



Delta's 50th anniversary activities

Presenting the "Opening and Family Day for the New Chungli Plant" and the "Online Special Exhibition"

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As fall approaches and the global pandemic has started letting up a little, Delta's regional offices have slowly reopened one after another. We hope that all colleagues and their family members have been staying safe and healthy! Despite the ongoing pandemic, Delta's 50th anniversary event series kicked off in the spring with a special exhibition at Tongli Lake, China and has been touring at Delta's five factories thus far. In this issue of the "Special Report", we invite you to join us at the new Zhongli factory in Taiwan and participate in the opening ceremony, as well as family day activities. Rub shoulders with Delta's management team and a number of high-level executives as you enjoy the 50th anniversary special exhibition and view the latest and most integrated flagship showroom together. At the same time, the special exhibition is also available in 3D online to provide internal and external partners with a panoramic viewing experience. Don't miss the exciting content that awaits!

"Sustainability (ESG)" has been Delta's core philosophy for 50 years, and it is also a part of Delta's DNA. The foundation of the company's business development is rooted in sustainability, and we continue to provide innovative, clean and energy-saving solutions. When it comes to corporate governance level, we established a sustainability committee as early as 2007, and introduced a Chief Sustainability Officer post in 2019. In this issue of "Brand People", we interviewed Delta's Chief Sustainability Officer, Mr. Jesse Chou, sharing his thoughts on the journey of helping Delta push through ESG and on having spent more than 17 years of his career with Delta.

With the rising wave of carbon neutrality in the manufacturing industry, energy-saving and consumption reduction have become the focus of attention in the industrial automation market, and the inverter is an integral part of the energy-saving system. Delta has been dedicated to developing the industrial automation field for more than 20 years. Our full range of products have been made with the concepts of high-precision, high-speed, and high-energy efficiency in mind. "IoT Smart Solution" will explain how inverters reduce carbon emissions and enhance smart manufacturing capabilities through product design and improvements.

Delta's building automation solutions span multiple fields and has recently been incorporated into Jiaotong University's Hancheng gymnasium in China. The building management platform uses Delta Controls' enteliweb, which provides real-time monitoring, integrated building control, as well as energy consumption and lighting systems to create a smart, energy-saving and high-efficient gymnasium. The "unmanned store" is a new retail model that has been gaining traction in recent years and can be seen in subways, coworking spaces, smart parks and other places. Delta has worked with a well-known e-commerce company to create an "unmanned supermarket", providing Amplon RT series low-power UPS to ensure that the electrical supply to the supermarket is not interrupted. More exciting cases await in the "Brand Circle"!

The ocean is more beautiful than you can imagine! The Delta Foundation invited the 8K photography team to Palau, where 80% of the marine territory is classified as a protected area, to capture the vibrancy of the coral reef ecosystem. This issue of "Delta Green Life" takes you on a journey to view the wonderful world of marine life that most people don't get to see. Let's all do our part in protecting the beautiful oceans!

Brand Management Division





Delta's 50th anniversary activities Presenting the "Opening and Family Day for the New Chungli Plant" and the "Online Special Exhibition"

Text by Brand Management Division (BMD)

In our previous Special Report, we covered the "Influencing 50, Embracing 50" activities that included a touring exhibition in China, 8K projection festival in Thailand, coral restoration event, and a sneak preview for the special exhibition in Taiwan. In this Special Report, we invite you to come with us to the new Chungli Plant in Taiwan to experience the warmth of the Family Day activities, view Delta's newest and most complete flagship exhibition hall, and enjoy the 50th anniversary special exhibition with rich and in-depth themes. At the same time, we include a 3D online special exhibition that provides an immersive experience to our friends and colleagues.



Delta's 50th anniversary family day and special exhibition— looking at Delta's past, present, and future

Delta's global "Influencing 50, Embracing 50" events that celebrate our 50th anniversary have been launched successively in various locations. With the opening of the new Chungli Plant 5, Delta's largest plant in Taiwan, the Corporate Communication Division, Human Resource Division, Chungli Plant personnel, and Brand Management Division jointly planned and held a family day on August 28th and 29th. The event invited employees, their families, and retirees to revisit the important moments in Delta's 50 years of history, as well as to look forward to the next 50 years of sustainable development.



On the first day of the event, Mr. Bruce Cheng, the founder, led the management team and senior executives to express their gratitude to colleagues and family members

Delta's management team and senior executives enthusiastically participated in the two-day event. Mr. Bruce Cheng, founder and honorary chairman, expressed his gratitude to the efforts of everyone in Delta, especially those who supported him during the early stage of the business. Delta will continue to innovate with its 50 years of accumulated capabilities and work with partners from all walks of life to continue to grow. Mr. Yancey Hai, chairman, and Mr. Ping Cheng, CEO, are looking ahead to the next 50 years, actively laying out strategies for electric vehicles, smart automation, infrastructure, and implementing ESG into operations that bring a positive impact.

The family day activities included the 50th anniversary special exhibition, flagship exhibition hall, and "8K immersive projection R&D site." The 50th anniversary special exhibition is divided into eight thematic areas, with the main theme of "Sustainable Conservation & Nurturing Life" to create a Delta Newsroom. Delta Origins recaps Delta products from the '70s and '80s. The Outline area records 50 Delta milestones; the Business area depicts the business profile, products, and solutions; and the Contributors area introduces the key partners and internal teams that Delta is grateful to. The ESG area introduces Delta's sustainability concepts and practices in three directions: Environmental, Social, and Governance. The Design area analyzes the design for combining architecture and carbon reduction for the better and the Culture area displays Delta's recommended literature. Delta Action shares how the Delta Foundation turns ideas into action, including DeltaMOOCx free online courses and coral restoration initiatives. Finally, the Delta Radio area conveys the corporate vision, authentic and unique brands, and green living ideas through the exhibition's audio technology.



SPECIAL REPORT

The newly opened flagship exhibition hall at Chungli Plant presents Delta's innovative products and solutions for each business unit. Through the display of real products and audio-visuals, visitors can learn about the development of Delta's business. In addition to the latest exhibition hall, the three-story 8K projection environment at the Chungli plant provides the ultimate immersive experience with a large 420-inch screen. On the day of the event, the 8K environmental video "Coral Reef Fish" produced by the Delta Foundation was displayed, hoping to inspire people to reflect on the ecological environment while admiring the beauty of the ocean.

During the tour, the founder, Mr. Bruce Cheng, personally shared Delta's development with everyone at Delta and their family members, starting from a small 15-person factory next to a field, and the interesting stories and heartfelt experiences of his entrepreneurial journey. The audience listened with great interest as if they were walking through the corridor of time together. The CEO, Mr. Ping Cheng, Delta's first chief brand officer in 2010, personally shared with the audience Delta's transformation process over the past decade and introduced Delta's core competencies and solutions for its products.



Founder and Honorary Chairman Mr. Bruce Cheng and his wife Mrs. Eying Hsieh, as well as Mr. Steven Liu, chairman of Cyntec Co., Ltd., pose for a group photo with Delta's retirees who were on the list of "50 People of Delta" in the area titled "Delta Contributors" at the Special Exhibition



Mr. Ping Cheng, CEO of Delta, introduced the latest Delta products in person to employees and their families



The three-story Delta 8K Immersive Projection Laboratory allowed the employees and their families to experience the ultimate in sound and light effects



The online exhibition presents eight thematic areas through video tours and 3D exhibition areas, allowing everyone interested in Delta to join the event online

The 50th anniversary exhibition will run for one year as of August 28th and will be available online. Even if you cannot attend the exhibition in person, you can still experience the eight thematic areas through audio tours and real 3D exhibits. Through the online and physical exhibition, we hope to invite more people to retrace the footsteps of Delta's history and look forward to a brighter future.

Delta's 50th anniversary online special exhibition:
<https://delta50.deltaww.com/exhibition/>



Delta's 50th anniversary "Sustainable Conservation & Nurturing Life" online forum

In the 50th anniversary series, Delta Electronics Foundation (DEF) four live online forums. The forums are divided into two main themes, "Save and Purify" and "A Healthy Ocean" of which everyone is invited to participate and listen. The topics covered include air pollution, smart grid, marine conservation, and more. Many experts and scholars, environmental groups, and public welfare organizations were invited to share their knowledge and experiences with the audience online. The four online forums of "Sustainable Conservation & Nurturing Life" explore the two themes of "Save and Purify" and "A Healthy Ocean," in how to work together to remain below the 1.5°C danger line and restore marine biodiversity.



The Foundation invited Dr. Paul Ai, senior director of Delta Solution System Integration Division, and Dr. Jacky Lai, product manager of Delta's Smart Grid Division, along with many other experts and scholars to explain how to save electricity

In the forum "The Distance between Smart Grid and Your Home Meter," the Foundation invited Dr. Paul Ai, Senior Director of Delta Solution System Integration Division, and Dr. Jacky Lai, Product Manager of Delta's Smart Grid Division, along with many other experts and scholars to explain how to use Delta's technology and energy solutions, as well as practical ways to save electricity in our daily lives. All of this knowledge can be used to implement low-carbon living, increase the penetration of renewable energy, and move toward the goal of "net-zero emissions." The "Sustainable Conservation & Nurturing Life" online forum was well received by the audience and the video garnered more than 10,000 views.

Delta's 50th anniversary series of activities, through physical events, online exhibitions, and forums, recap Delta's history over the last half-century and showcase core technologies and solutions. More importantly, the activities convey to the public the "Sustainable Conservation & Nurturing Life" initiative, which cherishes energy, respects all organisms and the environment, and provides our next generation with a sustainable future. Check out the 50th-anniversary event website for more exciting content!

"Influencing 50, Embracing 50" series activities: <https://delta50.deltaww.com/>

"Sustainable Conservation & Nurturing Life" Series:

My Sky—Solutions For Air Pollution in Construction and Transportation:
https://www.youtube.com/watch?v=3vTeaGmV_8k

The Distance Between Smart Grid and Your Home Meter:
<https://www.youtube.com/watch?v=ytFhUEyptGw>

Giving Back to Nature—30% of the Ocean by 2030:
<https://www.youtube.com/watch?v=FG5ausw501s>

Global warming—Taiwan's Coral Bleaching Crisis:
<https://www.youtube.com/watch?v=8qXKwFKSsXc>



ESG chief committed to achieve Delta's sustainability goals

Interview with Delta Chief Sustainability Officer - Mr. Jesse Chou

Text by Brand Management Division (BMD)

The concept of "ESG" has been making waves around the world. In line with this trend, Delta first established its Sustainability Committee in 2007 and introduced the post of Chief Sustainability Officer in 2019 to actively promote and further its sustainable development policies. Along the way, Delta won many world-class awards and have been widely recognized globally. It has been selected as part of the World Index of the Dow Jones Sustainability Indices (DJSI) for ten consecutive years. It also won the 2020 "Taiwan Corporate Sustainability Award" and ten awards from the "Global Corporate Sustainability Award". These awards helped drive concrete results in sustainability efforts also added value to the company's revenue and the brand! In this issue of "People Behind the Brand", honored guest Mr. Jesse Chou, the Chief Sustainability Officer, shares with us his journey in promoting ESG with Delta.





Chief Sustainability Officer Jesse Chou represented Delta in receiving 10 awards from the 2020 Taiwan Corporate Sustainability Awards (TCSA) and Global Corporate Sustainability Awards (GCSA)



Chief Sustainability Officer (middle) joins the Sustainable Development team for a group photo: the team promotes sustainability projects from environmental (E), social (S), and governance (G) aspects

Pragmatic, trustworthy and deeply committed to sustainability

"Pragmatism, willingness to set long-term goals, and deliver on promises; these are extremely valuable core values, whether for ESG or Delta's development. This is what I experienced with Delta and these have become part of the Delta employee's DNA," began Mr. Jesse Chou, opening the interview with these profound words.

Whether it is promoting ESG externally and communicating brand propositions, or incorporating ESG internally into Delta's DNA, the ESG Office has always spared no effort in pushing the concept. Delta's sustainable development is based on combining business strategy with ESG while adhering to the company's mission of "protecting the environment, conserving energy, and loving the earth". In doing so, it is dedicated to providing innovative energy-saving solutions for a better future. These are the core values that guide Delta's business development and corporate sustainability.

In order to promote ESG, it is necessary to have the support of senior management, a good executive team, as well as the necessary methods and structure. Delta first established its Sustainability Committee in 2007 and was the first company in Taiwan to set up such a committee. More than ten years have passed since it was first set up and the founder, Mr. Cheng, still holds the title of Honorary Chairman. The company President serves as the Chairman, while the Chief Executive Officer, the Chief Operating Officer and other high-level directors make up the committee members. Under them are the ESG Office and various project teams that serve as a think tank, as well as to provide project executives and managers, who implement ESG through promoting environment, society and governance-related projects. Through the support of Delta's senior management team, and its subsequent active promotion through internal and external communication channels for more than ten years, the concept of ESG was internalized and naturally become part and parcel of the corporate culture.

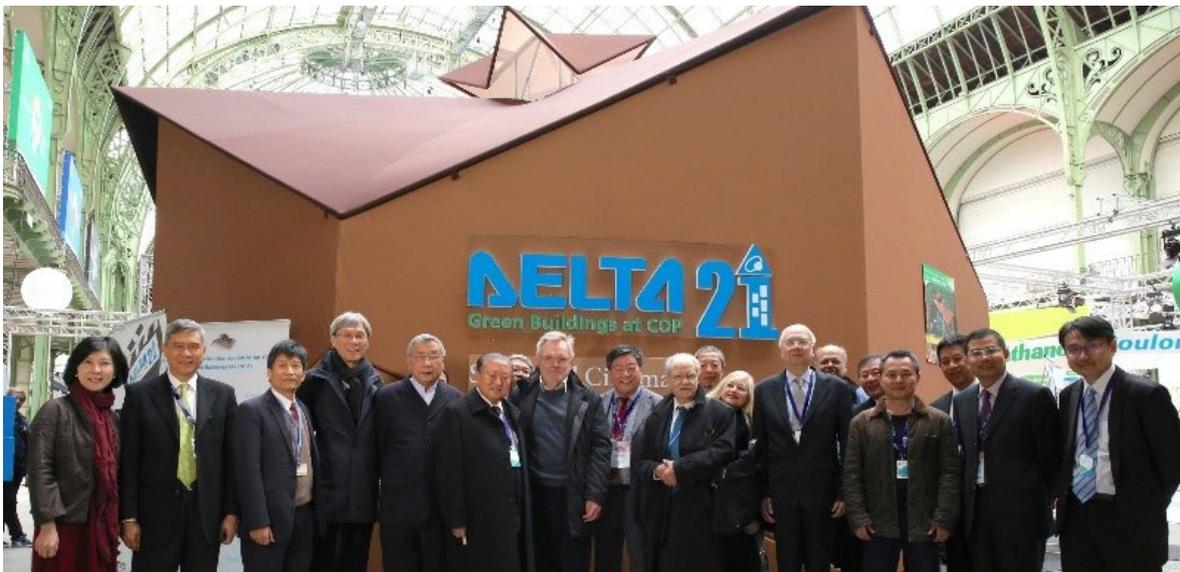
"I joined Delta in 2004," Mr. Chou recalled, "Something I will never forget is being tasked to write Taiwan's first CSR report. That was in 2005 and I wasn't able to find any reference materials, so I had to learn by doing. At the same time, Mr. Hai, who was the Chief Executive Officer then, also asked me to summarize a report on the Kyoto Protocol and share it with all my co-workers. As I had previously been working in the technology sector, I was completely baffled. How was that in any way related to the company's operations?" Time really flies. It has been more than ten years since the release of Taiwan's first CSR report. The Kyoto Protocol unexpectedly became Delta's first foray into climate change issues. The fact that Delta has paid attention to this issue for such a long time is clear evidence of how closely integrated ESG is with Delta's DNA.



Establishing methodology from scratch and learning by doing

Delta has been paying close attention to climate change issues for many years. One of the key factors for the promotion of sustainable development was the strong support of Mr. Bruce Cheng, the founder of the Delta Group. Another key factor was Mr. Ping Cheng's willingness to sign the "We Mean Business" agreement in 2015, which was initiated by thousands of the most influential companies around the world and the World Business Council for Sustainable Development of Enterprises, among other organizations. The agreement promises that the signing companies will actively work towards reaching the science-based carbon reduction target (SBT) in their independent carbon reduction efforts. Though Delta passed the SBTi assessment, it is committed to reducing its carbon intensity by 56.6% in 2025 from the figure achieved in 2014. In February 2018, it went a step further and became a supporter of Task Force on Climate-related Financial Disclosures (TCFD). In March 2021, it announced its membership into RE100, a global renewable energy initiative. Delta has promised to achieve 100% renewable energy consumption and carbon neutrality throughout its global operations by 2030. It is the first Taiwanese high tech manufacturer to commit to achieving the RE100 and carbon neutral goals by 2030.

"Too many international standards have popped up over the years, but Delta has been keeping abreast with the key initiatives," remarked Mr. Chou, "Not only must we meet these standards, we have to also make sure that every figure has been verified by a third party. That means that not only does Delta ESG have to achieve those figures, it also has to ensure that the results are verifiable to as large an extent as possible." Over the years, Delta has participated in various international evaluations. The purpose was not to get a score, but rather, to "realign" itself. In particular, the World Index of the Dow Jones Sustainability Indices (DJSI) is looked upon highly by Delta and other companies. It also focuses on various sustainability topics every year that keeps pace with the times. This is the best form of ESG "self-evaluation" and Delta conducts its yearly self-evaluations based on this benchmark.



Delta's management team attends the 2015 UN Climate Change Conference (COP21) at Paris, and Delta signs "We Mean Business" in the same year to show our commitment to supporting alignment with the international community through ESG actions

Ask to describe Delta's journey towards sustainable development in one sentence, Mr. Chou said, "There was no methodology to make reference to at the beginning, and it was an rough journey." Today, Delta's ESG has been rated as an international benchmark, and many international companies interested in ESG, but unsure of how to begin incorporating it have started looking at Delta as a case study. Mr. Chou distills the key factors, "Creating a strategy and setting goals might be difficult, but they are essential steps." In terms of sustainable development within the company, Delta currently has goals, lessons, ideas, and experience, and is gradually cultivating the ability to move from having multiple separate goals to working towards the ultimate goal. This is the result of Delta's strong ESG execution.



Gaining insight into opportunities amidst challenges and making advanced preparations for Delta's future sustainability

While promoting ESG, Delta is also actively seeking new business opportunities from it, resulting in an endless stream of new challenges. As Delta has a global presence with a large number of geographically dispersed factories, it is impossible to concentrate their energy consumption. As such, the biggest challenges currently facing Delta are how to purchase green energy-related products in the different countries that it operates and how to narrow the gap between the rate of energy consumption and the rate of power generation to achieve a better match score.



Delta's ESG strategy aligns with international trends and carries out relevant actions in our business operations. Wujiang factory with the built-in solar power increases the usage rate of green energy

"While there are many challenges, these bring with them opportunities. When it comes to market demand, Delta often prepares makes advanced preparations." During the interview, Mr. Chou expressed that he was not worried about difficulties. Rather, he had the calm composure of a veteran. These new business opportunities include how to solve the problem of power distribution and improve the match score, as well as helping customers who have encountered difficulties to solve their problems.

The policy of "advanced preparation" has been a factor for many successful ESG cases, and these have left a deep impression on Mr. Chou. Recently, international consumer electronics brand customers have requested that Delta switch to using 100% renewable electricity to produce their products within a very short period of time. Mr. Chou mentioned that in the face of sudden "resolute policy changes" from customers, Delta is still mostly able to prepare ahead of time to quickly respond to and solve these problems. However, when dealing with the many requirements of customers, it is inevitable to feel frustrated sometimes. However, as Delta's charismatic Chief Sustainability Officer, he is still determined to enthusiastically lead the team in overcoming difficulties, one after another.

"I am most grateful to have the support of the management team and the heads of the various business groups!" stated Mr. Chou humbly. Taking the internal carbon fee levied on various BGs as an example, even if it was to erode the profits of the various business units, the resistance encountered when communicating the policy was still much smaller than imagined. The endless stream of stories is a testament to the fact that Delta has been successfully passing down the spirit and culture of sustainability over the past 50 years. It looks forward to taking on the next 50 years through diversified channels and methods that are more advanced in quality, depth, and breadth.



Delta's high-efficiency inverters help achieve carbon neutrality in the new era of smart manufacturing

Text by IABG

With over 20 years of development, Delta has continued to expand its market share of inverters by providing high quality and performance. It has not only boosted its brand awareness in the industrial automation field, but has also received recognition from customers in diverse industries such as textile, packaging, woodworking, electronic manufacturing, rubber and plastic, food and beverages, water treatment, metallurgy, and more. In recent years, the growth of the general inverter market has slowed due to the economic environment. However, Gavin Chang, the General Manager of the Delta Motor Drive System Business Unit expressed satisfaction with the sales performance of Delta's products. "Building on the double-digit growth of 2020, Delta's inverters continue to perform well in the first quarter of 2021." In addition to the MH300, MS300, and ME300 Series, which have been the mainstay of growth, Delta has also achieved excellent results in various industrial applications. In terms of energy efficiency, Delta's synchronous reluctance motors (SynRM) have become one of the best choices for industrial customers to save and reduce energy consumption. The motors show significant energy-saving capabilities and can be coupled with fans, pumps, air compressors, and extruders for a wide range of applications. As for the high-power market segment, Delta has launched its new Motion Control Drive System to meet customers' needs for precise positioning with a high-power range of 15 ~ 80 kW. Gavin also mentioned, "Observing the industrial trend of integration, Delta has analyzed the market and figured out the needs of machine makers and end-users. By further integrating hardware, software, and technologies such as IIoT and Cyber-Physical System (CPS), Delta has introduced comprehensive Machine/Factory/Process Automation solutions to help customers increase productivity and reduce operating costs."





With the growing trend for carbon neutrality in the manufacturing industry, energy-saving and consumption reduction have become the focus of attention in the inverter market. In this regard, Delta upholds its corporate mission of "To provide innovative, clean, and energy-efficient solutions for a better tomorrow." Moreover, Delta signed its first power purchase agreement (PPA) at the beginning of 2021 to contribute to its RE100 commitment to reach 100% utilization of renewable energy as well as carbon neutrality in its global operations by 2030. This action in turn has expanded market space for its inverter products. Gavin believes that this trend is both a challenge and an opportunity saying, "Inverters are energy-saving products for the front line. Compatibility and energy-saving performance are both Delta's key focus in applying its full range of product designs. Inverters are an important part for systematic energy-saving." The MH300, MS300, and ME300 product series are good examples that demonstrate Delta's design and encapsulation capabilities in independent intelligent power modules (IPM). Providing high yields and excellent stability, these products' cumulative sales volume has exceeded one million units in the past three years. Gavin stated, "Delta invests more than 8% of its annual revenue in R&D innovation to improve the energy conversion efficiency of its products. From 2010 to 2020, Delta's energy-efficient products, including inverters, have assisted customers worldwide in saving about 33.5 billion kWh of electricity and reducing carbon emissions by 17.8 million tons."



Since inverter technologies have reached the maturity stage, products are now facing similar challenges. Gavin believes that the key to future product competitiveness lies in specialization, systematization, and intelligence. "In response to market segmentation, specialized products with high industry attributes will continue to emerge and coexist with general models, where both multifunctional and simple products appear in the market. At the same time, compact designs that integrate PLCs, servo systems, and other functions will also become the focus of development to enhance the flexibility of future integration into smart manufacturing and to achieve the close integration of digitalization and communication capabilities." Based on this insight, Delta has divided its product departments into high and low power, industrial, and new technology development. In addition, Delta has expanded its applications by extending the integrated power of the entire inverter system to build power drive products for industrial solutions.

With the inevitable trend of smart manufacturing around the corner, digitalized and intellectualized inverter products must meet basic performance requirements such as for energy-saving, stability, and ease of use. Delta is integrating its automation products, software, and system solutions, including automated equipment, production line integration, data collection and analysis, and even operation management. Gavin stated, "With customer needs as our guideline for product development, we will remain dedicated to introducing comprehensive solutions with high added value that help our customers build highly integrated smart factories and create a competitive advantage. By moving towards high-mix low-volume (HMLV) manufacturing, Delta is building momentum to fulfill its promise of "Digitized Automation for a Changing World."



Actively investing in the development of renewable power applications and striving towards the RE100 goal

Text by Corporate Sustainable Development Office

Delta celebrates its 50th anniversary this year (2021) and continues the mission of combining business operations with sustainable development. In early March of this year, Delta announced that it had joined the RE100 global renewable energy climate group. By joining the group, Delta pledges to achieve the total goal of 100% renewable electricity and carbon neutrality by 2030 for all Delta locations worldwide, becoming the first company in Taiwan's high-tech manufacturing industry to commit to reaching the RE100 target by 2030. This is not only a tribute to Delta's 50 years of experience and efforts in environmental protection and energy conservation but also a commitment to the global environment. Delta is also actively following the international trend and laying out a clear blueprint for Delta's sustainability strategy.

In less than six months after committing to RE100, Delta has successfully signed a long-term green Power Purchase Agreement (PPA) with TCC Green Energy Corporation to supply Delta with 19 million kWh of green power from a 7.2MW wind power installation each year. Under the leadership of the management team and close cooperation between the cross-departmental and cross-regional project teams, Delta is moving towards the RE100 goal one step at a time, which is the best depiction of "Delta Rising (Note 1)."



Brand-name manufacturers actively participate in RE100 and the application of renewable power becomes an important indicator for supply chain assessment

RE100 is a global renewable energy initiative led by The Climate Group (Note 2) and CDP. Companies that join the initiative must make a public commitment to achieve 100% green power according to schedule by 2050 and be reviewed each year. At present, RE100 has over 300 corporate members, from various industries such as high-tech, finance, food and beverage, and apparel fashion, among which are many of Delta's major international brand clients. Also, many benchmarking corporations are beginning to demand that suppliers provide products made using 100% renewable energy in their supply chains. With imminent deadlines for this criterion, suppliers will be caught off guard and have their businesses affected if not prepared in advance.



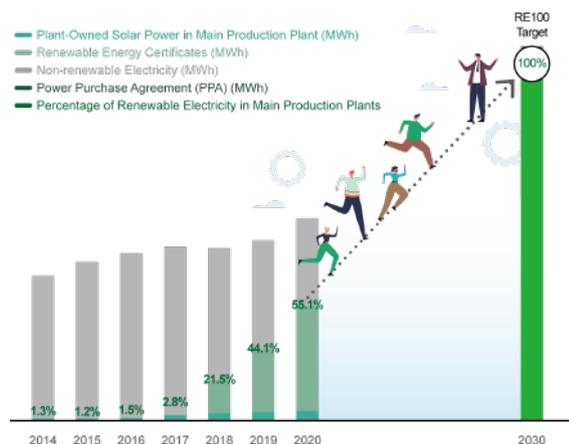
Built-in solar power system in own factory is an important strategy to align with international community and respond to RE100 trend. Photo is Delta Chenzhou factory with built-in solar power system

Many of Delta's business units have been experiencing this kind of pressure for quite some time. For example, Delta's major network customer and major consumer electronics brand-customer coincidentally launched an investigation into the use of renewable energy in their supply chains in November 2020, with the latter demanding that manufacturers commit to using renewable electricity for all their products starting in 2022.

Successful experience in reducing carbon emissions for SBT is an important foundation for achieving 100% renewable electricity

After passing the Science-based Targets (SBT) in 2017 and setting the year 2014 as the baseline, Delta aims to achieve a 56.6% decrease in carbon intensity by 2025. By continuously implementing the three major relevant strategies including voluntary energy conservation and carbon reduction, in-house solar power generation and consumption, and purchasing green energy or acquiring international renewable energy certificates, Delta has already reduced carbon intensity by over 55% in 2020. The use of renewable electricity has also reached about 45.7% of the global electricity consumption for all locations, and the renewable electricity used in major production plants accounted for about 55.1% of the total electricity consumption. The experience gained from the implementation of SBT builds Delta's confidence to further meet the new challenges of RE100.

Although Delta is in the lead in deploying renewable power applications through the implementation of SBT, there are still many hurdles to overcome to achieve 100% renewable power usage by 2030, given Delta's global presence on five continents. According to internal inventory and analysis, Delta's locations that should be included in RE100 are covered by more than 30 country codes and includes nearly 90 companies. Since the development of renewable power varies greatly for each location, the difficulties in realizing RE100 vary. Factors such as high prices, complicated policies, lack of natural resources, and lack of green power purchase channels are all challenges that need to be faced.



Delta is actively implementing SBT to reduce carbon emissions. By 2020, the carbon intensity has been reduced by more than 55%, which is ahead of schedule. Also, regenerated electricity used at major production plants already accounts for approximately 55.1% of overall electricity consumption, further building our confidence to meet new challenges on the path to reaching the RE100 goal



In light of the inconsistent development of renewable energy in each country at this stage, Delta will evaluate the appropriate renewable energy development strategies and corresponding solutions for each region, depending on the degree of green power market liberalization and relevant government regulations. Delta's main production sites include China, Taiwan, Thailand, and India. Delta will strive to achieve its RE100 commitment by using its energy-saving, self-generating, and self-built solar power plants, as well as power purchase agreements and renewable power certificates following local market trends. Delta has also developed various renewable energy application solutions to help power generators use renewable energy more efficiently. For example, energy storage systems can intelligently control the charging and discharging time points to help customers improve the matching ratio between electricity consumption and renewable energy generation, which is a promising business opportunity.

All hands on deck to promote RE100— achieving the milestone for the first long-term green power purchase agreement



Members of Delta's Taiwan Green Energy Team visited a wind power project site to survey and evaluate the power generation conditions

At the beginning of 2021, Delta established a cross-departmental Taiwan Green Energy Working Group at its headquarters, integrating relevant units such as plant affairs, finance, procurement, legal affairs, capital, and the ESG Office. According to each unit's respective authority and responsibility, they will together enter the green power trading market and negotiate with green power suppliers. The collaboration is aimed to speed up the process of signing power purchase agreements and sales contracts, of which this agreement model and experience can be shared to the various locations and regions around the world.

After the establishment of the Green Energy Team, we took the lead in selecting sustainable power generation sites in Taiwan that produced low environmental impact, and conducted on-site surveys and evaluations both in the mountains and at sea, with the main goal of signing long-term PPA contracts. After working tirelessly to overcome the shortage of green power supply in Taiwan, we signed Delta's first long-term green power purchase agreement with our business

partner, TCC Green Energy Corporation, a subsidiary of TSMC Group (Note 3), in August. With a total installation capacity of 7.2MW, the land-based wind turbines of TCC Green Energy will provide Delta with approximately 19 million kWh of green electricity per year, which is expected to reduce the earth's carbon footprint by more than 193,000 tons. The Green Energy Group also continues to negotiate with several green power companies to accelerate the achievement of its goals with a combination of wind, light, and water energy sources.

Delta has further established a cross-regional RE100 committee and working groups, with the ESG Office acting as the secretariat coordinator. Headquarters and regional operations directors form the regional working groups to promote and achieve the renewable power goals of all local Delta sites. Since the development stages of renewable energy vary in each region, regions with mature development will reach the RE100 target sooner, such as Taiwan, where the management team has been instructed to reach 100% renewable electricity by 2025. Each regional operation director also reports regularly to Delta's management team and the Sustainability Committee on the progress of local RE100 promotion. We hope that with all of our employees participating in RE100 and every small effort will count in moving closer to allowing truly efficient and clean renewable energy to become the driving force for the sustainable development of each regional operation.

*1 "Delta Rising" is the opening video for Delta's 50th-anniversary Special Exhibition. It tells the story of the founder, Mr. Bruce Cheng, and Delta's efforts in pursuing energy conservation, carbon reduction, and sustainable hope through the power of innovative technology and foundations in the face of climate change.

*2 The Climate Group is a nonprofit organization based in London that promotes important environmental initiatives. Since 2014, we have launched three major environmental initiatives, including RE100, EV100, and EP100. Delta is currently a RE100 and EV100 member company.

*3 TCC Green Energy Corporation is the first power utility group in Taiwan to provide a full range of services in renewable energy investment and development, project contracting, operation and maintenance, and green power sales. TCC Green Energy has been a long-term partner with Delta and has recently adopted Delta's centralized three-phase solar power inverters in the construction of the largest 150MW Tainan Yiantian solar farm and other renewable energy projects to stabilize solar power output.



Delta Electronics Foundation launches a radio website to commemorate Principal Chung Laung Liu

Text by DEF



Delta Electronics Foundation launches a radio website to commemorate Principal Chung Laung Liu

The world was shocked with remorse when National Tsing Hua University's former Principal Chung Laung Liu suddenly passed away at the end of last year. Mr. Bruce Cheng, Founder of Delta and Chairman of Delta Electronics Foundation, has known Principal Liu as a good friend of thirty years. Knowing that Principal Liu was committed to promoting general science education through radio broadcast, Mr. Cheng commissioned a radio station to produce "Talks with Principal Liu" (<https://www.chunglaungliu.com>), where anyone with Internet access can listen to over 800 episodes of brilliant radio shows that Principal Liu recorded for the past fifteen years. The contents of these shows range from literature and arts, general science, digital society, and daily life. The shows are also available on various Podcast platforms, so that Principal Liu can continue to impact us on air.

Not only was Principal Liu an internationally renowned pioneer in information science around the world who contributed toward computer-aided design (CAD) and discrete mathematics, but he was also a famed educator in the Chinese-speaking areas. Having studied at National Cheng Kung University and the Massachusetts Institute of Technology (MIT), Liu taught at the University of Illinois before being recruited to teach at NTHU. He was also a Fellow at the Academia Sinica. Besides educating the youth on campus, he also became a radio show host on FM97.5, where he shared his well-read and enriched life experiences with his dedicated audience members on air in each week.

Mr. Bruce Cheng, Founder of Delta and Chairman of Delta Electronics Foundation, commented that Principal Liu was more than just an award-winning scholar, he was also a wise man who never stopped learning. In December 2015, Principal Liu had attended multiple events with Delta's delegate team during the famous Paris Agreement, where the world anticipated much-needed change. It was also during this time when Liu had expressed his high hopes for Delta via poet Du Fu's poem, roughly translated to mean "We can only build resilient and sturdy houses by providing shelter to disadvantaged students around the world". We hope to touch even more people via Principal Liu's wisdom and humor, as well as his down-to-earth and well-read manners via the latest digital broadcasting technology.

Talks with Principal Liu website

Available at: <https://www.chunglaungliu.com/>



Delta's ultra fast EV charger to power electric haulage truck in the UK

Text by EMEA

Delta's 200kW Ultra Fast EV Charger (UFC200) will charge an electric haulage truck in the UK. The new electric truck, which is operated by a major haulage operator in South Wales, will be used to provide delivery services for British multinational groceries and general merchandise retailer. Rapid Charge chose to install Delta's UFC200 at its South Wales depot to meet the truck's charging requirements given the UFC200's AC and DC outputs, multiple CCS connectors, as well as Delta's long standing reputation for quality and reliability.

Adrian Wright, CEO, of Rapid Charge, said: "We are delighted to have been given the opportunity to support our client with the installation of Delta's UFC200 to charge the new electric truck. We have made history with this being the first 200kW Ultra Fast EV Charger (UFC) on UK soil to power an electric truck. Given that electric power is the future of global haulage, we are confident that Delta's reliable and durable UFC is a perfect solution for this application. With this installation, we are playing a role in kick-starting a new era for the haulage industry that will result in a dramatic reduction of its carbon footprint."

Vincent Lin, senior director of e-Mobility & Smart Energy Solutions business development, Delta EMEA, said: "We are very excited to work with Rapid Charge in playing a key role in the electric revolution that's set to sweep across the haulage industry. Providing the power source for the UK's electric lorry reflects Delta's status as a provider of leading EV charging solutions. We are certain that this is the first step in helping the industry migrate to electric powered vehicles, which are better for the environment while offering haulage companies lower operating costs."

Rapid Charge chose to install Delta's UFC200 at the South Wales depot to meet the truck's charging requirements. Delta's UFC impressed them with its features - ranging from both AC and DC outputs and its multiple CCS connectors - as well as Delta's long standing reputation for quality and the reliability of its solutions. Designed to support next generation EVs, e-trucks and e-buses in a broad range of applications such as highways, parking lots, service stations, logistics companies, as well as urban traffic hubs., Delta's UFC200 provides the convenience of a single station installation combined with the ability to charge up to four vehicles at the same time. This maximises the individual charge rates depending on the vehicle - which reduces vehicle waiting times - while dynamically adjusting to secure grid connection points. For larger DC charging parks, additional variants and configurations are available in order to optimise the operation or to support different traffic/parking schemes.



Delta's Ultra Fast EV Charger to power electric haulage truck in the UK



Intelligent temperature control and human-machine interface help precise baking

Text by EMEA

The requirements for the bread furnace machine defined four temperature zones. The conveyor belt of this traveling oven design must also be held at the correct speed throughout the process. Rounding off the specifications was a human-machine interface (HMI) to configure the baking process, deliver temperature status of each zone, and output any error status information.

The Mechatronics Ltd. team benefited from the broad range of industrial automation solutions in the Delta portfolio. Integration of the VFD, HMI, and Temperature Controller was simplified thanks to the out-of-the-box interoperability and connectivity of the components selected.

For the HMI, the team selected the Advanced HMI DOP-107WV from the DOP-100 Series. This touch-based control panel features a 16:9 7" color TFT screen with a modern-looking, narrow frame. Its multilingual support. Considering the operating environment, the flat, wipeable surface of the DOP-107WV proved the ideal choice for a dusty bakery.

Special attention was given to selecting the optimal control approach for the seven heating elements used, the DTC1000 Temperature Controller was selected as the main controller, with DTC2000 controllers used in parallel for the remaining six heaters. To provide optimal temperature regulation, the auto-tuning function of the DTC1000/2000 was used. The inputs are acquired from third-party PT100 temperature sensors while control of the heating elements is implemented with solid-state relays. Auto-tuning uses a training process to configure the closed-loop PID controller once the sensors and heaters are installed in this 250 kW furnace. Closely coupled with the quality of the bake is the speed control of the conveyor belt. The MS300 VFD is linked to an inductive proximity sensor that is easy to clean and remains accurate in the dusty baking environment.

"Construction of the bread furnace was simplified by the availability of components that are interoperable and fulfilled the requirements demanded by our customers. Accurate temperature control was most critical for us, and the Delta team's support was essential in configuring the DTC1000/2000 auto-tuning function. This assistance contributed to the project moving from the initial design stage to full production." said Toma Draganov, Automation engineer at Mechatronics Ltd.



Intelligent temperature control and human-machine interface help precise baking



DRC introduces "Smart Manufacturing Integration Lab" in promoting innovation

Text by Delta Research Center



Delta's "Smart Manufacturing Integration Lab" provides smart manufacturing solutions and services

Delta Research Center's Smart Manufacturing Integration Laboratory is located in Wuhan City and has the geographical advantage of being a thoroughfare for nine provinces. The lab provides partners and customers with smart manufacturing solutions and services using Delta Group's automation products and Delta Research Center's core technologies in virtual-real integration systems.

The lab not only has pioneering solutions such as convertible smart machines, AI applications, and digitization tools such as AR/VR, but also provides an innovative experimental base for validating technology prototypes and cross-domain collaboration with partners or customers, and is expected to be the best partner in the smart manufacturing ecosystem.



AR/VR digitization tools help accelerate the digital transformation of enterprises



Convertible smart machines and conveyor belts for flexible manufacturing



Smart AI applications—automatic defect classification, predictive maintenance, and digital twin



Delta Controls' building control solution improves the smart operations of China CTU

Text by Delta GreenTech China (DGC)

Recently, Delta Controls has completed the smart Class B integrated sports complex for the stadium of Xi'an Chiao Tung University Fundamental Education Campus in Hancheng City, China. In September 2021, the Judo Competition for the 14th China National Games will be hosted on the campus. Delta Controls' building control systems will once again ensure the smooth operation of the large-scale event with its professional technical capabilities.



Delta Controls' smart building control solutions help operate and maintain the site where the judo competition of the China National Games will be held

Compared with the original method used in managing the building, Delta Controls' smart building control system can monitor the operation status of equipment in real-time and schedule start/stop commands in advance, which not only saves labor cost but also improves management efficiency. This is especially true for dealing with malfunctioning equipment. Originally, much time and effort were needed just to first pinpoint the faulty equipment before the examination. In addition, the cause of the malfunction is not recorded, which further increases the difficulty in conducting maintenance. After adopting a smart building control system, the system can alert personnel of any equipment failure, so that the maintenance personnel can repair the equipment more quickly and timely, further ensuring uninterrupted operations. Users can also monitor and control the building's modular air conditioning system, fresh air system, ventilation system, thermal source system, and the CO concentration in the basement parking lot through preset parameters according to the needs of the environment to ensure comfort and health of the environment.

In this project, Delta Controls used the graphical software enteliweb as its management platform, which is multi-functional software that can manage building automation, energy consumption, and smart lighting systems. Users can create custom dashboards, access the platform from mobile devices such as smartphones, handle device alerts, and more. The software features functions such as energy analysis, manual data entry, visual data comparison, task logging, and filtering on demand. Administrators, managers, and operators alike can use enteliWEB to view the information and focus they need, making the software suitable for customized needs.

After the China National Games, the stadium in Xi'an Chiao Tung University Fundamental Education Campus in Hancheng City will be open to the public and will be used for sports teaching and training, cultural performances, and exhibitions for the school. In collaboration with Delta Controls, this smart sports complex that integrates teaching, competition, and training not only meets the needs of the judo competition but also adds more functionality to the city and serves the community.



Delta partners with renowned e-commerce company to create a new unmanned supermarket

Text by Delta GreenTech China (DGC)



5-20kVA UPS of the Amplon RT Series ensures a reliable unmanned supermarket system

24-hour "unmanned supermarkets" are popping up one after another in subway stations, business centers, parks, office buildings, and more locations. New technologies such as barcode scanning for entry, face recognition, anti-theft monitoring, remote customer service, and smart cashiers provide a convenient and new shopping experience. In this new frontier of retail, Delta, a global provider of power management and thermal solutions, has partnered with a leading e-commerce company to ensure reliable power for its unmanned supermarkets with the Amplon RT Series low power UPS.

The unmanned supermarket is a new business model that this well-known e-commerce company is attempting to expand in the next few years. This new retail model combines "people, goods, storage, and distribution" both online and offline. The all-in-one machines used in the unmanned supermarket implement a series of new retail technologies that require a reliable power supply and should take up little space. The UPS, batteries, power distribution, and monitoring equipment are concentrated in a single cabinet, with a total height of 8U (35.56cm), leaving as much space as possible for servers while ensuring a reliable power supply for critical equipment.

Delta recommends using the full-rated power factor designed 5-20kVA UPS of the Amplon RT series accompanied with battery packs, which have been rigorously tested by customers, have far better discharge capacity than competitive products and are more compact. Combined with the UPS built-in software, it can provide more accurate predictions for discharge time and support enough load capacity for critical equipment. In terms of availability, flexibility, and manageability, the Amplon RT series has significant advantages in the application of unmanned supermarkets with all-in-one cabinets, including:

- An online dual-switch design that allows zero interruption in switching battery power supply, providing full-time protection for unmanned supermarket equipment 24/7
- Installation height as low as 2U for easier installment, leaving more space for servers
- A function for detecting battery age, which can monitor the battery status for predictive maintenance and realize unmanned services
- Critical component life prediction, such as fan life prediction, to prevent accidents by providing advanced alerts for malfunctions or shutdowns
- Output power factor up to 1, with the capacity for various loads without derating, and can provide 100% active power output
- With AC-AC efficiency up to 96.5% and ECO operating efficiency 99%, it can significantly reduce operating cost

This all-in-one solution that uses the Amplon RT series low-power UPS fully meets the existing needs of the unmanned supermarket while taking into account the flexible expansion requirements for future business development. In terms of space, battery backup time, equipment plug-and-use, the UPS excels in carrying capacity and even in software protocol interfacing.



Charging electric vehicles in community housing: mid-sized community in northern Taiwan

Text by EISBG

This model community in New Taipei City, Taiwan, is one of the best in the area. Residents here have been asking the community to meet their electric vehicle-charging needs. However, installing additional chargers to existing buildings might result in inadequate power distribution, leading to safety concerns as well as management issues. Therefore, after receiving professional advice from Delta's distributor, the community decided to adopt a "comprehensive planning" model last November, in which power, cables, equipment safety, and operational and maintenance needs are all integrated into the solution. Finally, more than half of residents signed up for the chargers.

In the case of this community, Delta has reapplied for independent, dedicated power meters for electric vehicles after confirming the community's power distribution balances with Taiwan Power Company. An independent power meter, coupled with the energy management functions of DeltaGrid® EV Management, is set up for each floor. Current limitations can be set to make sure that current overload, which may cause fires, does not occur. Moreover, the scheduling function also allows car owners to charge at different times. The charger may be used by each parking spaces, making sure that all car owners can meet their charging needs. Also, DeltaGrid® EV Management backend management system is uniformly used, allowing building managers and members of the building committee to understand the current usage of every charger. In terms of management issues such as pricing and charging, the backend system also provides membership and billing functions. Payments can be collected through preauthorized RFID cards and fee storage functions, thereby ensuring fair payment from all users.



Charging electric vehicles in community housing: mid-sized community in northern Taiwan

While planning the charging facilities for this community, the technicians have planned dedicated cable framework structure above the lanes in the parking lot to avoid impacting the existing cables and fire facilities. Compared with residents who set up their own cables from their private meters, the length of the cables can be reduced, and any resident who wishes to install chargers can easily extend the cables to their parking space from the cable framework overhead. This makes it the overall environment more streamlined and much neater. Moreover, small-sized and compact AC Mini Plus, ideal for slower, overnight charging is hung at each parking space, creating an outlook that is aesthetically pleasing, easily enables expansion needs, and does not compromise car mobility. Delta has formulated a safe and aesthetically pleasing community charging environment friendly to both the users and the building committee by planning and installing cables, installing unified chargers throughout, and setting up a backend management system.



Delta Climate Salon analyzes the latest UN climate report

Text by DEF

Having focused on climate change and energy issues for many years, Delta Electronics Foundation (DEF) organized the online Delta Climate Salon on August 10, 2021. The salon analyzed the 'AR6 Climate Change 2021: The Physical Science Basis', the latest report from the United Nations' Intergovernmental Panel on Climate Change (IPCC) in order to help industries, the government, and the academia in Taiwan to stay on top of the latest climate trends and international information. On August 10th, the live streamed event cumulatively drew nearly 500 views, and the audience members passionately exchanged their ideas online.

Delta's Chief Brand Officer (CBO) and Deputy Chairman of Delta Electronics Foundation Shan-Shan Guo commented that, having immediately compiled relevant information on 'The Fifth Assessment Report (AR5)' seven years ago, 'The Special Report on Global Warming of 1.5°C (SR15)' three years ago, and 'Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC)' two years ago, DEF has once again immediately compiled relevant climate and science information for the public this year. The purpose of which is to strengthen the public's awareness to the impending climate crisis.

Chief Sustainability Officer and Spokesperson Jesse Chou stated that, Delta has been committed to developing green energies over the years by aligning its core competencies in battery technology, and strives to contribute toward keeping the global temperature increase to within 1.5°C. This year, Delta has also reached Power Purchase Agreement (PPA) with TCC Green Energy Corporation, the largest load transfer supplier of renewable energy in Taiwan. Delta will purchase wind power generator with a capacity of 7.2MW from Taiwan Cogeneration Corporation, which will supply approximately 19 million kWh of green energy to Delta in each year. This is a substantive move toward Delta's RE100 goal, which aims to achieve 100% renewable energy consumption and carbon neutrality at Delta's operations worldwide by 2030.

IPCC points out in its 'AR6 Climate Change 2021: The Physical Science Basis', that greenhouse gas (GHG) emissions from human activities have led the temperature of the Earth's surface to rise by 1.07°C from 1850 to 1900. It is very likely that we will exceed the 1.5°C threshold before 2040. To prevent climate disasters, we need to greatly reduce carbon emissions within the next decade, and to achieve net zero emissions by 2050.



Delta Climate Salon analyzes the latest UN climate report



Delta Cup International Solar Building Design Competition award ceremony

Text by Delta Public Affairs (Beijing)

Themed "Sunshine & Childlike Dreams," the award ceremony of the 2020 Delta Cup International Solar Building Design Competition was held in Beijing on July 15th. Outstanding proposals for kindergarten buildings that meet society's needs for early childhood education are collected from around the globe for this competition. Fierce competition ensued during the year, starting from team registrations and submitting work to expert evaluations. Among the 235 contestants, the team from Chongqing University and Huaqiao University won the first prize in Nanping City, Fujian Province, for their work on "Building Blocks - Paradise," which was built using prefabricated assembled modules. The team from Kunming University of Science and Technology won the first prize in the Xinjiang Bayingoleng Province for their work on "Sunbathing," which was a combination of ventilation pads and heated rooms to make the building suitable for the regional characteristics of its surroundings. This year, with Delta celebrating its 50th anniversary, the competition's committee gifted Delta with a crystal cup with the motto, "competing to nurture talents who are pillars of architecture and expressing our passion towards giving back and loving the Earth through green buildings," to express its blessings and to cherish its 16 years of cooperation.



Delta Cup International Solar Building Design Competition award ceremony

IIoT talents shine in the Delta International Smart & Green Manufacturing Contest

Text by Delta GreenTech China (DGC)

The final round of the 7th Delta International Smart & Green Manufacturing Contest — themed "Seeking Smart IIoT Talents" was held online. One hundred teams from universities at home and abroad (including six foreign teams, three from Thailand, two from India, and one from Vietnam) competed in the final stage to win the title of "Smart IIoT Talent." After fierce competition, the three teams from Shanghai Jiao Tong University, Harbin Institute of Science and Technology, and the Mahidol University of Thailand emerged victorious and were unanimously recognized by the jury and awarded the Grand Prize.

The judges considered that the proposal from Shanghai Jiao Tong University's Transformers team was systematically completed and in line with the development trend of smart factories. Their "Wanxiang Bookmarks Smart Workshop Magic Show" is a smart customization production line that uses customized bookmarks, including functions from sensing customization information, database construction, production scheduling, and quality monitoring throughout the process, to trace the outgoing inventory and information. The work of Harbin Institute of Science and Technology's Deep Concept team is a prototype of a food waste disposal system. Their "Food Waste Disposal System," is designed in response to environmental protection policies and focuses on the process flow. The "Cloud Data Processing, River Flood Prediction, and Drainage Control" proposal by the Calamari Warriors of Mahidol University, Thailand, is closely integrated with the current flooding hotspots. This development of an automated drainage system integrated with AI demonstrates a very innovative and practical model for predicting and directing water flow to prevent flooding, demonstrating the team's excellent innovation and practicability skills.



The "Cloud Data Processing, River Flood Prediction, and Drainage Control" proposal by the Calamari Warriors of Mahidol University, Thailand, is a very innovative and practical model and awarded the Grand Prize



Delta's 50th anniversary Shanghai tour opens

Text by Delta Public Affairs Office (Shanghai)



Delta Group-DGC General Manager Mr. Tan Yizhong (fifth from left) launches the "Delta 50th Anniversary Exhibition—Shanghai" together with Shanghai Taiwan Affairs Office Vice Director Li Xiaodong (fourth from left), Vice President Li Wei of the Shanghai Association for Promoting Exchanges Across the Taiwan Straits (third from right), Vice Director Qian Yueming of the Pudong New District Taiwan Affairs Office (second from left), President Zhang Jianzhen of the Shanghai Taiwan Sibling Investment Enterprise Association (third from left), and Party Committee Secretary Sun Huaming of Cao Lu Township (second from right)

Delta's 50th Anniversary Exhibition has made its way to each of Delta's plants in China and has been visited by more than 30,000 visitors, including local government officials, experts, scholars, customers, and employees. Delta's 50th Anniversary global series opened at Delta's Shanghai Operations Center and R&D Building. The "Sustainable Conservation & Nurturing Life"-themed exhibition invited Vice Director Li Xiaodong of the Shanghai Office of Taiwan Affairs, Vice President Li Wei of the Shanghai Association for Promoting Exchanges Across the Taiwan Straits, President Zhang Jianzhen of the Shanghai Taiwan Sibling Investment Enterprise Association, Vice Director Qian Yueming of the Pudong New District Taiwan Affairs Office, and Party Committee Secretary Sun Huaming and Mayor Jin Lijun of Cao Lu Township. Delta's 50th Anniversary Exhibition—Shanghai was launched by Delta GreenTech China's (DGC) President, Mr. Tan Yizhong, together with government leaders and guests. The exhibition was designed in the style of a Delta Newsroom, attracting the attention of all visitors, who were able to visually walk through the details of Delta's history over the past 50 years, as well as revisit the important moments of Delta's development in Shanghai in the past three decades. In addition, by viewing Delta's 8K projection at close range, visitors were able to experience half a century of management and challenges of Delta, and look forward to the future of sustainable development.

Kevin Tan, President of DGC, expressed his gratitude to all the leaders and guests who attended the exhibition. He pointed out that Delta has gradually grown and flourished in Shanghai in the past 30 years since its establishment. He would like to thank the government for investing a significant amount of human and material resources to provide a quality business environment and support Delta in all aspects. Delta will continue to serve the entire country from Shanghai and contribute to the sustainable growth of society and economy.



Delta (Thailand) supports Thailand’s national vaccination program

Text by DET

As the COVID-19 epidemic continues to spread rapidly in Thailand, the Chachoengsao Provincial Social Security Office supports Delta’s prevention measures and requested Delta’s new factory as a location to set up a COVID-19 vaccination site. Since July 8, medical professionals and volunteers are providing prompt and convenient vaccination for recipients at this new site.

On July 15, Mr. Jackie Chang, Delta Thailand President, represented the company to donate 100,000 THB to the Chachoengsao Provincial Social Security Office for necessary equipment. Delta’s new factory is chosen for accessibility and the suitability of unused factory buildings with proper ventilation. Delta offers meals and drinks for the medical team and site facilities with parking to accommodate medical workers and vaccine recipients throughout the program.



Delta (Thailand) supports Thailand’s national vaccination program

As a sustainable company in Thailand, Delta commits to protecting people throughout the COVID-19 pandemic. In 2020, Delta donated 10,500 DC brushless blowers from its Chachoengsao factory to support the development and production of a Powered Air Purifying Respirator (PAPR) and Personal Protective Equipment (PPE) for Thailand’s frontline COVID-19 medical personnel.

Delta donates UV disinfection cabins to Taoyuan International Airport against COVID-19

Text by Corporate Communication Division

Delta donated two U+ UV disinfection cabins to Taoyuan International Airport, which were installed at the immigration check-in areas in the north and south corridors of the second terminal, which have more passenger traffic. It takes only 5 seconds of irradiation to eliminate 81% of the COVID-19 virus on the surface of anything or anyone who passes through the gate. After disembarking, passengers can conduct full-body sterilization before entry to reduce the risk of spreading the virus. This also provides additional protection for the airport staff and strengthens airport epidemic prevention with the latest technology, especially with the new wave of virus variants on the rampage in other countries.

Delta’s U+ UV disinfection cabins use the Care222® light source module from USHIO, a Japanese manufacturer of special light sources. This module can precisely limit the wavelength to 222nm, which cannot penetrate the human corneal layer, not only allowing the UV-C UV light to effectively disinfect unoccupied spaces or objects but also quickly inhibit virus and bacteria activity on surfaces and in the air with people present, adhering to relevant safety regulations. Easy to install and use, UV disinfection cabins can provide quick, contactless, and efficient anti-bacterial services in key access routes or key disinfection spaces. It has been used in more than ten major hospitals for epidemic prevention, as well as many office buildings, factory production lines, campuses, and national training centers to help different industries fight the pandemic.



The disinfection cabin is located in the immigration check-in area, allowing passengers entering Taiwan from the second terminal to access the device



Delta receives three silvers from Brandon Hall Group's HCM Excellence Awards 2021

Text by Human Resource Management Division



Delta receives three silvers from Brandon Hall Group's HCM Excellence Awards 2021

Brandon Hall Groups' HCM Excellence Awards Program is one of the most recognized and respected research organizations in the field of human resources. This year (2021), Delta won three silver medals in the categories of Best Unique or Innovative Talent Management Solution, Best Use of Video for Learning, and Best Learning Team.

In the "Best Learning Team" and "Best Use of Video for Learning" categories, Delta was recognized for its efforts in identifying and cultivating the key talents needed for the future, actively strengthening the digital capabilities of its employees, and significantly enhancing the benefits of knowledge sharing and dissemination in response to its digital transformation strategy.

To stand firm and seize new opportunities in the wave of digitization, Delta first initiated the transformation of its functions and strengthened the framework for developing and cultivating talent with a "nurture by nature" method. Delta then created a digital learning solution to promote the convenience and immediacy of knowledge diffusion. At the same time, Delta targeted and assisted the key talents skilled at problem-solving in development and transformation. Delta's global learning development team has successfully helped the Group achieve the goals of continuous revenue growth, digitally transforming talent cultivation, and brand value enhancement year by year.

In promoting digital learning, Delta has developed a series of e-learning solutions that allow employees or the public to learn through various online platforms, such as DeltaMOOCx, Academy, or a mobile app. Users can easily learn and track their learning progress without time or geographical restrictions, effectively reducing the time and cost of training, thereby allowing Delta to fulfill its corporate social responsibility and prepare for the cultivation of automated talents beforehand.

To accelerated the strategic transformation of the organization, Delta has also mapped out a three-year project plan for the development of new talent, cultivating them into an engine that will power corporate transformation. The results have been recognized in the "Best Unique or Innovative Talent Management Program." In 2019, Delta selected dozens of new talents from around the globe and has successfully assisted 42% of these new talents to join the business solution team to plan and execute development events with their "cross-domain" and "sales" capabilities. In 2020, the Shadowing program allowed new talents to step out of their original fields and participate in business solution projects they have never experienced before. Senior experts were also arranged to mentor the participants, accelerating the talents to become one of the forces behind the company's transformation through "training," "experience," and "practice."



New power supplies widely used in medical development, industry and households

Text by DET

Compact 4" x 6" 650W power supply for medical applications

Delta's newest 650W model, MEU-650A24T, part of MEU Series medical power supply. The MEU-650A24T can deliver up to 650 W with forced air or 450W convection cooled, in a standard footprint 4" x 6". It is equipped with a 12V / 0.6A fan output and 5V / 2A standby output. High efficiency up to 95.5%, high power density up to 17.2W/inch³ and a wide operating temperature range of -20°C~70°C (full power available to +50°C). The MEU-650A24T is suitable for various applications such as ultrasound, anesthesia and IT equipment.

Major approvals include IEC/EN/CSA 60601-1 (Medical), IEC 60950-1, and IEC/EN/UL/CSA 62368-1 (ITE) including IEC/EN 60335-1 and IEC 61558-1 (Household appliances). The MEU-650A24T is also certified with EMC standards EN 55011 for industrial, scientific and medical (ISM) radio-frequency equipment, and EN 55032 for Information Technology Equipment (ITE) radio-frequency equipment; as well as full compliance with RoHS Directive for environmental protection.



Compact 4" x 6" 650W power supply for medical applications

200W and 150W PMT2 series low-profile power supply for ITE and household applications

Delta has expanded the PMT2 Series low-profile power supply by adding 200W (AC input selectable by switch) and 150W (90 – 264 Vac universal input range). The 200W models are 62% smaller than its predecessor at a slim footprint of 159 x 97 x 30 mm. These models has a selectable AC switch input and offer single outputs of 12V, 24V, 36V, and 48V. The 150W models are the same dimension as the 200W models (29% smaller than previous generation) and offer single outputs of 12V, 15V, 24V, 30V, 36V and 48V.

Like the other models of the PMT2 Series, the 200W and 150W models are designed to be competitively priced with a low profile of ≤ 30 mm height. Both models can operate within a wide temperature range from -30°C to +70°C and full power up to +50°C. They also have a low no-load power consumption of less than 0.3W (150W) and 0.5W (200W) respectively and low leakage current < 0.5 mA.

Both models are certified to IEC/EN/BS EN 60335-1, IEC/EN/BS EN 61558-2-16 for household appliances safety, IEC 60950-1 & IEC/EN/BS EN/UL 62368-1 for information and communication technology equipment, and EMI standard EN 55032, Class B, the PMT2 Series is suitable for household appliances and industrial automation equipment requiring 1U low profile power supplies.



200W and 150W PMT2 series low-profile power supply for ITE and household applications

LIFE IN THE
CORAL REEFS

8K

珊瑚礁魚

The fight to defend the oceans! Delta's 8K environmental documentary "Life in the Coral Reefs" released worldwide

Text by Delta Electronics Foundation

The vast ocean is responsible not only for creating a climate system and supplying the oxygen needed for life, but is also responsible for holding the world's systems together. However, slowly but surely, it is moving towards a crisis point. Climate change, overfishing, marine pollution, and habitat destruction all threaten the health and survival of the ocean.

The 15th Conference of the Parties to the United Nations Convention on Biological Diversity is due to be held in Kunming, China in mid-October. The small Pacific island nations are gearing up for negotiations with representatives from the countries, in hopes of getting them to list 30% of the world's waters as permanent protected areas, which would provide a lifeline for the marine ecosystem. The Delta Foundation, which has long been paying close attention to climate change and environmental issues, released the new 8K documentary on the marine environment, "Life in the Coral Reefs", on the eve of the conference. The professional 8K filming team traveled all the way to Palau, a model country when it comes to marine conservation, to capture scenes of the vibrant local coral reef ecosystem, in an attempt to encourage the public to pay attention to marine protection issues.

The 8K ultra-high image definition allows the audience to appreciate the uniqueness of various marine creatures that one does not usually get to see with their own eyes. From the courtship and mating of the greater blue-ringed octopus, the leisurely gliding of the giant oceanic manta rays and the spawning fish storms, to the highly popular garden eels seen in aquariums around the world, every segment provides a therapeutic experience while drawing viewers into the wonderful underwater landscape. The film showcases the biodiversity supported by the coral reef ecosystem, and the close interdependent relationship between the inhabitants of the biosphere.

According to a scientific report by the United Nations Intergovernmental Panel on Climate Change (IPCC), 70 to 90% of global coral reef populations are likely to disappear as early as 2030 due to the effects of climate change. Such marvelous and beautiful marine landscapes may soon be wiped off the face of the Earth, and the creatures and humans that rely on this precious ecosystem will subsequently find themselves in peril. From the 2019 "Water with Life in Taiwan" to the recently released "Swimming with Humpback Whale" and "Life in the Coral Reefs", the Delta Foundation has been trying to describe profound and complex environmental issues through vivid natural scenery and emotionally moving images, in an attempt to make an appeal to the world to take concrete steps towards carbon reduction and protect the ocean and land.

Video link: <https://youtu.be/nrFN4Vcdj4Y>

Delta "Nurturing the Oceans" Environmental Initiative <https://delta50.deltaww.com/initiative/sea.html>

