Brand News

Special Report
Delta Headquarters passes EEWH-Renovation green building Diamond certification

Brand People
Shaping corporate image with issue planning
An interview with Delta Spokesperson Jesse Chou

Brand Circle
"Capture" touching moments: Global premiere of Qumi micro movie
From the Editor

Special Report

02 Delta Headquarters passes EEWH-Renovation green building Diamond certification

Brand Circle

06 Delta Innovation Award enters the sixth year
07 Delta EMEA 2013 Business Kick-off Meeting
07 Hannover Messe 2014 preview
08 Delta showcases Green Power Solutions at CeBIT 2014
09 Delta unveils its latest display and monitoring solutions at ISE 2014
09 Delta presents projection mapping show at NCFTA with display system integration solutions
10 Delta’s InfraSuite Datacenter Solution wins Nanjing University bid
10 Delta supports world’s leading IT hardware manufacturer to build data centers for KLU in India
11 ATM security solution successfully developed by Delta
11 CliQ II 24V NEC Class 2 power supply now available with 100W output power
12 Delta power quality success story for manufacturing industries in China
13 Delta Ultron HPH UPS wins Product of the Year 2013
13 Delta builds a flagship classroom for Dongshan Senior High with NovoClassroom solutions
14 DGC wins 2013 procurement contract for telecom power systems from China Mobile
14 Delta visualization solutions for EEWC
15 Delta saves energy for a Henan biochemical engineering plant with MV drive
15 Delta safeguards Zhengzhou Gas-Fired Power Plant with InfraSuite solution
16 Delta wins three IA awards
17 Stunning IA shows from Delta this spring

Brand People

18 Shaping corporate image with issue planning - An interview with Delta Spokesperson & Corporate Communications Senior Director Jesse Chou

Brand Academy

22 Swiftly use e-marketing tools to accurately lock on to target customers

News Station

25 News Station

Delta Green Life

26 “Capture” touching moments: Global premiere of Qumi micro movie
28 Bangkok with Thai cuisine: Explore local travel
29 DEF organizes first “Solar Seed Winter Camp” to connect with international green building education
"In fact, I can give you an introduction right away!" says the actor at the end of the Qumi micro movie while taking out the projector from his pocket. This line vividly captures the key features of our Qumi projector—light, compact, and easy to carry. To enhance the brand awareness of Vivitek Qumi, the Brand Management Office has recently produced a micro movie to link the Vivitek Qumi with Delta brand through the issue of environmental protection. The actor and actress of the movie are Delta employees, both of them enthusiastic about environmental education. The movie tried to present the application of Qumi in various everyday life situations through real role-playing and an episode of subtle rendezvous. This is the first product image film by Delta and has been attracting heated feedback after launch. Behind-scene stories will be shared in the current issue of Brand News Bi-Monthly.

Delta’s devotion to environmental protection is expressed not only in the Qumi micro movie, but also realized in building EEWH renovation. At the beginning of this year, Delta Headquarters Ruiguang passed the first "Diamond" green building certification for EEWH-RN in Taiwan. The building is also Delta’s eleventh green building in the world. The EEWH renovation project of Delta Headquarters was planned and implemented by Delta employees with our energy saving products and solutions. As a result, the building saves up to 51.75% energy. In the "Special Report", we will tell you about this project that makes Delta proud.

Both the media and institutional investors attended the investor conference held in mid-March. The positive report afterwards even pushed the recent stock price of Delta to a historical high. Delta's perseverance and the corporate image built by Founder Bruce Cheng have gained public recognition under the undeniable effort of the Corporate Communications chaired by Jesse Chou, who is also the Delta spokesperson. In the "Brand People", we will introduce to you how Chou captures press attention and designs communication issues with his operating strategies.

The "Brand Academy" in this issue reports the interview with the marketing teams of DGC and MCISBU. In the interview, they shared with us their e-marketing experience and outcomes on Google and Baidu. Effective use of e-marketing tools can ensure e-marketing ROI and increase Delta website traffic significantly to enhance Delta brand awareness substantially.

In June, Delta will sponsor Taiwan's National Chiao Tung University with numbers of Delta energy solutions to participate in the Solar Decathlon Europe (SDE), held in France, with other outstanding universities coming from the world. As it is the first time for Taiwanese school to participate in the SDE, Delta Electronics Foundation organized a green building educational winter camp for senior high school students to equip Taiwanese students with the ability to connect with the world. In the "Delta Green Life", we will show you how these senior high school students help old building renovation in urban areas with their creativity.

Shan-Shan Guo,
Brand Management Office
Delta Headquarters passes EEWH-Renovation green building Diamond certification

< Text by Energy Management Service Department >

Enforcing energy saving: Start from oneself

Delta received another green building honor in early 2014. Delta Headquarters on Ruiguang Road passed the Diamond certification, the highest level of green building certification in Taiwan. This is a new milestone for Delta green buildings and the first time for Delta to remodel an existing building into a green building. From diagnosis, planning, design and programming, to the application for certification, the Delta team did it all on its own. With carbon reduction efficiency up to 51.75%, Delta Headquarters is so far the most energy efficient office building and the first medium level (6-15 stories) office building ever to pass Diamond certification in Taiwan.

Hitting the nail on the head: Find energy saving opportunities

Given that fully understanding the energy consumption points in an existing building is the biggest challenge in remodeling it into a green building, Dr. Pei-lin Wu, senior director of the Energy Management Service Department, began with a building diagnosis to find energy saving opportunities in Delta Headquarters. In general, there is a number of major energy saving opportunities in ordinary commercial buildings (see the chart below), and HVAC and lighting are the two main energy consumption sources. First, Dr. Wu formed an energy saving diagnosis team with the IABG, LSBD, and SIBD and conducted an onsite survey to measure the power consumption and operating efficiency of major equipment.
Beginning service in 1999, Delta Headquarters Ruiguang is a 9-storey office building with three underground floors. It was the first office building in Neihu Science Park using the solar PV system (5 KW). Renovating this 15-year-old office building into a green building was like "altering clothes when wearing them", because we needed to match the original building design and use and maintain its routine operations. Therefore, renovating an existing building into a green building is much more difficult than building a new green building. Without considering datacenter power consumption, the energy saving diagnosis team found the following opportunities after diagnosis and evaluation: (1) HVAC, which consumes about 39.3% of the building's energy; and (2) lighting which consumes about 18.5%. After data assessment, the team initiated the renovation project.

Challenging the top: Connect with international certification

To pass international green building certification (existing building items) was the most important task in this renovation project. Famous international green building assessment systems, such as the LEED of the USA and the CASEE of Japan, have announced the green building assessment items and standards for existing buildings. Taiwan also announced the EEWH BR manual for building renovation in 2010 with two types of certification: "EEWH performance and efficiency assessment" and "carbon reduction efficiency assessment". Taking into account the long-term impact of energy consumption of existing buildings, we selected "carbon reduction efficiency assessment".

Before the project began, Dr. Wu took the team to National Cheng Kung University to ask for advice from Professor Hsien-te Lin, green building expert of Taiwan. After listening to the team's presentation, Professor Lin believed that the "Diamond" would be an extremely tough challenge for Delta Headquarters Ruiguang. Although he recommended a lower level, the team determined to challenge this mission impossible toward the "Diamond" after further assessment.

To challenge the "Diamond", Delta immediately formed a project team for interdepartmental cooperation. The project team was formed with the HR, IABG, LSBD, DSBU, SIBD, IT Department, Corporate Communications, Delta Networks, and Delta Electronics Foundation, with the Energy Management Service Department as the coordinator, integrator, manager, and implementer of the project.

Four measures for total EEWH renovation

1. Capturing power consumption trends with an energy management system

Energy information visualization is the key to energy saving. Converting energy information into applications that meet management requirements can significantly reduce energy consumption. As electrical appliances are among the top three energy consumption sources of commercial buildings, a visualized monitoring system enables users to feel energy cost better and thereby change energy consumption habits.
The project team adopted the iPEMS™ intelligent monitoring and management system of the DSBU together terminal devices including meters, controller, and sensors to capture the energy information of the entire Delta HQ building on one single screen, particularly major power consumption items: HVAC, lighting, outlet, elevator, etc. Besides locating energy consumption sources, the iPEMS™ enables us to keep track of energy-saving effectiveness and to control energy consumption.

2. Saving 25% energy: VFD for HVAC

Based on the project team's assessment, the old HVAC in the Delta HQ building was operated at fixed frequency, and there is space for saving energy, including (1) the fixed water volume (FWV) system (chiller system and cooling water system) cannot regulate flow according to heat load. The fixed air volume (FAV) system (air handling unit (AHU) and cooling tower fan) cannot adjust air volume according to temperature change. Only timers were installed on each floor with manual temperature control.

Therefore, changing the FWV system into the variable water volume (VWV) system and installing inverters at the condenser water pump and chilled water pump enable the motor to regulate rotation speed according to temperature change. Then, changing the FAV system into the variable air volume (VAV) system and installing inverters on the AHU and cooling tower fan can significantly reduce energy consumption. Testing, adjusting and balancing (TAB) were conducted on the entire HVAC for optimal operation.

Without replacing any HVAC hardware, the project team successfully enhances the electricity efficiency rate (EER) of the HVAC of the Delta HQ building with Delta's HVAC energy products and solutions, including the PLC controller, inverter, HMI, and hub and the HVAC intelligent control logic. At full-load operation, the energy consumption of HVAC reduced up to 25%.

3. Saving 74% energy: Optimal lighting for building

In the EEWH renovation project, besides replacing all T8 fluorescent lamps with Delta's LED lamps in the office area, luminance was measured with luminance meters to provide optimal lighting levels in accordance with the CNS luminance standard for work environments and reduce unnecessary lighting figures. Eventually, one third of fluorescent tubes were reduced.

Lighting system improvement also included: (1) infrared occupancy sensing switches for lamps in public corridors with PLC timers; (2) time management for the lighting system to shut down unnecessary lighting sources after work; and (3) Delta outdoor LED lamps for street lamps.

With such the power consumption of the lighting system of the Delta HQ building reduced up to 74%.

4. Saving 30% energy: Energy regeneration device for elevators

Elevators in the building are driven by inductor motors with traditional brake resistors to transform the regeneration energy into heat energy to prevent system overload when the motor is non-functioning (free fall of the elevator...
Delta’s LED lighting solution provides optimal lighting for the HQ.

The power consumption of Delta elevator system reduced by about 30%.

or counter weight). This heat energy is ventilated in the elevator facilities. The elevator energy feedback unit independently developed by Delta can be incorporated to the motor systems made by leading suppliers to replace traditional brake resistors. Besides alimenting other equipment with regeneration energy, this unit can reduce heat accumulation in elevator facilities and the energy consumption of the ventilation system.

By replacing traditional brake resistors with Delta's elevator energy feedback unit, both heat generated by elevators and the power consumption of the ventilation system were reduced. As a result, the power consumption of the elevator system reduced by about 30%.

Triumph with great achievements: Carbon Reduction Rate 51.75%

Renovating an existing building into a green building is tough work. For example, to avoid interfering with office operation on weekdays, the team needed to work on holidays to ensure the project went smoothly. According to Dr. Wu, "Team members even sacrificed their travel holidays and Dragon Boat Festival for the EEWH renovation project. Their morale is noble!"

Although it is not easy to persevere with the corporate philosophy, the final success made the entire Delta Group proud. After the EEWH renovation project, Delta Headquarters Ruiguang has become Taiwan's best carbon reduction building and the first ever to pass Taiwan green building certification through renovation. Most importantly, it is the first time for Delta to pass EEWH-RN Diamond certification through the concerted efforts of all employees (including energy saving diagnosis, planning, design, programming, and application for certification).

Breaking even with investments in three years: Green buildings can be achieved by 'renovation'

About 97% of buildings in Taiwan are existing buildings. A large amount of heat energy has been wasted as buildings in earlier times were not designed for sustainable development and energy saving. In addition, there is much space for energy saving improvement in terms of heat insulation, A/C ventilation, lighting, and energy management. Besides demonstrating how to renovate an existing building into a green building with Delta products, the Delta HQ building proves that EEWH renovation is worth it. Take this project as an example; all investments will be covered in three years. With this case of success, we hope that more existing buildings in Taiwan can renovate into green buildings.
Delta Innovation Award enters the sixth year

Spring is the season for Delta employees to review their efforts and harvest their innovation achievements. The 6th Delta Innovation Award attracted 39 teams from worldwide Delta locations, including North America, South America, China, Thailand, and Taiwan.

Since 2013, the award evaluation process has become more organized and coherent. The three categories of the award are "New Product", "Manufacturing", and "Business Model/Process". Judges are Delta senior officers from their respective fields. An executive committee formed by higher level officers determines three guidelines:

(1) Provide a better evaluation mechanism to honor the effort and technology innovation of employees.
(2) Promote interdepartmental cooperation and exchange to fully demonstrate team spirit.
(3) Enforce talent cultivation for mid-generation executives to participate in headquarters affairs to broaden their horizon.

This year, manufacturing judges traveled to the different plants to evaluate contestants on-site, so as to fully understand value these innovative applications brought to Delta from different angles.

Top management officers including Mr. Bruce Cheng, Mr. Hai, Mr. Ko, Mr. Ping Cheng and Mr. Johnson Lee personally attended the ceremony held on March 28. This year there are four winning teams. We hope that more teams will participate in the award next year to demonstrate Delta's innovation DNA.
Delta EMEA 2013 Business Kick-off Meeting

< Text by Delta EMEA >

From the 29th to 30th January 2014 the EMEA Business Kick off Meeting took place in Hoofddorp, the Netherlands. Over 120 participants from all EMEA countries attended the event.

The first meeting day started with a welcome message from Jackie Chang, President and GM of Delta EMEA. Besides introducing the new EMEA organization, Jackie stressed the importance of expanding business lines from single product to multi product sales. Reviews of 2013 and outlooks to the targets for 2014 and beyond by different business units then followed. Market strategies of UPS and LED lighting were introduced and success story with Telecom Italia in LED lighting were shared. The participants were split into 8 groups to work out specific action items on how to support and increase the new business areas of UPS and LED Lighting.

The second day was scheduled with presentations from all businesses that Delta has in EMEA. We shared success stories, sales approach tactics and lessons learned in different BU's and countries. Jackie also encouraged the sales team to develop new business opportunities with the spirit of entrepreneurship to reach EMEA's regional revenue target of USD 2 Billion by 2020.

Hannover Messe 2014 preview

< Text by Brand Management Office/ IABG >

The world's largest industry fair, Hannover Messe, is coming up and it will be held from April 7-11. At the fair, Delta will display a full range of smart manufacturing solutions to enhance the reliability and productivity of production platforms and equipment for worldwide customers.

Based on the theme of “Smart Manufacturing”, Delta will present highly integrated solutions, combining visualization, integrated automation, and power infrastructure. Highlights at the fair will include: industrial automation solutions- realization of smart manufacturing; building automation solutions HVAC systems, energy recycling system for elevators and plant monitoring systems to enhance the energy efficiency of production equipment, brand new InfraSuite datacenter solutions- highly reliable, highly scalable, highly integrated, easy to maintain, standardized, and modularized high performance solutions; display and monitoring solutions- real-time industrial monitoring and management system; and EV charging solutions- new generation chargers and smart grid function.

Delta will also present a live demo of our power quality solutions for the very first time. This demo adopts Delta's AFP2000 Series active power filter to perform effective harmonics suppression, and will be one of the most attention-grabbing displays at Delta's stand. With strong support from EMEA partners, Delta will share automation solution success stories and information about standard power supplies at the Delta Industrial Automation Seminar to enhance the partnerships.
Delta showcases Green Power Solutions at CeBIT 2014

< Text by Judy Wu/ MCISBU >

Delta displayed a full line of green power solutions at this year’s CeBIT, the world’s leading IT show. A variety of backup power products and data center solutions were demonstrated with the theme "Green Power Solutions".

As an end-to-end power solutions provider for small and medium enterprises, Delta introduced a full spectrum of its latest UPSs, including its Amplon family UPSs (Amplon N 1-3k, GAIA 1-3k, M 1-3k and RT 5-10k) that are energy-saving backup power solutions to support medium to small network devices, security and surveillance systems and POS systems. Delta also showcased its Ultron family UPSs (Ultron EH 10-20k, HPH 20-40k and DPS 60-120k) that are engineered to achieve leading power efficiency for mission critical applications such as industrial equipment, datacenters, traffic control facilities, broadcast stations and backbone networks.

"At CeBIT we showcased a full series of solutions that not only protects the critical operations of our customers, but also lowers their Total Cost of Ownership (TCO)," said Mr. Jackie Chang, President and GM of Delta EMEA. "For example, our Amplon M series UPS is designed with our engineering excellence. With a high output power factor of 0.9 and AC-AC efficiency up to 97%, the Amplon M series UPS is able to lower operation expenses for customers while providing reliable power protection to their mission critical devices."

Delta also demonstrated its InfraSuite Datacenter Infrastructure Solutions for constructing highly reliable and energy-efficient datacenters with scalability, modularity, standardization and ease-of-maintenance, which can help enterprises around the world achieve "green datacenters" with more than 25% energy savings.
Delta unveils its latest display and monitoring solutions at ISE 2014

< Text by Sanjit Gupta/ Delta India, Jolanda Medendorp/ Vivitek EMEA >

Delta exhibited its state-of-the-art display and monitoring solutions at ISE 2014 in Amsterdam in February. The showcase included Delta's new Ultra Slim Series Video Wall, IP based Controller-DVCS (Distributive Vision Control system) and Embedded Controller-MiNiCON, and the compact, lightweight Wide Xtreme megapixel display. Delta's video wall product portfolio included the rear projection technology based 52" WUXGA Video wall, super narrow bezel 55" LCD video for control room and non-control room applications, a 4mm Pitch indoor LED wall and the revolutionary WX Series displays.

Vivitek, a brand of Delta, also showed its strength of the broad projector and solutions portfolio with dazzling images and interactivity on the floor. The Large Venue projectors were demonstrated on a 7-meter curved screen with beautiful edge blended content that was coordinated also with the 2 opposite large screen presentations. Main attention at the show was for the new DU6871 large venue projector which was introduced at the show.

Delta presents projection mapping show at NCFTA with display system integration solutions

< Text by Ray Shen/ DSBU >

During this Lunar New Year, Delta and the National Center for Traditional Arts (NCFTA) co-organized the building projection with eight sets of advanced projectors each at 30,000lm to present high definition projection mapping with seamless edge-blending technology. For the year of the horse, the show began with the gallop of horses, with backdrops shifting fast to catch up with the horses. Images appeared like travelling through a tunnel to present the 3D effect.

In addition, Delta specifically integrated advanced projection with mobile devices for visitors to express their wishes in characters on the projected lantern. On the façade of the five-storey building, the lanterns rose into the sky slowly, bringing a warm and touching scene. During Lunar New Year, a total of 11,000 lanterns of hope were lit to spread happiness and realize environmental protection.
Delta’s InfraSuite Datacenter Solution wins Nanjing University bid

< Text by Judy Wu / MCISBU >

Delta’s InfraSuite Datacenter Solution recently outperformed rivals and won the bid for Nanjing University’s datacenter construction project by providing an integrated solution. What makes it a milestone project is the installation of five 70kW RowCool units, with a total of 350kW of cooling capacity. This is the largest capacity implemented by Delta in the education sector.

Ever since the launch of the Partner Growth program by Delta’s Mission Critical Infrastructure Solutions (MCIS) business unit, a number of distributor-targeted training sessions have been carried out, greatly improving distributors’ capability in technology, solution design and sales skills. Delta Systems Co., Ltd. Nanjing played a leading role throughout the bidding process, including pre-tracking, preparing a bidding plan, designing and writing the bidding documents, all the way through to the finally winning the bid. Delta’s MCIS PM and FAE teams assisted at only a few critical points. We are working closely with distributors to create a better future.

Delta supports world’s leading IT hardware manufacturer to build data centers for KLU in India

< Text by Judy Wu / MCISBU >

Delta India recently has achieved this prestigious position in offering cutting edge solutions and products for world’s leading IT hardware manufacture to win Koneru Lakshmaiah University (KLU) project.

KLU required solutions to build a 500sqft data center in Andhra Pradesh, India. KLU selected the world’s leading IT hardware manufacturer’s bid to build their data center. The world’s leading IT hardware manufacturer in association with Delta offered KLU the Delta InfraSuite Environment Management System and Modular UPSs to create a more energy efficient and cost effective data center.

Delta proposed its Environment Monitoring System (EMS) solution to easily and cost effectively replace a more expensive Building Management System (BMS). Delta’s EMS contains the EnviroProbe and EnviroStation to monitor a data center’s environment such as temperature and humidity as well as provide alarms for fire, smoke and unauthorized entry. The EnviroProbe offers a backlight LCD to monitor temperature and humidity for a single enclosure, and it also provides 4 contact closure inputs for monitoring other environmental devices. An EnviroStation integrated with EnviroProbes can monitor data center temperature and a variety of critical equipment through an RS485 with Modbus protocol, and send the data to a central manager via a network. Delta’s InsightPower Manager software provides prompt handling of any data centre graphical interface and historical data records for more effective management. This EMS feature provides a more cost effective solution to replace the BMS of small data centers.

Delta’s Modulon NH Plus and DPH UPSs are ideal for medium-sized datacenters demanding in efficiency and availability at a lower Total Cost of Ownership (TCO). The NH Plus and DPH are modular UPSs designed to offer high reliability, and the hot swappable module concept brings MTTR close to zero for highest uptime and availability for critical data center servers. The DPH is able to deliver high AC-AC operating efficiency of 95% at 30% light load, and 96% from 50% load ensuring savings in electricity bills and improvements in PUE. The Modulon NH Plus and DPH are scalable and expandable to keep initial investment low and support future business growth.
ATM security solution successfully developed by Delta

< Text by Sanjit Gupta/ Delta India >

To keep in pace with the growth of Indian economy, the banking industry has been deploying ATMs across the country with exponential growth and CAGR of 29%. Roll-out of ATM network brings tremendous challenges in terms of managing the cash services, monitoring & managing the ATM sites and the security and safety of the ATMs.

Delta responded to the challenge with use of technology and its expertise of remote monitoring services in Telecom, to offer an innovative solution for e-Surveillance of ATM 24x7, which can report any suspicious activity or criminal attempt before its occurs. The solution comprises of an indigenous "Octopus Controller" to interfaces with external sensors like

- Door Switch to alert entry to the ATM site,
- Panic switch for activation by the user
- Hooter & Becon light for audio-visual alarming
- Motion sensor to detect activity at unusual hours
- Voice message player to deter the intruders from any criminal activity
- Concealed cameras (pin-hole & infrared vision) to capture pictures
- Vibration and displacement sensor to prevent of removing the cash dispenser & cheque drop box

Though the solution is to endow with security through e-Surveillance, Delta further improves the energy efficiency and reduces the operational cost by monitoring and controlling the Air-conditioner, Signage Board, UPS and the Batteries at the ATM sites.

CliQ II 24V NEC Class 2 power supply now available with 100W output power

< Text by Delta Electronics Thailand >

Delta extends CliQ II DIN Rail Power Supply series with a 24V 100W model that has UL 1310 and NEC Class 2 certifications. The DRP-24V100W1NN adheres to IP20 protection level and can be used in general industrial applications, especially for dry indoor condition with the advantage of lower wiring costs for a system due to its compliance with NEC Class 2 requirements.

Like the rest of the models in the CliQ series, conformal coating is applied on the PCBA to protect against dust and chemical pollutants. The product can operate over a wide temperature range from -25°C to +80°C. The DRP-24V100W1NN features universal AC input voltage range from 85Vac to 264Vac and the power will not de-rate for the entire input voltage range. The product also includes overvoltage, overload, over temperature and short circuit protections.
Delta power quality success story for manufacturing industries in China

< Text by IABG/ DGC >

Delta recently proposed power quality solutions for the automobile manufacturer in East China and a listed kitchens supplier in Zhejiang.

For the automobile manufacturer, Delta SVG2000 was installed by the 1000KVA voltage transformer in the final assembly workshop to manage the power distribution system. With dynamic compensation for the leading, lagging and the harmonic current, the SVG2000 successfully suppressed the voltage distortion rate from 8.1% to 0.9%, and current distortion rate from 20.3% to 5.2%, and eliminated the sources of overheating, resonance and many other problems.

The SVG2000 also compensated the reactive power for the power wasted and improved the total power factor from 0.71 to 0.98. The improvements kept the company free from penalties charged by power utilities due to low power. Instead, they were rewarded with discounted power bills for their improved power factor.

Delta also implemented power quality solutions to a listed kitchens supplier in Zhejiang to improve its electroplating shop significantly, as witnessed by harmonic management efficiency up to 96%. This stops harmonic interference of other electrical equipment on site and the power factor is increased to 0.95. By applying onsite management with terminal rectifiers, the DGC installed six APF2000 active power filters on three sets of electroplating equipment before connecting to the grid. Through the real-time waveform check of all three phases with current transformers, the harmonic current component and idle component needed compensation are obtained to produce reverse current input to the power system to filter harmonic.

Delta's energy management products include the active front end AFE2000, active power filter APF2000, and static variable generator SVG2000. They provide multidimensional solutions to resolve capability loss, equipment investment/maintenance cost, and occupational safety and health problems due to power quality problems in the process. They also maximize the efficiency of limited power resources to ensure safe, reliable, high efficiency, and energy saving production equipment and environment.
Delta Ultron HPH UPS wins Product of the Year 2013

After winning the silver prize from the China International Industry Fair (CIIF), Delta's Ultron HPH UPS won again the "Technology Excellence Award 2013" from the IT168, a leading IT web media, from nearly ten thousand homogeneous entries for its unrivaled technical performance among products of the same power stage in the industry. In fact, the Ultron HPH UPS is the only UPS to win this award.

The Ultron HPH UPS delivers up to 96% overall energy efficiency (even up to 99% in ECO mode), which is 5% higher than that of the competitors and with extremely high ROI. The HPH UPS is designed upon power factor 1 (PF=1) and delivers full rate constant power output at medium to low stages to ensure 100% power output for load at random power factors without the need to de-rate. Compared to competing models on the market, the HPH UPS comes with 20% extra load. In addition, the Ultron HPH UPS supports multiple frameworks including single dual input, parallel redundancy, and serial hot swap to bring extreme flexibility. With these excellent performance and industry-top technical standards, the Ultron HPH UPS became the product of the year, selected from among nearly ten thousand entries.

Delta builds a flagship classroom for Dongshan Senior High with NovoClassroom solutions

Delta and Dongshan Senior High School recently organized the e-learning achievement exhibition. Delta NovoBoard (electronic whiteboard) and NovoClassroom (tablet interactive instruction platform) replace traditional textbooks, notebooks, blackboard, and chalk to create multidimensional e-learning situations emphasizing teacher-student interaction.

The NovoBoard is an electronic touch whiteboard that can be connected to a computer to replace conventional whiteboards with an interactive electronic whiteboard. Along with the NovoClassroom platform, students and teachers can start different learning modes with the electronic whiteboard and tablets. With the help of digital hardware and software, students can change from recipients of knowledge into acquirers and sharers of knowledge.

To promote e-learning systems effectively, the seed instructors have gradually increased from ten to thirty. With hardware like mobile carriers, electronic whiteboards, and computer servers and software instruction systems, the smooth teaching tempo fully demonstrates an example of innovative teaching.
DGC wins 2013 procurement contract for telecom power systems from China Mobile

< Text by Communication Key Account Business Division/ DGC >

Good news from the Communication Key Account Business Division at the beginning of year of the horse: DGC won the power system contract 2013 of China Mobile. This contract also includes the combined power supply, discrete power supply, and wall-mount power supply ranges. Again, the DGC has become a major equipment supplier for China Mobile, paving way for the DGC's participation in China's 4G network construction.

"This contract involves the 4G network construction project of China Mobile. The success in this contract will foretell the DGC's eligibility in China's 4G network construction. Therefore, no miss was allowed," said Ruiqing Lu of Communication Key Account Business Division, DGC. The division began preparing for the project in April 2013. In addition to aggressively communicating with different departments of China Mobile to demonstrate the technical capability and professional service of the DGC, the division integrated all resources within the group to meet project requirements and resolve related problems. With the full concern and support from DGC top management and the cooperation of the sales unit, product division, and Delta BGs, the division finally won the contract from China Mobile.

Delta visualization solutions for EEWC

< Text by Video Wall System Department/ DGC >

Recently Delta visualization solutions were successfully applied in Changchun Earthquake Early Warning Center (Changchun EEWC) to provide a visualization platform for real-time monitoring and data processing to help Changchun EEWC achieve the analysis, early warning, and emergency command of earthquakes.

To fulfill the EEWC demands, DGC provided a high power, high definition, high resolution, highly intelligent control, and easy to operate large-screen TV wall system. The TV wall system integrates a number of world-leading technologies and uses a 2 x 4 cube configuration. Each cube is a 60-inch XGA DLP dual lamp display, the DVCS, control software, and peripheral equipment.

As important monitoring information is displayed on the EEWC main screen, the DGC provided the industry-leading dual lamp thermal coupling DLP projection unit. The patented dual lamp thermal coupling technology provides single lamp, dual lamp, and alternate modes for more accurate and faster switch to reduce focus deviation and response lag as a result of mechanical lamp switch. This guarantees zero lag for the emergency response system, GIS system, and dispatch meeting conferences of the EEWC. The exclusive "screen backup" function assures site monitoring continuity by eliminating transient image disappearance during unexpected lamp failures. With a broader color range, the Delta visualization system brings more vivid true colors and provides effective guarantee for system stability. The brand new 3D comb filter technology provides dynamic anti-aliasing function to deliver shaper images in greater detail and significantly enhance dynamic picture quality for customers to view truer and smoother images.
Delta saves energy for a Henan biochemical engineering plant with MV drive

< Text by Medium Voltage Drive Department/ DGC >

The DGC recently won a process energy-saving reengineering contract from a large biochemical engineering plant in Henan with its medium voltage (MV) drives. This success proves again the R&D, design, and performance of Delta MV drives meet the requirements of Chinese customers and can provide customers with optimal solutions.

This biochemical engineering plant in Henan is industry leader in both capability and scale and it is a focus enterprise in China's circular economy. In response to the government's call for energy saving and emission reduction, this biochemical engineering plant has implemented a series of process reengineering activities at different branches to save energy. Supplying the key component of this energy-saving reengineering project, the DGC not only reduced energy consumption and enhanced energy saving of the project but also maximized energy efficiency and cost efficiency for the client by implementing the Delta MV drive MVD1000 series to the two air compressors of the project.

Delta MVD1000 is a high-efficiency, compact, high reliable and energy-saving solution adaptable for a wide range of applications in segments such as power generation, oil & gas, mining, metals, cement, and public facilities to provide end users with complete and easy-to-operate driving solutions. The MVD1000 in this project helps the client to regulate flow with electronic intelligent automation to replace original valve control. The drive adjuster maintains power equipment in an optimal condition to enhance operating efficiency significantly to save up to 40% energy. Besides prolonging the lifespan of electrical and mechanical equipment, this reduces CO₂ emissions and has won high praise from the client.

Delta safeguards Zhengzhou Gas-Fired Power Plant with InfraSuite solution

< Text by Mission Critical Infrastructure Solution Department/ DGC >

The DGC recently won a datacenter contract from Zhengzhou Gas-Fired Power Plant, a large power company under the China Power Investment Corporation (CPIC). To help Zhengzhou Gas-Fired Power Plant to build a green, energy saving, safe, and reliable modern data center, the DGC provided a gas-fired power plant with the Delta InfraSuite datacenter solution, to improve the power plant's business standards and service quality.

To better serve customers, after an in-depth analysis of the datacenter of Zhengzhou Gas-Fired Power Plant, DGC personnel selected the 11K Delta InfraSuite for this project. Based on the "integrated framework and modular design" concept, DGC personnel integrated the power distribution and monitoring system, rack system, and refrigerating system into one single unit for small datacenters with less than ten cabinets and an area of about 50m². In addition, InfraSuite provides power management, user management, and environment monitoring software functions to realize total monitoring from main to single rack power supply and from air-conditioning parameters to server racks. InfraSuite also provides password and access control. When there is an accident, it will alert users in three modes: remote display, SMS, and audible and lighting alarm, to realize true datacenter safety for Zhengzhou Gas-Fired Power Plant.

In addition, the modular design of InfraSuite realizes on-demand layout ranging from 5KVA. Based on the actual requirements of customers, reliability design for T1-T4 can fulfill the customer's demand for the current datacenter and future expansion requirements. Compared to similar products in the market, in addition to the stability, reliability, and high performance of Delta-branded products, InfraSuite delivers incomparably high C/P value and low construction quantity to become a perfect datacenter solution.
Delta wins three IA awards

Great news from Delta! The DGC won three heavyweight awards for Innovative Product, Operational Management, and Model Project at the CAMRS 2014 (China Automation Market Research Seminar 2014) & the 12th China Automation Annual Award Ceremony held on March 7 by the China Industrial Control Website (CIC).

After the great rises and falls in the previous years, the China automation market finally regained stability in 2013. Led by GM Simon Chang, the IABG entered the strategic upgrade period at the beginning of this year to reinforce technical R&D, grasp the opportunities of the electronics and livelihood market, maintain traditional strengths in the OEM market, and aggressively cultivate the project market, so as to maintain 20% growth for the IABG to shine over the IA industry. Another target is maintain top 5 in the Chinese market for PLC, inverter, servo, and MMI products. Therefore, the CIC honored Chang with the "Operational Management Award" to recognize his visionary leadership and the Delta's outstanding performance in the global industrial automation circus.

The "Innovative Product Award" is a popular award. Delta won the award from over ten thousand entries with its CH2000H crane inverter for its ultrahigh load and unrivaled safety features and communication performance that can fulfill the load and high-performance control requirements of various lifting devices used in projects, ports, transportation, and cranes.

In addition, the DGC won the "Model Project Award" with its "Delta PLC and Internet Product in Drug Packaging Link System Project". This shows Delta's success in customer diversification and its efforts and achievements in the project market are recognized.

DGC Directing GM Donald Yu was also invited to participate in the founding ceremony of the "China Industrial and Electrical Automation CEO Club" and share Delta's success in energy-saving technology application, customer service, market cultivation, and sustainable operations.
Stunning IA shows from Delta this spring

< Text by IABU/ DGC >

Delta industrial automation solutions bring new opportunities and New Year gifts to machine tool, metal processing, and packaging industries.

**Full CNC machine tool solutions showcase at CCMT**

At the 8th China CNC Machine Tool Fair (CMMT 2014) at the end of February in Shanghai, Delta exhibited a series of industrial automation solutions that became the CCMT focus.

Delta products have always been considered an indicator of technology development in the industry. At the fair, Delta presented the “full CNC machine tool solution” and "axle solution" and the application of these solutions on high-speed precision CNC threading machines and high-speed tapping machines.

**Printing solutions astound PFP Expo 2013**

In early March, Delta participated in the 20th South China International Exhibition on Printing Industry (PFP Expo) to display the latest printing solutions, including the "Delta IA Network" which integrates control, driving, and energy saving applications by means of networking; and the "DMV, Delta Machine Vision" which significantly enhances the speed and precision of printing equipment by integrating with the HMC (human machine interface & controller) to astound visitors.

**Four IA product categories enliven CWIEME**

At the China West International Equipment Manufacturing Exposition (CWIEME) also launched in March, Delta demonstrated its power and innovation in equipment manufacturing.

At the exposition Delta displayed four IA product categories: control, motion, drive, and motor, and comprehensive dynamic demonstrations. As Delta's lead product for mid-end and high-end markets, the AH500 is a medium size PLC suitable for mid- and high-end plant automation, building automation, and process automation. The DMV vision-based automation solutions for the food, health, and packaging industries are functionally unique, compact, and practical. The precision and high-performance 10MC fly shear and rotary cut system supports comprehensive industrial machinery applications. The dynamic CNC demonstration platforms displayed rich and novel contents.

**Two machinery solutions appear at SIMM Expo**

At the Shenzhen International Machinery Manufacturing Industry Exhibition, Delta unveiled the “HMC pickup arm 5-axis standard solution” together with the previously launched "full CNC machine tool solution"to provide industries with different practical options.

Delta has recently launched numbers of new heavyweight control products including the CNC system, 3-in-1 ASDA-M servo, HMC, and motion control card; and machine tool axle solutions, motion control solutions, and CNC machine tool solutions built with these products for the electronics industry.

Visitors were attracted to Delta IA solutions
Shaping corporate image with issue planning
An interview with Delta Spokesperson & Corporate Communications Senior Director Jesse Chou

< Text by Brand Management Office >

In May 2010, Taiwan's President Ying-jeou Ma brought cabinet members to Delta Headquarters to recognize Delta's achievements in green energy technology development. Delta Founder Bruce Cheng and CEO Yancey Hai (now Chairman) received them personally. Jesse Chou, the current Delta spokesperson and Corporate Communications Senior Director, was the person who presided over this event.

From guest receptions, press conferences, investor conferences, to external activities, Chou is always there to help corporate officers communicate with the outside world and to grasp every opportunity to promote Delta and successfully shape its corporate image. He is highly praised by Rick Tsai, who was his immediate supervisor back at Taiwan Semiconductor Manufacturing Corporation and now chairperson of Chunghwa Telecom, "If there is a vote in Taiwan, Jesse will surely be elected as the best corporate spokesperson. Before the public really knew of Delta, he gradually shaped the personal image of Cheng and built the corporate image of Delta, thus boosting Delta's stock price with brilliant performance."

In this issue's "Brand People", we will let you better understand Jesse Chou - the person who rocks Delta's media publicity and issue planning.

Highlight Delta's DNA and shape corporate value

In 2004, thirty-three years after its founding, Delta's stock price was NT$30 per share. By 2014, the forty-third year of Delta, the stock price has already risen to over NT$180 per share. It was the decade of Delta's takeoff. In addition to demonstrating outstanding competitiveness in the power supply domain, we have successfully transformed from a component supplier into a system integrator and have won the good graces of foreign investors for our achievements in the continual development of green products and our own brand. All this has happened during Jesse Chou's first decade at Delta. Looking at Delta's brilliant performance today, Chou still remembers the scene of investor conferences held last decade.

"In the past, the public viewed Delta as a traditional and conservative electronics company. At that time, the involvement of institutional investors and the media was low. They all thought Delta operated too steadily and was focused only on power supply products, without much change. Today, things are really different! Institutional investors and the media come to every investor conference and are quite aggressive, for fear they won't be able
to follow the direction of Delta's operations," Chou said smiling casually. However, he did not mention that the reports in recent years on Delta by institutional investors and the media are the result of the efforts of Chou and the Corporate Communications team.

After determined questioning, Chou, who never talks about himself but always seems to put Delta first, finally demonstrated his knack for promoting Delta.

"I am lucky to work for a healthy company for which 'integrity' is a very important part. At Delta employees all work for the same goal. Founder Bruce Cheng is the true treasure and promoter of Delta." The company's healthy structure is Chou's publicity focus, but how does he shape Delta's corporate image? "Media relations" and "investor relations" are the key.

Set topics and choose media

"I decided to start with the media. Using the media to let more people understand Delta was the most efficient way." Speaking of his own expertise, Chou’s eyes began to sparkle.

"Delta is a very large organic entity. Our scope of business is wide and deep. How to change Delta's traditional, conservative public image was the first challenge. In the first few years, I began continuous communication with the media about two issues: first, Delta is an R&D focused and technology-oriented supplier; and second, Delta is a Taiwan-based company with worldwide operations."

Winning major awards worldwide was the operating strategy.

"First, we targeted the 'CommonWealth Magazine Benchmark Enterprise' award. The 'Most Admired Company Survey' of the CommonWealth Magazine is considered the Academy Awards of business in Taiwan. Using the same method as international media, the survey reviews corporations with ten indicators. Delta has been the continuous winner in the electronics industry for the past twelve consecutive years to date." Chou could not hide his pride for Delta's brilliant achievement.

"In following years, we gradually turned to internationally renowned CSR Awards. As CSR covers more with a broader scope, its effect is greater. In 2013 we were lucky enough to be the only large enterprise that won the CSR Award from both the CommonWealth Magazine and Global View Magazine for successfully branding Delta's 'green business' and 'sustainable operations'."

Think globally and extend influence

After securing our performance in Taiwan, extending our influence worldwide was the next step. First, we started from Delta's largest operating center: China.
In recent years, our performance at China’s CSR awards was also prominent. These included awards for the Top 100 Green Companies for four consecutive years and the CBN China CSR Outstanding Business Award for two consecutive years. We are the only Taiwanese enterprise to win these awards in China. In addition, we were rated as a top ten CSR enterprise 2013 by the Chinese Academy of Social Sciences. At the IR Magazine Awards for Greater China 2013, the most important event for the Asian investment industry, Delta won the Best Sustainable Development Practice Award," said Chou assuredly.

Being on one of the Dow Jones Sustainability Indexes (DJSI) for three consecutive years has enabled Delta to attain yet a higher goal.

"The DJSI is one of the most credible sustainable indexes in the world. Standing out amid a host of world-leading enterprises, Delta was ranked number one in scoring items. These international awards have affirmed Delta’s integration of its long-term efforts, business model, operating performance, and sustainable development. By increasing Delta’s international exposure, we can demonstrate synergies in front of customers to enhance our corporate value."

Revise and implement basic tools to strengthen regional power

Besides communicating with the media by publishing press releases, Delta’s Corporate Communications has built a set of basic tools to cope with the company’s transformation and branding in recent years, and to optimize the communication platform to meet organizational needs.
“2013 was the busiest and the most fruitful year for Corporate Communications. From our corporate website revision, corporate profile revision, the completion of the Beijing showroom, our online video database update, and more, we hope to provide effective resources and tools for regional offices to promote our business,” Chou explained. “Delta is a huge organization and the goal of Corporate Communications is to become Delta’s international news center, information platform, and CSR promoter.”

**Corporate Communications Functions and Tasks**

In addition, Chou wants to develop a press release collaboration model between Corporate Communications and regional offices.

“At the beginning, Corporate Communications will help our regional offices. Gradually, regional offices must develop their own frontline and strategies with our resources. More importantly, they need to plan events to increase international exposure. Through cooperation with the Brand Management Office in recent years, we have successfully increased Delta’s exposure at the world’s four major international exhibitions (CES, Hannover Messe, Computex, and CIIF). In the future, Corporate Communications will become Delta’s news center, controlling the distribution and quality of press releases published by regional offices. This way the regional offices will have more space to develop.”

Under Chou’s leadership, Corporate Communications has successfully played an internal role in coordinating Delta Headquarters and the company’s business units, business groups, and regional offices, extending the department’s function. Externally it has successfully communicated Delta’s philosophy and core values and shaped Delta’s corporate image to the media, institutional investors, and the public. Although his achievements are many, Chou never spares on effort. At the end of the interview, he made a wish for himself and his team to meet a new decade for Delta with conscientious dedication.
Swiftly use e-marketing tools to accurately lock on to target customers

In the highly competitive business environment, how to accurately locate target customers has always been the biggest challenge to sales personnel. Statistics show: If we needed to find and communicate with 50 million target customers, it would take 38 years with the radio and 13 years with TV, but only 4 years with e-marketing tools. The significance of e-marketing tools is thus understood.

In the Brand Academy of the current issue, we will share with you the experience of the DGC and MCISBU in the application of e-marketing tools in terms of China and global marketing and investment benefit assessment.

Flexible use of five major tools

As a result of internet development, e-marketing tools have become one kind of major and accurate marketing tools for sales and marketing. At present the five most common methods in online advertising include: (1) Keyword advertising: links or prompts displayed in the search results of internet search engines (e.g. Google, Bing, Yahoo, Baidu, etc.) for target customers to quickly find the products recommended by us. (2) Display advertising: functions like keyword advertising; it provides the picture of related products for customers to contact our products more effectively. (3) Opinion leader websites: by linking to opinion leader websites, we can effectively enable target customers to further understand our current products and communicate new product information to them. (4) Video advertising: product videos are placed in search engines or opinion leader websites to reinforce brand image and product functions. (5) Community media: promote products to more people through community discussions where netizens share related experiences and recommend products to latent customers, thus allowing advertisers to establish a reliable image.

Without a doubt, the EDM is the initiator of e-marketing. Although the effect of EDM is less effective compared to other e-marketing tools today, the clear, direct, and comprehensive information communication of EDM can gradually develop credibility in target customers.

Long-term benefit tracking with e-marketing tools

Ms. Weini He of the DGC shared with us their marketing achievements on Baidu. "Together with the China International Industry Fair 2013, the traffic forms the Delta sector to the DGC website increased significantly, and product enquiries and requests for quotation (RFQ) also increased extensively."

Ms. Yalin Tsai of the MCISBU also indicated that e-marketing tools are very popular for their media characteristics: real-time, interactive response, great operating flexibility, and quantifiable effectiveness assessment. As quantifiable effectiveness assessment provides
clearer and more transparent data regarding return of investment (ROI), users can keep track on the ROI of every penny. This makes e-marketing different from conventional magazine advertising or commercials. "From the actual achievements of e-marketing over the past two years, worldwide MCIS employees have felt the overall benefit of e-marketing. Therefore, e-marketing has become an essential component of our annual marketing campaign."

"However, it can cut both ways. The benefits of e-marketing can become risks," Ms. Tsai reminded us. For example, people discuss on community websites around the clock, if we cannot make immediate and proper response to a product problem, a minor issue may turn out to be a crisis with the synergic effect of community website. Most importantly, the brand image developed over a long time may be overturned overnight. In addition, content update of community media is important. If no one updates the content in the community media, negative comments will accumulate.

**Strategic thinking: choice of "push" and "pull"**

"How to reach the interlocutor with the optimal tool is the key to e-marketing success," added by Ms. Tsai.

After further analyzing e-marketing tools, we can categorize them into two types: "push" and "pull". "Push" refers to informing customers of our products with product pictures, community media, and images; and "pull" means effectively guiding customers to explore and even purchase our products through opinion leader websites and keyword search. "The choice of 'push' or 'pull' tools depends on consumer behavior observation," Ms. Tsai explained. "With the calculation and comparison capabilities of search engines, we can categorize keywords. For example, consumers searching for the keywords "UPS" and "120KVA UPS" are from two different groups. The group searching for "UPS" is still making preliminary comparison and has lower brand understanding. In contrast, the latter group is expert buyers searching for specific products."

Take the MCISBU as an example; it adopts diverse strategies for new product lines and current product lines. For new product lines, the MCISBU will increase product exposures and enhance brand awareness through product pictures, commercials, and opinion leader websites. For current product lines, they will advertise with accurate keyword comparison to guide customers to the correct product page.

The DGC began using the brand landmark took on Baidu this March. "By systemically categorizing keywords, we can contact customers really interested in Delta product," said Ms. He. "Last year we tried the brand zone method where the Delta brand and product outlines were presented after users searched with the keyword, and the results were great. This year we added the keyword pack (systemically categorize keywords) to enhance the comparison of keyword search and Delta products."

**Increase ROI from SEM to SEO**

Both the DGC and the MCISBU hold a positive attitude toward the effectiveness of e-marketing tools. "At present, we receive more product enquiries and RFQs through e-marketing tools. Besides boosting sales, we can recover the investment cost," Ms. Tsai smiled.
Ms. He added, "Looking back in 2013, besides recovering the investment cost, e-marketing tools increased site traffic significantly to substantially enhance Delta's brand awareness."

However, the MCISBU has a higher goal: Are there other ways to create bigger marketing effectiveness?

"Search Engine Marketing (SEM) achieves marketing effectiveness through investment; while Search Engine Optimization (SEO) can maximize marketing effectiveness." With SEO the MCISBU improved the website's organic search rankings in the search engine result page by increasing the website content's relevance to search terms. Take Google as an example, the search engine sort the rankings of the search term in the search engine result page with ranking rules and algorithm called "natural ranking" based on two factors: website's substantial score and website reputation.

In Google's ranking rules, there are standards for rating the template, content, editing method, keyword strings, etc of a website. As a result, the higher the website score, the higher the ranking of this website in "natural ranking". In website reputation, interlinking with other websites and continuous e-marketing campaigns can make a website more famous to raise its ranking and thereby bring more quality potential customers and site traffic.

Long-lasting effectiveness with two together

According to Ms. Tsai, "There are about 760 million websites around the world, and Google and Facebook are at the top in site traffic term. The official website ranking of competitors APC is 14451st, Emerson is 76881st, and Eaton is 35519th, while Delta is 280329th. However, the ranking of MCISBU's official website is as high as 400000th. Through comprehensive adjustment of the layout and settings of www.deltapowersolutions.com, we hope to continuously raise the natural ranking of our website by combining with e-marketing tools and thereby to ensure that potential customers searching for UPS and datacenter products can quickly and directly local MCISBU products.

"Take the 129JVA UPS as an example. After adjusting website search terms and increasing the appearance of the keyword ‘120KVA’ in the website content, when users search for 120 KVA UPS from Google, they will find Delta products on top of the search result page."

In SEM, the return on investment is equivalent to the amount of investment. In SEO, we can global website visibility and brand awareness with more cost-effective ways. Over the past two to three years, the DGC and MCISBU have accumulated much and comprehensive e-marketing experiences with considerable effectiveness. In fact, to further brand Delta with the most cost-effective ways in the cyberspace along with technological advancement is the common goal of both teams.
Industrial automation party to continue

In 2013 the factory-automation industry got more media attention than ever before and global automation index soared 33%, outperforming the MSCI World by 9%. However, with Federal Open Market Committee’s (FOMC) tapering of QE3 and China's shift into domestic demand, vendors and investors are wondering if this is the end of the party.

Crédit Lyonnais Securities Asia Asia-Pacific Markets published a special report about automation. Although several short-term momentum indicators (PMI, growth rates and second derivative indicators) are volatile during recent months, the broker points room for another two years of expansion. In Japan, the machinery market is in the early stages of a multiyear up cycle; while in China, a recovery in automotive capex to drive machinery demand. In the USA, manufacturers continue to spend on productivity improvements.

Robot will remain the topic in next two upcoming years. Compared to Korea and Japan, USA and China still lag in the penetration of robot. With shale gas and China's soaring wage, growth of robot in these areas can be expected.

Beijing to spend 760bn RMB to improve city’s air quality

Authorities in China’s capital announce tough new measures to tackle hazardous levels of air pollution. In an attempt to clean up the smoggy air in the Chinese capital, Beijing's authorities have introduced a new set of measures to cut emissions and allocated 760 billion RMB to improve the city's air quality by 2017.

This January, Beijing once again suffered hazardous levels of air pollution prompting the city's mayor to announce an "all-out effort" to tackle the smog. Residents were advised to stay indoors as levels of fine particulate pollution known as PM2.5 reached the highest in a year. Unhealthy and even hazardous levels of air pollution have become commonplace in Beijing and in 2013 the city endured a total of 189 polluted air days. The Beijing authorities encourage private sectors to participate in projects improving city's air quality and will facilitate suitable conditions for players to dive in.

The Tesla's Model S will build a huge battery factory

As the battery electric vehicle (BEV) market "First Mover", the Tesla Model S won the 2013 "World Green Car". A total of 22,477 Model S cars were sold in 2013, surpassing Tesla's annual sales target of 21,500 units. The US Environmental Protection Agency (EPA) official range for the Model S Performance model equipped with a 85 kWh lithium-ion battery pack is 265 miles (426 km), making the Model S the electric car with the greatest range available in the market.

One of the strengths of Tesla by Frost & Sullivan study, is the Model S has Superior products in terms of exceptional vehicle performance and attractive vehicle designs. Its battery pack cost is $238/kWh with 60kWh/85kWh lithium-ion battery, using 18650 type cobalt acid lithium-ion battery cell, that is a significant advantage over other OEMs. For example, GM's cost is a little less than $500/kWh on the Volt. Another strength is unique business model and innovative distribution/sales network, there's no in-store sales; more than 12,500 confirmed online bookings (mid-2012).

According to Bloomberg, now Tesla likes to build new factory that "comparable to all of the lithium-ion battery production in the world in one factory". Tesla expects to deliver more than 35,000 Model S vehicles worldwide in 2014.

Air pollution and respiratory diseases push nebulizer growth

Nebulizer is a drug delivery device used to administer medication in the form of a mist inhaled into the lungs. Nebulizers are commonly used for the treatment of asthma, COPD and other respiratory diseases.

According to GlobalData’s report, worldwide nebulizer market size is US$432m in 2012 and expected to reach US$595m by 2019 with CAGR 4.68%. At present, the global nebulizer market is witnessing steady growth. As the prevalence of asthma and COPD is increasing and increased awareness of respiratory disease, worldwide demand for nebulizer is expected to grow.

You also can reach more information by connecting DeltaInsight: http://deltainsight/Index.aspx
"Capture" touching moments: Global premiere of Qumi micro movie

< Text by Brand Management Office >

Michael Hsieh, a bird ecology enthusiast who concerns himself with and has a strong sense of mission for environment protection and nature, is a member of the Delta Electronics Foundation (DEF). Before joining the DEF, he was a bird eco-tour guide who took visitors to watch closely grey-faced buzzards migrating twice a year. With his background, the idea of Delta's first product image movie, the Qumi micro movie, was born.

Real roles, touching stories

The little shy and stiff actor in the file is in fact the portrayal of Michael. Through a real role playing, the lines and story development are integrated with Michael's real work. In November 2013, he participated in the Warsaw Climate Change Conference 2013 organized by the Intergovernmental Panel on Climate Change (IPCC) on behalf of the DEF. During the conference, he appeared at the DEF press conference held in Taipei by means of videoconferencing. As these episodes have already been included in the script of the Qumi micro movie, close cinematographic records were maintained during this Warsaw tour.

Sandy Sun, the actress, is also a DEF employee specializing in writing. In the movie, she is an ecology blogger. By playing their real roles in life, the actor and the actress presented the application of Qumi in different everyday life situations through an indistinct emotional rendezvous staged by the playwright.

In real life, Michael is shy and stiff, just like the actor

The grey-faced buzzard (Butastur indicus) is a migratory bird of prey. When it travels from north to south for the winter each October and returns north each March, it transits over the Hengchun Peninsula. Each time, tens of thousands of grey-faced buzzards cover the sky over the peninsula.

The Intergovernmental Panel on Climate Change, IPCC, is a scientific intergovernmental body formed by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988. It gathers the latest scientific research on climate change across the world to write reports for the reference of decision-makers.
Home produced by Delta

The micro movie received heated feedback after launch. Besides the actor and the actress, other elements of the movie, including the plot, voiceover, and film score, have become hot topics, and everybody is curious about who the production team was. In fact, the entire movie was produced by Delta!

As the producer of the micro movie, Delta CEO Ping Cheng hopes to demonstrate the synergy of Vivitek Qumi and Delta together by linking Vivitek—a brand of Delta. The touching story of the movie was written by Delta CBO and DEF CEO Shan-Shan Guo. By setting Michael and Sandy’s concern about ecology and environmental protection as the movie’s main storyline, Guo emphasizes Delta’s environmental protection brand DNA. As photographer of the movie, Arthur Yeh has been working closely with Delta and planned a number of exhibitions for the Qumi. To enrich visual effects, Yeh carefully designed different kinds of publicity materials, which made the movie more delicate. Voiceover is another soul of a movie. The emotional and attractive male voice in the movie comes from Thomas Chang of the Corporate Communications. Chang won the unanimous recognition of the production team for his voice, which is superior to that of professional voice actors. The voice linking the Vivitek brand at the end of the movie comes from Jair, an Italian employee of Corporate Communications. The voice in movie’s ending music is stunning! This refreshing voice suggests the audiences gain an indistinct affection between the actor and the actress. Connie Chang, the singer, will soon graduate from the Department of Architecture of UC Berkeley. She was a DEF trainee when she was an eleventh grader. Influenced by the DEF, she decided to specialize in green building. In addition to outstanding academic performance, she is a singer-songwriter who loves music since she was little. The songs in the movie were written and sung by her.

To promote and to share

The effort for each part made the Qumi micro movie a reality. The shooting process of this esthetic movie was tough. Here, we would like to share with you some behind-scene stories. Do you know how many takes it took to finish the confession scene of the hero and the heroine? The answer is 38 takes! They repeated the same dialog again and again to show the audiences the most natural and the most perfect scene. When you see Michael and Sandy in the office next time, don’t forget to give them a thumbs up. Qumi micro movie is now available at MyDelta and . Please enjoy it and capture the touching moments with us.

Cast/Production Crew:
Unafraid against the threat of the United Front for Democracy against Dictatorship (UDD), I completed my Bangkok foreign independent travel, which I had planned a long time ago. Besides exploring the local culture in depth, I wanted to realize the spirit of low-carbon travel.

Traffic congestion is serious in Bangkok, during both peak and off-peak hours, day in and day out. Therefore, the underground is the best option to save valuable time on a trip. Moreover, it is economical and environmentally friendly. The City Line is the most convenient way to travel from the airport to the city center. In the city center, Bangkok’s rapid transit system includes the BTS aboveground and the MRT underground, which cover most sightseeing spots. Fares are reasonable, ranging from 10 Baht to 70 Baht. Therefore, it is the highly recommended public transportation for foreign independent travelers.

Tourism is well developed in Bangkok, and Thai cuisine is probably one of the contributors. To unveil the secret of Thai cuisine, I enrolled to a popular cooking class at that time. This cooking class is very famous among Bangkok’s tourists. As teachers speak fluent English and the price is affordable (1,000 Bhat/person/course), it attracts travelers worldwide. The main feature of this cooking class is that students can shop local ingredients in local markets to reduce their carbon footprint from ingredient transportation and to promote local economic development.

Thai cuisine is as extensive and profound as Chinese cuisine. If you want to make authentic Thai foods, you need to make good preparations, particularly the proportion of culinary herbs and spices. This class included four courses: pomelo salad (appetizer), nam-phrik-kaeng-phet (red curry paste), tom-khaa-kai (Chicken galangal in coconut cream soup), and kow neuw ma muang (mango on sticky rice). Students made all dishes step by step, including the red curry (not ready-made curry paste). First, culinary herbs are diced and meshed in a stone bowl. It takes about half an hour or so to make true thick curry paste. It is not easy to prepare the pomelo salad. I spent an hour to shred, dice, and sculpture the ingredients (right, including food sculpture). It needs more than a dozen spices for a small bowl of salad. All the toils are worth it when multiple sweet and sour flavors begin to wake your taste. In addition, khao neeo namuang, a popular Thai dessert, is made with common ingredients of Thailand, including mango, coconut milk, pandan leaves, and palm sugar. One bowl after a meal makes you feel like in paradise!

Returning to the hotel after a great meal, we were cheered up by the faint fragrance spread over the guestroom. As Thai people are good at making the best use of materials at hand, they replace air fresheners with seasonal flowers. Each evening room service personnel put a small bunch of fresh flowers on top of the pillows in the guestroom. They even remind guests to reuse towels and toiletries, to save resources for earth.

In fact, low-carbon travel is neither boring nor tough. As an old saying goes, “follow local custom”, this is an attitude of low-carbon travel. Both you and I can make it happen, right?
DEF organizes first "Solar Seed Winter Camp" to connect with international green building education

< Text by Pamela Huang/ Delta Electronics Foundation >

This June, Delta will support National Chiao Tung University (NCTU) of Taiwan with multiple energy integration solutions to participate in the Solar Decathlon Europe (SED) held in France with 20 top universities in the world. It is the first time for a Taiwan-based university to participate in the event. To enable Taiwanese students to connect with the world, Delta Electronics Foundation (DEF) and the NCTU organized together the first “Solar Seed Winter Camp” for senior high school students in Taiwan. Thirty-five elite students started out from building high energy efficiency housing claimed by the SDE to propose modification plans for corrugated steel buildings in urban Taiwan.

During the camp period Delta Founder and Honorary Chairman Bruce Cheng encouraged students to make innovation by their heart. Like many Delta products, they all started from strange ideas. However, they all emphasize efficiency maximization for all kinds of energy, as human beings are producing too many and too much greenhouse gases.

Experts were invited to share their experience in issues like climate change, emerging energy, and urban history during the camp. Architects and senior high school teachers also participated in group brainstorming to stimulate the imagination of Taiwanese students for the energy-saving roof of different kinds of functional housing. Finally, Hsinchu Senior High School won the award with the "Ximending in the Air".

The Delta Energy Education Goodwill Ambassador Selection was the biggest highlight of the event. Yen-ting Chen from the eleventh grade of Hsinchu Senior High School was selected for his high awareness of environmental issue promotion, good command of English and logical thinking. In the future, he will join the NCTU team at the two-week SDE held in France and will share the lesson learned on the energy saving and carbon reduction blog of DEF.

1. Mr. Cheng and Yen-ting Chen, Delta Energy Education Goodwill Ambassador
2. Ximending in the Air of Hsinchu Senior High School won the champion