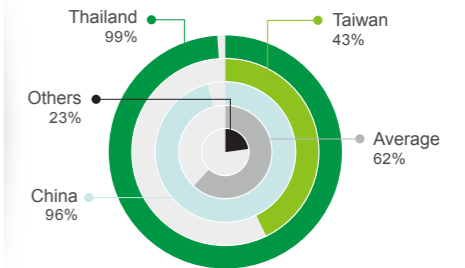


In addition, Delta continues to implement local procurement strategies and construct a green supply chain to build close relations with local partners, promote local social and economic development, and reduce carbon dioxide emissions produced in production and transportation. The percentages of global and local procurement of direct materials for major production sites in China, Taiwan, and Thailand are shown in the following table.

Percentage of Global Procurement



Percentage of Local Procurement



\* Local procurement refers to procurement of products produced by plants in the country



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

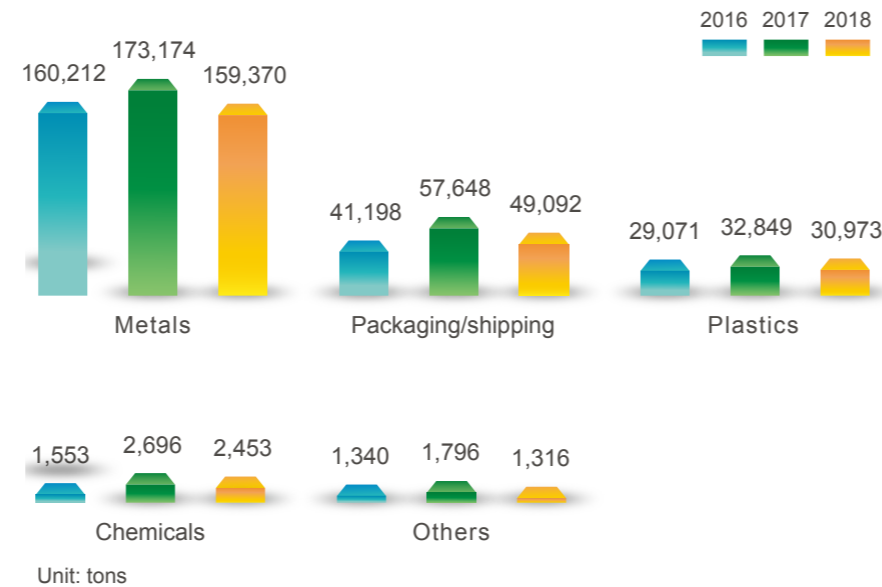
Employee Relations and Social Participation

Appendix

## Materials Management

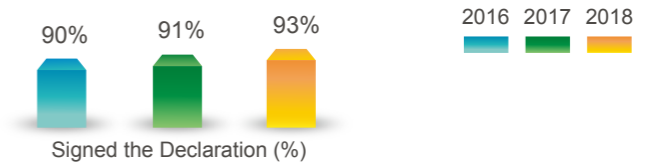
The main materials used by Delta include: metals, plastics, chemicals, packaging or buffer packaging materials, and other materials. Renewable materials accounted for 33.5% of the weight of wooden boxes, pallets and cartons in 2018. Recycled paper accounted for 90.7% of all paper packaging materials. No substances harmful to the ozone layer are used during our production processes. Compared with 2017, a large increase in material management procurement weight occurred in 2018 mainly because motors and brakes were converted to external purchases and the demand for models dropped. It resulted in an 8% decrease in metals, a 14.8% decrease in packaging, and a 5.7% decrease in plastics. There was also a 9% decrease in organic solvents used in production and a 26.7% decrease in other materials used.

### Materials Management

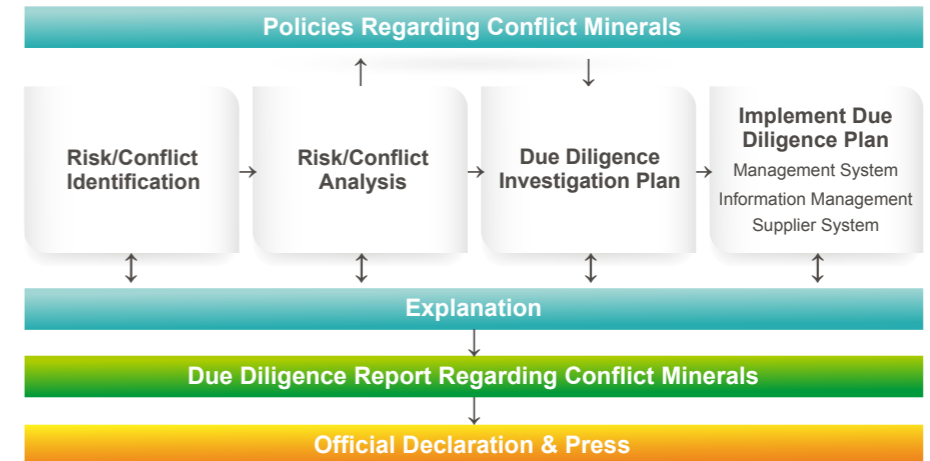


## Conflict Minerals Management

Delta maintains a strict policy and management system for not using conflict minerals. According to the "Organization for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas," a Supplier Conflict Minerals Policy and Due Diligence Policy should be established to continuously make active and passive assessments of the management of suppliers' potential use of conflict minerals. By taking these actions, Delta's supply chain is ensured to both respect human rights and to not participate in conflicts. Up until 2018, about 93% of the main material suppliers have signed the "Declaration of Non-use of Conflict Minerals." Currently, Delta has not discovered conflict materials used in the supply chain. Delta continuously communicates with major materials suppliers by employing its influence on corporate social responsibility, and increasing the possibility for the origin of ore products to undertake RBA assessment or verification of a third party.



### Management Mechanism for Due Diligence Research on Conflict Minerals





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Human Rights Management

Delta adheres to the behavioral principles advocated by the Responsible Business Alliance (RBA) and has developed RBA digital learning materials to advocate for labor rights and for ethical, health, environmental, and management systems. Delta is committed to self-discipline for the Company and for sustainable suppliers with the highest level of standards in dealing with human rights, environmental protection, and responsible business conduct in its supply chain. We strive to abide by RBA behavioral principles through standards of practice that are more rigorous than industry standards. Delta requires all qualified suppliers to sign the "Delta Integrity Declaration" and we advocate Delta's anti-corruption policy and training through emails and the procurement platform. We have surveyed a total of 968 Tier 1 and 117 critical non-Tier 1 suppliers through an ESG questionnaire survey to identify the high risk of human rights in the supply chain, and identified a total of 239 Tier 1 and 28 of critical non-Tier1 such suppliers that high risk rate is 24.7% and 24%.

## Reporting Channels

To ensure sustainable cooperation with suppliers and prevent any violation of the Supplier Code of Conduct, we require all qualified suppliers to sign the "Delta Integrity Declaration". We promote Delta's anti-corruption policy and training through emails and the EC procurement platform. We have also established supplier complaint channels and provide the 885@deltaww.com email and hotlines in China and Taiwan for reporters to issue signed/anonymous complaints to contacts assigned by management level executives for clarification and reports to effectively prevent abuse.

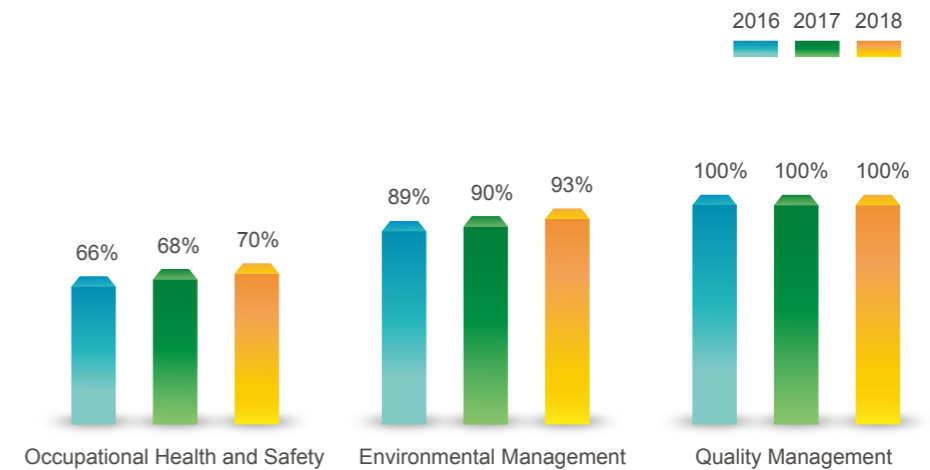
## 4.5.2 Supplier Verification and Risk Management

In response to international supply chain trends, customer demands, and local regulations, Delta has used its years of experience in CSR to formulate the Sustainable Supply Chain Management Regulations. These regulations require suppliers to meet local regulatory requirements for labor rights, health and safety, environmental protection, ethics, management systems, the Supplier Corporate Social Responsibility Policy, and the related code of conduct (for example, Responsible Business Alliance Code of Conduct). We also require suppliers to meet related regulations based on the due diligence principle to implement a sustainable supply chain management system.

## Supplier Verification

In respect to the requirements of establishing the management of a sustainable supply chain, Delta requests suppliers to receive Quality Verification as well as sign an "Integrity Statement" and an "RBA Declaration." For quality verification, all new suppliers must obtain ISO9000 verification to become qualified suppliers. For Occupational Health & Safety verification, Delta requires suppliers to implement RBA, Labor, and Health & Safety as key points to enhance future consultation and audits to protect human rights throughout Delta's green supply chain. The verifications for quality, environment, and occupational health & safety systems obtained by key suppliers from 2016 to 2018 have increased each year as shown in the following table:

Percentage of Certified Key Suppliers of Power Supply Products from 2016 to 2018





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

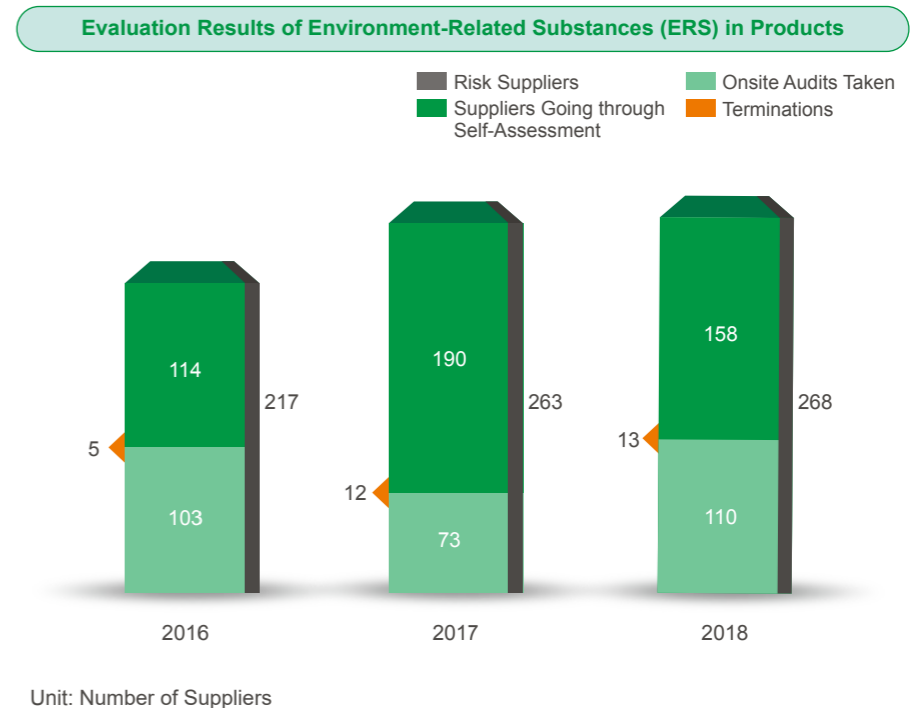
Appendix

## Supplier Risk Management

Delta is committed to the promotion and implementation of CSR and we encourage suppliers to do the same. We established the Supplier EC Platform and targeted key first and second-tier suppliers using questionnaire surveys to analyze their current situation in relation to corporate governance, environmental, and social factors. We used the information in combination with our experience in promoting CSR to make a "Risk Map" that identifies high-risk suppliers. We regularly carry out CSR audit counseling and hold training sessions with common study materials to inspire potential suppliers to join the green supply chain. The risk evaluation that Delta undertakes for its suppliers is based on environmentally-related material management, RBA audits, and Supplier ESG (environmental, social, and governance) Risk Management. They are explained below:

## Management of Environment-Related Substances (ERS) in Products

Delta has introduced the IECQ QC080000 Quality System and promoted Green Product Management (GPM) systems in major plants. IECQ is implemented based on the risk classification of materials. At the same time, Delta takes the Green Products Management (GPM) system as a shared platform of environmental information in the supply chain. The most recent international environmental requirements, such as the latest controlled substances of the EU's RoHS 2.0, REACH SVHC, EP2 and others, are provided to supplier partners for their reference and compliance with the requirements, and for establishing a management system for the material supply system. In addition, Delta has established teams in major plants for the verification of Environment Related Substances in products. Continuous consultation has been provided to improve the Management System for Environment Related Substances of key suppliers. The ERS analysis of Delta's main plants in China in 2016-2018 is provided in the following table:



## Supply Chain ESG Committee

Delta established the Supply Chain ESG Committee to effectively implement sustainable management for the supply chain and to integrate the Company's global procurement systems. The Committee is chaired by the Vice President of Procurement and its members include procurement managers of business groups. The Committee is assigned an executive secretary to plan and implement project activities and the Corporate Sustainability Development Office serves as the consulting team. The six major project categories include "amendment of rules/management regulations", "supplier ESG evaluation", "procurement platform function enhancement", "waste reduction management", "communication and education", and "special issue management". The Committee meets regularly to promote projects and review progress.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Supplier Sustainability Management Evaluation Procedures



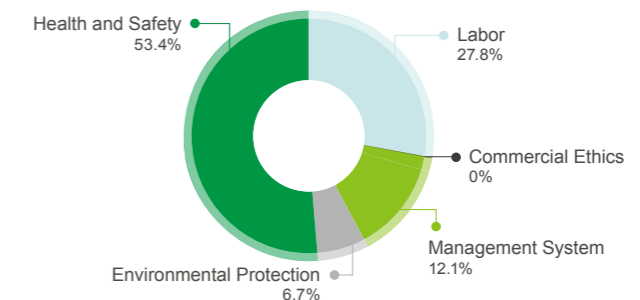
## Supplier Audit Implementation

To lower ESG risks in the supply chain and to improve competitiveness, Delta began providing RBA audits and assistance to key suppliers with high ESG risks in 2012. Key suppliers are selected based on the performance of materials in inventory, production process, and overall user-end quality. We select key components and list suppliers that account for the top 80% of all purchases as key suppliers. In January each year, we make such choices based on the performance

in quality, transaction volume, and environmental safety and health, or labor rights and designate suppliers for key audits and improvements in the current year. As of 2018, Delta completed audits for 116 key suppliers. Among the 50 key suppliers for which audits were completed in 2018, audits were completed first audit for 21 suppliers and follow-up inspections were completed for 29 suppliers. The audit rate of key suppliers was 100%.

During Delta's supplier audits, a total of 848 items were found in EHS requiring improvement. Most of them were in particular management systems and occupational health management. In terms of labor rights, a total of 412 items requiring improvement were found, mostly for particular management systems and overtime work. Delta asks suppliers to provide detailed improvement plans in response to identified issues, based on a plant's actual status, within two weeks after receiving an audit report. The plan includes the case closure date and the person responsible for case closure. The suppliers were required to respond to Delta using the Audit Improvement Report format prepared by Delta and to provide improvement progress for deficiencies to ensure their adherence to RBA requirements. In addition, Delta provides experience in introducing and promoting Delta's ESG Management System as reference for suppliers. In 2018, the rate of improvements in defects reached about 72%. The frequency of audit reviews will be increased jointly based on the nature of the items not accomplished on the supplier ESG questionnaire survey, and requesting suppliers to improve as soon as possible.

## Analysis of Defects in Supplier Audits







# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Supplier ESG (Environmental, Social, and Governance) Risk Management

Extending to the operations of Delta's overall supply chain system, suppliers falling within the top 80% of Delta's annual procurement and those providing key components are listed as high-volume suppliers. These are designated as our key targets for conducting audits and for promoting improvements. Through Delta's long-term mission to implement CSR in practice, we have initiated a comprehensive information disclosure in terms of environmental, social, and governance aspects. We have surveyed a total of 968 Tier 1 and 117 critical non-Tier 1 suppliers through an ESG questionnaire survey to identify potential Environmental, Social, and Governance risks in the supply chain through tools including risk mapping. This can lower risks of interruption in the supply chain through onsite ESG inspections, mentoring and collective training. To encourage the supply chain to fulfill CSR in action and to effectively disclose ESG information of the supply chain, we initially provide incentives in the form of added bonus points in quarterly business reviews (QBRs) to suppliers demonstrating outstanding CSR results. After analyzing the results of the risk identification, an average score of lower than 70 points in the ESG questionnaire, violation of environmental regulations, failure to abide by Delta ERS, violation of labor regulations, or violation of safety and health regulations shall be classified as high-risk factors. Based on a resolution of the Supply Chain ESG Committee, supplier's ESG questionnaire average score of lower than 70 points and also with more than two high-risk factors shall be deemed as high-risk suppliers. We have identified a total of 284 Tier 1 and 35 of critical non-Tier1 such suppliers.

Delta applied for the "Response to International Environmental Protection Standards Assistance Plan" of the Industrial Development Bureau, Ministry of Economic Affairs in 2018 to establish a supplier sustainability management system. Delta established the Sustainable Supply Chain Management Regulations to require suppliers to meet local regulatory requirements in terms of labor rights, health and safety, environmental protection, ethics, and management systems, the Supplier Corporate Social Responsibility Policy, and related code of conduct (e.g. Responsible Business Alliance Code of Conduct). We also require suppliers to meet related regulations based on the due diligence principle. If a high-risk supplier

is identified, we propose rectification and improvement plans. If no concrete improvements are made within a specified period, it is reported to the Supply Chain ESG Committee which shall resolve to terminate the cooperation and transactions. In addition to amendments of the Supplier CSR Policy, Code of Conduct, and ESG Risk Management and Control Table, we also implemented onsite audits for eight high-risk suppliers in Taiwan and uncovered 17 deficiencies which consisted of excessive overtime work, waste labeling and placement, and others. We also proposed 68 recommendations which included greenhouse gas inventory, environmental target setting, and the use of personal protective equipment. We shall continue to expand the scope of ESG investigation and onsite audits to critical suppliers and request timely improvements from high-risk suppliers through mentoring and suggestions. In 2018, the rate of improvements in defects reached about 71%. We will also continue to track and monitor their progress for effective management.



Sustainable Supply Chain Establishment and Kick-off Meeting



### 4.5.3 Supplier Sustainability Engagement

To fulfill our corporate commitment "To provide innovative, clean and energy efficient solutions for a better tomorrow," Delta continuously cooperates with suppliers to reduce carbon emissions. This lowers operational costs for both Delta and the supplier, and increases the competitiveness of the entire supply chain.

Category	Partnership Item	Abstract	Quantitative/Qualitative Results
Waste Reduction	Packaging Materials Recycling	Delta cooperates with major processing factories to recycle packaging materials such as EPE, paper, and more.	<p>For instance, 75% of our packaging material for adapter products can be recycled and it has saved 0.72MUSD. Reason for the increase in the value of recycling in 2018 from 2017:</p> <ul style="list-style-type: none"> <li>• The plant increase production capacity.</li> <li>• Customers requested automatic insertion and smart manufacturing of products which used more blister packaging materials.</li> </ul>
Waste Reduction	Repetitive Use of Carriers (Plastic Frames)	Delta cooperates with local mechanism suppliers to use reusable carriers (plastic frames) for transporting plastic casings and materials in place of cardboard boxes.	For instance, 65 suppliers for our Dongguan and Wujiang plants joined this effort in 2018 and saved 1.98 million cardboard boxes, saving up to approximately 1.27 MUSD in packaging costs.
Waste Reduction	Pallet Recycling and Reuse	Delta works with local suppliers to use recycled foundations and battens of wooden	In the case of our Dongguan, Wujiang, and Wuhu plants, wood strings and wooden panels in pallets are recycled, saving 9,692 USD in pallet costs. Incentives for recycling totaled 3,373 USD and cumulative savings totaled 6,320 USD in operating costs.
Logistics Carbon Emissions Reduction	Green Logistics	Major global distribution centers cooperate with logistics providers to implement transportation cost optimization, consolidated delivery, milk runs, packaging design, container packaging and selection of optimal delivery routes, and other relevant measures.	For Delta Greentech plants, the total carbon emissions from logistics services for delivering products to customers via trucks in China totaled 11,465 tons CO <sub>2</sub> e. The carbon intensity for logistics (tons CO <sub>2</sub> e/MUSD-production value) was 2,052, a 2% decrease from 2,095 in 2017.
Energy-Efficient Product Applications	Introduction of Energy Saving and Carbon Reduction Products and Solutions	Delta assists suppliers introduce energy saving products or solutions, such as LED Lighting, inverters, energy management systems, and more.	Delta cooperated with 2 suppliers to implement energy saving products and solution in 2018

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

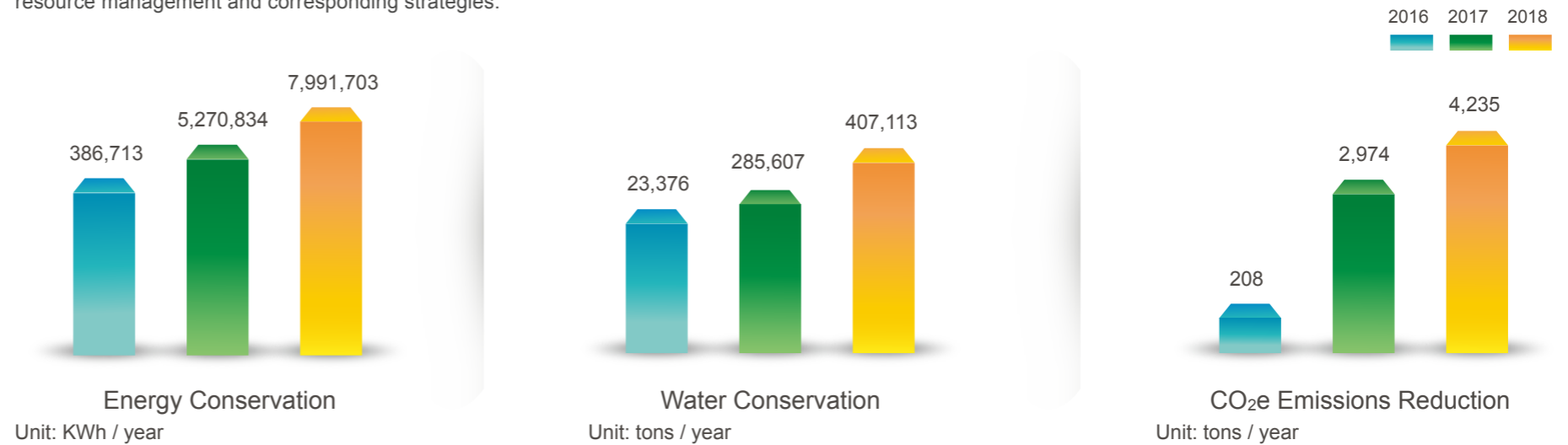
Appendix

## Water Resource Management

To assess water resource risks in the supply chain caused by climate change, Delta targeted the top 80% key suppliers (based on annual procurement value and major water consumption in each industry) as the first group for the water risk surveys. We used the Aqueduct Water Risk Atlas developed by the Water Risk Atlas Tool (WRI) and water dependence to assist suppliers in verifying whether their production base is situated in a water stressed area. Delta shall share the water conservation experience in Delta's own plants and green buildings with suppliers in water stressed areas, and assist the suppliers in setting up water resource management and corresponding strategies.

## Corporate Synergy System for Clean Production

Delta has participated in the Industrial Development Bureau-assisted green productivity promotional plan from 2016 to 2017. Delta took center stage and introduced 14 key suppliers with the goal of promoting green supplier ESG management to effectively lower the impact of our operations on the environment. The specific quantitative benefits are in the following table:



### Future Plans

- Enhance green supply chain ESG management and compliance and RBA standards and principles
- Identify high-risk suppliers, establish an ESG audit management mechanism, and implement improvement activities
- Encourage suppliers to pass environmental system verification and undertake self-assessment disclosure of greenhouse gas emissions
- Require the supply chain to increase social participation



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 4.6 General Issues

### 4.6.1 Board of Directors' Functions and Risk Management

#### 4.6.1.1 Enhancing the Board of Directors' Functions

The 18th Board of Directors of Delta Electronics consists of 11 seats for Directors (including 4 Independent Directors) with a term of three years. Delta has adopted the Candidate Nomination System for the appointment of Directors in accordance with Article 192-1 of the Company Act. The Shareholders Meeting selects Director nominees from a list of candidates. Mr. Yancey Hai serves as the Chairman. To implement a good Board governance system, improve supervisory functions, and enhance management, the following factors pertaining to the Board members' diversity and professional skills have been taken into consideration:

#### Diversity among members of the Board

The selection of Delta's board of director's is based on Delta Electronics' "Director's Election Rules" and "Corporate Governance Practices Code". To fulfill the Board's role in strategic guidance, members of the Board come from different nationalities, diverse professional backgrounds, expertise, and genders. Members of the Company's Board of Directors have extensive experience in business administration, finance, accounting, or the Company's business operations. Their professional backgrounds include control engineering, electrical engineering, materials engineering, industrial engineering, accounting, and management. They provide strategic guidance in the Company's operations.

#### Professionalism of the Board members

Delta Electronics' Board of Directors possess abilities including operations and management, accounting and financial analysis, crisis management, industry knowledge, international market perspective, leadership, and decision-making. To develop and improve the highest governing body's overall knowledge of economics, environment, and society, Delta conducts training for Board members. We also invite lecturers to give lectures or arrange external courses for Directors. The courses given in recent years include: International Financial Reporting Standards, conflicts of interest of directors and supervisors and their avoidance,

ethical business operations and corporate social responsibilities, and director and board performance evaluation. The Company offered courses including "Effects of Tax Reforms on Delta" and "Introduction of the New Personal Information Protection Legislation in the EU and China" for Directors in 2018.

#### Board of Directors

- Board meetings convene at least once a quarter to assess corporate business performance and discuss strategy topics. This includes impacts, risks, and opportunities in relation to economics, environment, and society.
- Five Board of Directors meetings were held in 2018, with an average attendance rate of 95%. The important decisions of the board of directors are instantaneously publicized on the Taiwan Stock Exchange Market Observation Post System as well as Delta's main website corporate governance section for reference.
- In 2016, the Board of Directors enacted the "Board of Directors Performance Assessment Measures" for evaluating the overall workings of the Board of Directors and administering self-assessment for individual directors. The result of the Self-Assessment for 2017-2018 Board of Directors Annual Performance has been announced on the Corporate Governance section of Delta's website.

#### Strategic Steering Committee

- Delta Electronics Board of Directors' members and operations team jointly formed an operations strategy management committee that regularly holds strategy meetings to analyze and discuss material issues of the Company.
- Every year, the Independent Directors and global regional managers participate in strategy meetings on the Company's institutions, regions, and technology. These meetings adjust strategic development and improve operational performance in response to market changes and rapid technological progress.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Compensation Committee

Delta created the Remuneration Committee to facilitate the link between the compensation for directors, supervisors and managers and the corporate operations performance to decide the ratio of dividend distribution. The Committee offers compensation policy suggestions based on industry competition, corporate operations performance, and the market rate to construct a company-level compensation policy. Three meetings were held in 2018.

- Delta participates in industry and consulting companies' salary surveys and evaluates how Delta's compensation compares to the current market.
- Delta based its incentive system on certain compensation issues with the help of external HR consulting firms
- Annual employee dividends amounts are determined after the Board of Directors agrees with the suggestions in the Shareholders Meeting and are published in the Company's annual reports.

## Audit Committee

- The Audit Committee is comprised of all Independent Directors, who are elected in the Shareholders Meetings. The list of Independent Director nominees is based on a candidate nomination system in accordance with Article 192-1 of the Company Act. The Chairperson of the Audit Committee is Independent Director Mr. Yung-Chin Chen.
- They are responsible for the supervising of the Company's financial statements, choosing the accountants for their independence, effectively implementing internal controls, ensuring that the Company follows relevant laws and regulations, and assessing possible and potential risks to the Company.
- The Committee regularly communicates with the Internal Audit Supervisor and CPA. Besides submitting the audit report to each Independent Director on a monthly basis, the Supervisor of the Internal Audit department is also responsible for reporting any material audit findings to the Audit Committee. The Audit Committee held 5 meetings in 2018. All meetings were attended by all Independent Directors, achieving a 100% attendance rate.

## 4.6.1.2 Implementing Risk Management

Delta's focuses on R&D, manufacturing, and sales and does not engage in high-risk, high-leverage investments. In addition, when forming the remuneration committee's regulations, the committees were expressly prohibited from leading directors and managers to pursue remuneration from behavior that exceed the risk appetite of the Company.

## Internal Audit Mechanisms

In addition to an Audit Committee under the jurisdiction of the Board of Directors control over the monitoring of the Company's existing or potential risks, Delta has established an independent internal audit department. This department supervises the control and completion of the Annual Audit Plan. The department also reports to the members of the Board of Directors and tracks continued improvements. In addition, to instill internal audit concepts throughout the Company, Delta utilizes a rotating internal audit system to train supervisors with auditing knowledge and capabilities.

## Risk Identification and Management

Delta's operating risks are effectively reduced through departments divided by professional expertise to carry out detailed risk identification. These groups also develop management strategies and response programs to reduce, transfer, and avoid risk. In the event of an emergency or material incident, Delta initiates the Delta crisis management system. The command of the crisis management team is given to the CEO who shall assemble legal, financial, business, human resources, and corporate information departments for joint participation. They form teams based on their functions and convene emergency incident processing meetings. They propose immediate evaluations for incidents and affected individuals. They also formulate, publish and communicate information to ensure information transparency and updates.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

	Financial Affairs Risk Management	Risk is reduced through rigorous control and appropriate tax planning, credit risk control, and financial crisis predictive modeling. In addition, market capital and bank interest rates are regularly assessed, and prudent fund-raising methods are used to hedge actions against exchange rate changes.
	Information Risk Management	A company-wide information management system to control and preserve information security provides management echelons with fast, effective, and transparent operations management information that reduces information safety risk.
	Environmental Risk Management	Environmental risk management considers regulatory requirements and management status impacts for both internal and external environments as well as adjusting improvement priorities. This is to establish management plans and indicators which are regularly reviewed and evaluated.
	Corporate Investment Risk Management	Corporate investment risk management evaluates long-term investment efficiency and actively cooperates with the operations department to seek strategic subjects to provide timely non-core investment projects. In addition, the department is responsible for investment assessment, review, supervision, and management to strategically reduce, transfer, and avoid risks.
	Safety and Health Risk Management	Identification of risk level factors in risk occurrence probability, staff operation frequency, and risk severity. Departments set relevant control measures based on determined risk levels.
	Legal and Intellectual Risk Management	Legal and intellectual risk management provides internal legal advice, product liability insurance renewal and settlement of claims, and handling legal issues and litigation to assist the operations department to process patents, trademarks, and other related intellectual property matters. It also provides antitrust education and training to reduce, transfer, or avoid associated risks.

## Enterprise Value Chain SDGs Development Opportunities

For corporate value chain events, Delta carries out "Value Chain Risk Responses," "SDGs Opportunities Response," "Positive/Negative Impact Analysis," "Existing Project Response," and "Material Topic Response" to support future business opportunities. We identify influence and responses to various risks in our business value chain so we can draft countermeasures and action plans for subsequent activities.





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

We identify influence and responses to various risks in our business value chain so we can draft countermeasures and action plans for subsequent activities.

Risks Issues	Supply Chain		Operations	Products			Society		
	Item	Tier 1 \ 2 or above	Logistics	Manufacture	Distribution	Product Use and R&D	Product Waste	Employees	Social Participation
Climate Change and Extreme Weather Conditions	●	●	●			●			●
Energy Use Management	●	●	●	●					●
Greenhouse Gas Emissions	●	●	●	●					●
Product Energy Efficiency	●					●			●
Energy Supply and Price Stability	●			●		●			●
Electronic Waste	●			●			●		
Water Resource Management	●			●		●			
Traceability Management for Raw Materials	●								●
Raw Material Supply Management	●	●	●						
Innovation and R&D				●		●	●		●
Disclosure of Transparency and Integrity	●	●	●		●			●	●
Talent Attraction & Retention	●	●						●	●
Labor Practices and Human Rights	●	●	●					●	
Occupational Health and Safety	●	●	●					●	
Network Safety	●	●	●		●	●		●	
Information System Security	●	●	●		●	●		●	
Privacy and Information Protection	●	●	●		●			●	
Product Safety						●			●
Legal Compliance	●	●	●		●			●	●



### SDGs Risks and Opportunities for Sustainability

Delta identifies "improving positive influence" and "decreasing negative influence" by analyzing the level of impact in each stage and its corresponding SDGs through value chain analysis. Delta focuses on seven SDGs: 4. Quality Education, 7. Affordable and Clean Energy, 9. Industry Innovation and infrastructure, 11.Sustainable Cities and Communities,12.Responsible Consumption and Production, 13. Climate Action, and 17. Global Partnerships, for business opportunities that serve as the direction for future key development plans.

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



To facilitate sustainable development, we focus on seven key SDGs to plan a sustainable development strategy and expand downward to various key aspects to formulate Delta's future strategy roadmap. We use international trend research and analysis and benchmark case studies in the industry to develop a framework for a development strategy. We also use core business analysis (group core values and business strategy plans) and trend analysis (international benchmarks and sustainability trends) to integrate internal core business operations and external sustainability trends to produce Delta's 2030 sustainable development strategy and key measures. We shall begin with the following steps:

- Strategies: Each strategy shall correspond to SDGs
- Indicators and targets: Each strategy shall expand downward to multiple indicators and short, medium, and long-term goals
- Action plans: Several action plans shall be established for each indicator/target
- Assigning responsible departments: Each strategy shall be assigned to responsible departments to take charge of different action plans



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 4.6.2 Comprehensive Information Disclosure and Shareholder Communication

Before the implementation of relevant legislation, Delta took the initiative and publicized our six months financial statements that were certified by CPAs. At the same time, we immediately made public announcements on the Taiwan Stock Exchange, and included an Investors section on our website for documents such as the Chairperson's Report to the Shareholders, company annual reports, financial statements, corporate governance regulations, stock value and dividend information, legal briefing sessions, and the relevant rules and regulations regarding our committees.

Delta's efforts and results towards information disclosure have been highly approved by institutions and various ratings organizations. Delta Electronics has received nine consecutive information disclosure assessments with a rating of A or higher since 2006. Delta received the highest A++ rating from 2012 to 2015. Delta won the Taiwan Stock Exchange Corporate Governance Evaluation Award from 2015 to 2018 as one of the top 5% of public companies. The awards were recognition of Delta's outstanding performance in protecting shareholder rights and interests, equal treatment of shareholders, strengthening the Board of Directors' functions, enhancing information transparency, putting into practice corporate social responsibility, and other evaluation items.

Delta hosts an Investors Conference each quarter, in which quarterly financial performance and operating conditions are announced and the Company's long-term strategic planning and future development are explained to investors and the media. The Company also provides simultaneous Chinese and English online streaming broadcast services on Delta's website. This makes it more convenient for all domestic and foreign investors to understand the Company's latest information in a timely manner. As Delta has a high ratio of foreign investors, we understand the importance to properly communicate with foreign investors. This is done through participation in various investor forums and conferences annually, and through direct visits to foreign shareholders in Asia, Europe, and the United States. In addition to describing operation conditions to foreign investors, we also

factor in positive advice from various stakeholders related to corporate operations, financial affairs, and corporate governance. At the same time, we fully cooperate with domestic and international visits and welcome non-periodic visits from investor representatives to see our global manufacturing bases and exhibitions.

In 2018, Delta Electronics participated in a total of 16 foreign investor meetings and over 300 investor interview conferences. Delta Electronics is the first in the industry to use voting by poll for all of the meeting items, which facilitated the participation of smaller stockholders in company decisions and their right to vote. The voting status and results are immediately disclosed to the public. We are also committed to providing feedback to the suggestions provided by stockholders at the annual Shareholders Meeting as reference for future strategies.



Delta CFO Ms. Judy Wang received the Corporate Governance Awards



## Contents

About the CSR Report

---

A word from the Management

---

Delta Group Overview

---

Sustainable Management

---

Communication with Stakeholders

---

Corporate Governance

---

Environmental Protection and Energy Conservation

---

Employee Relations and Social Participation

---

Appendix

### Devoted to Environmental Protection and Energy Savings

- 5.1 Key Performance Indicators
- 5.2 Climate Change
- 5.3 Energy Management
- 5.4 Water Resources Management
- 5.5 Waste Management
- 5.6 Green Product Liability
- 5.7 General Issues



## 5.1 Key Performance Indicators

### Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

#### Main Endeavors

- Accumulated and increased R&D momentum to continue to develop green energy, energy saving products and solutions.
- Implemented sustainable production, set reduction goals, and reduced the impact of plants and products on the environment.
- Developed renewable energy solutions and increased the use ratio for renewable energy.
- Promoted green building concepts and implemented green buildings by applying Delta's energy-saving solutions.
- Stayed in line with international sustainability goals and responded to international initiatives.

Energy savings of high efficiency products for worldwide customers  
**28.1** billion kWh 2010-2018

Energy saving practices at global green building plants  
**>16.18** million kWh

Renewable Energy Generated and Purchased  
**109.1** million kWh

Decrease in plant CI  
**16.8%** Compared to 2014

Decrease in building EUI  
**12.4%** Compared to 2014

Reduction in electricity consumption of non-IT equipment  
**24%** Compared to 2015

Decrease in plant WPI  
**19.8%** Compared to 2015

Waste recycling rate  
**74.8%**

Environmental protection investment  
**14.6** MUSD

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

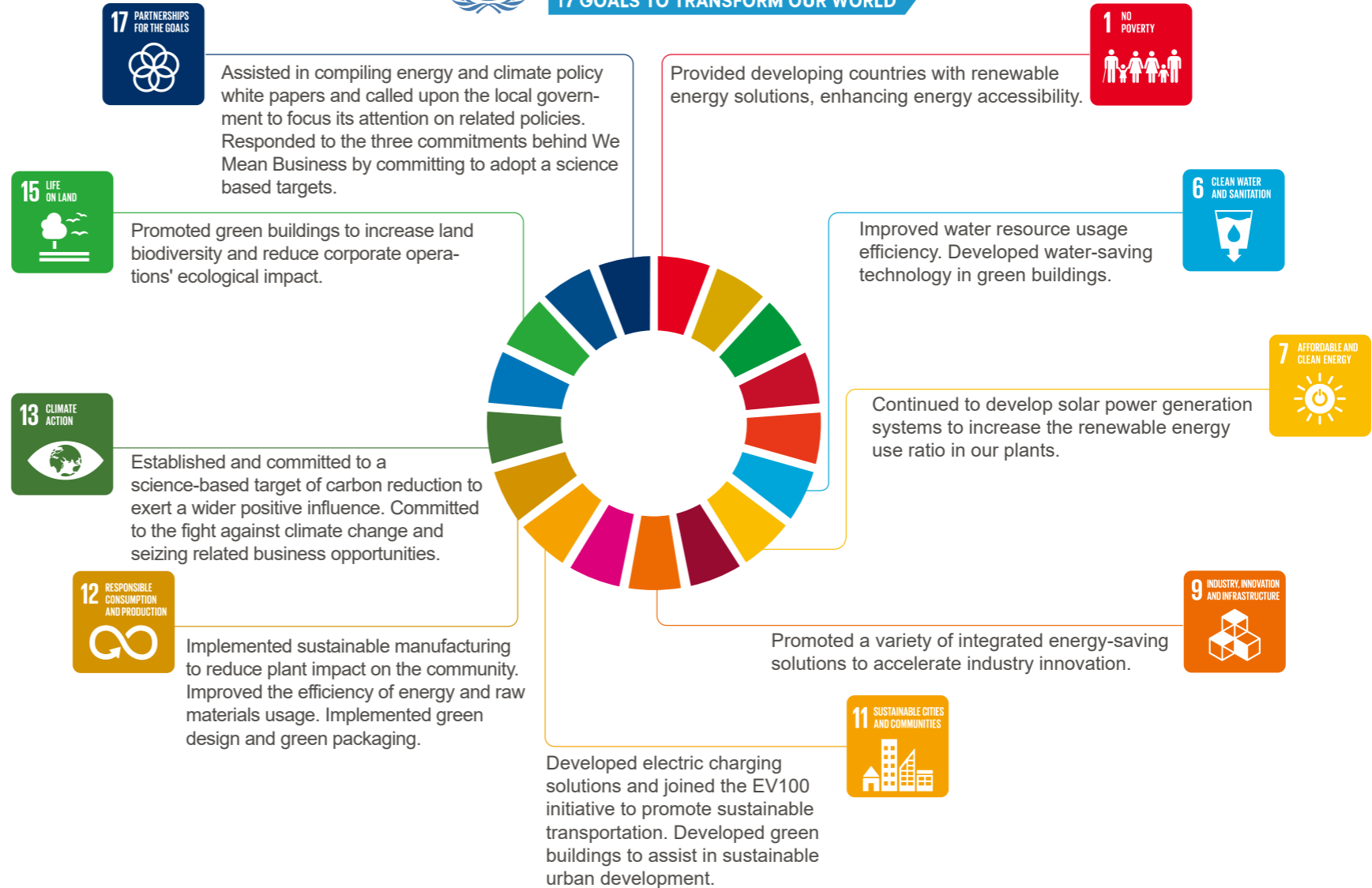
Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Aligning with UN Sustainable Development Goals



## Material Topics

### 5.2 Climate Change



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

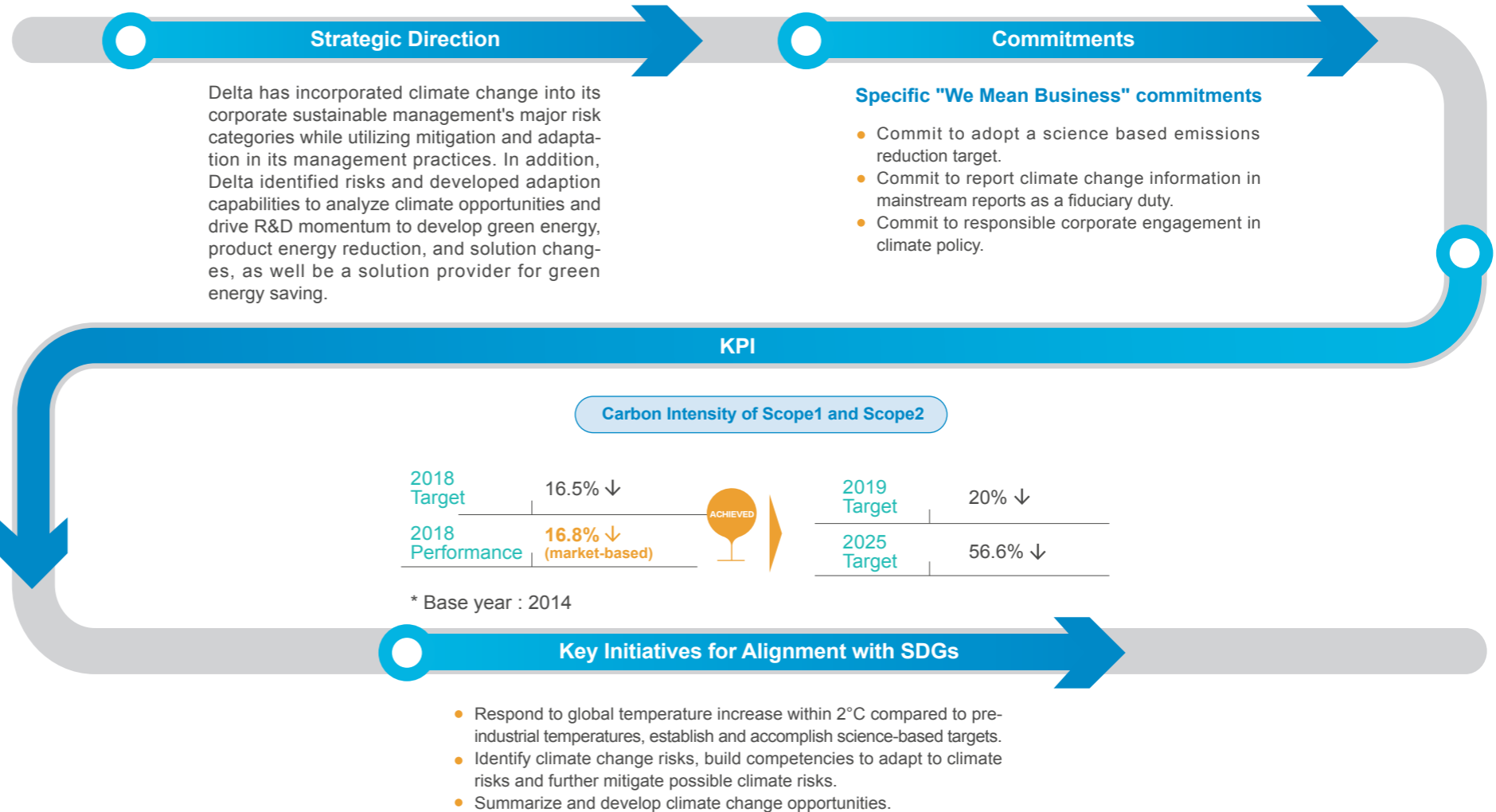
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 5.2.1 Identification of Climate Change Risks and Opportunities

The CSR Committee is managed and supervised by the Board of Directors and it is the highest organization for climate change risks and opportunities at Delta. A Corporate Sustainability Development Office and a Carbon Management Project in charge of promoting and implementing projects related to climate issues have been established under the CSR Committee. The Corporate Sustainability Development Office is in charge of identifying risks and opportunities related to climate change. It designs internal evaluation questionnaires for climate risks and opportunities by collecting and analyzing global trends, topics of interest from the industry, and relevant publications every year. It also calls on responsible departments regarding climate topics to identify climate risks and opportunities with material financial impact on Delta. Delta has paid close attention to relevant developments since the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD Recommendations) were announced by the Financial Stability Board (hereinafter referred to as FSB) in June 2017. We also disclose our procedures

for identifying climate change risks and their management, as well as the results of the risk and opportunities analysis in our Annual Report in accordance with the structure in the TCFD Recommendations. Please see Chapter 4 in Delta's "2018 Annual Report" for the complete TCFD disclosures.

Delta's TCFD Promotion Method:

- Collect and analyze global trends, topics of interest from the industry, initiatives, and relevant publications pertaining to climate.
- Delta and the identification of high relevance issues (risks and opportunities)
- Issues' model design (parameter and quantification)
- Accountant discloses impact evaluation
- Long-term cultivation and development
  - Internally: Master business opportunities and reduce risk
  - Externally: Communicating with and responding to stakeholders

### Management and Disclosure of TCFD

Framework	Corporate governance	Strategy	Risk management	Indicators and targets
	<ul style="list-style-type: none"> <li>• Board of Directors' Functions and Risk Management</li> <li>• CSR Committee</li> <li>• Sustainability Initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• This Chapter</li> <li>• Green Building</li> <li>• Water Resources Management</li> <li>• Green Product Liability</li> </ul>	<ul style="list-style-type: none"> <li>• Greenhouse Gas Inventory</li> <li>• Energy Management</li> <li>• Supply Chain Management</li> <li>• Social Participation</li> </ul>	<ul style="list-style-type: none"> <li>• Science Based Targets</li> <li>• Greenhouse Gas Inventory</li> <li>• Water Resources Management (Targets)</li> </ul>

### The Identification of Issues with High Relevance to Climate Change

Considering the impact of climate change and the response schedule, Delta conducts identification of issues with high-relevance to climate change once every two years, including opportunities and risks. In 2018, based on the information from 2017, a total of 25 climate-related risks were identified. Through the cross-analysis and calibration of the possibilities and degrees of impact, a total of 11 major risks were highlighted, covering policy and regulatory risks, technology risks, market risks and physical risks. In addition, 16 climate-related opportunities were identified and 5 of them were focused on due to the degree of relevance.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

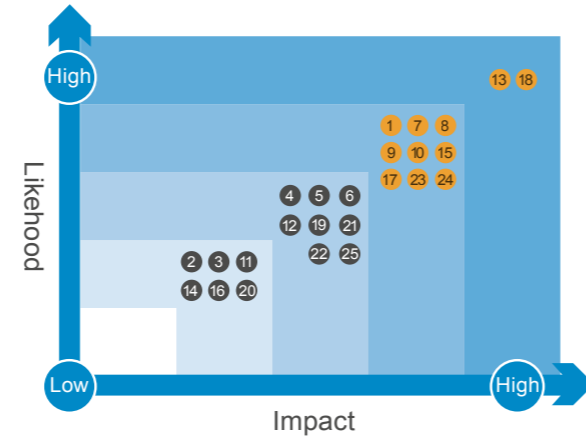
Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 05 Devoted to Environmental Protection and Energy Savings

### Climate Change Risk Analysis



#### Major Risks

- Increased pricing of GHG emissions
- Fuel/energy tax or relevant legal regulations
- Voluntary regulations
- Standard environmental regulations (including those being planned)
- Regulation of renewable energy
- Substitution of existing products and services with lower emissions options
- Costs to transition to lower emissions technology
- Uncertainty in market signals
- Increase cost of raw materials
- Changes in precipitation patterns and extreme variability in weather patterns
- Rising mean temperatures

#### Other Risks

- Increase in liability for reporting emissions
- Compulsory legal regulations for products and services
- Litigations
- International industry standards
- Constraints on air pollution
- Uncertainty of new legal regulations
- Lack of regulations
- Failure of investment in new technology
- Changes in consumer behavior
- Changes in consumer preferences
- Industry stigmatization
- Increases in stakeholders' concerns and negative feedback
- Increases in severity of extreme weather incidents
- Rise in average sea level

### Opportunities

- Participation in carbon markets:** Delta continues to observe the mechanism of domestic and foreign carbon markets, and evaluates the applicability of programs such as renewable energy certificates.
- Usage of a more efficient production and distribution process:** Delta applies the automation solution to Delta's production lines to increase production efficiency and provides customers with services such as automation solutions.
- Development or expansion of low carbon products and services:** Delta's three major business categories encompass Power Electronics, Automation, and Infrastructure. We continue to improve our product's energy efficiency and integrate them into a number of green and energy-saving solutions to offer the market low carbon options.
- Development of climate adaptation and solutions:** Delta promotes green buildings and combines solutions such as building automation to assist customers in responding to climate change.
- Responding to changes in consumer preferences:** Electric vehicles have become a trend for the future. Delta has invested in the research and development of electric vehicle infrastructure such as components and DC and AC charging facilities for many years, providing energy-saving and efficient products for end vehicle companies to use.

### Case UPS

Delta offers a wide range of high-reliability, high-efficiency products and services, from Uninterruptible Power Supplies (UPS) to data center solutions and many more. Today, as the demand for electricity continues to soar and the ratio of renewable power gradually increases, the importance of UPS for mitigating climate change is self-evident. High-efficiency UPS, green data center UPS and modular UPS products are our key research and development categories.

Delta identified three issues most relevant to UPS, including "Substitution of existing products and services with lower emissions options", "Development or expansion of low carbon products and services", and "Rising mean temperatures". If climate change factors are taken into account, it is initially estimated that the consolidated revenue, operating profits, and more in the balance sheet and income statement will be affected.

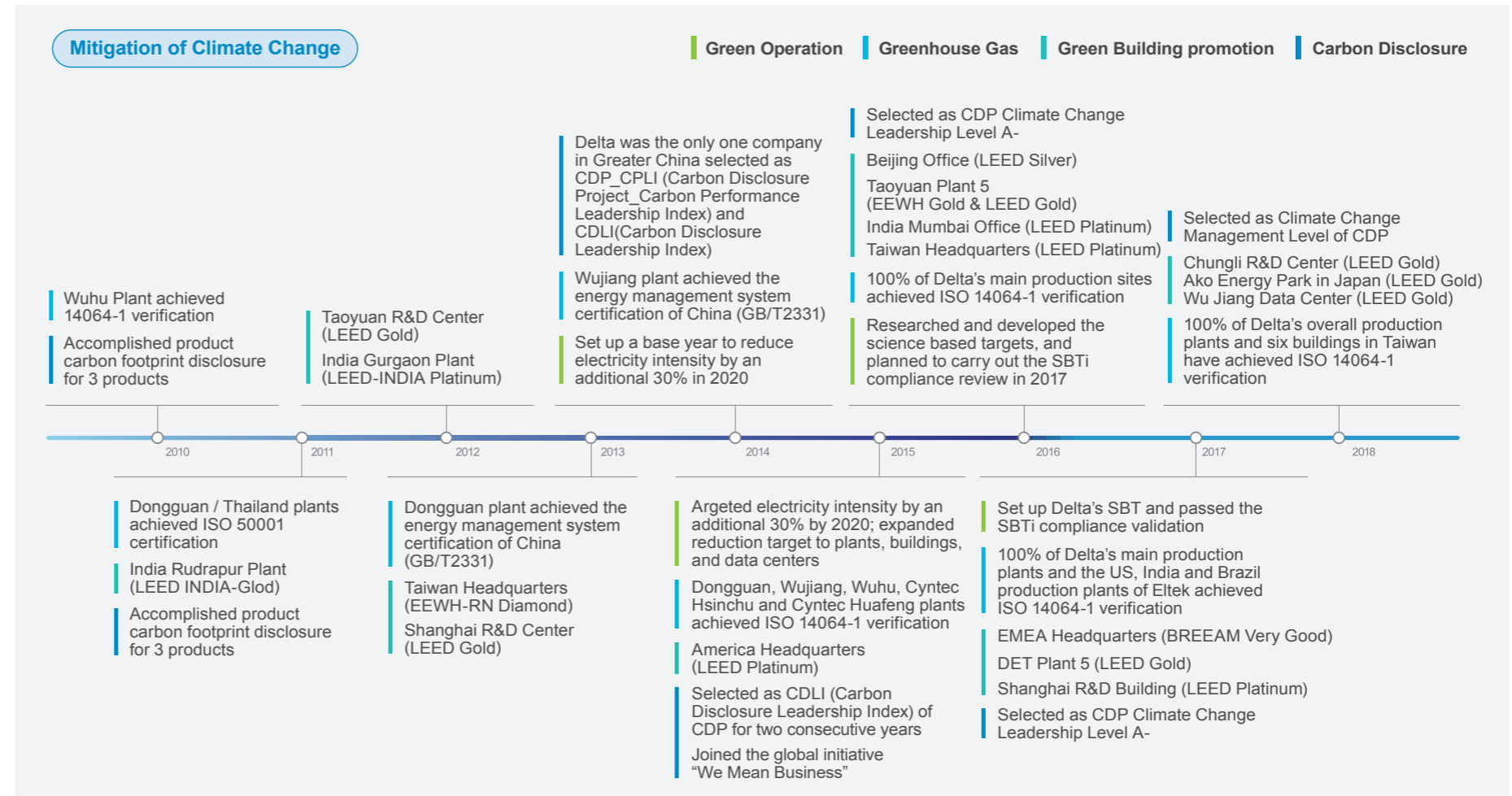
Issue	Scenario	Possible Financial Impact
Substitution of existing products and services with lower emissions options	Continuing to invest research and development resources in maintaining or enhancing the high energy efficiency of UPS products to increase product competitiveness	Increase in R&D expenditures
Development or expansion of low carbon products and services	Visiting customers to collect specification information and strategically developing the three major categories of UPS products	Increase in revenue from low carbon products and services
Rising mean temperatures	Based on the IPCC AR5 RCP8.5 scenario, the average annual temperature increase is calculated to be 0.03 degrees	Increase in operating costs Increase in fixed assets



## 5.2.2 Response to Climate Change

### 5.2.2.1 Mitigation of Climate Change

In an effort to minimize the impact on the climate, Delta is devoted to precise management and promotion of green operations, energy management, carbon disclosure, and green buildings/plants. Key achievements in climate change mitigation is shown in the following chart:



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### 5.2.2.2 Adaptation to Climate Change

Developing capabilities to adapt to climate change and reduce extreme weather risks should be included in a corporate sustainability management strategy. Delta has taken the following measures to address this:

Adjustment Measures	Examples
<p><b>Strengthen infrastructure</b></p> <p>Engineering techniques were applied in areas vulnerable to extreme weather such as droughts and floods, to help reduce risks.</p>	<p>The foundations of Delta's Thailand plants are 5-6 meters higher than sea level in consideration of possible floods.</p>
<p><b>Build business continuity</b></p> <p>In response to possible extreme weather events, Delta's main production plants have established emergency response plans and mechanisms. A response team has been set up to make sure the operation can continue in the event of an incident and that operational capabilities can be recovered in a short period of time.</p>	<p>Plants in Taiwan are equipped with emergency generators or energy storage equipment to respond to power blackouts, and provide the power allocation management when power supply becomes limited.</p>
<p><b>Build business continuity</b></p> <p>The concept of a sustainable base in green building design is applied to enhance the tolerance of plants to extreme weather.</p>	<p>Delta's Tainan branch uses permeable pavement and a detention pool to ensure a 150% water retention rate.</p>

### 5.2.3 Greenhouse Gas Inventory and Management

Since 2007, Delta has participated in the CDP and disclosed our greenhouse gas emissions. Delta's main production plants achieved ISO 14064-1 Greenhouse Gas (GHG) verification successively. Since 2016, 100% of Delta's main production plants have achieved ISO 14064-1 Verification. In 2017, Eltek, Delta's subsidiary, achieved ISO 14064-1 Verification at its USA, Brazil, and India plants. In 2018, the scope of inventory was extended to buildings in Taiwan, and four new buildings completed the ISO 14064-1 GHG verification.

Delta has taken the lead in establishing science-based targets by proposing to lower our carbon intensity by 56.6% by 2025 using 2014 as the base year. Delta also passed a compliance validation from the Science Based Targets initiative (SBTi) in December 2017, becoming the first in Taiwan as well as one of the first 100 companies globally to pass this validation. In addition to our own specific response to control the global temperature increase to within 2°C, Delta calls for other companies to jointly respond to global carbon reduction and has been invited many times to CDP, SBTi and WRI to share our science-based targets experience.

#### Greenhouse Gas Inventory

##### Scope 1 and Scope 2

For years, Scope 2 has been the main scope for greenhouse gas (GHG) emissions. Delta's greenhouse gas emissions reduction strategy is based primarily on energy management and application of green power. The greenhouse gas emissions in Scope 1 and Scope 2 of the overall plant<sup>2</sup> in 2018 was 323,828 ton-CO<sub>2</sub>e which was a 20.8% reduction compared to 2017. It was mainly the result of additional green power in 2018 which accounted for 22.2%. We increased solar power generation system in main plants and purchased 88,800 International Renewable Energy Certificates (I-RECs) in China. Delta's Scope 1 and Scope 2 carbon intensity in 2018 in main production plants<sup>1</sup> was 41.2 (metric ton-CO<sub>2</sub>e/MUSD production value, market-based ) which was a reduction of 16.8% from the baseline year 2014 and a reduction of 21.7% from 2017. We have achieved the Science Based Targets (SBT) for this phase and fully demonstrated Delta's resolve for fulfilling the SBT.

\*1. Main production plants: Dongguan, Wujiang, Wuhu, Chenzhou plants in China; DET plant 1, 5, and 6 in Thailand, Taoyuan plants 1 & 2 in Taiwan, Cyntec Hsinchu and Huafeng plants, which are in the SBT commitment scope.

\*2. Overall production plants include Delta's main production plants and the US and India plants of Eltek acquired by 2015.

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

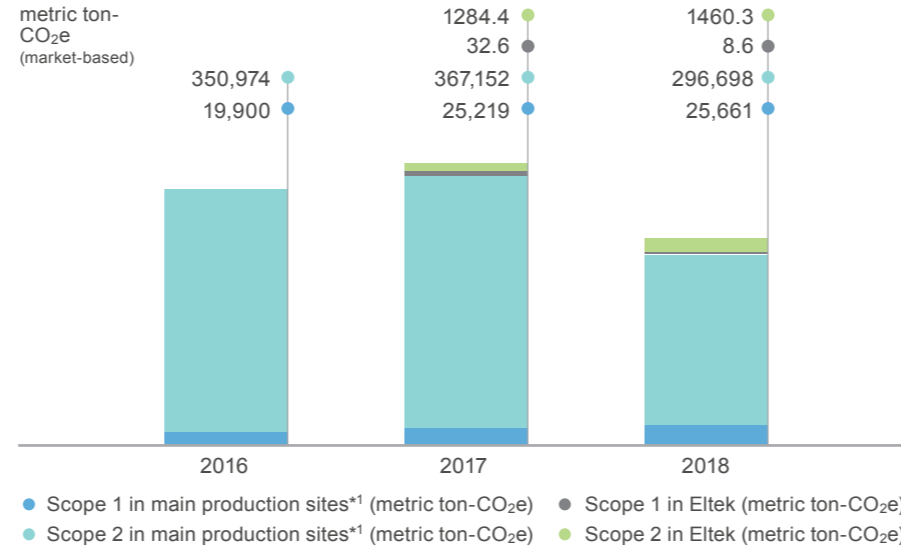
Corporate Governance

Environmental Protection and Energy Conservation

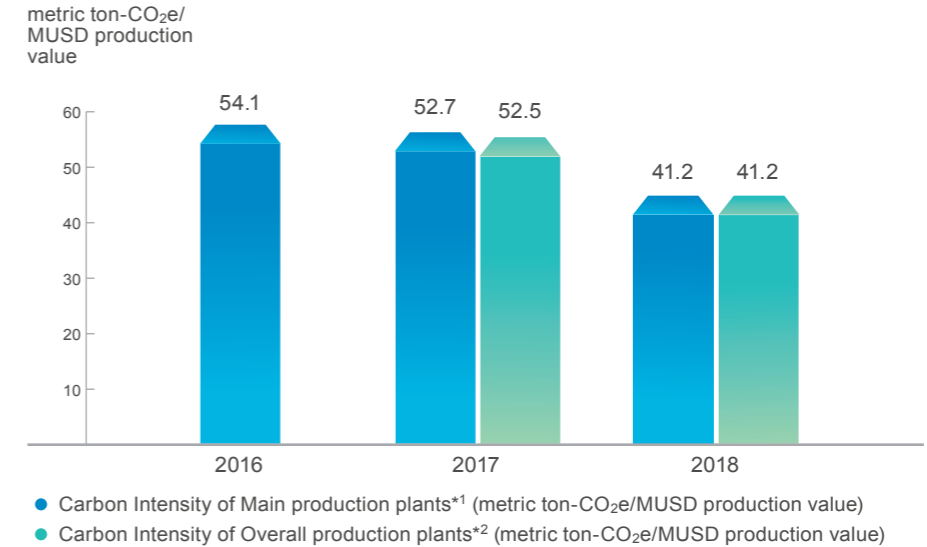
Employee Relations and Social Participation

Appendix

## Carbon Emissions



## Carbon Intensity



## Statistics of Greenhouse Gas Emissions in 2018

metric ton-CO<sub>2</sub>e (market-based)

	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>	Total
Main production plants	303,443.6	5,664.6	108.2	1,317.3	11,823.5	1.8	0	322,359
Overall production plants	304,912.6	5,664.6	108.2	1,317.3	11,823.5	1.8	0	323,828

\*1. Main production plants: Dongguan, Wujiang, Wuhu, Chenzhou plants in China; DET plant 1, 5, and 6 in Thailand, Taoyuan plants 1 & 2 in Taiwan, Cynotec Hsinchu and Huafeng plants, which are in the SBT commitment scope.

\*2. Overall production plants include Delta's main production plants and the US and India plants of Eltek acquired by 2015.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Scope 3

Having adopted the GHG Protocol Evaluator Tool to identify the primary source of Delta's Scope 3 emissions, results indicate that emissions from Use of Sold Products had exceeded 70% of all Scope 3 emissions. These results were verified by ISO 14064-1. To lower GHG emissions, Delta aim to lower scope 3 emissions

20% by 2022 from the base year of 2016 by increasing the average efficiency of server power supplies in the use of its sold products 1.6%. In 2018, the average efficiency of server power supplies were increased by 0.06% compared to base year 2016.

### Carbon Emissions

metric ton-CO<sub>2</sub>e (market-based)

Item	Emissions in 2018
Purchased goods and services	12,422
Business travel	4,729
Waste generated in operations	283
Use of sold products	446,577
Upstream transportation & distribution	7,146
Downstream transportation & distribution	38,562
Downstream leased assets	6,498

### Delta's Internal Carbon Pricing

Delta has paid attention to the trends of internal carbon pricing. Though Delta is not defined as a massive carbon-emitting enterprise by law, we still pay attention to carbon taxes, laws and regulations related to main production plants and collect information on Chinese carbon transactions and Taiwanese greenhouse gas emissions policies as well as research reports on the global carbon market. To strengthen autonomous management, we established internal carbon pricing through voluntarily internalizing the carbon emissions from operating activities into economic costs. Internal carbon pricing is updated annually according to legal trends, international business cases, and by considering the investment costs of the Company's energy-saving projects, renewable energy establishment and green power purchasing. Carbon pricing serves as a tool that supports an internal decarbonisation strategy as well as risk management. In the future, in response to Delta's customers' renewable energy demand, Delta plans to combine internal carbon pricing and the internal carbon management mechanism to implement carbon management decision-making and risk management integration between the plants and business units.

### Future Plans

- Expand the scope of climate-related financial impact evaluation and seek opportunities for Delta to respond to climate change
- Implement carbon reduction performance for the plants, and evaluate the applicability for renewable energy certificates to fulfill Delta's commitment to SBT
- Set up an internal carbon pricing operational mechanism; launch trial projects to assess the influence of assigning costs to carbon emissions on operations



## Material Topics

# 5.3 Energy Management



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

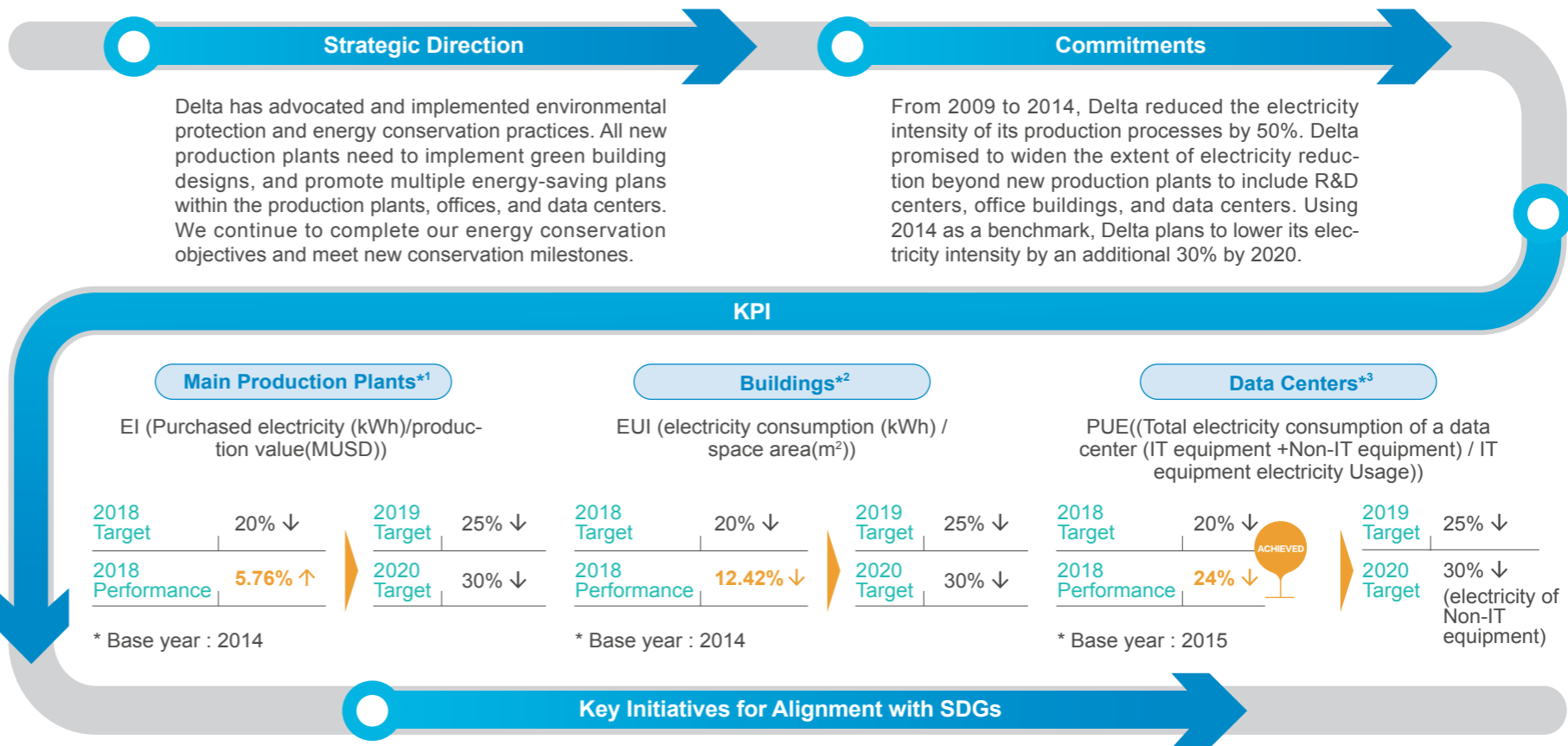
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



\* 1. Main production plants: Dongguan, Wujiang, Wuhu, Chenzhou plants in China; DET plant 1, 5, and 6 in Thailand, Taoyuan plants 1 & 2 in Taiwan, Cynotec Hsinchu and Huafeng plants, which are in the SBT commitment scope.

\* 2. 13 Buildings: including RuetiGuang, Yang Guang, Taoyuan Plant 3, Chungli 1 & 2, Tainan 1 & 2, Dongguan Technology Development, Wujiang Technology Development, Shanghai Technology Development, Japan Headquarters, American Headquarters and Germany SOEST.

\* 3. 4 Data Centers (Taiwan Headquarters, Wujiang, DET plant 5 and American Headquarters).



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Energy Conservation Performance

Main Plants	Buildings	Data Centers
<p>2018 EI was 62,295 kWh/MUSD for Delta's main production plants*<sup>1</sup>, which showed a decrease of 5.8% compared to that of 2017 and a 5.8% increase compared to that of 2014. The main reasons are:</p> <ul style="list-style-type: none"> <li>Increased new production sites and production lines</li> <li>Increased power consumption from air conditioners and air compressors</li> </ul>	<p>The EUI of 13 buildings in 2018 was 145.96 (kWh / m<sup>2</sup> / year), a decrease of 6.0% compared to that of 2017; and a 12.4% decrease compared to that of 2014. The main reasons are:</p> <ul style="list-style-type: none"> <li>Added energy-saving equipment: E-load replaces traditional passive load and changes to LED lighting</li> <li>Implemented daily electricity consumption management and performed checks according to the daily, weekly and monthly lines</li> </ul>	<p>2018 PUE was 1.37 for Delta's 4 data centers*<sup>3</sup>, which showed a decrease in electricity consumption of non-IT equipment by 24.0% decrease compared to that of 2015. The main reasons are:</p> <ul style="list-style-type: none"> <li>Changed to high energy-saving VFD chillers</li> <li>Optimized the efficiency of naturally aspirated systems</li> <li>Adjusted the placement of the virtual hosts to even the temperature distribution</li> </ul>

## Delta's Energy Utilization

Through the years, Delta's energy sources have been fossil fuels, such as natural gas, diesel, petroleum, and liquid petroleum, as well as purchased electricity from major production sites in Taiwan, China and Thailand. Delta's fossil fuels are mainly used to power emergency power generators, lawn mowers, forklift trucks, company vehicles, as well as ovens and stoves in dormitories and cafeterias.

In recent years, Delta has significantly changed the ratio of its fossil fuel consumption. This is mostly because purer natural gas has gradually been adopted for stoves and ovens instead of diesel and promote the electronic vehicles to reduce the GHG emissions. According to a GHG data analysis, purchased electricity is the main source of GHG emissions in Delta's major production sites (about 93% in 2018).

### Energy Consumption

Attribute	Category	Item	2016* <sup>1</sup>	2017* <sup>1</sup>	2018* <sup>1</sup>	2018* <sup>2</sup>
Input	Energy	Purchased Electricity (MWh)	461,909	492,636	486,614	489,345
		Natural Gases (GJ)	79,812	85,455	97,527	97,531
		Diesel (GJ)	18,040	13,112	11,540	11,665
		Gasoline (GJ)	10,785	10,212	8,877	9,303
		Liquid Petroleum Gases (GJ)	190,462	177,603	174,427	174,427

\*1. Main production plants: Dongguan, Wujiang, Wuhu, Chenzhou plants in China; DET plant 1, 5, and 6 in Thailand, Taoyuan plants 1 & 2 in Taiwan, Cynotec Hsinchu and Huafeng plants, which are in the SBT commitment scope.

\*2. Overall production plants include Delta's main production plants and the US and India plants of Eltek acquired by 2015.

\*3. 4 Data Centers (Taiwan Headquarters, Wujiang, DET plant 5 and American Headquarters).

## Establishing Delta Energy Online and Continuous Promotion of Energy Conservation Projects

In 2011, Delta established a cross functional energy management committee, and an Energy-Saving Technology Team was organized within the committee. Over the years, the team has implemented various energy conservation and improvement measures for public plants. In 2017, we established a Production Plant Energy-Saving Technology Team for the sintering furnace, reflow furnace, wave soldering furnace and burn-in production plant. By coordinating firsthand experience with energy conservation from internal and external consultants, the

team is able to implement these practices at all primary production plants around the world.

From 2011 to 2018, each main production plant continued to implement energy conservation and carbon reduction measures (see the following table). The Company put 264 energy saving projects into practice in 2018, approximately 41,232 kWh of electricity was saved and 29,677 metric tons of CO<sub>2</sub>e emissions were reduced in that year alone. Delta implemented a total of 1,846 energy saving projects from 2011 to 2018 with approximately 2.3 billion kWh of electricity saved and 186,622 metric tons of CO<sub>2</sub>e emissions reduced accordingly.

### Energy Conservation Practices From 2011 to 2018

NO.	Energy Saving Subject	Statistical Item	2017	2018	2011~2018
1	Air Conditioning Ventilation Systems	Cases	93	42	395
		Electricity Savings (MWh)	10,278	6,040	42,934
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	7,669	4,434	33,322
2	Air Compressors	Cases	41	19	177
		Electricity Savings (MWh)	3,742	1,587	18,100
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	2,991	1,237	14,426
3	Injection Molding Machines	Cases	0	3	25
		Electricity Savings (MWh)	0	25	14,413
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	0	29	12,511
4	Lighting Systems	Cases	27	9	138
		Electricity Savings (MWh)	683	170	11,704
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	4,143	118	13,165
5	Burn-in Recovery Systems	Cases	17	23	97
		Electricity Savings (MWh)	3,434	11,997	46,086
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	3,137	7,878	35,116
6	Process Improvements	Cases	169	124	568
		Electricity Savings (MWh)	8,674	11,700	41,285
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	6,835	9,411	32,932
7	Other (Management, etc.)	Cases	64	44	390
		Electricity Savings (MWh)	10,587	9,703	55,522
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	7,709	6,570	45,082
Total		Cases	405	264	1,846
		Electricity Savings (MWh)	37,398	41,232	230,152
		Carbon Reduction (Metric Tons CO <sub>2</sub> e)*1	32,484	29,677	186,622

\*1. The electricity emission coefficient in Taiwan is 0.554 kg CO<sub>2</sub>e/kWh; the emission coefficients of China's regional power grid are 0.8046 kg CO<sub>2</sub>e/kWh in Eastern China, 0.9014 kg CO<sub>2</sub>e/kWh in Central China, and 0.8367 kg CO<sub>2</sub>e/kWh in Southern China. The electricity emission coefficient in Thailand is 0.5813 kg CO<sub>2</sub>e/kWh.

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Increasing Applications of Renewable Energy

Delta continues to expand its solar power system in plants, promote renewable energy, and increase the use ratio of renewable energy every year. In 2018, in response to the requirements of Taiwan's Renewable Energy Development Act, Delta planned to install 10% of the contracted capacity of renewable energy in its regulatory-controlled Taiwan plants in 2019.

### History of Delta's Renewable Energy

2014	Dongguan, Wujiang and Wuhu plants in China participated in the "Golden Sun Demonstration Engineering" project, in which solar power generation systems were established at the plants
2016	Taoyuan Plant 2, Cytotec Huateng and Huafeng Plant established solar power generation systems at the plants.
2017	Chenzhou plant in China established solar power generation system.
2018	Wujiang and Wuhu plants in China expanded the solar power generation systems. Purchased I-REC (International Renewable Energy Certificates) for the China area.

- In 2018, Delta generated 20.3 million kWh green electricity from solar power systems and purchased 88.8 million kWh I-RECs in China area. Delta's usage rate of renewable energy was 22.2%.
- Compared to installation without solar systems and purchase of RECs, GHG reduction was totaling 88,106 metric tons CO<sub>2</sub>e.
- Compared to 2017, increase 41.43% green power generation, with the purchase of RECs, Delta increase 659.46% contribution of green electricity.
- In 2019, we expect to increase the use of green electricity we produce by 24% and we shall continue to purchase green electricity to achieve Delta's SBTs.

\*1. Delta calculates EUI of each green building in line with the methodologies from the literatures cited on pages 71 and 72. Accordingly, the following are excluded from EUI calculation: lab electricity (Shanghai R&D Center, Taipei Headquarters, Taoyuan Technology Center, Taoyuan Plant 5, Tainan Plant Phase I and Phase II, Chungli R&D Center), data center electricity and area (American Headquarters and Taipei Headquarters), production electricity usage (Taoyuan Plant 5), unused area and indoor parking area (for applicable buildings).

## Promotion of Energy Conservation by Green Buildings

Since the construction of Delta's first green building at the Southern Taiwan Science Park in 2006, Delta promised that all new plants and offices shall implement green building concepts. In 2018, Delta added two green buildings with LEED Gold certification: the Chungli R&D Center and a multi-purpose building in the Ako Energy Park in Japan. Both use a variety of Delta's latest energy-saving products and solutions. The Ako Energy Park is Delta's first self-operated large-scale solar power plant. The multi-purpose building in the park is Delta's first green building in Japan to receive the LEED Gold certification.

In addition, Delta applies the product and energy-saving solutions to its own data center in the Wujiang R&D and Manufacturing Center, which has obtained the LEED v4 ID+C (Interior Design and Construction) Gold certification. It is the world's first green data center to receive this honor.

In 2018, we were invited by the U.S. Green Building Council (USGBC) to share our experience of green building promotion at the GreenBuild China Conference and we received the "Leadership Award" and "Industry Pioneer" honor.

As of 2018, Delta has 15 certified green plants and buildings. Delta has autonomously set goals to establish comparison standards based on the EUI (kWh/m<sup>2</sup>/year) for local building standards\*1. We calculate energy savings in reference to the ISAE 3000 Assurance Process, and in 2018, Delta's global certified green plants and buildings collectively saved, in total, 16.18 million kWh of electricity and reduced carbon emissions by approximately 10,366 metric tons CO<sub>2</sub>e.



### In 2018, Delta's 15 Certified Green Buildings were assured by ISAE 3000

<p><b>Inaugurated in 1999</b></p> <p><b>Taiwan Headquarters</b></p> <p>EEWH-RN Diamond LEED Platinum (Building Renovation)</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 83 &lt; EUI Baseline:166<sup>*1</sup></li> <li>• Historical highest energy savings rate: 58% (Compared to traditional offices)</li> </ul>	<p><b>Inaugurated in 2006</b></p> <p><b>Tainan Plant Phase 1</b></p> <p>EEWH Diamond</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 126 &lt; EUI Baseline:166<sup>*1</sup></li> <li>• Historical highest energy savings rate: 38% (Compared to traditional offices)</li> </ul>	<p><b>Inaugurated in 2011</b></p> <p><b>Taoyuan Technology Center</b></p> <p>LEED Gold EEWH Gold</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 112 &lt; EUI Baseline:166<sup>*1</sup></li> <li>• Historical highest energy savings rate: 53% (Compared to traditional offices)</li> </ul>	<p><b>Inaugurated in 2013</b></p> <p><b>Tainan Plant Phase 2</b></p> <p>EEWH Diamond</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 64 &lt; EUI Baseline:166<sup>*1</sup></li> <li>• Historical highest energy savings rate: 61% (Compared to traditional offices)</li> </ul>	<p><b>Inaugurated in 2015</b></p> <p><b>Taoyuan Plant 5</b></p> <p>LEED Gold EEWH Gold</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 162 &lt; EUI Baseline:169<sup>*2</sup></li> <li>• Historical highest energy savings rate: 19% (Compared to traditional offices)</li> </ul>
<p><b>Inaugurated in 2017</b></p> <p><b>Chungli R&amp;D Center</b></p> <p>LEED Gold</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 92 &lt; EUI Baseline : 166<sup>*1</sup></li> <li>• Historical highest energy savings rate: 45% (Compared to office buildings)</li> </ul>	<p><b>Inaugurated in 2011</b></p> <p><b>Shanghai R&amp;D Center</b></p> <p>LEED Gold LEED Platinum (Building Renovation)</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 65 &lt; EUI Baseline : 91.3<sup>*3</sup></li> <li>• Historical highest energy savings rate: 36% (Compared to large-scale civil buildings)</li> </ul>	<p><b>Inaugurated in 2012</b></p> <p><b>Beijing Office</b></p> <p>LEED Silver</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 41 &lt; EUI Baseline:124<sup>*4</sup></li> <li>• Historical highest energy savings rate: 73% (Compared to traditional offices)</li> </ul>	<p><b>Inaugurated in 2008</b></p> <p><b>India Rudrapur Plant</b></p> <p>LEED-India Gold</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 82 &lt; EUI Baseline:210<sup>*5</sup></li> <li>• Historical highest energy savings rate: 76% (Compared to traditional commercial buildings)</li> </ul>	<p><b>Inaugurated in 2011</b></p> <p><b>India Gurgaon Plant</b></p> <p>LEED-India Platinum</p> <p>Energy Saving Performance</p> <ul style="list-style-type: none"> <li>• 2018 EUI : 98 &lt; EUI Baseline:210<sup>*5</sup></li> <li>• Historical highest energy savings rate: 54% (Compared to traditional commercial buildings)</li> </ul>

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

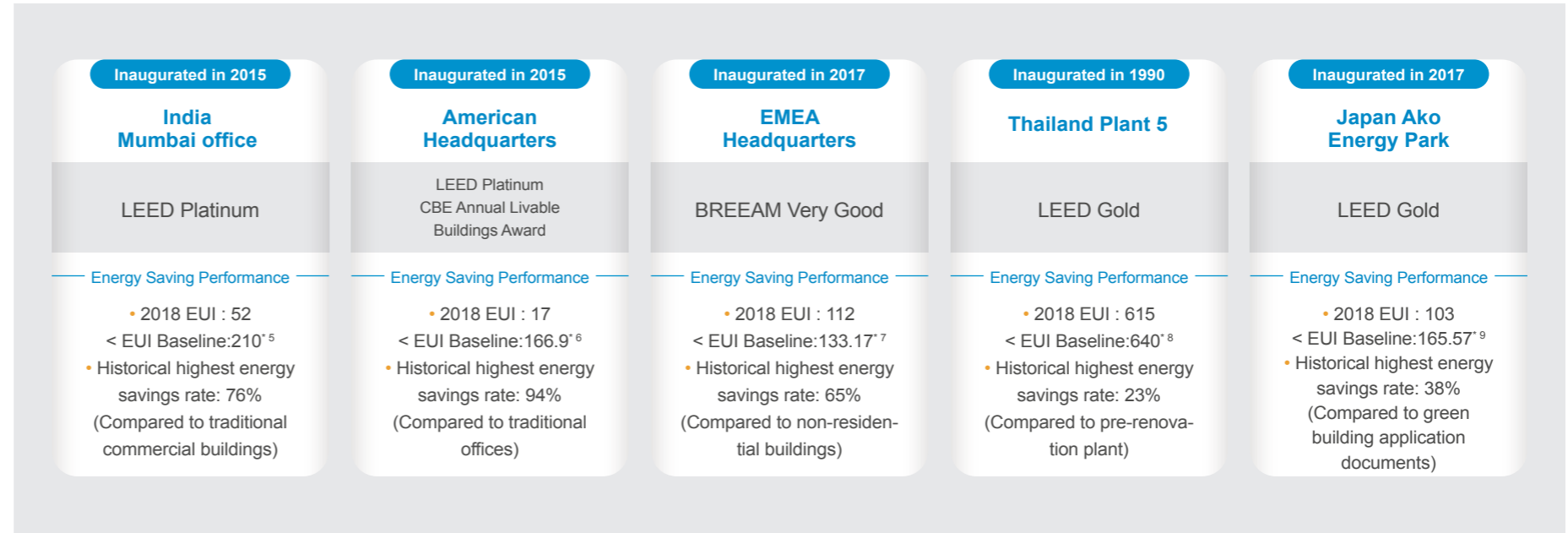
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



## Future Plans

- Continue to implement energy-saving projects to achieve our commitment of reducing the density of total electricity consumption by 30% by 2020.
- Continue to fulfill our commitment that all production plants and offices must be green buildings.
- Continue to increase the use of green electricity and buy green electricity to achieve Delta's SBTs.

\*1. < Bureau of Energy, Ministry of Economic Affairs, R.O.C. (Taiwan)> 2017 Energy Audit Annual Report for Non-Productive Industries (P.24): 166 kWh/m<sup>2</sup>/year (Office buildings, parking lots not included)

\*2. < Architecture and Building Research Institute, Ministry of the Interior, R.O.C. (Taiwan)> Green Building Evaluation Manual of the Architecture and Building Research Institute of Ministry of the Interior-Basic Version (P.184): 169 kWh/m<sup>2</sup>/year (Air conditioned general factory operation area).

\*3. <Shanghai Municipal Commission of Housing and Urban-Rural Development>2016 Shanghai Municipal Public Building Energy Consumption Monitoring Report (P.18): 91.3 kWh/m<sup>2</sup>/year(Office buildings, parking lots not included).

\*4. <The Energy Foundation> Study on Energy Conservation Potential and Promotion Mechanism for Civil Buildings in Beijing (P.25): 124 kWh/m<sup>2</sup>/year (Office buildings, parking lots not included).

\*5. <UN and Indian Bureau of Energy Efficiency> Energy Efficiency Improvements in Commercial Buildings (P.14): 210 kWh/m<sup>2</sup>/year(Commercial buildings, parking lots not included).

\*6. <Energy Star> Technical Reference of the 2018 U.S. Energy Use Intensity by Property Type (P.4): 52.9 kBtu/ft<sup>2</sup>/year (166.88 kWh/m<sup>2</sup>/year) (Office buildings).

\*7. <European Commission> EU Buildings Database (Access date: April 8, 2019): 133.17 kWh/m<sup>2</sup>/year (Netherlands 2014 nonresidential buildings).

\*8. <LEED 2009 for Existing Buildings Operations and Maintenance Rating System> Thailand Plant 5 Green Building Application (According to the LEED 2009 for Existing Buildings Operations and Maintenance)-Baseline year 2010-2012 average EUI: 640 kWh/m<sup>2</sup>/year

\*9. Japan AKO Energy Park green building application documents (according to LEED v4 commercial interiors, retail, hospitality minimum energy performance simulation requirements) simulation baseline value: 165.57 kWh/m<sup>2</sup>/year



Material Topics

5.4 Water Resources Management



Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

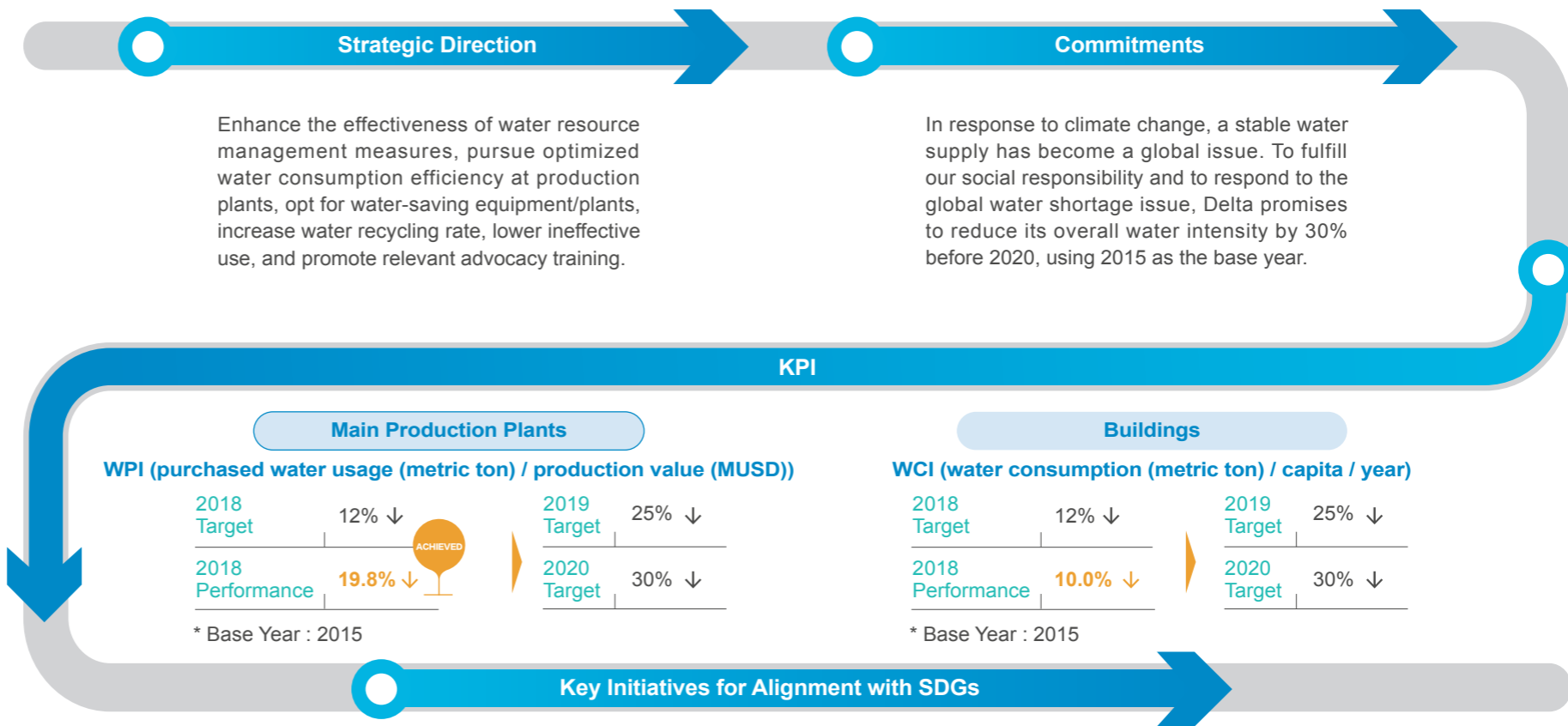
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



**Strategic Direction**  
Enhance the effectiveness of water resource management measures, pursue optimized water consumption efficiency at production plants, opt for water-saving equipment/plants, increase water recycling rate, lower ineffective use, and promote relevant advocacy training.

**Commitments**  
In response to climate change, a stable water supply has become a global issue. To fulfill our social responsibility and to respond to the global water shortage issue, Delta promises to reduce its overall water intensity by 30% before 2020, using 2015 as the base year.

KPI

**Main Production Plants**

WPI (purchased water usage (metric ton) / production value (MUSD))

2018 Target	12% ↓	2019 Target	25% ↓
2018 Performance	19.8% ↓	2020 Target	30% ↓

\* Base Year : 2015

**Buildings**

WCI (water consumption (metric ton) / capita / year)

2018 Target	12% ↓	2019 Target	25% ↓
2018 Performance	10.0% ↓	2020 Target	30% ↓

\* Base Year : 2015

- Key Initiatives for Alignment with SDGs**
- Establish water resource risks identification measures
  - Establish reduction targets and water consumption surveillance system
  - Promote water source reduction and improved water recycling



### Identification of Water Risk Factors and Response Measures

Delta used the Aqueduct Water Risk Atlas developed by the World Resources Institute to analyze water impact at each site and comprehensively considered the water consumption information and the operational impact. After the weighted scoring,

Wujiang and Dongguan were ranked as the highest risk level. Combining with the risks and opportunities identification process, Delta implemented the corresponding measures on the identified plants with risk:

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

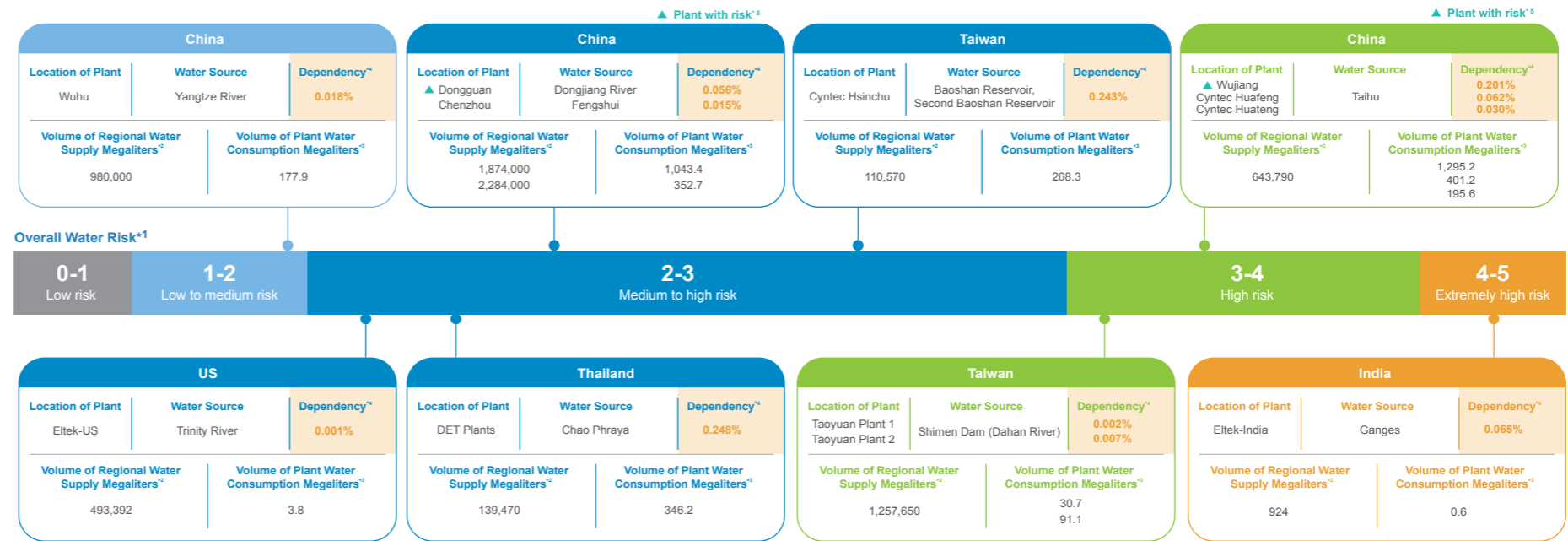
Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Water Sources and Risks at Overall Production Plants



\*1. According to the Aqueduct Water Risk Atlas analyzed data of the World Resources Institute.  
 \*2. Announced total water supply from each region in 2017.  
 \*3. Total tap water consumption from each plant in 2018.  
 \*4. Total tap water consumption from each plant in 2018 / announced total water supply from each region in 2017.  
 \*5. Sorted by considering the dependency, impact and production value information.

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Identification of Water Risk and Response Measures

Risks		Measures Taken
Stricter Regulations	Total Volume Control and Waste (Sewage) Water Discharge	<ul style="list-style-type: none"> <li>Wujiang and Dongguan were mainly engaged in assembly operations, and there was no discharge in the local areas</li> <li>The water discharge has been inspected on a regular basis and it has met the discharge standards</li> <li>Continued to promote water conservation measures in response to water conservation targets</li> </ul>
Climate Change	Drought	<ul style="list-style-type: none"> <li>Added rainwater reuse and condensate recycling, and saved a total of 27.9 megaliters in 2018</li> <li>Promoted the cascade use of drainage appliances, and recycled a total of 11.7 megaliters in 2018</li> </ul>
	Flooding	<ul style="list-style-type: none"> <li>Established emergency response plans and mechanisms and set up response teams</li> <li>Used engineering techniques to reduce risks, the foundations were already above sea level when setting up the plants to reduce the risk of river flooding</li> <li>Installed flood control gates</li> </ul>

## Implementation of Water Resources Management

To effectively mitigate and reduce water resource risks, Delta completed the water meter installation in all main production plants and buildings in 2018. Combining with Delta Energy Online, we monitored water consumption and analyzed it by respective purposes to figure out ineffective water use and reduction opportunities. To reduce the water shortage crisis and ensure a sufficient water supply, Delta integrated internal and external resources and promoted source reduction and end-of-pipe recycling at the same time. The source reduction measures included water management monitoring, improvement of water equipment efficiency and reduction of inefficient water use. End-of-pipe recycling prioritized the compliance with water quality standards for local discharges, along with the set up of reclaimed water treatment facilities, to increase the recycling rate.

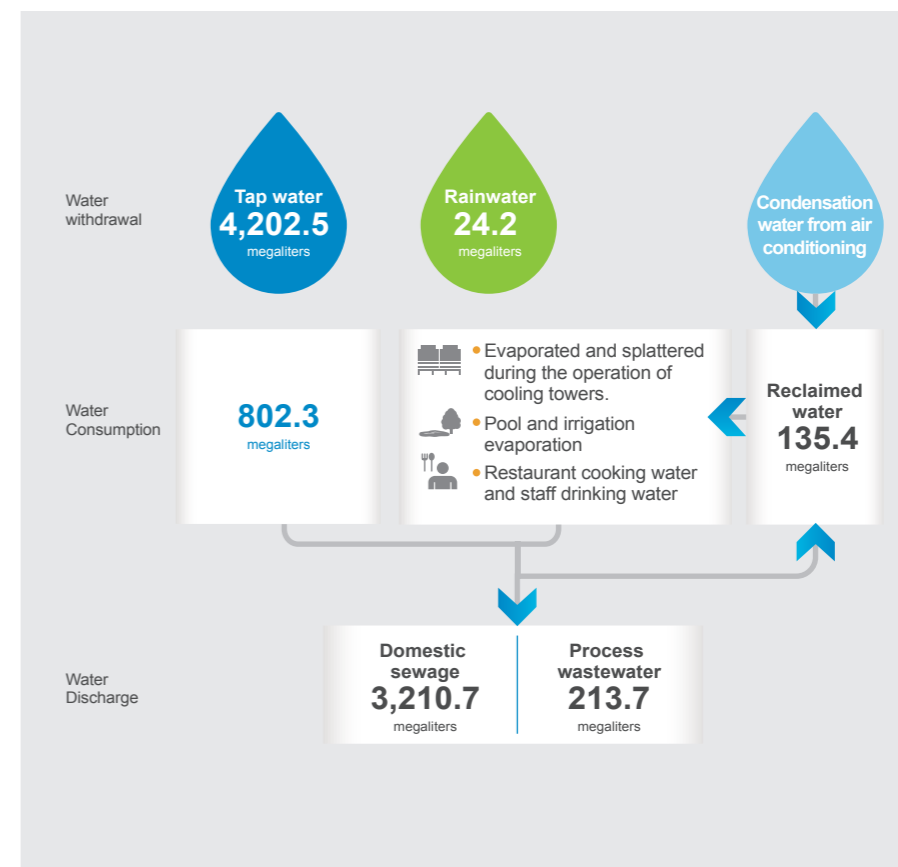
## Promotion of Water Resource Conservation and Water Recycling and Reuse

The water withdrawal source for Delta's overall production plants was mostly tap water (99.5%) mainly used in cooling towers, canteens, daily sanitary and a small amount was used as process water.

In 2018, Delta's total volume of water withdrawal for overall production plants was 4,231.1 megaliters and the total volume of water withdrawal for main production

plants was 4,226.7 megaliters. Delta established the "Water Conservation and Waste Reduction Management Committee" in 2016, and a total of 111 projects were implemented in the main production plants in 2018 including: rainwater reuse, air conditioning condensate recycling, pressure of water supply control, and equipment adjustment and improvement, saving a total of 334.2 megaliters of water consumption. Within which, the total recycled water in 2018<sup>\*1</sup> reached 159.6 megaliters and the water recycling ratio<sup>\*2</sup> reached 3.66%.

## Water Flow Chart of Main Production Plants



\*1. Total water recycled = (reclaimed water + rainwater)

\*2. Water recycling ratio = total water recycled / (total water withdrawal + recycled water)



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Water Conservation Performance

Main Plants	Buildings
<p>2018 Water productivity intensity (WPI) was 537 metric tons/MUSD for Delta's main production plants*<sup>1</sup>, a decrease of 15.9% compared to 2017; and a 19.8% decrease compared to 2015. The main reasons are:</p> <ul style="list-style-type: none"> <li>• The addition of condensation water recycling</li> <li>• The increase in the wastewater recycling rate</li> </ul>	<p>The WCI of 8 buildings*<sup>2</sup> in 2018 was 25.2 (metric tons/capita/year), a decrease of 7.8% compared to 2017; and a 10% decrease compared to 2015. The main reasons are:</p> <ul style="list-style-type: none"> <li>• The increase of the cooling tower concentration ratio</li> <li>• The addition of condensation water recycling</li> <li>• Recycling of vegetable cleaning water in the canteen</li> </ul>

### Wastewater Management

All waste (sewage) water from Delta's main production plant is either properly treated by suitable wastewater treatment facilities or directly discharged to waste (sewage) water plants designated by the local management center. For sites where no flow meter is installed, the sewage discharge is estimated to be 80% of the water consumption. The wastewater discharge for Taoyuan Plant 2, Cyntec Hsinchu and Cyntec Huateng is calculated by monitoring and inspecting the discharge volume. Quality of discharge across all plants is in compliance with current legal regulations. We regularly test the wastewater quality to ensure that no material impact is posed to the surrounding environment from receiving water. No material leakage or overflow occurred at any production plant in 2018.

### Quality and Destination of Water Discharge

Region	Manufacturing Plant	Process Wastewater (megaliters)	Concentration of Effluent (mg/L)			Processing Unit	Maximum Processing Volume	Receiving Water	Impact* <sup>3</sup>
			Total Suspended Solids	Biochemical Oxygen Demand	Chemical Oxygen Demand				
Taiwan	Taoyuan Plant 2	0.8	3.3	1.1	8.65	Guishan Industrial Park Sewage Treatment Plant	24 megaliters/day	Nankan River	<1.0%
	Cyntec Hsinchu	189.2	7.2	5.8	61.8	Hsinchu Science Park Sewage Treatment Plant	165 megaliters/day	Ke-Ya River	<1.0%
China	Cyntec Huateng	23.7	17	-	30.3	Yundong Sewage Processing Plant	60 megaliters/day	Wusong River	<1.0%

### Future Plans

- In the next phase, Delta plans to promote reduction measures, such as standby machines' water-saving management, increasing recycled water utilization, and more, to fulfill our water reduction commitment

\*1. Main production plants: Dongguan, Wujiang, Wuhu, Chenzhou plants in China; DET plant 1, 5, and 6 in Thailand, Taoyuan plants 1 & 2 in Taiwan, Cyntec Hsinchu and Huafeng plants.

\*2. 8 Buildings: including RueiGuang, Yang Guang, Taoyuan Plant 3, Chungli 1 & 2, Tainan 1 & 2, Shanghai Technology Development.

\*3. Impact = process wastewater / maximum processing volume

## Material Topics

## 5.5 Waste Management



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

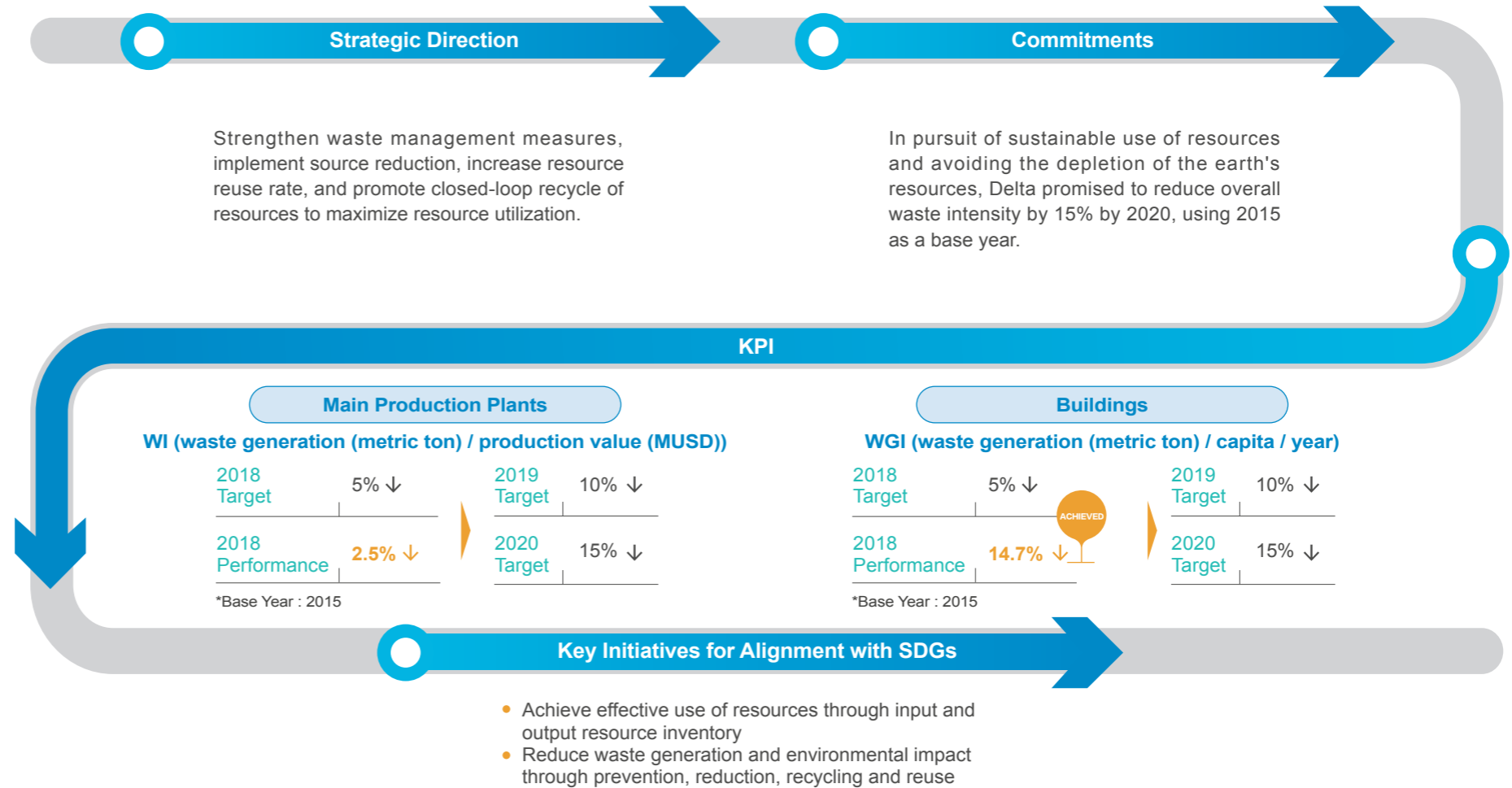
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





### Establishing the Material Flow Inventory Process

Delta uses material flow analysis software to identify waste flows and sources with greater impact and volume through scientific methods and to determine the priority and direction of waste reduction. According to the statistical analysis of all waste, approximately 34.6% is packaging waste, 34.8% is process waste, 21.2% is domestic and non-recyclable business waste and 9.4% is other waste. In response

to the above results, Delta has included supply chain cooperation, packaging material management and reduction, raw material utilization rate improvement, plastic reduction, and more in the promotion project. We held regular meetings to track the progress of implementation.

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

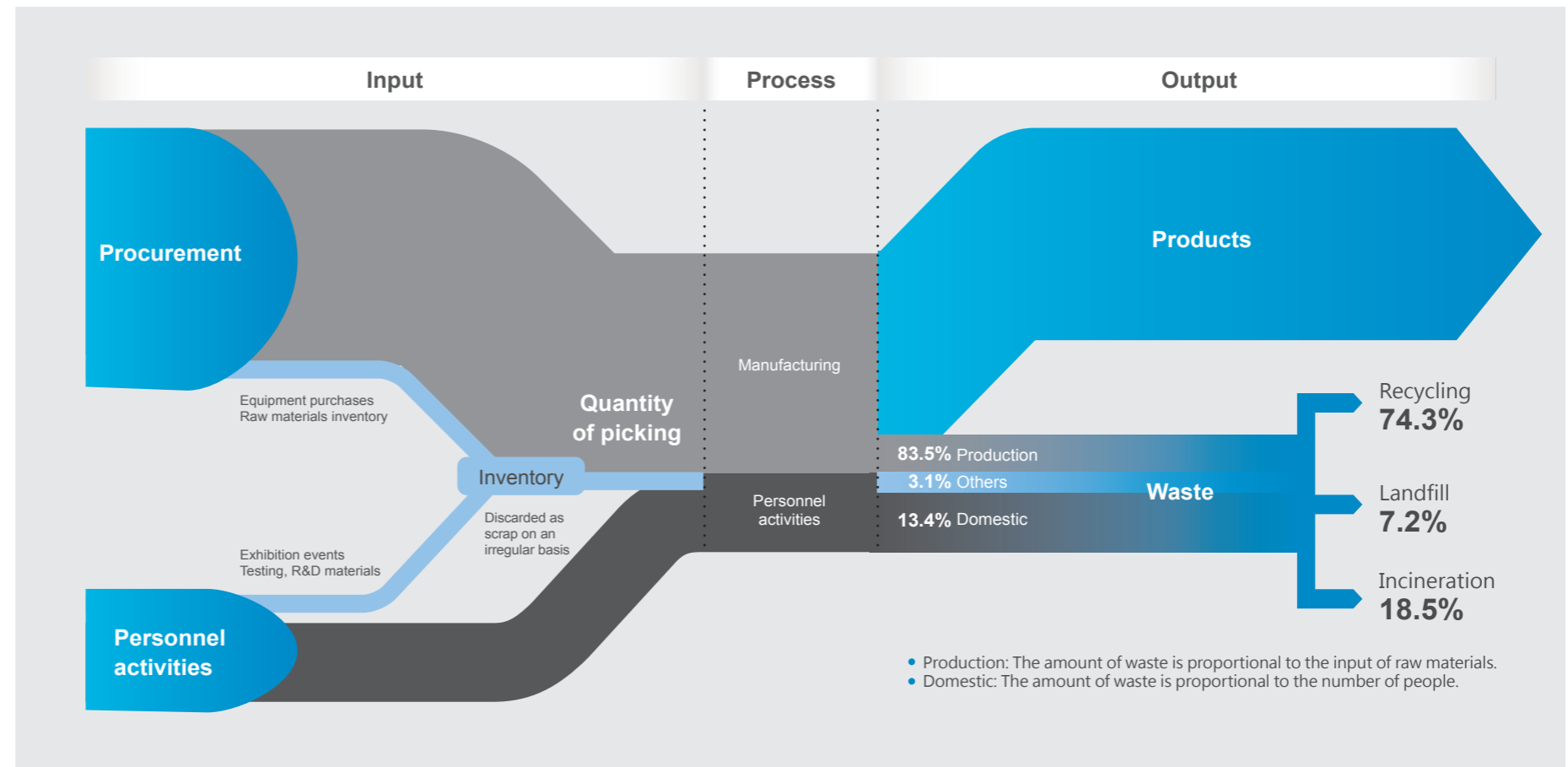
Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

Material Flow Diagram





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Implementing Waste Management

Delta established the “Water Conservation and Waste Reduction Management Committee” in 2016. To achieve the sustainable use of resources and ensure proper handling of waste, the Committee analyzed the sources and types of waste output, and identified the potential for reuse by combining respective internal and external resources. Delta continued to promote waste reduction measures and a total of 114 waste reduction projects were implemented in the main production plants in 2018. These projects included carton and plastic box recycling of supply

chain, production fixture improvement, and implementing a restriction policy on the domestic use of plastic. A total of 1,705.7 metric tons of waste has been saved. Statistically, in 2018, the total weight of waste at overall production plants was 42,746.7 metric tons and the total weight of waste at the main production plants was 42,666.0 metric tons, of which, non-hazardous waste accounted for 39,429.9 metric tons (92.4%), and hazardous waste accounted for 3,236.1 metric tons (7.6%). The waste recycling ratio in 2018 reached 74.8%.

### Industrial Waste Output and Treatment Status Statistics

Waste Type	Disposal Method	Main Production Plants	Overall Production Plants
Non-Hazardous Waste (metric tons)	Incineration	6,097.4	6,097.4
	Landfill	2,963.9	3,003.4
	Recycling and Reuse	30,368.6	30,401.8
	Subtotal	39,429.9	39,502.6
Hazardous Waste (metric tons)	Incineration	1,554.5	1,554.5
	Landfill	134.3	134.3
	Recycling and Reuse	1,547.3	1,555.3
	Subtotal	3,236.1	3,244.1
Total Waste (metric tons)		42,666.0	42,746.7
Waste Recycling Rate		74.8%	74.8%

### Waste Reduction Performance

Main Production Plants	Buildings
<p>2018 Waste intensity (WI) was 5.46 metric ton/MUSD for the main production plants*1, a decrease of 7.8% compared to 2017; and a 2.5% decrease compared to 2015. The main reasons were:</p> <ul style="list-style-type: none"> <li>• Recycling reuse of the suppliers' delivery packaging material (refer to 4.5.3)</li> <li>• Improvement of the molds reduced waste generation</li> </ul>	<p>The WGI of 8 buildings*2 in 2018 was 104.9 (kg/capita/year), a decrease of 5.8% compared to 2017; and a 14.7% decrease compared to 2015. The main reasons were:</p> <ul style="list-style-type: none"> <li>• Prohibition on the use of plastic bags and disposable utensils</li> <li>• Composting of fallen leaves and coffee grounds</li> <li>• Stopped providing disposable supplies</li> </ul>

### Future Plans

- To fulfill our waste reduction commitment, in the next phase, Delta plans to promote more reduction measures, including paper recycling, reducing sludge water content and organic solvent usage, and more.

\*1. Main production plants: Dongguan, Wujiang, Wuhu, Chenzhou plants in China; DET plant 1, 5, and 6 in Thailand, Taoyuan plants 1 & 2 in Taiwan, Cyntec Hsinchu and Huafeng plants.

\*2. 8 Buildings: including RueiGuang, Yang Guang, Taoyuan Plant 3, Chungli 1 & 2, Tainan 1 & 2, Shanghai Technology Development.



## Material Topics

# 5.6 Green Product Liability



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 5.6.1 Green Design

### Life Cycle Assessment

Life Cycle Assessment (LCA) is a systematic analysis method for environmental impact caused in each phase, from acquisition of raw materials, manufacturing and assembly, sales, transportation, and use to final disposal. To reduce the impact of products on the environment, Delta conducted full-scale LCA and Screening LCA on respective products according to the international standard ISO 14040/44, and implemented green design in each phase.

Product carbon footprint is the best example of Streamlined LCA (SLCA) in action. Due to Delta's variety of products, we calculate our carbon footprint in various stages. Delta established a product carbon footprint calculation mechanism as well as international carbon emission factor databases to create a platform of knowledge that will contribute to green product R&D and the selection of low carbon emission materials. The knowledge and experience involved is transferred abroad for use by Delta's other production plants.

Since 2010, Delta has selected several products to perform product carbon footprint research. We completed the carbon footprint inventory and acquired PAS 2050 certification for products such as notebook external power supply unit

(Adaptor), DC brushless fan (DC fan) and PV inverter, and continues to carry out a self-inventory of the PocketCell mobile power pack products. Since 2016, Delta has completed ISO 14067-1 carbon footprint verification for products such as high-efficiency rectifier modules TPS, 800W and 1200W switch mode power supply units and electric vehicle on-board chargers year by year, going further into green and low carbon design.

Summarizing the results of several products' LCA shows that the environmental impact from the "use phase" of Delta's core products is currently most significant during their actual life cycle, and "acquisition of raw materials" comes in second. Delta has long continued to improve our product's energy efficiency and reduce the environmental impact during the use phase. In 2018, the CSR Committee committed to integrate the existing international carbon emission factor database into the raw material BOM list, establish green design rules for low-carbon products, and continue to improve product energy efficiency to reduce carbon emissions during the use phase.

### Strategies for Lowering Environmental Impact of Products

We employ the following strategies to reduce the potential environmental impact during each stage of the product life cycle.

#### Reduce Use of Environment-Related Substances

Delta has implemented the Green Product Management (GPM) IT System based on the QC 080000 hazardous substance process management system. Our environmental standards are set based on the GPM system to strictly comply with global regulations, customer needs and environmental protection trends. In terms of material selection, we only choose materials that are environment-friendly. Apart from inspecting materials testing reports from suppliers, Delta manages parts/components based on their environment-related substance risk level to ensure the proper control of environment-related substances. Delta plants have also introduced lead-free processes and low-halogen materials to help customers have access to greener and more eco-friendly products.

#### Reduction of Carbon Emissions during Material Transportation

Delta has implemented a low-carbon procurement policy. Local suppliers are given priority when procuring all materials with the exception of critical components. Major global distribution centers cooperate with logistics providers to implement transportation cost optimization, consolidated delivery, milk runs, packaging design, container packaging and selection of optimal delivery routes, and other relevant measures. Taking Delta plants in China as an example, In 2018, the total carbon emissions from logistics services for delivering products to customers via trucks in China totaled 11,465 tons CO<sub>2</sub>e. The carbon intensity for logistics (tons CO<sub>2</sub>e/MUSD production value) was 2,052, a 2% decrease from 2,095 in 2017.



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Adoption of Green Packaging Materials

Delta employs green packaging materials for all of our products, using corrugated paper, cardboard, paper, and wooden boxes, all in line with our transportation process needs. Waste packaging materials can be recycled, reused, or used repeatedly. For example, in 2018, the weight of recyclable materials accounted for approximately 33.5% of the wooden boxes, pallets, and paper boxes used. The amount of recycled paper used accounted for 90.7% of paper packaging; another example is automation motors that are packaged in wooden boxes with fixed flaps that can be used repeatedly.

## Enhancing Energy Efficiency of Products

The continued energy efficiency improvement in our products is a concrete example of Delta's enterprise mission: "To provide innovative, clean and energy-efficient solutions for a better tomorrow". Today, Delta's power management products have achieved as much as 90% energy efficiency, for example, our telecom power supplies have up to 98% efficiency, PV inverters have a peak conversion efficiency of 98.8%, and DC-DC converters for vehicles have a 96% efficiency. In 2018, Delta was awarded the Energy Star Sustained Excellence Award for Breeze ventilation fan products. Delta has been awarded the ENERGY STAR Partner of the Year from the U.S. Environmental Protection Agency (EPA) for three consecutive years due to our products' energy savings and contributions to reducing greenhouse gas emissions.

## Ease of Dismantling and Recycling Products

Delta designs its products for easy dismantling and recycling. We help B2B customers improve the reuse rate and recycling rate of waste electronics products to conform to the target region's environmental regulations such as the EU's WEEE directive. For our own brand products, we work with local recycling organizations to ensure the proper recycling and ultimate disposal of waste products. For instance, our charger / mobile power brand Innergie has registered with local EU authorities and has joined Germany's electronic waste recycling system.

## 5.6.2 Eco-labels and Eco-declarations

### Type I Eco-labels

Type I Eco-labels conform to the specification standards for organizations or governments and have been verified by third parties. Trademarks are easily identified by clients and consumers.

Delta's Type I Eco-labels include the following:



#### Taiwan Green Mark

36 projector products have obtained the Taiwan Green Mark



#### Taiwan Energy Label

60 products have obtained the Taiwan Energy Label (including indoor lighting, street lighting, bathroom ventilating fans)



#### China Environmental Labelling

60 products certified by China CEC



#### ENERGY STAR Most Efficient Products

79 energy saving ventilation fan products were awarded the ENERGY STAR's Most Efficient Products



#### 80 PLUS Certification

323 power supply products certified by 80 PLUS

### Type II Environmental Declarations

Data collected from Streamlined Life Cycle Assessments (SLCA) for several of our products shows that the environmental impact from the use phase of Delta's core products is most significant during their actual life cycle. We therefore implement product environmental information disclosure while improving product energy efficiency and integrate this with the ISO 14021 Self-Declared Environmental Claims and the ISO 14025 Environmental Product Declaration (EPD).

In 2010, we launched the "Energy E" program for rectifiers which offers an EnergyE labels to our Rectifier product catalogs and products with energy efficiency of over 95%, 96%, and 97% with green, gold and purple label to allow easy identification by customers.

#### EnergyE Product Label



Efficiency > 97%



Efficiency 96%~97%



Efficiency 95%~96%



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 5.6.3 Energy Saving Benefits of Products

Delta continues to enhance product energy efficiency and to develop integrated green energy/energy-saving products and solutions. This helps clients conserve more energy and achieve even higher cost-effective performance. Based on the shipment of power supplies, direct-current fans, uninterruptible power supplies, variable-frequency drives, LED lamps, electrical ballasts, PV inverters, and direct-current EV chargers from China, Taiwan, and Thailand between 2010 and 2018, Delta's high efficiency products saved customers an estimated 28.1 billion kWh of electricity and reduced carbon emissions by 15.06 million tons CO<sub>2</sub>e.

In 2018, Delta's high efficiency products have helped customers save 3.8 billion kWh of electricity and reduced carbon emissions by 2.10 million metric tons CO<sub>2</sub>e. In 2015, Delta was the first in the industry to introduce energy-saving product calculations into ISAE 3000 assurance. Since then, product items have been added each year. In 2018, we added the energy-saving assurance for the Uninterruptible Power Supply and TV Power. Delta had accomplished assurance of ISAE 3000 product energy conservation for 10 products by 2018.

**In 2018, the energy savings of 10 types of products had been assured by ISAE3000**

Product name	Explanation for calculation of energy savings	Energy saved (kWh / year)
Uninterruptible Power Supply (UPS)	By comparing the efficiency of Delta uninterruptible power supply (UPS) to that of EU Code of Code on Energy Efficiency and Quality of AC Uninterruptible power supply systems (EU UPS CoC rev.2), UPS models in 2018, annual energy savings was	79 million kWh
TV Power	By comparing the efficiency of Delta Open frame TV power to that of the minimum energy efficiency required by customer's specifications, for shipments of the 9 main Open frame TV power models*1 in 2018, annual energy savings was	23 million kWh
PV Inverter	By comparing the efficiency of Delta PV Inverter (PVI) to the minimum average efficiency 97.5%*2 of the ENERGY STAR Market and Industry Scoping Report, for the shipments of PVI to North America and Europe in 2018, annual energy savings was	7 million kWh
EV Charger	By comparing the efficiency of Delta EV DC Charger to the minimum efficiency 90% regulated by CHAdeMo, for the shipments of EV DC Charger in 2018, annual energy savings was	5 million kWh
LED High bay	Assuming that end-users installed Delta LED high bays to replace Metal Halide high bays, and by comparing the efficiency of Delta LED high bays to the minimum efficiency requirements for the procurement of Metal Halide high bays (Distribution: Direct, LER: Closed) issued by the United States Department of Energy, for the shipments of LED high bays in 2018, annual energy savings was	10 million kWh
LED Street Lights	Assuming that end-users installed Delta LED street lights to replace mercury street lights, for the shipments of LED street lights to Taiwan in 2018, annual energy savings was	11 million kWh
Server Power	By comparing the efficiency of Delta Server Power to that of 80 Plus Bronze requirements, for the shipments of 10 major customers in 2018, annual energy savings was	1.26 billion kWh
Ventilating Fans	By comparing the efficiency of Delta ventilating fans to that of USA Energy Star or Taiwan Energy Label requirements, for shipments of products that have been certified by the USA Energy Star or Taiwan Energy Label in 2018, annual energy savings was	31 million kWh
AC-DC Adapter	By comparing the efficiency of Delta AC-DC adapters to that of Code of Conduct External Power Supplies (EC No. 278/2009 stage 2), for shipments of the 13 main AC-DC Adaptor models*3 in 2018, annual energy savings was	29 million kWh
Electronic Ballasts	Assuming that end-users replace existing Magnetic Ballasts with Electronic Ballasts, for shipments of Delta Electronic Ballast for Fluorescent Lamps to 9 major customers in 2018, annual energy savings for end-users was	105 million kWh

\*1. Main product models and series are APDP-209A2 A, AP-P242AM A, AP-P288AM A, AP-P348AM A, AP-P448AM A, AP-P426AM A, AP-P469AM A, AP-P96AM A, and AP-P125AM A. The minimum energy efficiency requirement of customer specifications for the first eight models mentioned above is 80%, and the minimum energy efficiency requirement for the last model is 85%.

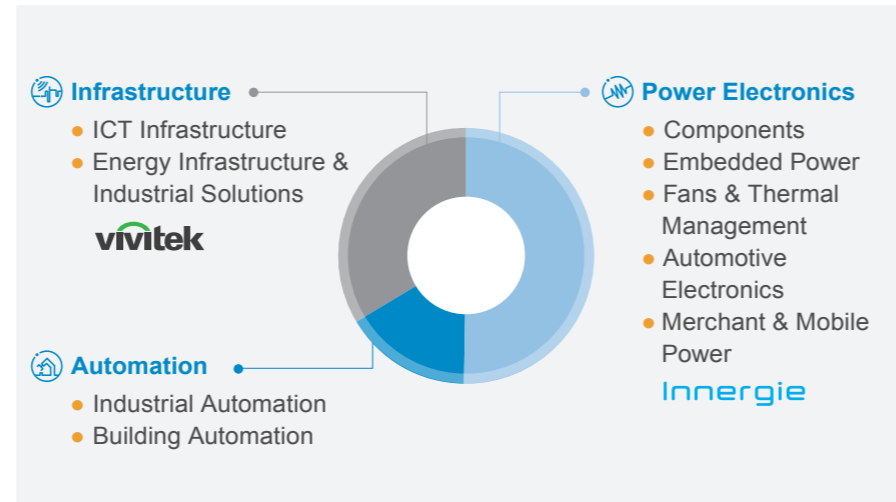
\*2. ENERGY STAR Market and Industry Scoping Report

\*3. Main product models and series are ADP-45FE, ADP-45AG, ADP-45BG, ADP-45DG, ADP-45EG, ADP-65HB, ADP-65XD, ADP-65YD, ADP-90WH, ADP-90DE, ADP-120MH, ADP-120RH, ADP-180MB.



### 5.6.4 Green Products/Services Innovation

To ensure that resource allocations and management efforts are focused on our chosen markets with high development potential, Delta carried out organizational reform and in May 2017, reorganized its business groups into three business categories, namely, "Power and Electronics", "Automation", and "Infrastructure".



\* Based on the ratio of annual revenue

Delta not only maintains its leadership position in the Original Design Manufacturer (ODM) field, we are also expanding our Delta Smart Manufacturing (DSM) total solutions. By integrating our product advantages with hardware and software technology, we are working to achieve a smart, automated production plant. By acquiring an in-depth knowledge of our customers needs, we create and provide customers with energy-saving total solutions that are comfortable, convenient, eco-friendly, and high performing. Delta provides total solutions to customers around the world. We have delivered 739 successful cases with significant benefits to our customers in reducing operating costs while enhancing their global competitiveness.

Our energy-related solutions have saved customers 20%~40% in energy consumption

### Statistics of Delta's 7 Major Solutions from 2012 to 2018

Delta's Solutions	2012-2018	2016	2017	2018
Datacenters	254	44	40	34
Displays and Monitoring	129	24	25	24
EV Charging	30	4	2	11
Industrial Automation (IA)	140	29	20	25
Renewable Energy	46	12	3	7
Building Automation	53	8	7	29
Telecom Power	81	21	26	11
Others	27	0	0	6
Total	739	142	123	147

#### Success Cases

#### Delta Smart Street Lights—Building the Smart City Blueprint of Jakarta

Delta participated in the smart city construction plan of Jakarta, Indonesia, by providing a smart street lighting system. Delta has installed more than 20,000 LED smart street lights with a management platform and has wireless networking functions, such as remote monitoring, maintenance, management and lighting control. In addition to energy savings of at least 48% compared to the traditional high-pressure sodium lights used in the past, the operation status for the street lights can be monitored by the management platform. Delta's smart street light solution has wireless networking technology. In addition to lighting, there is potential for additional functions including video surveillance, air quality detection, temperature detection, water level detection, information board, and electric vehicle charging. The wireless networking function enables the highly concentrated street lights in the city to become a closely woven communication network and a solid backbone for the smart city.

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Delta Assists Customers in Building a Submarine Cable Data Center in Myanmar—Promoting Digitization Development in Southeast Asia

Delta provided a 200 kW containerized data center solution with modular design for the Singapore-based Campana Group, which is building the largest high-speed data center corridor connecting Singapore and Myanmar—the MYTHIC International Submarine Cable Project. The project connects Myanmar to Singapore and will branch to Thailand and will help end-users in Southeast Asia enjoy a richer digital life. Delta's containerized data center solutions come with green efficiency performance that will meet a target for an annual average PUE below 1.43, which is the gold level for the Green Grid standard. In recent

years, containerized data center solutions have become the best choice for edge computing and disaster-recovery data centers. As of now, Delta has delivered 100 products worldwide and successfully built an application example for containerized data centers.

### Future Plans

- Continue to enhance product energy efficiency , and facilitate global clients in conserving more energy
- Bring the green circular economy concept to all products, extend product life cycles, and optimize product recycling mechanisms
- Expand the scope of reusable energy and continue to cultivate automated solutions to systematically provide better options for our clients





## 5.7 General Issues

### 5.7.1 Environmental Protection Expenditures and Profit and Loss

#### Environmental Protection Expenditures

Item	Expenditure (MUSD)
Input cost for energy savings	9.7
Input cost for water conservation	1.2
Input cost for waste reduction	0.9
Others*	2.8
<b>Total</b>	<b>14.6</b>

\* Includes waste, air pollution and waste (sewage) water treatment fees, environmental testing fees, and management system verification costs.

#### Environmental Profit and Loss

Delta understands the importance and value of environmental capital and believes it is the foundation behind Delta's products and services. We continue to conduct environmental profit and loss (EP&L) assessments to analyze and to further monetize the environmental impact of Delta's production activities. The impact pathway was adopted for the impact value assessment for Delta's four main types of environmental capital: greenhouse gases, air pollution, water withdrawal, and waste. Overall, the environmental impact value of Delta's main production plants in 2018 was approximately 21.9 MUSD, a decrease of 14.1% compared to 25.5 MUSD in 2017.

### 5.7.2 Air Pollution Prevention and Management

All of Delta's plants have obtained emission permits in compliance with local environmental regulations. The plants used the best available treatment technologies for each pollutant type to minimize environmental loads around the

plants. Gas monitoring is regularly scheduled at discharge outfalls for the plants. Currently, air pollutants generated by Delta include Volatile Organic Compounds (VOCs), Nitrogen Oxides (NOx) and Sulfur Oxides (SOx).

In 2018, the VOCs for overall production plants was 110.5 metric tons. And the calculation of air emissions was based on the results of testing reports and operation hours. The VOCs mainly came from escaped asphalt (filled in electronic ballast) during the heating process, volatile organic solvents (such as fluxes and isopropyl alcohol), and others. Most NOx and SOx came from testing or the emergency use of generators at plants. Minute quantities came from hot water furnaces in dormitories and kitchens.

### 5.7.3 Compliance with Environmental Protection Regulations

Delta regards regulatory compliance as the most basic requirement. Delta's main plants are located at industrial parks, science parks, or local industrial development zones. We take further actions in our daily operations to minimize the impact on the local ecosystem and environment.

In 2018, no significant fines or penalties (>10,000 USD) related to the environment or ecological issues.

There is, one violation of the environmental protection regulations occurred in Cyntec Hsinchu plant, a subsidiary of Delta. Other than this, there were no other environmental protection violations. The following table provides an explanation for the violation:

Item	Content
Environmental laws and regulations violated	Article 24, Paragraph 2 of the Air Pollution Control Act
Description	The activated carbon exchange frequency in the stationary pollution source operation permit was inconsistent with the registered content
Total penalty	3,256 USD
Rectification measures	<ol style="list-style-type: none"> <li>1. Replace activated carbon once every season, which is more frequent than the exchange frequency provided in the permit</li> <li>2. Revise the manual to modify the frequency, and operate and implement plant management based on the actual PDCA</li> </ol>

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



## Contents

About the CSR Report

---

A word from the Management

---

Delta Group Overview

---

Sustainable Management

---

Communication with Stakeholders

---

Corporate Governance

---

Environmental Protection and  
Energy Conservation

---

Employee Relations and  
Social Participation

---

Appendix

### Employee Relations and Social Participation

- 6.1 Key Performance Indicators
- 6.2 Talent Attraction and Retention
- 6.3 Labor Rights and Labor Relations
- 6.4 Talent Management and Learning Development
- 6.5 Social Participation
- 6.6 General Issues





## 6.1 Key Performance Indicators

### Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Delta's Main Endeavors

- Invest in long-term industrial academic interactions to build employer branding
- Provide diversified training courses for improving employee professional knowledge and skills they require for the future
- Implement long-term motivational development for employees to encourage talent retention
- Popularize green building and transportation, promote science, energy education and climate action, and cultivate talent
- Develop the DeltaMOOCx online learning platform centered on technical and vocational education

\*1. As of year-end 2018  
 \*2. Cumulative from 2015  
 \*3. Total days lost to disabling injuries x 1,000,000/total work hours  
 \*4. Disabling injuries x 1,000,000/total work hours

Employees  
**86,101** people\*1

Global Turnover Rate  
**37.4%**

Average Hours of Training per Person  
**48** hours/person/year

Retention Rate after Parental Leave  
**82%**

Number of Volunteers for Energy Education  
**383** people

DeltaMOOCx e-Learning Video Views\*2  
**4.26** million

Electricity Savings of Donated Green Buildings  
**1.64** million kWh

Disabling Severity Rate (SR)\*3  
**8**

Disabling Frequency Rate (FR)\*4  
**0.65**

Aligning with UN Sustainable Development Goals



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

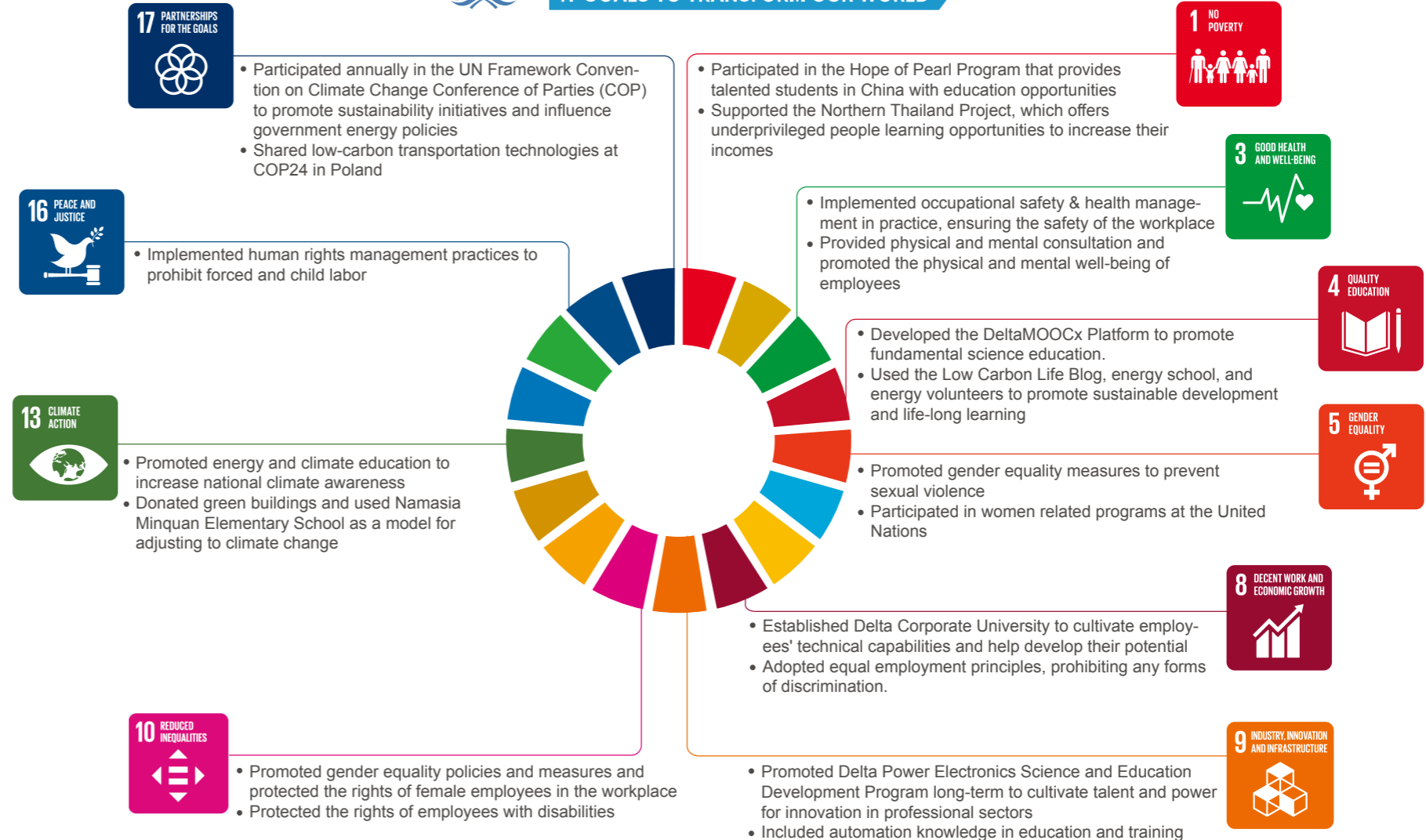
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

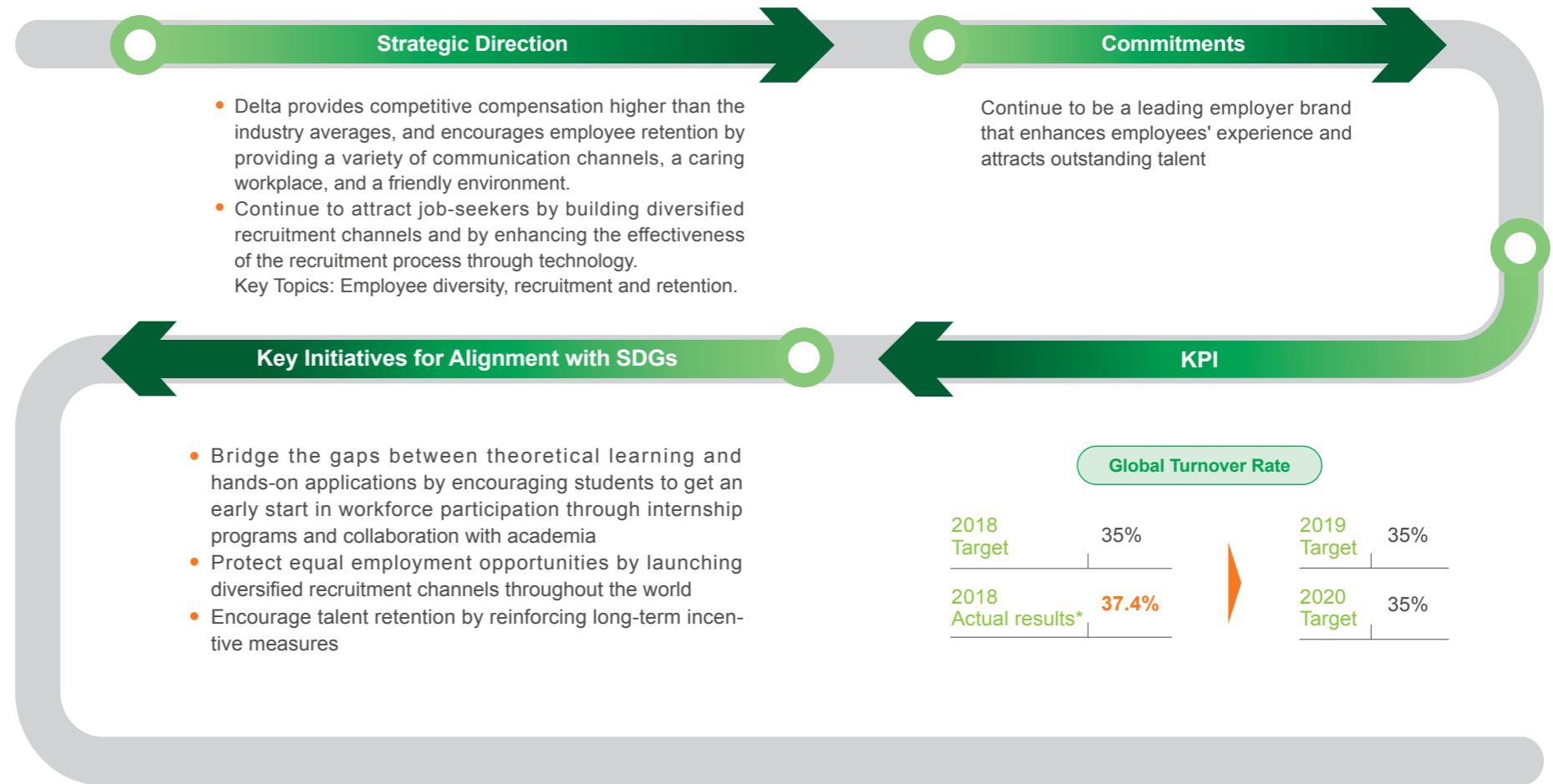
Employee Relations and Social Participation

Appendix



## Material Topics

# 6.2 Talent Attraction and Retention



\*. We have strengthened the scope for calculation. The definition of newly hired and resigned direct employees excludes employees who have not stayed with the Company for more than 1 month since first joining. Due to the more stringent definition, we did not reach our target in 2018. In the future, while continuing to carry out our smart manufacturing plans and redesigning our work force, we will analyze the global turnover rate systematically and take relevant actions

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Global Employee Composition

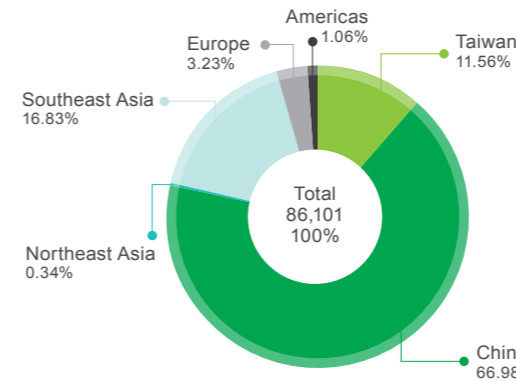
As of year-end 2018, Delta Group has 86,101 employees worldwide, including 5,055 employees in management positions, 22,173 indirect non-management employees, 58,873 direct employees, and 210 contract employees (routine work models).

Due to the nature of the technology industry and the employment market, most of Delta's management level and technical personnel are males. Nevertheless, the male to female ratio in our overall global operations is relatively balanced. Males account for 55% of all employees, and females 45%. Delta also strategically focuses on hiring and ensuring job protection for female workers to balance the gender proportion for our employees.

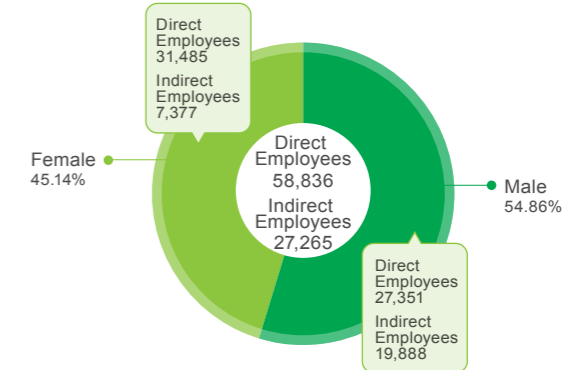
Delta employees are young in terms of the age structure. In terms of age structure, 41% of the employees in the dominant group is under 30 years old, 30- to 50-year-olds account for 55%, and employees over the age of 50 account for 4%. We also aspire to create quality career development for the younger generation. Over 80% of the Company's employees are based in our global production manufacturing plants, including our China and Thailand facilities. Taiwan is the headquarters for operations and coordinates global strategic development, back-end operations, product R&D, and marketing and sales, and accounts for approximately 10% of all employees. Overseas branches are located in regions and countries including North America, Europe, Japan, China, Thailand, India and Singapore. Delta is known for high levels of globalization and diversity, and we have employees from diverse cultural backgrounds at each of our operational regions.

### Global Employee Composition<sup>\*1</sup>

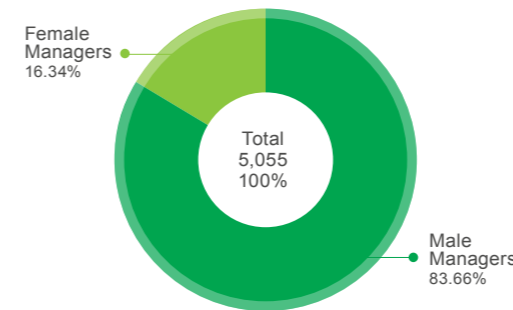
Employee Distribution in Each Region



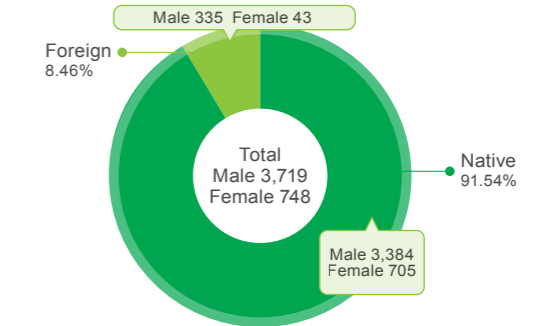
Gender of Direct and Indirect Employees in Non-Management Roles by Gender<sup>\*2</sup>



Management Positions by Gender



Number of Native and Foreign Management Position by Gender



Distribution of unofficial employees (contracted and dispatched workers)

Region	Male	Female	Subtotal
Southeast Asia (SEA)	159	10	169
Europe (EMEA)	11	2	13
Americas	19	9	28

\*1. Refer to the chapter on long-term internships for disclosure regarding interns

\*2. Direct employee definitions: Employees directly related to production activities (for example, production, quality management, materials, and procurement). Indirect employee definitions: Employees indirectly related to production activities (e.g. accounting, sales, R&D, and general affairs).



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Diverse Talent, Equal Recruitment Opportunities

Delta has established a 'Delta Group Employee Policy' to comply with international labor and human rights standards and to encourage diversity and promote equality. Delta strives to create a work environment where employees can feel at ease. No material termination incident occurred in 2018 at any of Delta's manufacturing plants due to operational abolition/dissolution. In addition, Delta also encourages disadvantaged groups in the society to contribute their skills. As of year-end 2018, Delta hired 2,323 employees from minority groups (for example, Taiwanese aborigines and ethnic minorities in China) and we hired 394 physically or mentally challenged individuals worldwide. In addition to receiving economic security after joining Delta, the disadvantaged individuals also receive group support during work so that they are not isolated from society.

## Structure of Global New Hires and Employee Turnover Rate

Delta provides an excellent work environment that includes competitive compensation, a learning environment with advancement opportunities, and safe work conditions so that our employees can feel at ease at Delta. The Company continues to seek enhancements and transitions in its business model. We emphasize that our talent is the foundation of our competitiveness. We regularly conduct employee engagement surveys to understand the activeness and opinions of our employees at work. We establish reinforcement plans at each level of the organization and monitor the progress of improvement. This increases employees' willingness to remain at the Company, to recommend the Company to others, and to build closer partnerships with Delta.

Number of New Hires by Region, Gender, and Age<sup>\*1\*2</sup>

Region		TW		China		SEA		NEA		EMEA		Americas		Total	
Gender	Age	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%		
Female	<30	274	2.91%	7,218	12.04%	2,145	15.45%	4	1.46%	41	1.63%	27	3.84%	9,709	11.19%
	30-50	364	3.86%	5,116	8.54%	475	3.42%	12	4.38%	90	3.59%	32	4.55%	6,089	7.02%
	≥50	2	0.02%	10	0.02%	2	0.01%	0	0.00%	19	0.76%	3	0.43%	36	0.04%
Male	<30	423	4.49%	15,283	25.50%	498	3.59%	1	0.36%	58	2.31%	55	7.81%	16,318	18.81%
	30-50	598	6.34%	5,555	9.27%	333	2.40%	29	10.58%	129	5.14%	51	7.24%	6,695	7.72%
	≥50	17	0.18%	10	0.02%	11	0.08%	4	1.46%	27	1.08%	10	1.42%	79	0.09%
Total		1,678	17.79%	33,192	55.38%	3,464	24.94%	50	18.25%	364	14.50%	178	25.28%	38,926	44.9%

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

Number of Direct Employee Turnover by Region, Gender, and Age<sup>\*1,2</sup>

Region		TW		China		SEA		NEA		EMEA		Americas		Total	
Gender	Age	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%		
Female	<30	67	3.4%	6,204	13.1%	776	7.5%	0	-	14	2.5%	8	13.6%	7,069	11.7%
	30-50	81	4.1%	4,661	9.9%	236	2.3%	0	-	32	5.7%	3	5.1%	5,013	8.3%
	≥50	3	0.2%	80	0.2%	1	0.0%	0	-	13	2.3%	0	0.0%	97	0.2%
Male	<30	24	1.2%	12,129	25.6%	135	1.3%	0	-	28	5.0%	8	13.6%	12,324	20.4%
	30-50	32	1.6%	4,466	9.4%	52	0.5%	0	-	29	5.2%	12	20.3%	4,591	7.6%
	≥50	0	0.0%	21	0.0%	0	0.0%	0	-	16	2.8%	4	6.8%	41	0.1%
Total		207	10.5%	27,561	58.2%	1,200	11.6%	0	-	132	23.5%	35	59.3%	29,135	48.3%

Number of Indirect Employee Turnover by Region, Gender, and Age<sup>\*1,2</sup>

Region		TW		China		SEA		NEA		EMEA		Americas		Total	
Gender	Age	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%		
Female	<30	21	0.3%	233	1.8%	18	0.5%	2	0.7%	7	0.4%	19	2.9%	300	1.1%
	30-50	78	1.0%	236	1.9%	37	1.1%	6	2.2%	40	2.1%	17	2.6%	414	1.6%
	≥50	4	0.1%	3	0.0%	1	0.0%	0	0.0%	27	1.4%	2	0.3%	37	0.1%
Male	<30	69	0.9%	956	7.6%	60	1.7%	1	0.4%	18	0.9%	37	5.7%	1,141	4.3%
	30-50	303	4.1%	782	6.2%	116	3.3%	9	3.3%	102	5.2%	14	2.2%	1,326	5.0%
	≥50	27	0.4%	11	0.1%	6	0.2%	4	1.5%	39	2.0%	9	1.4%	96	0.4%
Total		502	6.7%	2,221	17.6%	238	6.8%	22	8.0%	233	12.0%	98	15.2%	3,314	12.5%

Number of Employee Turnover by Region, Gender, and Age<sup>\*1,2</sup>

Region		TW		China		SEA		NEA		EMEA		Americas		Total	
Gender	Age	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%	Head count	%		
Female	<30	88	0.9%	6,437	10.7%	794	5.7%	2	0.7%	21	0.8%	27	3.8%	7,369	8.5%
	30-50	159	1.7%	4,897	8.2%	273	2.0%	6	2.2%	72	2.9%	20	2.8%	5,427	6.3%
	≥50	7	0.1%	83	0.1%	2	0.0%	0	0.0%	40	1.6%	2	0.3%	134	0.2%
Male	<30	93	1.0%	13,085	21.8%	195	1.4%	1	0.4%	46	1.8%	45	6.4%	13,465	15.5%
	30-50	335	3.6%	5,248	8.8%	168	1.2%	9	3.3%	131	5.2%	26	3.7%	5,917	6.8%
	≥50	27	0.3%	32	0.1%	6	0.0%	4	1.5%	55	2.2%	13	1.8%	137	0.2%
Total		709	7.5%	29,782	49.7%	1,438	10.4%	22	8.0%	365	14.5%	133	18.9%	32,449	37.4%

\*1. The calculations for global new recruits and turnover do not include 'non-voluntary': employees leaving because of retirement, dismissal by law, rescission of contract, or closure of internship, or those indirect employees who have not stayed with the Company for more than 3 months since they first joined, and direct employees who have not stayed with the Company for more than 1 months since they first joined.

\*2. Turnover = resignations / ((number of employees at the beginning of the period + number of employees at the end of the period)/2). New hire ratio = new hires / ((number of employees at the beginning of the period + number of employees at the end of the period)/2).



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Industry Academia Collaboration to Cultivate Quality Talents Across the Globe

Delta continues development across the globe and its demand for talents continues to grow each year. In addition to attending various campus events and industrial academic collaboration and developing the talent market in Taiwan, the Company uses various industrial academic collaborations to attract professionals from across the world. The Company adopted "smart technology to create the future" as the main recruitment theme in 2018 to attract top candidates with similar ideals for the development of a series of smart city solutions. Delta products span across different sectors. To demonstrate Delta's technology, we describe our current technology development to students in schools as well as the general public each year. We use forums to let people understand the applications and technologies of Delta products, and we integrate product energy conservation design concepts to let them learn about the importance of environmental protection in research and development. We participated in more than 30 campus career forums and provided campus enterprise tutors (for example, career coach program of Cheng Kung University and Tsing Hua University Enterprise Talent Development Program) in 2018. We help participating students improve their soft power skills by providing related courses on industrial trends, career guidance, and personal analysis.



Participation in the Tsing Hua University Enterprise Talent Development Program

## Delta Campus Employer Brand Marketing

Delta designed a short-term camp program and a long-term internship system to facilitate closer interactions with outstanding campus talents:

- I. Camp: The two-day camp accepted 35 students in 2017 and in 2018, we divided the camp into software and hardware programs to accept 70 students. In the training for specific R&D sectors, we let participants experience life in the workplace and bring work design into the classrooms so students could operate the software and hardware required for the future workplace and to improve their basic capabilities.
- II. Long-term internship program: The Internship program is a very important strategy for Delta. We expanded the internship opportunities from a single R&D unit to 100 interns in different units including human resources, finance, marketing, and manufacturing. We now have 200 students in internship programs across the world (in different regions). Our internship activities were promoted on students' favorite social media (Facebook fan page: Delta Career; LinkedIn: Delta Electronics) and we received positive feedback for the program design that integrates professional skills and teamwork. The satisfaction rate (4.5 out of 5) and willingness to join Delta (4.3 out of 5) after graduation were relatively high scores. We also cooperated with foreign offices for the Ministry of Education and National Chiao Tung University in their first overseas internship program which became popular amongst students. By utilizing internship opportunities to bridge the gap between theory and practice, we can help improve the confidence of graduates when they start their careers and establish Delta's brand image as a good employer.

### Number of interns in internship programs

Region	Male	Female	Total number of employees	Notes
Taiwan	85	15	100	
China	70	11	81	
Northeast Asia	0	2	2	Japan
Southeast Asia(SEA)	11	3	14	Thailand
Europe(EMEA)	0	3	3	Netherlands

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



Engineering Camp for College Students: Develop Attitude for Learning and Development and Key Operations



Actual Robotic Arm Operations Demonstrate Key R&D Breakthroughs for Interns



Participation in the Taiwan External Trade Development Council (TAITRA)'s Overseas Talent Recruitment Missions in Japan and India to Expand the Overseas Talent Market



Delta has organized the "Delta Cup Advanced Automation Contest" for five consecutive years to promote technology and market the Delta brand. We let students learn about keys in design and train them to consider product layout from a systemic perspective. Students that received first prize qualified for interviews and dozens of students have joined Delta through this channel. In recent years, there has been a significant increase in the demand for both international firmware and software talent in all regions, particularly at our R&D center in Taiwan. Our Talent Development team visited the India Institution of Technology (IIT) for two consecutive years to recruit talents for software, firmware, and electronics-related fields. We also partnered with the Ministry of Economic Affairs in the 'Overseas Talent Recruiting Mission' in 2018 to recruit talent from Japan and India, and we gained a head-start on reaching out to overseas talent pools. To ensure access to a stable and solid talent pool, Delta participated in the 'Northern Stream of Nanyang Talents - Taipei City ICT Southern Diamond Talent Convergence Plan', which facilitated the introduction of talent from Malaysia and India to Taiwan. With internships, we present overseas talent with product knowledge relevant to Delta and arrange for them to serve in diverse regions based on our global needs.

Delta promotes the employer brand improvement event. In addition to promoting various campus relation promotion programs, we also achieved great results in social media operations. We received multiple awards in 2018.





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

- Delta was selected in the "Top 100 Most Desirable Companies Among the Young Generation" organized by "Cheers" Magazine for the seventh consecutive year and our ranking in 2018 improved significantly from 56th to 27th.
- We won the Transformation Award on LinkedIn in 2018 which demonstrated our high ranking in social media followers and our growth rate. Delta was the only company that received this award for two consecutive years and we received recognition for our social media operations.
- Delta's summer internship program has been in existence for three consecutive years. It was selected by the 104 Job Bank as one of the "Top 10 Favorite Companies for Interns".
- Delta's Wujiang Plant in China won the "Outstanding Human Resources Management Award" from the Wujiang Economic & Technological Development Zone.

## Competitive Compensation Packages

Delta's overall compensation is higher than the technology industry averages. The Company offers competitive compensation structures to recruit and retain talent. We provide employee incentives for value creation, especially the linkage between the company's operating performance and employees salaries. Employees in Taiwan receive fixed monthly salaries as well as a year-end bonus, performance-based bonus, and profit sharing. To incentivize employees in a timely manner, since 2017, the Company has adjusted the method for distributing cash remuneration and bonuses for employees based on the Company's profitability and team performance. We issue a "cash bonus" from the current year to employees in April of the following year and we set aside net profit after tax as "employee cash remuneration" which is distributed in August. As disclosed to the Taiwan Stock Exchange Corporation, the average salary for non-management full time employees is USD 48,348 annually.

### Comparisons of Base Salaries of Direct Employee and Local Minimum Wages in Global Operations

Region	Direct Employee	
	Male	Female
Taiwan	1.06	1.06
China	1.01	1.01
Thailand	1.00	1.00

### Average Monthly Salary of Indirect Employee (Comparison of Male to Female) in Global Operations

Region	Non-management		Management Role		
	Male	Female	Male	Female	
Taiwan	1.00	0.91	1.00	0.96	
China	R&D Center	1.00	0.74	1.00	0.96
	Manufacturing Plant	1.00	0.95	1.00	0.91
Thailand	1.00	0.97	1.00	1.04	
USA	1.00	0.82	1.00	0.94	
Germany	1.00	0.79	1.00	0.95	
France	1.00	0.82	1.00	0.97	
Finland	1.00	1.10	1.00	0.90	



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Encouraging Long-term Retention through Long-term Incentive Measures Delta encourages employees to stay with the Company over the long-term

The average years of experience for Delta's global professional employees is 8.5 years, higher than industry averages in the technology field. To motivate employees to stay and develop within the Group, the Company has planned diversified long-term retention measures, such as public recognition and awards for high-performing employees and veteran employees at our global operations. Every employee awards ceremony in Taiwan and China ends on a serious yet heartwarming note each year. Focusing on employee retention, the Company has built an environment for long-term development. We also identify and track young recruits with potential through our talent management mechanism and pay attention to their development potential within our businesses. Delta also encourages employee participation through the annual Delta Innovation Awards to generate an innovative spirit within the Company.

### Retirement System Practices

Delta processes retirement applications and pension provision standards in accordance with the Labor Standard Act and Labor Pension Act. The Company also files pensions to the Trust Division of the Bank of Taiwan or the employee's personal pension account in accordance with relevant regulations. The Labor Pension Act applies to those who have joined the Company after July 1, 2005 (inclusive). Those who have joined the Company before (excluding) July 1, 2005 can choose a pension system in the Labor Pension Act or Labor Standard Act within 5 years starting in July 1, 2005 based on actual needs. The Labor Standard Act would still apply to employees who have not made a decision within the deadline. Pensions for overseas subsidiaries, branches, and affiliates use the defined benefit plan. Social security funds including pension and healthcare are filed each month in accordance with regulations from local governments.

### Delta Global Employee Engagement Survey

The scope of Delta's Employee Engagement Survey has gradually expanded from Taiwan to China as the Company seeks employees' true opinions in Delta's rapid international expansion. We included employees in the United States, Europe, Northeast Asia, and Southeast Asia in the 2016 survey. Delta organized the first Global Employee Engagement Survey in 2018 and used a renowned external consultancy to provide independent and fair analysis. The global response rate was 59% which was in line with participation rates of large enterprises based on the standards of the consultancy company and lent credibility to the analysis. The scores from the 2018 Delta Global Employee Engagement Survey were consistent with global market standards. In terms of the research, employees across the world expressed approval of the leadership, company ideals, and teamwork. The Global Employee Engagement Survey was closely followed by senior executives who discussed the results of the analysis and explored the causes. They also instructed regional business units to communicate with their employees and implement follow-up solutions to respond to employees' expectations.

#### Follow-up solutions for the Employee Satisfaction Survey

Actions taken after the survey	Explanation
Report the results of the Survey to the CEO	We requested the consultancy company to provide a professional analysis briefing to the CEO to let the management learn about employees' ideas for the Company.
Global communication	We published the results of surveys in different regions and communicated the current state of the Company to employees in a transparent and open manner.
In-depth reports and analyses for regional and business units	The human resources department assisted managers of various regions and business units to conduct in-depth cross-examinations of the report and help supervisors inquire about the advantages and areas that require improvement in the units to facilitate changes. advantages and areas that require improvement in the units to facilitate changes..
Action plan execution and follow up	Based on the instructions from the highest management levels, regional units were required to formulate improvement plans in response to the Survey results and report to the human resources head office and the highest-ranking supervisors.

## Material Topics

# 6.3 Labor Rights and Labor Relations



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

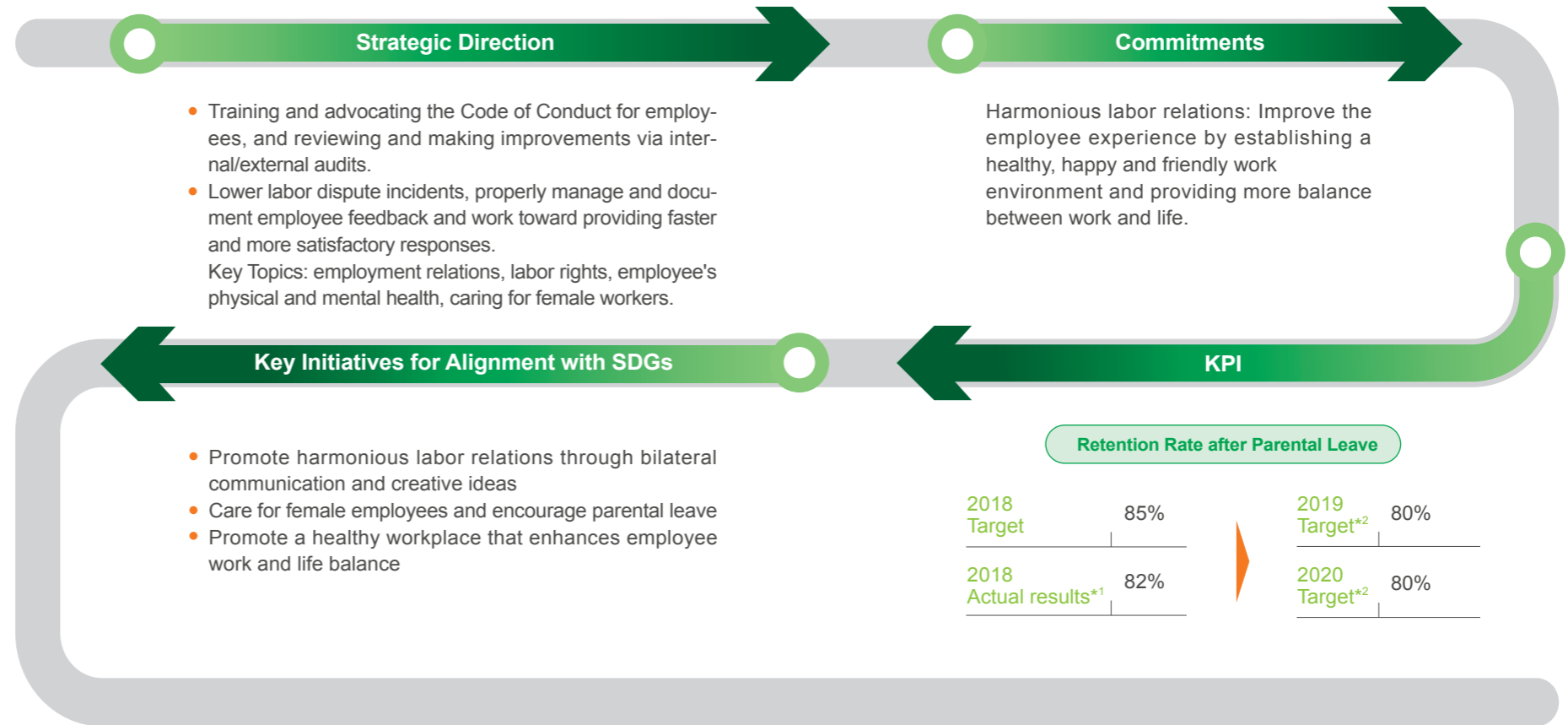
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



\* 1. Childbirth depends on individual conditions and may vary from year to year. Although we did not reach our 2018 objective, we will continuously improve and implement our retention scheme.  
 \* 2. Considering that retention rate after one year of parental leave is affected by several personal factors, we have modified our target slightly for reasonableness.



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Employee Communications and Human Rights Management

Delta is dedicated to the long-term friendly management of labor relations and human rights in all regions across the world. Employee representatives regularly communicate with employers to discuss benefits planning and various employee rights in Taiwan, China, and Thailand. Communication channels include the human resources website, employee feedback mailbox, Sexual Harassment Grievance Committee, face-to-face conversations, hotlines, and labor management meetings. Global coverage for collective bargaining agreements and employees that have joined independent trade unions was 73% in 2018. Besides serving as a communication channel for employee representatives, the labor-management meetings also document relevant discussion topics and monitor their development. For instance, we hosted 20 sessions of the labor-management meetings for our Taiwan manufacturing plants in 2018. Our Employee Welfare Committee for all manufacturing plants and operations also held four meetings. Resolutions have been achieved for all employee benefit proposals. The employee representatives also expressed employees' opinions and views for management and for benefit programs and have come to a consensus with the Company. Delta notifies employees impacted by changes before the material changes are made to the Company's operations. This is in accordance with local legal regulations in each country or collective contracts signed with unions. Besides giving advance notice, the Company also assists employees with relevant support measures, such as helping employees transfer to other departments, referring to external work opportunities or providing information to recruiters or recruitment agencies, and/or providing employees with relevant conditions to assist in applying for government aid.

Delta strives to provide transparent and bilateral communications channels for management and employees, and to create a work environment with high levels of participation. In addition to clear communications channels and a division of labor, the Company also documents and regulates employee complaints and their sources for smooth, diversified channels of communications. For instance, our internal channels dealt with all 166 complaints/reports in Taiwan in 2018.

#### Employee Feedback in Taiwan in 2018 Statistics

Communication Channel	Number of Cases	Number of Processed Cases	Number of Pending Cases
Employee Welfare Committee	144	144	0
Labor-management meeting	11	11	0
Labor-management negotiation	4	4	0
Sexual harassment complaints	4	4	0
Direct complaints	3	3	0
Total	166	166	0



The Delta Digest employee feedback box for the Americas encourages employees to express their creative ideas



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

The Taoyuan Manufacturing Plant of Delta Networks, Inc., an affiliated company of Delta, was penalized by the competent authority in 2018 for violating regulations on the maximum number of working hours per day. No other labor review or audit deficiencies were found. The following table explains the breach and incident

Manufacturing Plant	Date/Unit of Audit	Scope of Breach	Company's Corrective Measures
Taoyuan Manufacturing Plant	September 26, 2018 Office of Labor Inspection, Taoyuan	The duration of overtime exceeded the legal requirement (Paragraph 2 of Article 32 in the Labor Standards Act) Amount of Fine: NTD 50,000 (USD 1,628)	The duration of overtime exceeded the legal requirement (Paragraph 2 of Article 32 in the Labor Standards Act) Amount of Fine: NTD 50,000 (USD 1,628)

## Employee Code of Conduct

Delta has defined a clear Code of Conduct to create better performance and provide better, more comprehensive products while abiding by the law and moral principles to maintain its company assets, rights, and brand while working toward sustainable development. The Code is intended for all directors, managers, and employees. Delta's Taiwan operations have produced e-Learning courses on the 'Employee Code of Conduct' and 'Sexual Harassment Prevention' to disseminate relevant information. These courses are mandatory for new hires starting in 2018. We also use contests and lucky draws to encourage employees to view the courses and we use relaxing and lively content to help promotion. We accumulated a total of 4,671 views at the end of 2018 and we received good reviews. The total amount of viewers grew by almost five-fold. We accumulated 90,442 hours of human rights-related education and training courses in 2018 and provided training to 92,653 individuals (headcount).

### Chapters of the Delta Code of Conduct

1. Dealings with Partners and Third Parties
2. Avoidance of Conflicting Interests
3. Use of Company Resources
4. Protection and Use of Trade Secrets and Confidential Information
5. Compliance with Environmental Protection Rules
6. Business Operation with Integrity
7. Training, Propagating, Discipline and Complaint Channels



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Employee Health Promotion

To encourage employees to devote themselves to work, the Company uses various health management and promotion measures to take care of employees' health. We established a new Health Management Center in 2018 to integrate the government's resources and promote the "three sections and five levels" system for public health. We focus on preventive healthcare that integrates exercise and health examinations to implement related health management plans and promote information exchanges in diverse channels. The Delta Healthcare Center regularly monitors and examines changes in the number of severe illnesses in Taiwan. It also analyzes compensation incidents based on employee health conditions and plans key healthcare activities for the following year. For instance, Delta Taiwan defined its 2018 healthcare theme 'Lung Care for Better Health' based on the healthcare trends of year-end 2017 in which the Company promoted the importance of lung health. Employees can prevent illness through healthy eating, exercise, athletics, and other activities relevant to healthcare. For instance, we provided food materials that promote lung health into the group meal menu, organized Chinese medicine lung health seminars, and promoted exercises that help strengthen cardiopulmonary functions. We hosted a total of 74 rounds of health promotional activities this year which were attended by 11,592 persons (headcount). This is twice the number of participants from the previous year. Delta also plans customized health checkups for different groups each year. We exceed regulatory requirements by providing annual health examinations for all employees and annual health examinations for elderly employees in Taiwan. A total of 432 employees over the age of 50 participated in normal health checkups and 362 persons participated in advanced checkups in Taiwan in 2018 achieving a health checkup participation rate of 80.3% with health checkup expenses of USD 180,775. The Company hires visually-impaired massage therapists to relieve employees of daily work-related stress. The Company uses the opportunity to show our support for the livelihood of visually-impaired individuals.

### Caring for Female Employees and Parental Leave

Delta provides maternal care packages more comprehensive than legal requirements for female employees. We provide childbirth consultation to female employees that are over 3 months pregnant and to nursing mothers with children less than one year old. Doctors undertake risk evaluation and health checkups for mothers and provide safety and healthcare measures. A total of 302 individuals have enjoyed this benefit in Taiwan from 2015 to 2018. The Company works hard to provide more comprehensive maternity projects to create a friendly maternity health workplace. Pregnant employees can enjoy designated parking spots and maternity gift packs, and adjustments of work based on conditions in individual cases. Mothers Healthcare Centers are established at all major Delta facilities throughout the world to help alleviate mental and physical stress from childbirth by sharing healthcare knowledge before and after childbirth. Delta has also arranged a designated production line that takes mental and physical competency during pregnancy into consideration for pregnant front-line workers in Thailand. Pregnant workers also enjoy a more comfortable space and easier access than regular workers. Delta's Thailand Plant worked with the United Nations International Labour Organization (ILO) Pioneer Women in 2018 to jointly organize the "STEM Workforce Training Program" and respond to the impact of Industry 4.0 on the employment of female workers in Thailand. We adopt the United Nations ILO' training system and methodology to improve female workers' participation in all work indicators particularly for career development and work satisfaction.



Thailand Plant worked with the United Nations International Labour Organization (ILO) Pioneer Women in 2018 to jointly organize the "STEM Workforce Training Program"



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

Number of Individuals Receiving Subsidies and Total Subsidies in Taiwan in 2018

Subsidized Items	Number of Individuals	Amount of Subsidy
Childbirth Subsidy	253	NTD 506,000 (USD 16,474)
Wedding Subsidy	194	NTD 582,000 (USD 18,948)
Funeral Subsidy	196	NTD 1,193,000 (USD 38,841)
Emergency Aid	40	NTD 20,000 (USD 651)

Employees Who Applied for Parental Leave in Accordance with Laws, Reinstatement, and Retention in Taiwan Statistics<sup>\*1,2</sup>

Parental Leave Statistics	Male	Female	Subtotal
Number of employees qualified for parental leave in 2018	1,118	312	1,430
Number of employees applying for parental leave in 2018	10	46	56
Number of employees expected to apply for parental leave and reinstatement in 2018 (C)	12	43	55
Number of employees applying for parental leave and reinstatement in 2018 (D)	8	36	44
Number of employees reinstated after parental leave in 2017 (E)	8	30	38
Number of employees working 1 year after reinstatement in 2017 (F)	6	25	31
Return to Work Rate (D/C)	67%	84%	80%
Retention Rate (F/E)	75%	83%	82%

\*1. Employees who applied for maternal leave of more than 56 days and paternity leave from January 1, 2015 to December 31, 2016

\*2. Employees that remain working after one year: Calculate the number of employees reinstated after maternal leave in 2017 and remain working after one year on December 31, 2018.

## Return from Parental Leave and Retention

Delta employees enjoy more paid casual and sick leave than industry averages and legal requirements. This allows employees to take care of their families while contributing their expertise at work. For instance, when family members require vaccinations, suffer from severe illnesses, or other material incidents that require personal attention, employees can apply for our fully-paid 'Family Care Leave' to make necessary arrangements. When employees can't cope with work because of newborn family members, they can take parental leave to care for their infants for up to two years. Afterwards, the Company will contact the principal and plan for his/her return to allow for better work transition so that parents of newborns can successfully transition between family life and the workplace. In 2018, 82% of all employees who took parental leave and returned to work have stayed with the Company for more than one year, and those who have returned have properly adapted to their work.

## Obtain Balance between Work and Life

Delta stresses harmonious employment relations. The Company understands that gentle interactions can alleviate life's pressure as well as enhance interpersonal relations. Delta emphasizes a balance between work and personal life through the "Live Better, Work Smart." slogan. Delta received the "iSports Employer Certification" from the Sports Administration, Ministry of Education in Taiwan in 2018. We were evaluated as a model enterprise for supporting the development of the sports industry and promoting a healthy workplace and brand value. We demonstrate the Company's goal for promoting work and life balance and creating a friendly work environment. We also respond to the government's initiative for encouraging companies to appoint professionals with sports-related expertise to serve as sports instructors to create a healthy and vibrant workplace. We applied for the "employer subsidy for hiring athlete instructor" and received subsidies totaling NTD 300,000 (USD 9,767). Our comprehensive benefits and corporate culture have received recognition from college students and our rankings in the "Top 100 Most Desirable Companies Among the Young Generation" improved significantly from 56<sup>th</sup> in 2017 to 27<sup>th</sup> in 2018.

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

We encourage employees to invite their families to attend all major employee activities at our global operations. Although Delta's sports days, gatherings, trips, charity events, and the annual 'Delta Family Day' events are hosted at different locations for each global operation, these events are always characterized by the same festive atmosphere. The Family Day event in Taiwan in 2018 was particularly innovative and we had more than 2000 family members for the first time. We organized diverse contests between departments, employee performances, and family science events in the wide Taipei Expo Butterfly Hall and surrounding areas.



Family Day in Taiwan in 2018

The employees demonstrated teamwork and full participation sports ethics. Delta also provides an 'Outstanding Academic Scholarship' in China and Thailand to encourage the children of our employees to study. For those who are single, Delta encourages socializing through employee activities and social clubs for employees to seek suitable companions. The Welfare Committee in Taiwan is committed to 'care for employees' and 'Lohas Workplace'. It provides subsidies for weddings, funerals, childbirth, hospitalization, and birthdays as well as domestic and overseas travel, festivities, sports competition, club activities, art and literature lectures, baseball events, and Lohas Day events.



East China Employee Sports Day and Family Day Activity in 2018





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## Benefit Plans Superior to Legal Requirements

We provide insurance and leave policies in Taiwan that are superior to legal requirements as shown in the following table.

### Our Practices Superior to Legal Requirements in Taiwan in 2018

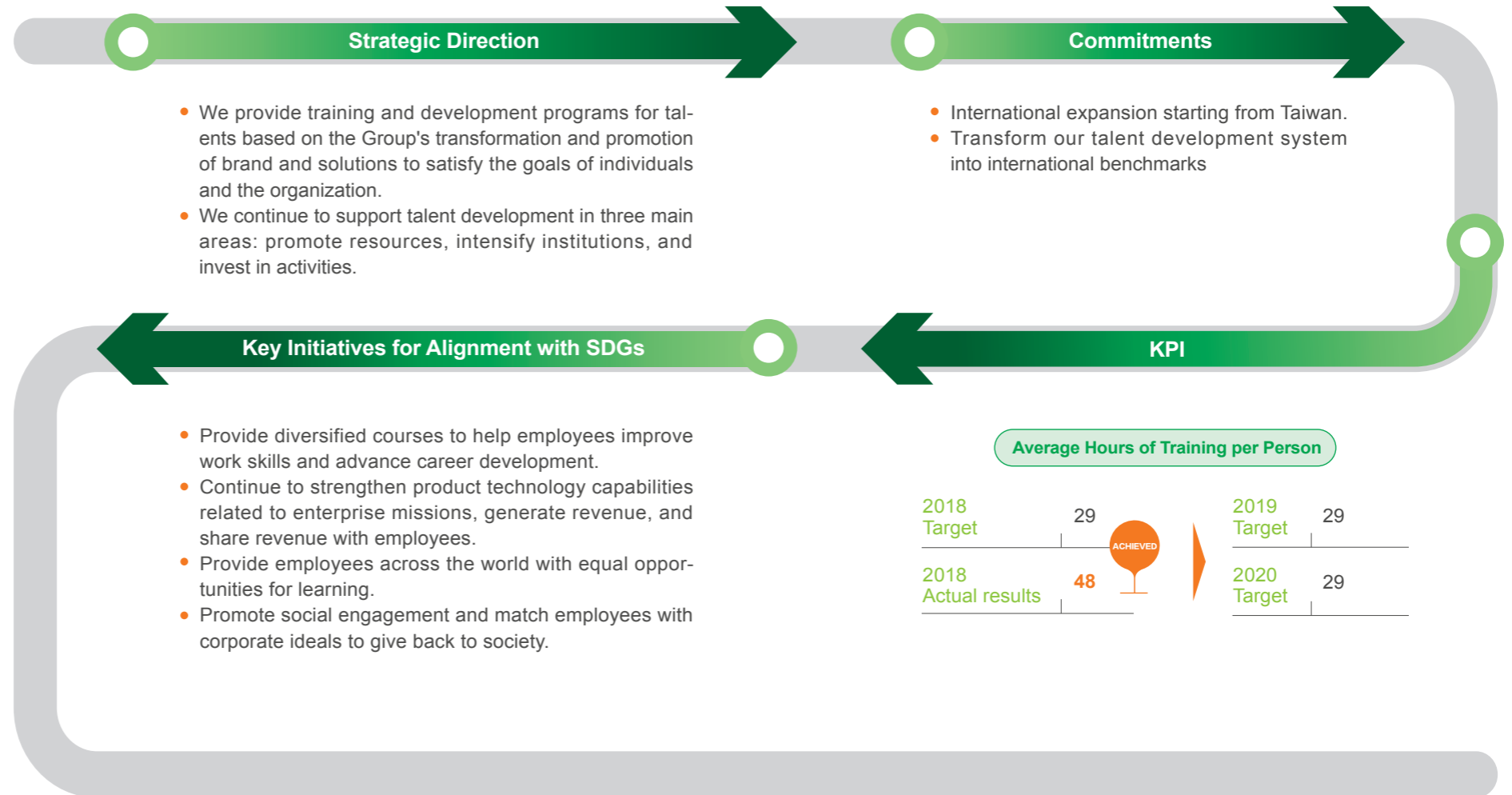
Item	Legal Requirements	Our Practices
Insurance	Labor insurance and national health insurance are applied starting from the first day an employee joins the Company.	Besides filing for labor insurance and national health insurance for our employees in accordance with the law, we also plan a group comprehensive insurance package that includes life insurance, major illness insurance, inpatient medical insurance, and cancer insurance free of charge. We also provide employees with the option to file group comprehensive insurance for their family members (spouse and children) free of charge. We provide up to 1 year of leave from illness, and the Company pays up to 3 months of insurance coverage (labor and health insurance).
Sick Leave	30 days of 50% pay for common sick leave in each year.	For common sick leave included within the 30-day limit, we will continue to pay compensation each year for those in professional and management roles up to the differences after benefit payments from insurance
Casual Leave	14 days each year	For those in professional and management roles and have already used up all compensatory leave and annual leave, the Company will continue to pay for casualty leave (up to 14 days).
Holidays	12 days of national holidays in each year	Besides 12 days of national holidays, the Company also offers an additional 7 days of memorial day holidays. The Company provides 4 days of paid holiday each year as well as NTD 10,000 (USD 326) as a travel subsidy.

## Calling for Employee Social Participation

Delta participates in energy education and charity activities. Delta has spread its green business philosophy to different corners of society through our employees' efforts. Delta encourages its employees and their families to volunteer and participate of their own accord. Delta allows employees to take 'Charity Leave' so that they can perform volunteer work without feeling pressure from the workplace. Besides inviting employees to participate in social welfare activities, the Company also utilizes internal resources from the Employee Welfare Committee to assist socially disadvantaged groups. For example, Delta Taiwan organized a Christmas Day charity event with the social enterprise i-goods for the first time in 2018. We gathered more than 2,300 items from all plants and delivered them to 34 social associations for disadvantaged groups that advocate rights for disadvantaged children, people with disabilities, and elderly people who need care. We hope to bring love to all corners of society that need love and care. The Delta Family Day events also incorporated charity initiatives and we use environmental protection bags made from 100% recycled plastic. We also invite visually impaired groups such as the Blind Orchestra and Taipei School for the Visually Impaired to give musical performances. We arrange services by visually-impaired massage therapists and organized charity fairs to support social welfare through our actions. Our employees in China have voluntarily formed a Caring for Society Club to promote social participation. Volunteers also helped with counseling disadvantaged families to assist in children's mental development. Employee clubs of the East China Plant participated in the "Employee New Year's Gala" organized by CCTV and won prizes in the Employee Performance Contest organized by labor authorities in Wujiang. The Wujiang Plant was also awarded the "Best demo site for promoting the health of the migrating population in China". Our long-standing financial aid programs for disadvantaged groups in China and Thailand encourage high-performing students in remote areas or from disadvantaged families to study. Successful programs include the Chinese Education in Northern Thailand, Hope for Pearl program, and Energy Education Volunteering, which have all shown significant results and conveyed positive energy from Delta employees. More than 14,600 students (headcount) benefited from the energy education promotion program.

## Material Topics

# 6.4 Talent Management and Learning Development



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

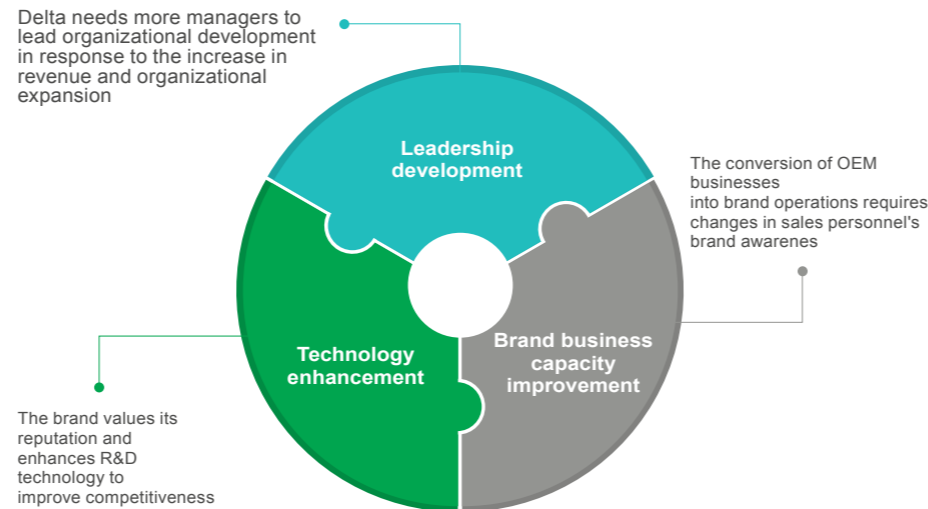
Appendix

## Strategic Talent Development

At Delta, talent training and development are based on corporate strategy and direct improvement of individuals' skills required for work. Senior executives invest high amounts of commitment and resources in the development of key talents and successors. Senior executives form the Leadership Development Committee (LDC) and meet once every six months to develop talent development plans based on the business strategy and enterprise development perspectives.

In terms of professional skills, Delta invites senior executives responsible for research and development to form the Field of Management (FOM) Committee to clearly state the skills required for each position in electronics, machinery, and firmware. Delta uses these skills as the basis for professional training. The Company reviews talent development strategies in strategic meetings each year. Level 1 supervisors review and communicate the talent development plans for the Company. After discussions between the companies, Delta established three major talent strategies centered on leadership, brand, and technology to be implemented across the globe.

### Delta's three key talent development strategies



In terms of leadership development, Delta and a renowned global management consulting company established six main management competencies for Delta and clearly defined the management actions to be demonstrated by managers on all levels. In 2018, the human resources department developed 14 mandatory management courses based on management competencies for global implementation. We aim to let all Delta managers across the world improve their management competencies in a consistent manner based on the Company's requirements. The Taiwan headquarters introduced corporate management courses from Celemi, a renowned Swedish corporate management company, based on the results of competency evaluation data. Participants were invited from different business units to effectively strengthen their strategic perspectives and business sensitivity and improve organization synergy networks. In addition to the introduction of external resources, Delta also invited mid-level to senior executives to serve as lecturers in "New Junior Managers Foundation" courses to strengthen the new managers' knowledge of Delta culture, interviews, and performance feedback as well as share their management experience. The training has received positive feedback since its launch in 2018. The courses shall be offered each year. We plan to expand upwards and prepare courses for new mid-level managers in 2019.

Delta has transitioned toward brand and solution businesses in recent years to implement global marketing strategies and market penetration. Delta seeks to improve product performance and brand businesses to implement mutual support. In terms of professional skills, Delta clearly states the skills required for each position and provides corresponding professional training. In Taiwan, we invite internal experts or professors from reputable institutions to lecture on power and electronics technologies, mechanical design, software and firmware design, and quality management to expose attendees to more professional competencies. The improvement of the attendee's technical skills also enhanced the value of our products. Delta obtained 797 more patents in 2018 compared to the previous year. Delta's Shanghai R&D Center adopted a management trainee program to cultivate outstanding FAE (Field Application Engineer) talents. The achievement rate for training outstanding two-star talents in 2018 increased from 19% to 61% and the Center became the training center for FAE personnel in China.



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

For the transformation of sales personnel's skills, Delta planned a series of marketing, business, and contract courses to improve brand performance. The Delta brand's revenue grew each year and the brand value has also reached record highs each year, reaching 266 MUSD in 2018. Delta will focus on brand courses and make brand business courses more extensive for promotion across the world. Delta's talent strategy has successfully helped the transformation of the Company and helped us win the Silver Medal in Talent Quality-management System (TTQS) from the Workforce Development Agency, Ministry of Labor in 2017 and the National Talent Development Award from the Ministry of Labor in 2018. We have become a benchmark in the industry.



Delta won the 2018 National Talent Development Award of the Ministry of Labor in 2018 and the talent development system received high acclaim.

Comparison of the Execution of the Talent Development Program in Different Years in Taiwan (by headcount)

Strategy	2017	2018	Growth
Leadership Development	945	1,454	54%
Technology Enhancement	2,324	3,539	52%
Brand capacity improvement	514	870	69%

### Performance Evaluation and Feedback

Delta's performance management system integrates organization goals with individuals and talent development. Employees fill out their personal annual targets in the performance management system each year. Their direct supervisors confirm the connection between the targets set by their subordinates and the targets of the unit. In addition, in 2018, Delta successfully adopted a real-time performance feedback system that differs from the downward and non-instantaneous evaluation system. The supervisor and the evaluated personnel can use the system to invite employees with more frequent interactions to provide evaluation or recommendations. The evaluator can choose to provide an evaluation openly or anonymously and the evaluated personnel can receive feedback from supervisors and other colleagues instantaneously so that they can complete real-time, transparent, and diverse performance feedback.

### Global Employee Training Input and Outcome

Delta's senior executives provide high levels of support and commitment for talent development in terms of resources, system, and activities.

In terms of resources, Delta's global education and training expenditures in 2018 reached USD 3,373,150 which was a marginal decline compared to previous years. The decline was attributed to Delta's pursuit in recent years to digitalize training courses. This is in line with the automation adopted for Delta Smart Manufacturing to reduce the training requirements for direct labor. However, training hours for indirect labor increased by 125% from the previous year and Delta's R&D expenditures for technology advancement continued to increase. It showed that Delta's investment in talent development and organizational strategies has remained relatively consistent.

In terms of the system, the highest management levels and level one executives have formed the Leadership Development Committee to periodically review and establish talent development strategies. We use the annual strategy meetings to review the consistency between corporate and talent development strategies. Senior executives also serve as internal lecturers. In 2018, the CEO Mr. Ping Cheng organized a two-day seminar at the Europe Headquarters to share his management experience.

In terms of activities for strategy and culture communication, Delta adopted a system similar to TED Talk and invited management and senior executives to Delta



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

Talk to share the Company's strategies and goals. We let employees know how they can make contributions and use e-Learning to deliver results across the world. In 2018, the CEO Mr. Ping Cheng and Chief Operating Officer Mr. Simon Chang communicated corporate culture and strategy to employees across the world, and Chief Brand Officer Ms. Shan-Shan Guo also shared her experience and outlook on Delta's transformation of its brand business. They brought diversity and brand-new elements to Delta Talk. Delta Talk inspired Delta employees across the world. Delta Thailand adopted the model from Headquarters in 2018 and gradually expanded to allow employees to serve as lecturers. It organized five sessions of employee speeches that encompassed management reforms, business procedures, and ecological benefits. More than 3,000 people cast their votes on Facebook and the events received wide acclaim from employees. In 2018, Delta's global training hours totaled 4,068,490 hours, and 48 hours per employee.\*

### 2018 Delta Global Hours of Training

	By Gender	Average Hour by Gender	DL	IDL
	2,307,833	50	1,632,660	675,173
	1,760,657	46	1,512,561	248,096
Total Hours	4,068,490	—	3,145,221	923,269
Average	—	48 hr	54 hr	35 hr

\* The training management system was not completely introduced to the Americas and the Company could not identify the number of hours logged by different employees. Therefore, their number of hours were not included in the calculation of total hours. The Americas were also excluded for the calculation for the number of hours per employee

### Key Talent Leadership Development and Employee Career Development

Delta provides full support and focus for the development of key talents. Delta established the Leadership Development Committee to continuously identify talents and inventory their echelon succession. The Committee focuses on the Company's business strategy and provides assistance in development activities to increase

talent preparedness. Delta's 2018 Global Leadership Workshop was successfully held in the Wujiang Training Base in August. After the talent inventory meeting, the Workshop served as an important event for key development for the year. We continued the success of the first Global Leadership Workshop organized last year and shifted the focus to the Company's strategy for transformation. We focused on solution businesses and conducted activities on New Business Development (NBD) and synergy between business units and regions. We invited the CEO Ping Cheng, Chief Operating Officer Mr. Simon Chang, and Professor Chi-Jen Li of the College of Management, National Taiwan University to serve as high-level instructors at the Workshop. They led attendees in in-depth discussions on case studies for key issues in the strategic transformation.



The 2018 Global Leadership Workshop focused on solution businesses and more than 50 mid-level to senior executives from across the world participated in the Workshop.



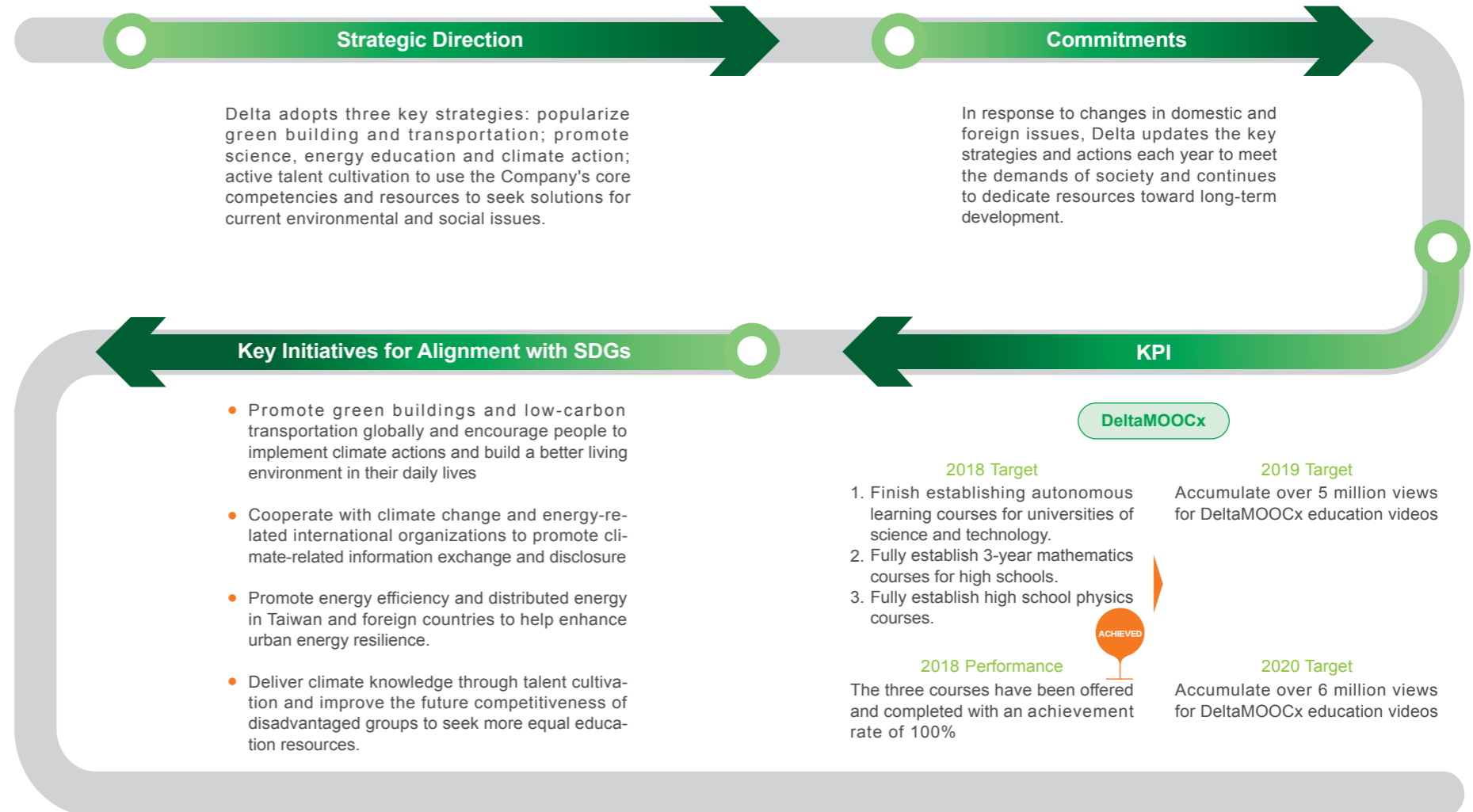
The course contents helped bring everyone closer in discussions and studies.

### Transparent Real-Time Delta Management System

To improve the Company's digital learning environment and promote internal communication, Delta promoted the e-Learning platform across the world and recorded digital courses for internal development. Delta also used the digital learning platform "Academy" with video conferences for online courses and online course database to encourage users to learn in their spare time and to improve the efficiency of the production of digital courses. Delta also created an internal Delta Management System (DMS) for data storage in the traditional sense and to integrate three major functions: smart search, document management, and expert communities. We also use smart search and "question-response-incentive" functions to connect internal employees, promote inter-department information and interpersonal exchanges, and optimize internal communication channels.

## Material Topics

# 6.5 Social Participation



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

In addition to providing quality products and services, Delta also participates in various activities that benefit society. We have achieved great results in popularizing green building and transportation, promoting science, energy education and climate action, and cultivating talent. Delta invested approximately USD 9.53 million in social engagement in 2018 and talent cultivation accounted for the largest share. Followed by expenditures for popularizing green building and transportation and for promoting science, energy education and climate action. Expenditures in the three categories accounted for 94% of the total and the remaining items consisted of charitable donations and management costs.

Delta also supports associations that focus on climate change, sustainability, business development, and talent cultivation. Our total global expenditures in the associations in 2018 amounted to USD 149,000. We are members of the Center for Corporate Sustainability, Dutch Green Building Council (DGBC), China Renewable Energy Society, Chinese Association of Automation, and Taiwan Optoelectronic Semiconductor Industry Association (TOSIA).

## 6.5.1 Popularizing Green Building and Transportation Concepts

### Microclimate Data Applications in Green Building Design

Understanding the importance of precise weather information to conserve energy in buildings, Delta collaborated with the Central Weather Bureau, MOTC and Taiwan Architecture & Building Center (TABC). We commissioned Professor Tai-Jan George Chen and his research team from Atmospheric Sciences, NTU to develop the 'Green BIM Microclimate Database.' Architects have free access to the designated website. We completed 26 measurement stations in main metropolitan areas in Taiwan in 2018. The energy consumption simulation software uses past weather data in the Building Information Modeling (BIM). This allows architects to consider weather data including sunshine, wind speed, temperature, humidity, and rainfall for the building site during design, and reduce future energy consumption for the building by increasing ventilation, natural lighting, surrounding green belt, and other green building designs.



Green BIM Building Microclimate Data Platform  
<http://www.weatherservice.org.tw/>

### Delta's Building Carbon Footprint Evaluation System Adopted by Authorities

Delta collaborated with the Low Carbon Building Association (LCBA) to promote the Taiwan Building Carbon Footprint Product Category Rule (CFP-PCR) system. Currently city governments, including New Taipei City and Taichung, have adopted the system as a necessary criteria when constructing buildings for urban renewal or for low carbon demonstration sites. Twenty buildings across Taiwan have passed the carbon footprint evaluation including the buildings in the new Taichung World Flora Exposition. In 2018, the LCBA offered three types of carbon footprint expert training courses for buildings, landscape, and internal decor to educate the general public on the differences between the types of systems and the application procedures. Hopefully this will encourage people to choose low carbon building materials for landscape and decor for residences and offices. We have provided building carbon footprint evaluator training to more than 300 participants in programs in Northern, Central, and Southern Taiwan.



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### New "Residential Green Decoration" Course for Green-Collar Architects Training Workshops

The Delta Electronics Foundation and Taiwan Green Collar Association have jointly promoted the "Green Collar Architects Training Workshops" since 2009. In response to people's strong demand for energy conservation transformation in houses, we offered the first "Residential Green Decoration" course. This course teaches people how to select green building materials, plan, design, construct, and conduct acceptance inspections so they can succeed in their first residential transformation. At the end of 2018, we provided 18 rounds of the Green Collar Architect introductory course, designer training course, and advanced topic courses and provided training to 447 participants.



Visits by students of the Green Collar Architects Training Workshop

### International Climate Think Tank Research Builds Basis for Climate Issues

In 2018, Delta collaborated with the American Council for an Energy-Efficient Economy (ACEEE) for the first time and produced the Local High-Impact Energy Efficiency Strategies Toolkit. This toolkit shows how American cities establish building energy conservation and transportation data disclosure policies as well as the detailed benefits for policies, resources for execution, and policy design elements. We sought to expand the government's imagination for policies, promote dialogue between different stakeholders, and develop guidelines for establishing an energy efficiency governance framework suitable for local governments in Taiwan.

### Donated Green Buildings

Since 2009, Delta has donated five certified green buildings: the Delta Building and the Y. S. Sun Green Building Research Center at National Cheng Kung University (NCKU), the Delta Building at National Tsing Hua University (NTHU), the Namasia Ming Chuan Elementary School, and the Kuo-Ting Optoelectronic Building at National Central University (NCU). In 2018, Delta Group's five donated green buildings reduced, in total, 1.64 million kWh of electricity and 869 ton CO<sub>2</sub>e emissions. Energy conservation efforts for The Delta Building at National Tsing Hua University were affected as power consumption for air-conditioning increased in 2017. We plan to introduce Delta Energy Management Systems in the future to strengthen the management of the building's energy consumption.

#### Energy Saving Benefits of Delta's Donated Green Buildings

Delta's Donated Green Buildings	Green Building Certification	Energy Saving Performance <sup>*4</sup>
The Delta Building at National Cheng Kung University (NCKU) (Inaugurated in 2009)	EEWH (School Category)	<ul style="list-style-type: none"> <li>2018 EUI: 94.66</li> <li>43% energy savings<sup>*1</sup></li> </ul>
The Y. S. Sun Green Building Research Center at National Cheng Kung University (NCKU) (Inaugurated in 2011)	LEED Platinum Grade, EEWH Diamond Grade	<ul style="list-style-type: none"> <li>2018 EUI: 29.53</li> <li>82% energy savings<sup>*1</sup></li> </ul>
The Delta Building at National Tsing Hua University (NTHU) (Inaugurated in 2011)	EEWH Bronze Grade	<ul style="list-style-type: none"> <li>2018 EUI: 83.56</li> <li>-3% energy savings<sup>*2</sup></li> </ul>
The Namasia Ming Chuan Elementary School (Inaugurated in 2012)	EEWH Diamond Grade	<ul style="list-style-type: none"> <li>2018 EUI: 1.03</li> <li>93% energy savings<sup>*3</sup></li> </ul>
The Kuo-Ting Optoelectronics Building at National Central University (NCU) (Inaugurated in 2011)	EEWH Bronze Grade	<ul style="list-style-type: none"> <li>2018 EUI: 24.87</li> <li>69% energy savings<sup>*2</sup></li> </ul>

\*1. <Bureau of Energy, Ministry of Economic Affairs, R.O.C (Taiwan) > 2017 Energy Audit Annual Report for Non-Productive Industries (page 24) (published in December 2017): 166 kWh/m<sup>2</sup>/year (office building excluding parking lot)

\*2. <Bureau of Energy, Ministry of Economic Affairs, R.O.C (Taiwan)> 2017 Energy Audit Annual Report for Non-Productive Industries (page 24) (published in December 2017): 81 kWh/m<sup>2</sup>/year (schools - regular universities excluding indoor parking lot area)

\*3. <Ministry of Economic Affairs, Ministry of Education, National Development Council, R.O.C (Taiwan) > Energy Conservation Action Plan for Government Agencies and Schools (page 19) (revision published in December 2017): 15 kWh/m<sup>2</sup>/year (elementary school group 2) ; Annual energy usage excludes the solar power generation for self-use

\*4. Delta calculates EUI of each green building in line with the methodologies from the literatures cited on page p.111. Accordingly, the following are excluded from EUI calculation: lab electricity (The Delta Building at NTHU and The Kuo-Ting Optoelectronics Building at NCU) and indoor parking area (for applicable buildings).



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 6.5.2 Promoting Science, Energy Education and Climate Action

### Diverse Volunteer Services and Inclusion of Electric Vehicles in Education Materials

Delta continued to provide a variety of volunteer activities in 2018, including Energy Education Volunteers, volunteers at the 'Physics World' section of the National Museum of Natural Science, and guided tours through our manufacturing plants and donated green buildings. In terms of energy education, the elementary schools in our collaboration projects now include those in Taichung, Taoyuan, Taipei, Bangkok, Nan, Shanghai, Wujiang, Chengdu, Wuhu, Zhangzhou, Dongguan and Beijing as well as schools attended by family members of our employees. In response to global electric vehicle development trends, in 2018, Delta launched electric vehicle education programs for inclusion in energy education materials.

The programs meet standards for environmental education designs and incorporate air pollution issues for particular concern to international stakeholders. We teach students about the importance of air quality and explore the relationship between air pollution and daily transportation vehicles. The education materials are also connected to science education. They incorporate interesting electromagnetic education instruments and basic principles of electromagnetic brakes and power regeneration systems to provide hands-on experience and to show the differences between fuel vehicles and electric vehicles in terms of operations, structure, and carbon emissions. We had 383 energy volunteers (headcount) in 2018 that served for 8,698 hours and benefited 10,803 students (headcount).



Actual operation of electromagnetic education instruments



Students learn by thinking during courses



Formulate low-carbon transportation solutions

#### Energy volunteers share their experience

I have served as an energy volunteer about ten times. My daughter was in fourth grade and her teacher registered for Delta's Energy Education Course. That provided me with the opportunity to attend classes at my daughter's school. The children's surprise when they saw me appear in the blue volunteer vest with the education materials was very amusing. A lot of the children asked my daughter why her father had come to school. One day, after the end of the courses, the school teacher commented that the class had previously underperformed in science classes but the children began to want to learn about science after the courses. This not only improved their grades but also let my daughter learn more about her father. Being a volunteer was so much fun!

Kuo-Lung Peng, Plant Facility, Taipei



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### Wondering in the Solar System: Using Creativity to Promote Science

The Delta Electronics Foundation and the National Museum of Natural Science worked together on the "Wondering in the Solar System" exhibition to integrate education and contemporary creative projection displays. The display employed Delta's 8K projection technology to show high-resolution images of the sun and celestial bodies provided by the National Aeronautics and Space Administration (NASA). The use of art to portray science provided the people with a brand-new experience of astronomical achievements. The images projected in the special exhibition were approximately 16 times sharper than the full HD televisions we have at home and it showed detailed activities on the surface of the sun. It expanded the people's imagination and knowledge of the star we know as "the sun". Delta also invited more than 100 employees and family members to view the exhibition to allow more people in the Company to learn about science education and art. A total of 49,703 people (headcount) visited the exhibition from July 2018 to February 2019.



The Founder Mr. Bruce Cheng visited the Wondering in the Solar System special exhibition

### Participation in COP24 to Promote Distributed Energy with World-Class Think Tanks

Delta has always paid close attention to climate change and we have participated in the United Nations Climate Change Conference for 12 consecutive years. At COP24 in Poland in 2018, Delta organized and planned peripheral meetings for the UN official negotiations as a technology provider along with world-class think tanks and opinion leaders such as the C40 Cities Climate Leadership Group, U.S. Green Building Council, American Council for an Energy-Efficient Economy, and Renewable Energy Institute. We explored the role of distributed energy in the transfor-

mation of urban energy and the improvement of energy resilience. In addition, Delta demonstrated the benefits of frequency regulation and peak-shaving made possible by distributed energy to portray Delta's energy storage system, building energy conservation, and V2G/V2H electric vehicle recharging applications. These technologies help cities across the world strengthen energy resilience to respond to severe climate disasters. Delta's participation in COP24 was reported by IISD Reporting Services, a think tank and partner media of COP24.



Delta's CBO uses actual case studies to portray how distributed energy technology enhances energy resilience



Delta's Senior Vice President and ICTBG General Manager (far left) and the Chief Brand Officer (far right) took a photo with COP24 President Michal Kurtyka



Delta Booth Showcase Educational Lego to Build an Urban Blueprint for Distributed Energy



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## First-Hand Climate Data in Media Salon Facilitates High-Quality Environmental Reports

To cultivate the best climate and energy reports and deliver the latest knowledge on the world's climate, Delta organized three "media salons" in 2018 to discuss "How Taiwan Should Respond to the Arrival of Electric Vehicles", the "Special Report on Global Warming of 1.5°C", and "New Sustainability Issues at COP24". We invited domestic authoritative experts and lecturers to the events to discuss the issues, and we hosted more than 150 members of the media, research community, and opinion leaders in the private sector. To provide Taiwanese society with the latest climate data and scientific evidence, Delta gained access to closed-door meetings

at the Intergovernmental Panel on Climate Change (IPCC) and connected a live broadcast of the IPCC international press conference for the Special Report on Global Warming of 1.5°C. According to the report, if the temperature increase is to be controlled within 1.5°C, the global greenhouse gas emissions in 2030 must be reduced by 40-60% from levels in 2010. The responsibilities of the transportation sector are the most critical and the proportion of low-carbon energy use must increase from 5% in 2020 to 35-65%.



Chief Engineer of General Motors' electric vehicle team and Professor of Mechanical Engineering of National Taiwan University Wen-Hsiang Chiu explained international electric vehicle development trends to the audience



Delta attended the IPCC closed-door meeting and connected to the live broadcast of the international press conference



Delta organized a seminar after COP24 and invited the International Council for Local Environmental Initiatives (ICLEI) and Green Citizens' Action Alliance to share their experience in local energy conservation governance



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### 6.5.3 Talent Cultivation

The DeltaMOOCx online learning platform focuses on providing high-quality courses for vocational education



DeltaMOOCx online learning platform



2018 Social Education Public Service Group Award, Ministry of Education



Workshop for observers and instructors for the DeltaMOOCx platform's promotion and quality-oriented courses

The DeltaMOOCx online learning platform was specially designed by the Delta Electronics Foundation for regular high schools, engineering and natural science high schools, as well as technical universities. Its fundamental science course design is geared towards a high school curriculum. The Ministry of Education's K-12 Education Administration recommended the best centers and teachers, and the National Academy for Education Research reviewed textbook content. The platform serves the public interest and is offered free of charge.

Different from Taiwan's other learning platforms, DeltaMOOCx chose initially to focus on vocational education as its development core. The platform offers science courses as well teaching industry trends combined with industrial automation courses. This gives students a stable knowledge foundation that is directly beneficial to their higher education. The platform also extends to high school, improving their foundation for sciences, including math, physics, chemistry, biology, and electronics.

Since DeltaMOOCx began in March of 2015, it has reached 146 schools across the country, of which there are 53 high schools and colleges that have viewed the course materials recordings. At the end of 2018, 41,593 people had registered on the platform which provided 4,749 educational videos with views exceeding 4.26 million (including YouTube views). The number of views in 2018 alone exceeded the total number of views in the past.

DeltaMOOCx website: <http://deltamoox.net/>

### The Delta Cup Advanced Automation Contest

Delta has organized the Delta Cup Advanced Automation Contest for five consecutive years to promote technology and market the Delta brand. A total of 164 teams formed by students from Taiwan, India, Thailand, Vietnam, and China signed up for the contest and 74 teams advanced to the finals. They designed different applications through their creativity based on Delta's automation equipment. We let participating students learn about keys in design and train them to consider product layout from a systemic perspective. In addition to rich prize money incentives for students, students that received first prize obtained qualifications for interviews and may work in related units in Delta after they graduate.

### Long-Term Cultivation of Diverse Talents

Delta has long worked with external partners for joint talent cultivation through projects, scholarships, and awards including the "Hope of Pearl Program" and "Chinese Education in Northern Thailand" which encourage overseas Chinese students to study, the "Delta Environmental Scholarship" which encourages youths who seek a future career in environmental protection to study abroad, as well as the "Delta Corporate Environmental Ethics Grant", "Delta Environmental Law and Education Promotion Program", "Delta Power Electronics Science and Education Development Program", and "Delta Scholar Program" which support or reward outstanding scholars to promote long-term development in environmental protection, environmental law, and electronics.



Talent cultivation projects and incentives

Project (including cooperation or joint initiatives)	Purpose	Recipients	2018 investment	Cumulative data (end of 2018)
Hope for Pearl Program	Encourage overseas Chinese students in their studies	High-performing senior high school students from poor families in China	130 Delta-sponsored students in 3 high schools	460 students in 13 classes
Chinese Education in Northern Thailand	Encourage overseas Chinese students in their studies	National Army descendants in Northern Thailand	Scholarships were awarded to 5 students in 2018 totaling NTD 300,000 (USD 9,767)	More than 4000 students have received scholarships
Delta Environmental Scholarship	Nurture international sustainability talents	Young leaders who seek a future career in environmental protection and pursue advanced degrees abroad	7 winners with expertise in sustainable cities, forest conservation, and human rights	109 individuals so far
Delta Corporate Environmental Ethics Grant	Solution providers for sustainable development	Outstanding teachers in related disciplines in college	Two winners with expertise in international green supply chains and glass recycling forecast big data system	14 individuals so far
Delta Environmental Law and Education Promotion Program	Promotion of the development of environmental resource and energy disciplines to cultivate environmental law talents and promote interdisciplinary exchanges	8 key universities including Tsing Hua and Peking University	41 individuals including environmental law scholars and thesis prize awards	We provided grants to 5 Delta Environmental Law Scholars, 14 Delta Environmental Law Young Scholars, 24 paper publications, and 261 thesis publications
Delta Power Electronics Science and Education Development Program / Delta Scholar Program	Promote power electronics and power transmission studies and talent cultivation	10 key universities in China including Tsing Hua University	Sponsorship of 11 innovative research projects, scholarships for 59 outstanding graduate students, 1 Delta Greentech Scholar, and 2 Delta Greentech Young Scholars	We have provided grants to 260 innovative research projects, 41 outstanding science research projects, and 1,169 scholarship grants; evaluated and rewarded 29 Delta Greentech Scholars and 16 Delta Greentech Young Scholars; sponsored 20 Delta Visiting Scholars

# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

**Low Carbon Life Blog (since 2007):  
High-Quality Climate Media Platform with  
4.5 Million Views in 11 Years**

The Delta Electronics Foundation has started a 'Low Carbon Life Blog' dedicated to the long-term promotion of environmental ideas. Articles on the Blog in 2018 focused on low-carbon transportation. The Foundation also worked on projects with The News Lens, Taiwan Environmental Information Association, Social Enterprise Insights, and other media platforms.

Low Carbon Life Blog <https://lowestc.blogspot.com/>

**IC Broadcasting - Climate Battle in Taiwan (since 2010):  
Systematic Tracking of Climate Issues:  
Information Updates for Society**

The Delta Electronics Foundation's long-term collaboration with IC Broadcasting in Hsinchu Science Park has produced more than 450 episodes of the broadcast show "Climate Battle in Taiwan". To expand the audience in 2018, IC Broadcasting added new channels such as Podcasts to increase the impact of the show. The groups interviewed by the Foundation were more diverse, and more young people and green energy entrepreneurs were interviewed. They have brought about change to the environment.

**Sponsorship for the Tseng Hsu-Pai Journalism Award for  
setting up the "Delta Energy and Climate Special Award"  
(since 2013)**

Four works received recognition in the "Delta Energy and Climate Special Award" of the Tseng Hsu-Pai Journalism Award in 2018.

## 6.6 General Issues

### 6.6.1 Occupational Safety and Health

#### Occupational Safety and Health Management System

Providing employees with a safe and healthy workplace is one of Delta's most fundamental obligations as a corporate citizen. Delta's major manufacturing plants in Taiwan, China, and Thailand received the OHSAS 18001 certification,

#### Key discussions of Delta's regional Safety and Health Management Committees in 2018

	Taiwan	China	Thailand
Key Discussion Topics	<ol style="list-style-type: none"> <li>1. Safety evaluations and co-signatures for machinery and equipment purchase requests.</li> <li>2. Safety management of laboratories and high-risk areas.</li> <li>3. Traffic safety.</li> </ol>	<ol style="list-style-type: none"> <li>1. Machinery and equipment safety measures and incident improvements.</li> <li>2. Share cases for safety incidents and prevention safety.</li> <li>3. Increase employees' safety awareness</li> </ol>	<ol style="list-style-type: none"> <li>1. Safety of intelligent/automated machinery and equipment Workplace</li> <li>2. monitoring Health examinations</li> </ol>
Percentage of Total Employees	48%	No applicable requirements	65%
Supplementary Description	Number of employee representatives: 80 people Number of committee members: 166 people	Number of committee members: 231 people	Number of employee representatives: 33 people Number of committee members: 51 people

while Delta's Taoyuan and Tainan factories simultaneously received the CNS 15506 certification and obtained the TOSHMS certification. Delta has established industrial safety departments in production-oriented plants in China and Thailand which report directly to the highest-ranking local supervisor. In R&D and administration-oriented units in Taiwan, an occupational safety and health management department reports directly to the Chief Executive Officer. Delta established the Safety and Health Committee to take charge of reviews, coordination, and recommendations for safety and health management items. Its management units are responsible for planning, implementation, and inspections of safety and health management tasks in the plants.

#### Risk Management and Disaster Prevention

To prevent occupational hazards, we continue to strengthen engineering management, occupational management, and other preventive mechanisms, and we implement pre-purchase safety evaluations and increase safety measures for mechanical equipment. We also select low-hazard chemicals to replace high-hazard chemicals and adopt source control measures to ensure personnel and plant safety. We implement regular hazard identification and risk assessment for work procedures and control unacceptable risks. Applications shall be filed for operations with higher risks and levels of hazards, and such operations can only be carried out with the approval of related units. To ensure safe operations for power equipment and facilities, our manufacturing plants regularly utilize an Infrared Thermal Imaging Camera to undertake non-blackout inspections for early detection of any abnormalities.

#### Occupational Health and Safety Assessment

The plants shall conduct automatic inspections and self-inspections in accordance with government regulations and the Company's operation standards to ensure the safety of employees and plants and to prevent injury to personnel and loss of property. Safety and health management department personnel carry out routine occupational safety assessments and inspections, and each department promotes inter-industry health and safety inspection activities. Inspectors include safety and health management department employees, factory work environment safety personnel, and departmental work environment safety promotion employees. Through the observational learning of cross-industry inter-inspector activities, factory personnel safety and health management exchanges and interaction were improved as were manufacturing plant audits. Certain main production plants shall



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

include inspection results in the safety and health evaluation activity. The units with the most improvement shall receive commendations and bonuses as well as rewards for the implementation personnel to encourage improvements in how employees practice safety and health management in their work. Taiwan Headquarters carries out annual safety inspections of its major Chinese manufacturing plants and requires departments that have had incidents to conduct root cause analyses and improvements. An inspector then carries out follow-up inspections to check on the results of those improvements.

### Workplace Monitoring

Our respective plants, pursuant to practical operational hazardous situations and regulatory requirements, regularly appoint monitoring institutions to implement workplace monitoring to control hazardous factors in the workplace. Delta uses the results of these tests to carry out onsite improvements, thereby lowering the occurrence of workplace illnesses. The main chemical hazards in our primary Taiwan and China manufacturing plants are organic solvents. We focus our monitoring on tin oxide, isopropanol, xylene, carbon dioxide, and others. Our physical monitoring focuses on noise, light, dust, and others. A few personnel in certain plant areas carry out high-temperature and radioactive operations. We work to prevent employee workplace exposure to hazardous elements and their causes according to local statutory regulations. As such, operators that handle hazardous materials undergo special health checks and the results of those health check ratings are used to improve our healthcare management.

### Mental and Physical Health Promotions for Employees

Delta seeks to foster positive attitude for employees and effectively resolve employees' difficulties at work and in life. We established an employee psychological assistance system to pay attention to employees' mental health and improve employees' happiness factors. We assign experienced and professional psychiatrist teams to establish three levels of preventive measures for protecting mental health. We provide employees with telephone consultation, letters, mail, and face-to-face consultation. A total of 89 consulting sessions were provided in Taiwan in 2018 and we organized 11 courses and seminars in Employee Assistance Programs (EAPs).

### Training and Communication

To improve employee work safety and health knowledge, Delta held safety and health education training, sent emails, and utilized bulletin boards to cultivate employees' work safety awareness in the work environment and train them in the necessary safety and health knowledge and concepts for disaster prevention. In 2018, Delta Taiwan, China, and Thailand, as well as Delta's Group subsidiary Cyntec, all implemented workplace safety and health training, emergency response drills, fire drills, and related internal (external) on-the-job training for new and current employees. We recorded a total of 286,000 participants who registered with more than 1.187 million hours of training. The plants also organized regular safety and health Q&A, hazard forecasts, and occupational safety month events. They use the Company's internal website or mailbox to deliver occupational safety and health information to employees and they collect suggestions and feedback from employees to enhance a culture of safety.

### Contractor Management Performance

We established the safety, health, and environmental protection regulations for contractors to enhance safety and management for contractors in plants. We require contractors to abide by occupational health and safety laws and Delta's regulations. Only qualified individuals may enter the plants for operations. Delta's main production sites had no occupational hazards involving deaths of contractors in 2018. There were also no contractors that suffered disabling injuries or occupational diseases as a result of operations in the plants.

### Occupational Safety and Health Management Performance

The disabling frequency rate (FR) in Delta's main production sites in Taiwan, China, and Thailand in 2018 was 0.65; the disabling severity rate (SR) was 8. The disabling injuries consisted mainly of mechanical injuries caused by coiling or clamping mechanisms. Men made up 71% of those injured and female 29%. To prevent such hazards, plants added protective shields or photoelectric sensors or isolated dangerous areas and included them as inspection items. No personnel were killed by occupational hazards in 2018. With regard to internal targets, the two main production plants in China established disabling frequency rates and disabling severity rates as management goals. The safety and health management



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

goals for the two major production plants in 2018 were FR <0.2 (inclusive) and SR < 4 (inclusive). With regard to actual implementation results, the South China Plant reached its disabling severity rate target (FR=0.26,SR=3) while the East China Plant failed to reach its targets (FR=0.31,SR=9). For parts that did not reach intended targets, the plants shall continue to enhance various safety and health management tasks. In 2018, the Tainan branch failed to lock a power switch and to place a label to prohibit power supply when dismantling electrical equipment.

It was a violation of the Occupational Safety and Health Act and the branch was fined USD 1,954 by the Southern Taiwan Science Park Administration of the Ministry of Science and Technology. The plant added measures for placing the locks and labeling and added operating regulations. It also regularly follows up on the implementation status of the control measures to ensure the operational safety of employees.

Disabling frequency rate and disabling severity rate in 2018\*

Region	Disabling Frequency Rate(F.R.)			Disabling Severity Rate(S.R.)			Occupational Disease Rate (ODR)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Taiwan	0.40	0.57	0.45	4	1	3	0.00	0.00	0.00
China	0.41	0.11	0.28	8	3	6	0.00	0.00	0.00
Thailand	5.15	1.95	2.48	24	10	13	0.00	0.00	0.00
Cyntec (Including Cyntec China)	1.55	0.76	1.24	26	9	19	0.00	0.00	0.00
Total	0.73	0.55	0.65	11	5	8	0.00	0.00	0.00

\*Statistical count excludes traffic accidents outside production plants

Related awards in 2018:

- "Safety and Health Charity Award" from the Department of Labor, Taoyuan City Government
- Taoyuan Plant was commended by the Occupational Safety and Health Administration, Ministry of Labor which stated "Delta's registered safety and health core family companies have actively assisted in promoting improvement measures for SME workplace and made significant contributions to public welfare activities for occupation safety"
- Wuhu Plant was awarded the 'Safety Production Standard - Rank Two Enterprise' from Wuhu Safe Production Supervision Bureau





## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

CHAPTER /

7

### Appendix

- 7.1 Screening Criteria of Reporting Boundaries
- 7.2 Environmental Data
- 7.3 Index of GRI Standards Indicators
- 7.4 Summary of Information Assured (ISAE3000)
- 7.5 External Assurance Statement and Report



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

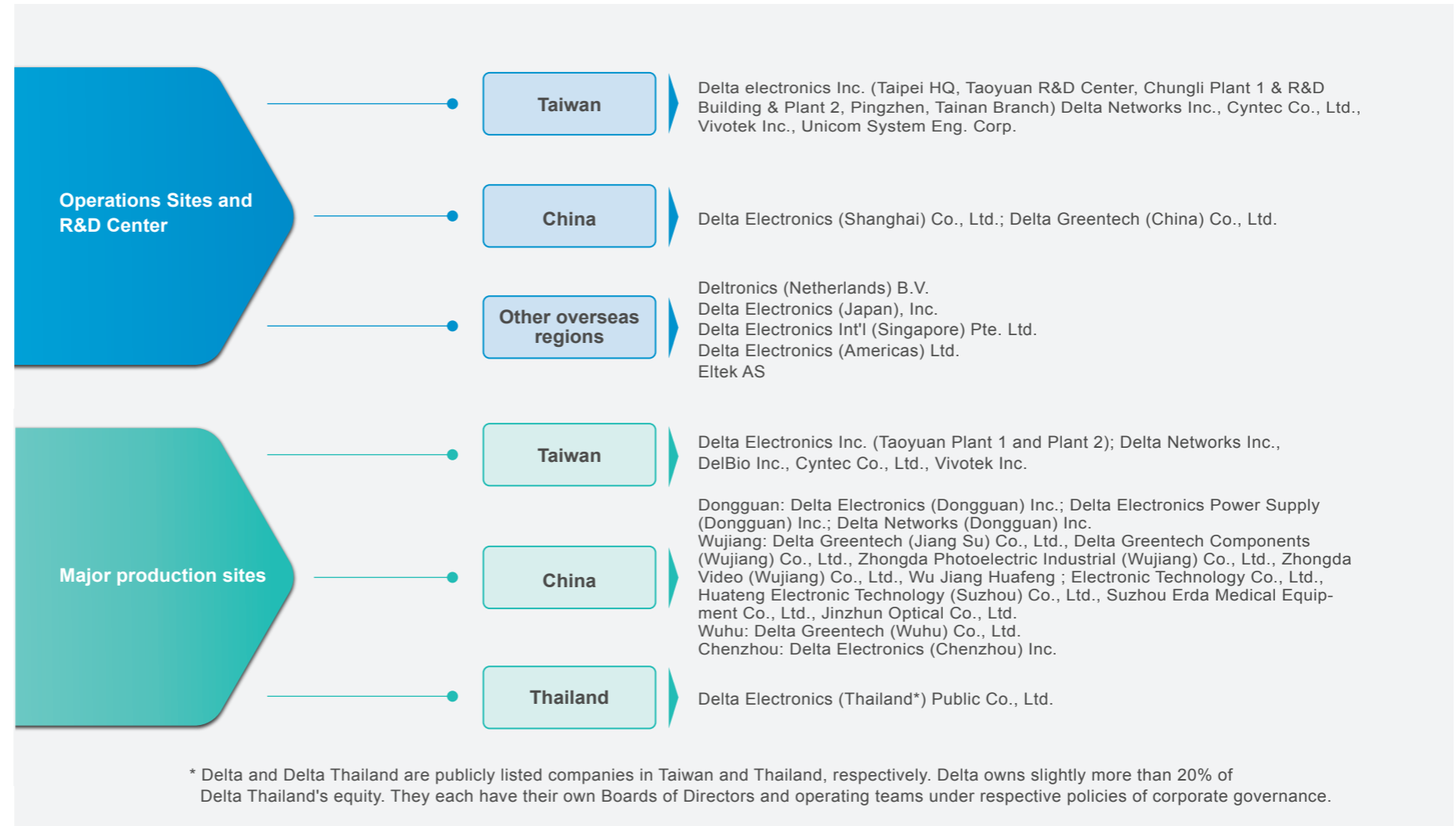
Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 7.1 Screening Criteria of Reporting Boundaries

Considering the realities of fact disclosure and actual managerial requirements, the boundaries of this report are not entirely consistent with the consolidated financial report of the company. Operations, R&D and production sites stated in the report are fully listed as follows:





## 7.2 Environmental Data

### Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

Attribute	Category	Item	Main Production Plant <sup>*1</sup>				Overall Production Plant <sup>*2</sup>	
			2015	2016	2017	2018	2017	2018
Output	Energy	Purchased Electricity (MWh)	441,242	461,909	492,237	486,614	494,789	489,345
		Natural Gases (GJ)	68,848	79,812	85,455	97,527	85,495	97,531
		Diesel (GJ)	20,275	18,040	13,112	11,540	8,653	11,665
		Gasoline (GJ)	10,521	10,785	10,212	8,877	10,614	9,304
		Liquid Petroleum Gases (GJ)	176,844	190,462	177,603	174,427	177,603	174,427
	Water Withdrawal <sup>*3</sup>	Tap Water (km <sup>3</sup> )	4,547.4	4,572.7	4,757.2	4,202.5	4,760.7	4,206.9
		Rainwater (km <sup>3</sup> )	-	-	8.1	24.2	8.1	24.2
		Total Water Withdrawal (km <sup>3</sup> )	4,547.4	4,572.7	4,765.3	4,226.7	4,768.8	4,231.1
		Water Recycling and Reuse (km <sup>3</sup> )	99.8	135.8	173.0	159.6	173.0	159.6
		GHG Emissions	Scope 1 (metric ton-CO <sub>2</sub> e)	21,673	19,900	25,219	25,661	25,254
Output	GHG Emissions	Scope 2 (metric ton-CO <sub>2</sub> e) market-based	343,094	350,974	367,152	296,698	368,436	298,159
		Scope 1+Scope2 (metric ton-CO <sub>2</sub> e) market-based	364,767	370,874	392,371	322,395	393,690	323,828
		Scope 2 (metric ton-CO <sub>2</sub> e) location-based	343,094	350,974	367,152	369,535	368,436	370,846
		Scope 1+Scope2 (metric ton-CO <sub>2</sub> e) location-based	364,767	370,874	392,371	395,196	393,690	396,516
		Carbon Intensity (metric ton-CO <sub>2</sub> e/MUSD)	58.1	54.1	52.7	41.2	52.5	41.2



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

Attribute	Category	Item	Main Production Plant* <sup>1</sup>				Overall Production Plant* <sup>2</sup>	
			2015	2016	2017	2018	2017	2018
Output	Non-hazardous Waste <sup>4</sup>	Incineration (ton)	7,029.1	7,729.2	7,863.6	6,097.4	7,863.6	6,097.4
		Landfill (ton)	1,522.3	1,773.9	2,132.1	2,963.9	2,215.8	3,003.4
		Recycling and Reuse (ton)	26,759.7	29,879.2	30,874.6	30,368.6	30,908.7	30,401.8
		Subtotal (ton)	35,311.1	39,382.3	40,870.3	39,429.9	40,988.1	39,502.6
	Hazardous Waste <sup>4</sup>	Incineration (ton)	1,178.9	1,441.4	1,654.3	1,554.5	1,654.3	1,554.5
		Landfill (ton)	58.3	70.7	20.3	134.3	20.3	134.3
		Recycling and Reuse (ton)	1,448.0	1,728.8	1,786.5	1,547.3	1,794.5	1,555.3
		Subtotal (ton)	2,685.2	3,240.9	3,461.1	3,236.1	3,469.1	3,244.1
	Water Discharge	Domestic Sewage (km <sup>3</sup> )	2,795.7	3,202.3	3,259.6	3,210.7	3,262.4	3,214.2
		Process Wastewater (km <sup>3</sup> )	522.6	257.6	564.9	213.7	564.9	213.7
Water Consumption	Total Water Compounds (km <sup>3</sup> )	1,229.1	1,112.8	940.8	802.3	941.5	803.2	
Air Emissions <sup>5</sup>	Volatile Organic Compounds (ton)	55.3	62.5	108.8	110.5	108.8	110.5	
Key Performance Indicators	Water Management	Water Recycling Rate	2.15%	2.88%	3.51%	3.66%	3.51%	3.66%
		WPI Reduction Rate	Base Year	0.5%	4.7%	19.8%	5.2%	20.1%
	Waste Management	Waste Recycling Rate	74.2%	74.2%	73.7%	74.8%	73.6%	74.8%
		WI Recycling Rate	Base Year	-10.9%	-6.3%	2.5%	-5.9%	2.9%

\*1. Main production plants: Dongguan, Wujiang, Wuhu, Chenzhou plants in China; DET plant 1, 5, and 6 in Thailand, Taoyuan plants 1 & 2 in Taiwan, Cyntec Hsinchu and Huafeng plants, which are in the SBT commitment scope.

\*2. Overall production plants include Delta's main production plants and the US and India plants of Eltek acquired by 2015. There were changes in the organization of the original Brazil plant of Eltek. To ensure data consistency, the 2017 historical data were adjusted by excluding the original Brazil plant of Eltek.

\*3. In 2018, we implemented the water productivity intensity based on ISAE 3000 assurance. As the scope of the assurance was consistent, we adjusted statistics from previous years and added the Chenzhou Technology Building.

\*4. According to the resolution of the Water Conservation and Waste Reduction Management Committee in 2018, the scope of disclosure of waste from all production sites must be consistent and statistics from previous years be adjusted. We added the weight of general and non-recyclable industrial waste.

\*5. In 2018, the calculation of air emissions was based on the results of testing reports and operation hours. As the scope of the assurance was consistent, we adjusted the data from 2015 to 2017.



## 7.3 Index of GRI Standard Indicators

The structure of this report follows the Global Reporting Initiative's (GRI) "GRI Sustainability Reporting Standards (2016)" (GRI Standards), GRI 303 (2018), and GRI 403 (2018).

### Core Indicators

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
General Disclosures	102-1	Name of the organization	1 Delta Group Overview	9	
General Disclosures	102-2	Activities, brands, products, and services	1 Delta Group Overview	9	
General Disclosures	102-3	Location of headquarters	1 Delta Group Overview	9	
General Disclosures	102-4	Location of operations	1 Delta Group Overview	9	
General Disclosures	102-5	Ownership and legal form	1 Delta Group Overview	9	
General Disclosures	102-6	Markets served	1 Delta Group Overview	9	
General Disclosures	102-7	Scale of the organization	1 Delta Group Overview	9	
General Disclosures	102-8	Information on employees and other workers	1 Delta Group Overview 6.2. Talent Attraction and Retention	9, 91-93	
General Disclosures	102-9	Supply Chain	4.5.1 Localized Management	43-45	
General Disclosures	102-10	Significant changes to the organization and its supply chain	-	NA	No major changes
General Disclosures	102-11	Precautionary Principle or approach	5.2 Proactive Response to Climate Change	60-66	
General Disclosures	102-12	External initiatives	2.3 Responding to Global Sustainable Development	20-22	

## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
General Disclosures	102-13	Membership of associations	1 Delta Group Overview	9	
General Disclosures	102-14	Statement from senior decision-maker	A word from the Management	9	
General Disclosures	102-16	Values, principles, standards, and norms of behavior	2.2.1 CSR Commitment 4.5.1 Localized Management 6.3 Labor Rights and Labor Relations	18, 43-45, 97-98	
General Disclosures	102-18	Governance structure	1.1 Delta Electronics Organizational Structure	10	
General Disclosures	102-40	List of stakeholder groups	3 Communication with Stakeholders	24-26	
General Disclosures	102-41	Collective bargaining agreements	6.3 Labor Rights and Labor Relations	99	
General Disclosures	102-42	Identifying and selecting stakeholders	3 Communication with Stakeholders	24-30	
General Disclosures	102-43	Approach to stakeholder engagement	3.1 Communication with Stakeholders and Response	24-26	
General Disclosures	102-44	Key topics and concerns raised	3.1 Communication with Stakeholders and Response	24-26	
General Disclosures	102-45	Entities included in the consolidated financial statements	7.1 Screening Criteria of the Reporting Boundaries	121	
General Disclosures	102-46	Defining report content and topic Boundaries	About the CSR Report	3	
General Disclosures	102-47	List of material topics	About the CSR Report 3.2 Materiality Assessment	3,27-30	



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
General Disclosures	102-48	Restatements of information	-	NA	No significant change in 2018
General Disclosures	102-49	Changes in reporting	-	NA	No significant change in 2018
General Disclosures	102-50	Reporting period	About the CSR Report	3	
General Disclosures	102-51	Date of most recent report	About the CSR Report	3	
General Disclosures	102-52	Reporting cycle	About the CSR Report	3	
General Disclosures	102-53	Contact point for questions regarding the report	About the CSR Report	3	
General Disclosures	102-54	Claims of reporting in accordance with the GRI Standards	About the CSR Report	3	
General Disclosures	102-55	GRI content index	7.3 Index of GRI Standards Indicators	124-134	
General Disclosures	102-56	External assurance	About the CSR Report 7.5 External Assurance Statement and Report	3,140-141	



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

### General indicator (non-core)

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
General Disclosures	102-15	Mechanisms for advice and concerns about ethics	3.2 Materiality Assessment	27-30	
General Disclosures	102-17	Key impacts, risks, and opportunities	6.3 Labor Rights and Labor Relations	99	
General Disclosures	102-19	Delegating authority	2.2.2 CSR Committee	19	
General Disclosures	102-20	Executive-level responsibility for economic, environmental, and social topics	2.2.2 CSR Committee	19	
General Disclosures	102-21	Consulting stakeholders on economic, environmental, and social topics	3.1 Communication with Stakeholders and Response	24-26	
General Disclosures	102-22	Composition of the highest governance body and its committees	-	NA	All board of directors are male
General Disclosures	102-23	Chair of the highest governance body	4.6.1 Board of Directors' Functions and Risk Management	51-53	
General Disclosures	102-24	Nominating and selecting the highest governance body	4.6.1 Board of Directors' Functions and Risk Management	51-53	
General Disclosures	102-25	Conflicts of interest	4.6.1 Board of Directors' Functions and Risk Management	51-53	
General Disclosures	102-26	Role of highest governance body in setting purpose, values, and strategy	4.6.1 Board of Directors' Functions and Risk Management	51-53	
General Disclosures	102-27	Collective knowledge of highest governance body	4.6.1 Board of Directors' Functions and Risk Management	51-53	





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
General Disclosures	102-28	Evaluating the highest governance body's performance	4.6.1 Board of Directors' Functions and Risk Management	51-53	
General Disclosures	102-29	Identifying and managing economic, environmental, and social impacts	3.2 Materiality Assessment	27-29	
General Disclosures	102-30	Effectiveness of risk management processes	3.2 Materiality Assessment	27-29	
General Disclosures	102-31	Review of economic, environmental, and social topics	3.2 Materiality Assessment	27-29	
General Disclosures	102-32	Highest governance body's role in sustainability reporting	2.2.2 CSR Committee	19	
General Disclosures	102-33	Communicating critical concerns	3 Communication with Stakeholders	24-26	
General Disclosures	102-34	Nature and total number of critical concerns	3.2 Materiality Assessment	27-29	
General Disclosures	102-35	Remuneration policies	4.6.1 Board of Directors' Functions and Risk Management	51-53	
General Disclosures	102-36	Process for determining remuneration	4.6.1 Board of Directors' Functions and Risk Management	51-53	
General Disclosures	102-37	Stakeholders' involvement in remuneration	3 Communication with Stakeholders	24-29	
General Disclosures	102-38	Annual total compensation ratio	-		Not disclosed
General Disclosures	102-39	Percentage increase in annual total compensation ratio	-		Not disclosed



# Contents

About the CSR Report

A word from the Management

[Delta Group Overview](#)

[Sustainable Management](#)

[Communication with Stakeholders](#)

[Corporate Governance](#)

[Environmental Protection and Energy Conservation](#)

[Employee Relations and Social Participation](#)

[Appendix](#)

## Specific disclosures

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
Economic Performance	201-1	Direct economic value generated and distributed	1 Delta Group Overview	9	Refer to page 3 of the 2018 Delta Electronics, Inc. (DEI) Annual Report
Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	5.2.1 Identification of Climate Change Risks and Opportunities	61-62	Refer to page 67-68 of the 2018 Delta Electronics, Inc. (DEI) Annual Report  V (used for the cost of actions taken for managing risks or opportunities). As financial data are the Company's confidential information, direct disclosure is not provided.
Market Presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	6.2 Talent Attraction and Retention	96	b.Reason for inapplicability: The percentage of other workers is extremely low
Indirect Economic Impacts	203-1	Infrastructure investments and services supported	6.5 Social Participation	109-110	
Procurement Practices	204-1	Proportion of spending on local suppliers	4.5.1 Localized Management	43	



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	4.6.1 Board of Directors' Functions and Risk Management	51-52	
Materials	301-1	Materials used by weight or volume	4.5.1 Localized Management	44	
Materials	301-3	Reclaimed products and their packaging materials	4.5.1 Localized Management	44	
Energy	302-1	Energy consumption within the organization	5.3 Energy Management	67-72	
Energy	302-2	Energy consumption outside of the organization	5.6.3 Energy Saving Benefits of Products	80-84	
Energy	302-3	Energy intensity	5.3 Energy Management	67-72	
Energy	302-4	Reduction of energy consumption	5.3 Energy Management 5.6.3 Energy Saving Benefits of Products	67-72	
Energy	302-5	Reductions in energy requirements of products and services	5.6.3 Energy Saving Benefits of Products 5.6.4 Green Products/Services Innovation	83-84	
Water	303-1	Interactions with water as a shared resource	5.4 Water Resources Management	73-76	
Water	303-2	Management of water discharge-related impacts	5.4 Water Resources Management	73-76	
Water	303-3	Water withdrawal	5.4 Water Resources Management	73-76	



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
Water	303-4	Water discharge	5.4 Water Resources Management	73-76	
Water	303-5	Water consumption	5.4 Water Resources Management	73-76	
Emissions	305-1	Direct (Scope 1) GHG emissions	5.2.3 Greenhouse Gas Inventory and Management	64-65	
Emissions	305-2	Energy indirect (Scope 2) GHG emissions	5.2.3 Greenhouse Gas Inventory and Management	64-65	
Emissions	305-3	Other indirect (Scope 3) GHG emissions	5.2.3 Greenhouse Gas Inventory and Management	66	
Emissions	305-4	GHG emissions intensity	5.2.3 Greenhouse Gas Inventory and Management	64-65	
Emissions	305-5	Reduction of GHG emissions	5.2.3 Greenhouse Gas Inventory and Management	64-66	
Emissions	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	5.7.2 Air Pollution Prevention and Management	85-86	
Effluents and Waste	306-1	Water discharge by quality and destination	5.4 Water Resources Management	73-76	
Effluents and Waste	306-2	Waste by type and disposal method	5.5 Waste Management	77-79	
Effluents and Waste	306-3	Significant spills	5.4 Water Resources Management 5.5 Waste Management	73-76, 77-79	
Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	4.5.1 Localized Management	43	



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
Supplier Environmental Assessment	308-2	Negative environmental impacts in the CPC and actions taken	4.5.2 Supplier Verification and Risk Management	45-48	
Employment	401-1	New employee hires and employee turnover	6.2 Talent Attraction and Retention	92-93	
Employment	401-3	Parental leave	6.3 Labor Rights and Labor Relations	101-102	
Labor/Management Relations	402-1	Minimum notice periods regarding operational changes	6.3 Labor Rights and Labor Relations	99	
Occupational Health and Safety	403-1	Occupational health and safety management system	6.6.1 Occupational Safety and Health	117	
Occupational Health and Safety	403-2	Hazard identification, risk assessment, and incident investigation	6.6.1 Occupational Safety and Health	117	
Occupational Health and Safety	403-4	Worker participation, consultation, and communication on occupational health and safety	6.6.1 Occupational Safety and Health	117-118	
Occupational Health and Safety	403-5	Worker training on occupational health and safety	6.6.1 Occupational Safety and Health	118	
Occupational Health and Safety	403-6	Promotion of worker health	6.3 Labor Rights and Labor Relations 6.6.1 Occupational Safety and Health	101, 118	
Occupational Health and Safety	403-8	Workers covered by an occupational health and safety management system	6.6.1 Occupational Safety and Health	117	



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
Occupational Health and Safety	403-9	Work-related injuries	6.6.1 Occupational Safety and Health	119	
Occupational Health and Safety	403-10	Work-related ill health	6.6.1 Occupational Safety and Health	119	
Training and Education	404-1	Average hours of training per year per employee	6.4 Talent Management and Learning Development	108	
Diversity and Equal Opportunity	405-2	Ratio of basic salary and remuneration of women to men	6.4 Talent Management and Learning Development	96	
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	-	NA	No discrimination occurred
Human Rights Assessment	412-1	Operations that have been subject to human rights reviews or impact assessments	4.5.1 Localized Management, 6.3 Labor Rights and Labor Relations	45, 99	
Human Rights Assessment	412-2	Employee training on human rights policies or procedures	4.5.1 Localized Management, 6.3 Labor Rights and Labor Relations	45, 98-100	Employees' human rights education and training hours totaled 90,442 hours b.The current statistics comprise of the head-count and they are not applicable to GRI definitions (percentage of individuals)
Human Rights Assessment	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	4.5.1 Localized Management	45	



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

GRI Standard Title	Disclosure Number	Disclosure Title	Chapter Name	Page No.	Explanation
Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	4.5.1 Localized Management	43	
Supplier Social Assessment	414-2	Negative social impacts in the CPC and actions taken	4.5.2 Supplier Verification and Risk Management	45-48	
Customer Health and Safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	5.6 Green Product Liability, 5.6.1 Green Design	80-82	No violations of laws occurred
Marketing and Labeling	417-1	Requirements for product and service information and labeling	5.6.2 Eco-labels and Eco-declarations	82	
Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	4.4 Customer Relationship Management	39-41	No customer complaints occurred
Social Economic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	6.3 Labor Rights and Labor Relations	100	



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## 7.4 Summary of Information Assured (ISAE 3000)

No.	Assured Item	Information Assured	Page	Reporting Criteria
1	Electronic ballast annual energy savings in 2018	Assuming that end-users replace existing Magnetic Ballasts with Electronic Ballasts, for shipments of Delta Electronic Ballast for Fluorescent Lamps to 9 major customers in 2018, annual energy savings for end-users was 105 million kWh.	83	<p>Annual Energy Savings (kWh) = <math>[\sum(A \times B) \times C] + 1000 \times 8 \text{ (hr)} \times 365 \text{ (day)}</math>.</p> <p>A: Maximum input voltage (W) of different models of Electronic Ballast installed in the compatible Fluorescent Lamp based on the data from customer's product brochure.</p> <p>B: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p> <p>C: Energy Savings=10%.</p>
2	Server power annual energy savings in 2018	By comparing the efficiency of Delta Server Power to that of 80 Plus Bronze requirements, for the shipments of 10 major customers in 2018, annual energy savings was 1.26 billion kWh.	83	<p>Annual Energy Savings (kWh) = <math>[\sum(A \times B \times C) \times D] + 1000 \times 24 \text{ (hr)} \times 365 \text{ (day)}</math>.</p> <p>A: Rated output power (W) of each Delta server power model.</p> <p>B: At the 50% load condition, power loss (W) difference between Delta server power and 80 Plus Bronze requirements.</p> <p>C: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p> <p>D: Percentage of load=50%.</p>
3	Ventilating fans annual energy savings in 2018	By comparing the efficiency of Delta ventilating fans to that of USA Energy Star or Taiwan Energy Label requirements, for shipments of products that have been certified by the USA Energy Star or Taiwan Energy Label in 2018, annual energy savings was 31 million kWh.	83	<p>Annual Energy Savings (kWh) = <math>\sum(A \times B \times C) \div 1000 \times 1671 \text{ (hour/Year)}^{*1}</math>.</p> <p>A: Rated output power (W) of each Delta ventilating fan model</p> <p>B: Energy saving rate ( the difference of efficiency between Delta ventilating fan and USA Energy Star/Taiwan Energy Label requirements divided by that of USA Energy Star/Taiwan Energy Label requirements).</p> <p>C: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p> <p>*1. Usage time of 1671 hours/year refers to Japanese Industrial Standards (JIS C 9921-2 ).</p>
4	LED street lights annual energy savings in 2018	Assuming that end-users installed Delta LED street lights to replace mercury street lights, for the shipments of LED street lights to Taiwan in 2018, annual energy savings was 11 million kWh.	83	<p>Annual Energy Savings (kWh) = <math>\sum(A \times B) \times 12 \text{ (hr)} \times 365 \text{ (day)}</math>.</p> <p>A: Power consumption (W) difference between LED street lights and theoretical replaced mercury street lights.</p> <p>B: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p>





# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

No.	Assured Item	Information Assured	Page	Reporting Criteria
5	AC-DC adapter annual energy savings in 2018	<p>By comparing the efficiency of Delta AC-DC adapters to that of Code of Conduct External Power Supplies (EC No. 278/2009 stage 2), for shipments of the 13 main AC-DC Adapter models<sup>*1</sup> in 2018, annual energy savings was 29 million kWh.</p> <p>*1. Main product models and series are ADP-45FE, ADP-45AG, ADP-45BG, ADP-45DG, ADP-45EG, ADP-65HB, ADP-65XD, ADP-65YD, ADP-90WH, ADP-90DE, ADP-120MH, ADP-120RH, ADP-180MB.</p>	83	<p>Annual Energy Savings (kWh) = { [Σ(A×B) ×C×39.9 (hr/week)×52 (week)]+[Σ(D×B) ×56.05(hr/week)×52 (week)] } ÷1000</p> <p>A: On charge mode, power loss (W) difference between Delta product and EU requirements at corresponding average efficiency.</p> <p>B: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p> <p>C: Percentage of load=56% (Refer to (EC) No 278/2009 analysis report <sup>*2</sup>).</p> <p>D: On no load mode, power loss (W) difference between Delta product and EU requirements.</p> <p>*1. Usage time refers to Page 22, Additional assessment in the frame of the review study on commission regulation (EC) No. 278/2009 External Power Supplies. *2. Percent loading of 56% refers to Page 21, Additional assessment in the frame of the review study on commission regulation (EC) No. 278/2009 External Power Supplies.</p>
6	PV inverter annual energy savings in 2018	<p>By comparing the efficiency of Delta PV Inverter (PVI) to the minimum average efficiency 97.5%<sup>*1</sup> of the ENERGY STAR Market and Industry Scoping Report, for the shipments of PVI to North America and Europe in 2018, annual energy savings was 7 million kWh.</p> <p>*1. ENERGY STAR Market and Industry Scoping Report</p>	83	<p>Annual Energy Savings (kWh) = Σ(A×B×C×D×T)×365 (day)÷1000</p> <p>A: Rated output power (W) of each Delta PVI model.</p> <p>B: Power loss (W) difference between Delta PVI and the ENERGY STAR market investigation.</p> <p>C: Percentage of load=100%.</p> <p>D: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p> <p>T: Usage time of various hours/day refers to NASA Daily solar radiation of the Delta PVI's shipping destination.</p>
7	EV charger annual energy savings in 2018	<p>By comparing the efficiency of Delta EV DC Charger to the minimum efficiency 90% regulated by CHAdeMo, for the shipments of EV DC Charger in 2018, annual energy savings was 5 million kWh.</p>	83	<p>Annual Energy Savings (kWh) = Σ(A×B×C)×D×8 (hr)×365 (day)÷1000</p> <p>A: Rated output power (W) of each Delta EV DC Charger model.</p> <p>B: Power loss (W) difference between Delta EV DC Charger and CHAdeMo requirements.</p> <p>C: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p> <p>D: Percentage of load=100%.</p>



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

No.	Assured Item	Information Assured	Page	Reporting Criteria
8	LED high bay annual energy savings in 2018	Assuming that end-users installed Delta LED high bays to replace Metal Halide high bays, and by comparing the efficiency of Delta LED high bays to the minimum efficiency requirements for the procurement of Metal Halide high bays (Distribution: Direct, LER: Closed) issued by the United States Department of Energy, for the shipments of LED high bays in 2018, annual energy savings was 10 million kWh.	83	<p>Annual Energy Savings (kWh) = <math>\Sigma[(A+B) \times C] \times 12 \text{ (hr)} \times 260 \text{ (day)} \div 1000</math></p> <p>A: Rated output power (W) of each Delta LED high bay model.</p> <p>B: The difference of efficiency between Delta LED high bay and United States Department of Energy's HID high bay requirements.</p> <p>C: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p>
9	Uninterruptible power supply annual energy savings in 2018	By comparing the efficiency of Delta uninterruptible power supply (UPS) to that of EU Code of Code on Energy Efficiency and Quality of AC Uninterruptible power supply systems (EU UPS CoC rev.2), UPS models in 2018, annual energy savings was 79 million kWh.	83	<p>Annual Energy Savings (kWh) = <math>\Sigma[(A \times B) \times C] \times 24 \text{ (hr)} \times 365 \text{ (day)} \div 1000</math></p> <p>A: Rated output power (W) of each Delta UPS model.</p> <p>B: On charge mode, time-weighted average power loss (W) difference between Delta UPS product and EU CoC requirements at corresponding efficiency on different load mode.</p> <p>C: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p>
10	TV power annual energy savings in 2018	<p>By comparing the efficiency of Delta Open frame TV power to that of the minimum energy efficiency required by customer's specifications, for shipments of the 9 main Open frame TV power models<sup>*1</sup> in 2018, annual energy savings was 23 million kWh.</p> <p>*1. Main product models and series are APDP-209A2 A, AP-P242AM A, AP-P288AM A, AP-P348AM A, AP-P448AM A, AP-P426AM A, AP-P469AM A, AP-P96AM A, AP-P125AM A. The minimum energy efficiency requirement of customer specifications for the first eight models mentioned above is 80%, and the minimum energy efficiency requirement for the last model is 85%.</p>	83	<p>Annual Energy Savings (kWh) = <math>\{[\Sigma(A \times B) \times C \times 2.8 \text{ (hr)}] + [\Sigma(D \times B) \times 21.2 \text{ (hr)}]\} \div 365 \text{ (day)} \div 1000</math></p> <p>A: On charge mode, power loss (W) difference between Delta product and the customers' minimum efficiency specifications.</p> <p>B: Quantities of products of each model are exported from SAP shipment record from 1/1/2018 to 12/31/2018.</p> <p>C: Load = load required for the customer's specifications for performance.</p> <p>D : On no load mode, power loss (W) difference between Delta product and the customer's minimum efficiency specifications.</p> <p>* 1: Usage time refers to the result of AMERICAN TIME USE SURVEY.</p>



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

No.	Assured Item	Information Assured	Page	Reporting Criteria
11	Electricity intensity in 2018	2018 EI was 62,295 kWh/MUSD for Delta's main production plants.	68	<p>Main production plants include China (Dongguan, Wujiang, Wuhu, Chenzhou and Cytect in Huafeng), Taiwan (Taoyuan Plant 1, Taoyuan Plant 2, Cytect in Hsinchu) and DET (plants 1, 5 &amp; 6).</p> <p>Electricity intensity = [purchased electricity usage (kWh)-purchased electricity usage (kWh) of excluded areas]/Production value (million USD).</p> <p>Global average= average PUE of four Delta data centers (Taiwan Headquarters, Wujiang, DET Plant 5 and American Headquarters)</p> <p>PUE is calculated with methodology provided by The Green Grid as follows:</p> <p>PUE= Total Data Center Energy (kWh) /IT Equipment Energy (kWh)</p> <p>IT equipment energy includes the energy associated with all of the IT equipment (e.g., compute, storage, and network equipment) along with supplemental equipment (e.g., KVM switches, monitors, and workstations/laptops used to monitor or otherwise control the data center).</p>
12	Power Usage Effectiveness (PUE) in 2018	2018 PUE was 1.37 for Delta's 4 data centers.	68	<p>Total data center energy includes all IT equipment energy as described above plus everything that supports the IT equipment using energy, such as:</p> <p>A: Power delivery components, including UPS systems, switchgear, generators, power distribution units (PDUs), batteries, and distribution losses external to the IT equipment</p> <p>B: Cooling system components, such as chillers, cooling towers, pumps, computer room air handling units (CRAHs), computer room air conditioning units (CRACs), and direct expansion air handler (DX) units</p> <p>C: Other miscellaneous component loads, such as data center lighting</p>
13	Electricity savings of green plants and buildings in 2018	In 2018, Delta's global certified green plants and buildings collectively saved, in total, 16.18 million kWh of electricity.	70	<p>The fifteen green factory/office buildings are the following: Taiwan Headquarters, Taoyuan Technology Center, Tainan Plant Phase 2, Tainan Plant Phase 1, India Rudrapur Plant, India Gurgaon Plant, Shanghai R&amp;D Center, American Headquarters, Taoyuan Plant 5, Beijing Office, India Mumbai Office, Thailand Plant 5, EMEA Headquarters, Chungli R&amp;D Center and Japan Ako Energy Park.</p> <p>Electricity savings (kWh) = (EUI in literature cited – Actual EUI of green buildings) * Floor area of green buildings</p> <p>EUI = Annual Electricity usage (kWh)/Floor area (m<sup>2</sup>).</p> <p>Note: Refer to footnotes *1 to *9 on pages 71 and 72 for "EUI in literature cited" and footnote *1 on page 70 for "Actual EUI of green buildings"</p>



## Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

No.	Assured Item	Information Assured	Page	Reporting Criteria
14	Electricity savings of donated green buildings in 2018	In 2018, Delta Group's five donated green buildings reduced, in total, 1.64 million kWh of electricity.	111	<p>The five donated green buildings are the following: the Delta Building and the Y. S. Sun Green Building Research Center at National Cheng Kung University (NCKU), the Kuo-Ting Optoelectronic Building at National Central University (NCU), the Delta Building at National Tsing Hua University (NTHU), as well as the Namasia Ming Chuan Elementary School.</p> <p>Electricity savings (kWh) = (EUI in literature cited – Actual EUI of green buildings) * Floor area of green buildings</p> <p>EUI = Annual Electricity usage (kWh)/Floor area (m<sup>2</sup>).</p> <p>Note: Refer to footnotes *1 to *3 on page 111 for “EUI in literature cited” and footnote *4 on page 111 for “Actual EUI of green buildings”</p>
15	Water productivity intensity (WPI) in 2018	2018 Water productivity intensity (WPI) was 537 metric ton/MUSD for Delta's main production plants.	76	<p>Main production plants include China (Dongguan, Wujiang, Wuhu, Chenzhou and Cytotec in Huafeng), Taiwan (Taoyuan Plant 1, Taoyuan Plant 2, Cytotec in Hsinchu) and DET (plants 1, 5 &amp; 6). Statistics are exported from tap water bills.</p> <p>Water productivity intensity = [ purchased water usage (metric ton)/Production value (million USD)</p>



# 7.5 External Assurance Statement and Report

## SGS Assurance Statement - GRI Standards & AA1000

### Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

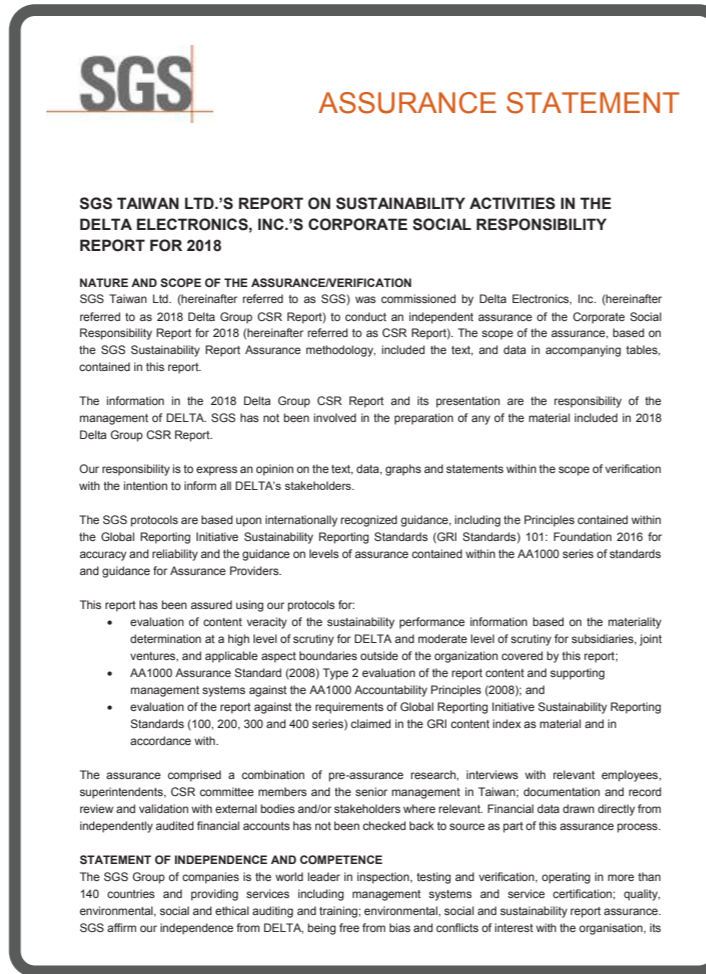
Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix



**SGS** ASSURANCE STATEMENT

**SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE DELTA ELECTRONICS, INC.'S CORPORATE SOCIAL RESPONSIBILITY REPORT FOR 2018**

**NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION**  
 SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Delta Electronics, Inc. (hereinafter referred to as 2018 Delta Group CSR Report) to conduct an independent assurance of the Corporate Social Responsibility Report for 2018 (hereinafter referred to as CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the text, and data in accompanying tables, contained in this report.

The information in the 2018 Delta Group CSR Report and its presentation are the responsibility of the management of DELTA. SGS has not been involved in the preparation of any of the material included in 2018 Delta Group CSR Report.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform all DELTA's stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

This report has been assured using our protocols for:

- evaluation of content veracity of the sustainability performance information based on the materiality determination at a high level of scrutiny for DELTA and moderate level of scrutiny for subsidiaries, joint ventures, and applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard (2008) Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008); and
- evaluation of the report against the requirements of Global Reporting Initiative Sustainability Reporting Standards (100, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with.

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, CSR committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant. Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

**STATEMENT OF INDEPENDENCE AND COMPETENCE**  
 The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from DELTA, being free from bias and conflicts of interest with the organisation, its

TWLP5008 Issue 1905

subsidiaries and stakeholders.  
 The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, EICC, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

**VERIFICATION/ ASSURANCE OPINION**  
 On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within 2018 Delta Group CSR Report verified is accurate, reliable and provides a fair and balanced representation of DELTA sustainability activities in 01/01/2018 to 12/31/2018.

The assurance team is of the opinion that the Report can be used by the Reporting Organisation's Stakeholders. We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting. In our opinion, the contents of the report meet the requirements of GRI Standards in accordance with Core Option and AA1000 Assurance Standard (2008) Type 2, High level assurance.

**AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS**

**Inclusivity**  
 DELTA has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, DELTA may proactively consider having more direct two-ways involvement of stakeholders during future engagement.

**Materiality**  
 DELTA has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

**Responsiveness**  
 The report includes coverage given to stakeholder engagement and channels for stakeholder feedback.

**GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS**

The report, 2018 Delta Group CSR Report, is adequately in line with the GRI Standards in accordance with Core Option. The material topics and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material topics and boundaries, and stakeholder engagement, GRI 102-40 to GRI 102-47, are correctly located in content index and report. For future reporting, it is recommended to enhanced DELTA's management approach components as per described in GRI 103-2. When reporting on goals and targets for each material topic, the expected results are suggested to be set, if applicable, with quantitative objectives.

Signed:  
 For and on behalf of SGS Taiwan Ltd.



David Huang  
 Senior Director  
 Taipei, Taiwan  
 14 May, 2019  
 WWW.SGS.COM



TWLP5008 Issue 1905



# Contents

About the CSR Report

A word from the Management

Delta Group Overview

Sustainable Management

Communication with Stakeholders

Corporate Governance

Environmental Protection and Energy Conservation

Employee Relations and Social Participation

Appendix

## ISAE 3000 Limited Assurance Report



Independent Limited Assurance Report

PWCM 18000492

To Delta Electronics, Inc.

We have been engaged by Delta Electronics, Inc. ("Company") to perform assurance procedures on the sustainability performance information identified by the Company and reported in the 2018 Delta Group CSR Report (hereinafter referred to as the "CSR Report"), and have issued a limited assurance report based on the result of our work performed.

### Subject Matter Information and Applicable Criteria

The sustainability performance information identified by the Company (hereinafter referred to as the "Subject Matter Information") and the respective applicable criteria are stated in the "Summary of Subject Matter Assured" on page 135 and 139 of the CSR Report. The scope of the aforementioned Subject Matter Information is also set out in the "Summary of Subject Matter Assured".

### Management's Responsibilities

The Management of the Company is responsible for the preparation of the sustainability performance information disclosed in the CSR Report in accordance with the respective applicable criteria, and for such internal control as management determines is necessary to enable the preparation of the sustainability performance information that is free from material misstatement, whether due to fraud or error.

### Our Responsibilities

We conducted our assurance work on the Subject Matter Information disclosed in the CSR Report in accordance with the International Standard on Assurance Engagements 3000, issued by the International Auditing and Assurance Standards Board, to identify whether any amendment is required for the Subject Matter Information to be prepared, in all material aspects, in accordance with the respective applicable criteria, and issue a limited assurance report.

We conducted our assurance work in accordance with the aforementioned standards including identifying the areas where there may be risks of material misstatement of the Subject Matter Information, and designing and performing procedures to address the identified areas. 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 we performed a reasonable assurance engagement.

The extent of the assurance work we performed were based on the identified risk areas and determined materiality, and given the circumstances of the engagement, we designed and performed the following procedures:

- Made inquiries of the persons responsible for the Subject Matter Information to understand the processes, information systems (if any), and the relevant internal controls relating to the preparation of the aforementioned information to identify the areas where there may be risks of material misstatement; and

資誠聯合會計師事務所 PricewaterhouseCoopers, Taiwan  
11012 臺北市信義區基隆路一段 333 號 27 樓  
27F, No. 333, Sec. 1, Keshung Rd., Xinyi Dist., Taipei 11012, Taiwan  
T: +886 (2) 2729 6666, F: +886 (2) 2729 6686, www.pwc.tw



Independent Limited Assurance Report

PWCM 18000492

- Based on the above understanding and the areas identified, performed analytical procedures on the Subject Matter Information and, if deemed necessary, performed selective testing including inquiry, observation, inspection, and reperformance to obtain evidence for limited assurance.

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 Quality Control Requirement

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies Statement 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.

### Inherent Limitations

Certain Subject Matter 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 we have performed and the evidence we have obtained, we are not aware of any amendment that is required for the Subject Matter Information to be prepared, in all material aspects, in accordance with the respective applicable criteria.

### Other Matter

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

PricewaterhouseCoopers, Taiwan

Li Yi-Huah  
Partner  
June 13, 2019

