

## 2007 CSR Report



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DELTA GROUP 2007 CSR REPORT

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# Letter from the Chairman

Dear Friends and Colleagues:

As a corporation we pursue profit and growth, yet we must not forget that we are members of society. Society provides us with the environment to grow and prosper so we in turn have a responsibility to society that we must live up to. Over the past year the issue of global warming has attracted unprecedented international attention. At the beginning of 2007, the UN Intergovernmental Panel on Climate Change (IPCC), made up of more than two thousand scientists from over one hundred and ten countries, released a report concluding with 90% confidence that Mankind has emitted excessive amounts of green house gases such as CO<sub>2</sub> over the past century. This has led to global warming, causing glaciers and the polar ice caps to melt, changes in ocean currents and climate as well as a rise in sea level. If we cannot stop CO<sub>2</sub> concentrations in the atmosphere from exceeding 450 ppm by 2015, scientists say average global temperatures will increase by two degrees Celsius by the end of the century compared to the 1990s. The consequences would leave billions of people without access to water and extreme climate conditions would create environmental refugees as well as threaten 30% of all species with extinction. This shows how severe and urgent this problem is.

Environmental protection and energy conservation has been a long-standing mission at Delta. As a responsible corporate citizen, Delta must do our part to slow global warming. We have dedicated ourselves to improving the efficiency of our products, to developing alternative energy sources, and to educating our employees on putting the principles of green design into practice.

In the solar energy sector, we are manufacturing multi-crystalline silicon solar cells through our subsidiary DelSolar, and developing a III-V concentrating solar cell receiver assembly with a conversion efficiency of over 35% with overseas partners. In daily operations, we have upgraded our factories, insulated equipment, improved the energy efficiency of air-conditioning systems and put into place waste recycling to save energy and minimize pollution. We are adopting green building design for all new construction. Delta's new plant in Tainan, for example, was the first industrial building in Taiwan to receive a "Gold-rated" Green Building Certificate, making it a landmark in eco-friendly design in Taiwan. Using 30% less energy and 40% less water than conventional buildings,



the plant also received the "Best Green Building Award of 2006" from the Ministry of Interior. In addition, we will carry out a greenhouse gas (GHG) inventory to understand Delta Group's carbon footprint and work to reduce our GHG emissions. This will not only help the Earth's environment but will also generate new business opportunities.

For the future, we will continue to innovate and develop products with high added value. We will provide employees with a work environment where they can reach their full potential while generating the maximum benefits for our shareholders, employees, and community. We will also continue to uphold the ideal of "Quality First" to improve customer satisfaction and work more closely

with our customers and suppliers to ensure that Delta's products fully comply with all applicable restrictions on hazardous substances.

Our efforts at fulfilling our CSR obligations are beginning to bear fruit. In 2006, we were chosen by Commonwealth Magazine as the benchmark company in the electronics industry for the 5th year in a row. We also received the CSR award from Global Views magazine for the 2nd successive year and were named by Commonwealth Magazine as one of the best corporate citizens. From our customers we received best supplier awards from Nortel and Intel, as well as awards from Microsoft, Sony, and Fujitsu Siemens. There is still room for improvement and we continue to integrate our corporate resources more effectively to develop energy-saving products and projects to help reduce the burden on the Earth's environment. In this way, we shall live up to our social responsibility and strive to be an outstanding corporate citizen.

Chairman of Delta Electronics and Chief Environmental Officer

Buice Cheng





Dear Friends:

It is an honor for me to present Delta's second Corporate Social Responsibility Report (CSR Report). We have made real improvements to the scope and depth of this report. Apart from illustrating Delta's interactions with our stakeholders, we have carried out a preliminary assessment of our consumption of energy and major resources, GHG emissions, and waste generation for 2006. By introducing indicators such as the intensity of electricity consumption, water consumption and GHG emissions, we are able to present an objective look at Delta's environmental performance over the past three years and provide a basis for future improvements.

Delta is not only committed to fulfilling our social responsibility as a corporation, but we are also actively encouraging the support and participation of all employees. To celebrate Delta's 35<sup>th</sup> anniversary, in 2006 we published the world's first company-wide "Green Map" project that introduces sites, facilities, and accomplishments in terms of environmental friendliness, energy conservation and ecological value. Covering Delta's 13 locations around the world, the Green Map project along with its matching training CD and comprehensive e-Learning system was a breakthrough in corporate environmental education for employees. We hope this will popularize the ideals of Green Living with our employees, their families, and communities. A CSR column was also added to Delta's internally published Delta E-News to keep our people in touch with the latest CSR news and trends in Taiwan and overseas.

Delta's efforts to strengthen corporate governance and information transparency have also received outside recognition. In 2006, the parent company Delta Electronics was ranked A in "Information Transparency and Disclosure" by the Securities & Futures Institute. Standard & Poor's also ranked Delta as one of the top 50 companies with the best credit ratings in Taiwan. At the same time we now provide live webcasts of our analyst meetings to ensure that our shareholders all receive the most comprehensive and up-to-date information.

As for controlling hazardous substance use in products (RoHS), Delta has established dedicated teams at each factory to review suppliers' qualifications and then audit, counsel or request improvement as necessary. Our business groups



have also set up joint audit teams to ensure that RoHS is properly followed. Deficiencies in procedures and operations are identified and then tracked to make sure they are corrected. Apart from restrictions on the use of hazardous substances in products, customers are now turning their attention to a corporation's social and environmental responsibility. At Delta, we have established an inter-departmental project team to carry out self-assessments and gap analyses with the Electronic Industry Code of Conduct (EICC) as our guide. When Delta is audited by our customers, the team also serves as our liaison. At our main manufacturing sites, we have started programs to understand and improve our suppliers' performance on labor, health and safety, as well as environmental issues.

There are many aspects of corporate social responsibility Delta continues to improve upon in 2007 and beyond. In this report, we have included our plans and prospects for the future as we become a better, more effective corporate citizen, endeavor to achieve the company's mission, and fulfill the expectations of our stakeholders.

Vice Chairman and CEO of Delta Electronics

Yanung Hai

## **Delta Group Overview**

Established : 1971

Worldwide revenues in 2006 : US\$ 4,268 million

Established in 1971, Delta Group is the largest manufacturer of ODM power supplies in the world. Our power supplies find application in computers, peripherals, and consumer products, as well as in communication and networking devices. Delta Group is also a major supplier of products such as video displays, networking equipment, industrial automation equipment, and electronic components for use in information technology, telecommunications, automotive, and consumer products. We have high self-expectations for being a good corporate citizen while pursuing business growth, as we carry out Delta's mission "To provide innovative energy-saving products to diminish man's impact on the environment. In addition, we value corporate governance, shareholder rights and interests, employee welfare and the mutually beneficial relationships between Delta and other stakeholders as we fulfill our corporate social responsibility.

Delta Group has sales offices and manufacturing plants worldwide with more than 60,000 employees. Our worldwide revenues exceeded US\$ 4,200 million in 2006.

## World Revenues and Group Organization

### ~ 40% CAGR

(Compound Annual Growth Rate) since 1971





## 2007 Delta CSR Report

Reporting period : January 1st to December 31st , 2006

Reporting scope<sup>1</sup>: Delta Electronics Inc. (Taiwan), Wujiang, Dongguan, Tianjin plants, Delta Electronics Shanghai (China), Delta Network Inc., Delta Electronics (Thailand) and Delta Energy Systems.

## **Delta's CSR Commitment**

Corporate Social Responsibility (CSR) covers the company's self-management, its symbiotic relationship with stakeholders and caring about the environment. As a good corporate citizen, Delta is committed to the following:

- Maintain sound corporate governance and strictly abide by commercial and ethical standards
- Comply with laws and regulations
- Provide employees with a safe and healthy work environment where they can live up to their full potential in return for reasonable remuneration and benefits
- Support environmental protection and energy conservation education and encourage employees to take part in community activities
- Create company value and enhance shareholder value

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 Develop environmentally-friendly, energy-saving products and implement sound practices to reduce our impact on the environment

The commitment above defines Delta's goals and direction in fulfilling its CSR. Delta integrates these ideals into its daily operations and will set up indicators to regularly track our performance so we can make improvements. We will also disclose all relevant information in a timely manner to maintain the quality of communications with internal and external parties.



2006 Global Views Magazine Annual CSR Award

## **Delta's CSR Organization**

The CSR Management Board is the top CSR organization within Delta. Chaired by our founder Mr. Bruce Cheng, board members include Delta Electronics' Chief Executive Officer, Chief Operations Officer as well as top executives for China and Thailand. It is the responsibility of this board to define Delta's CSR strategy and supervise its performance.

The CSR Management Board currently oversees the Environmental Protection Committee and the Health and Safety Committee. These two task forces are made up of the heads of business groups and site directors. Their responsibility is to plan and integrate environmental protection, health and safety actions. The Environmental Protection Committee itself is further divided into the Green Design and Green Operation working groups. Each group contains personnel from business divisions and relevant factory departments to ensure total implementation. The organization is shown below.

In addition, Delta Electronics Foundation, also founded by Mr. Cheng, plays an important role in Delta's CSR organization. Since its establishment in 1990, the mission of the foundation has been to promote sustainable development of society through the promotion of environmental protection, technological innovation and education. The foundation has been quite successful in this area.

As the scope of Delta's CSR expands over time, we will adjust the structure of the organization described above whenever necessary to ensure that Delta's commitment to sound corporate governance, stakeholders' interests and environmental protection are fully met.



## **Corporate Governance and Ethics**

"Maintain sound corporate governance and strictly abide by commercial and ethical standards" is a core commitment at Delta. We view this as a fundamental requirement for a responsible company, and we are dedicated to realizing this ideal in our everyday operations through comprehensive organizational planning and employee ethics education.

### **Corporate Governance**

Corporate governance is our top priority. Delta believes that high quality corporate governance is the best way to ensure that the company always delivers excellent performance and provides an optimum balance for all stakeholders' interests.

The organizational chart for parent company, Delta Electronics, is shown below. The Board of Directors currently consists of nine directors and two supervisors, including one independent director. To enhance the Board's responsibility and trust, a board meeting is convened at least once a quarter to review the company's performance and to discuss important strategic issues. Key resolutions passed by the Board are published in a timely manner on the Market Observation Post System of Taiwan's securities markets and on the Delta website's Corporate Governance area<sup>2</sup>. The company charter, board meeting regulations and election rules for the directors/ supervisors are provided for reference. Our internal audit team reports directly to the Board of Directors to ensure that the company operates in accordance with the Board's resolutions.

Delta's efforts towards high quality corporate governance are well recognized. In 2006 parent company Delta Electronics received the CSR award from Global Views Magazine for the 2nd successive year. It was named as one of the best corporate citizens and awarded as a benchmark company in the electronics industry for the 5<sup>th</sup> year in a row by Commonwealth Magazine. In addition, Delta Electronics was graded A for "Information Transparency and Disclosure" by the Securities & Futures Institute. Standard & Poor's also ranked Delta as one of Taiwan's top 50 companies with best credit ratings. We do not intend to rest on our laurels however and will continue to improve the quality of our corporate governance to fulfill our commitment to all stakeholders.

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## **Ethical Standards**

The Delta Code of Conduct describes Delta's expectations for all employees around the world, defines the standards expected of all employees and asks all employees to protect Delta's assets, rights and image by committing to legal and ethical behavior.

Key provisions in the Delta Code of Conduct include the following:

- The integrity of records shall be maintained: Generally accepted accounting principles must be complied with in Taiwan and in every country in which Delta business is conducted, and all transactions involving Delta must be executed in accordance with Delta policies and procedures. It is strictly prohibited to establish any undisclosed or unrecorded Delta fund or asset for any purpose.
- Misuse or illegal use of Delta assets is strictly prohibited.
- Business gifts and entertainment shall be appropriate: All employees must exercise care in providing gifts and entertainment to customers or suppliers in consistence with generally accepted ethical standards and business practices. All employees are forbidden to request or accept any gift, payment, special treatment or entertainment from suppliers or customers.
- All employees are prohibited to attend any activity that conflicts with Delta's interests: All employees are prohibited to attend any activity that conflicts with the company's interests and are also not allowed to engage or participate in any outside activities that interfere with his/her employment duties at Delta. Employees shall not receive any personal profit or advantage other than his/her compensation from Delta in connection with any transaction involving Delta.
- All employees have the obligation to comply with copyright laws.
- All employees shall keep the company's proprietary information confidential: Every employee has the responsibility to keep the company's proprietary information confidential and employees are not allowed to disclose this information, whether for profit or not.
- All employees shall protect the company's intellectual property rights: Every employee has the obligation to protect the company's intellectual property rights (including but not limited to inventions, technical information, product design) and any other Delta proprietary rights.
- Insider trading is prohibited: Every employee shall not take advantage of inside information to profit third parties or to obtain personal benefits. Financial results and business transaction information shall not be released without prior authorization in order to protect shareholders' interests.

Each employee has an important responsibility to help maintain Delta's reputation for the highest standards of integrity. Violation of these standards is regarded as misconduct. We require all employees to follow the contents of the Delta Code of Conduct to safeguard the rights of Delta and all stakeholders.



## **Delta and Stakeholders**

As a corporate citizen, stakeholders' rights are a high priority at Delta. This section describes the relationship between Delta and our main stakeholders — our employees, community, shareholders, customers and suppliers.

## **Delta and Employees**

Delta Group has more than 60,000 employees worldwide, who are involved in the following business sectors: power management, components, video displays, industrial automation and Delta Network Inc. (networking products). Geographically, the majority of employees are located in Taiwan, China, and Thailand.



#### Employee Policy and Communication Channels

Delta believes that our employees are our most valuable asset. We have a sound employee policy in place and abide by the following:

1) Forced labor and child labor is prohibited. Workers are free to leave upon reasonable notice. Workers under the age of 18 shall not perform hazardous work.

2) The workforce shall be free of harassment and unlawful discrimination. Any employee or applicant shall not be discriminated against based on race, religion, color, national origin, age, sex, disability or other factors that are unrelated to the legitimate business interests of Delta.

3) Compensation paid to workers shall comply with all applicable wage laws and local practices. This includes those relating to minimum wage and legally mandated benefits.

Apart from having a basic employee policy, we value our employees' opinions and wish to give all employees the room to grow and realize their potential. All Delta employees can

send feedback to the company on individual rights, benefits, management and work environment at any time through various channels including their direct superiors and the human resources department.

Additionally, to gain a better understanding of employees' views on their work and management, Delta conducts employee opinion surveys through objective and professional international consulting companies to ensure the validity and confidentiality of the survey results. This allows employees the opportunity to tell the company about their thoughts on management, communication, the environment, and personal issues. The survey report is then provided to unit supervisors and the human resources department as an important reference for future improvement efforts.

#### Occupational Health and Safety (OHS)

#### 1. Occupational Health and Safety Management System

"Providing employees with a safe and healthy work environment" is one of Delta's most basic responsibilities as a corporate citizen. For many management issues, environmental protection and occupational health and safety in the workplace are often two sides of the same coin. In other words, accidents can often cause environmental pollution, while incidents with a negative environmental impact can pose a safety threat to personnel or the factory site. Delta has begun to promote the integrated management of occupational health & safety and environmental issues. So far, our plants in Dongguan, Wujiang, Thailand and Delhi (India) have received both ISO 14001 and OHSAS 18001 certificates.

Our key occupational health and safety efforts include:

- Complying with health and safety regulations and promoting health and safety awareness
- Realizing employee involvement and reducing occupational hazard risks
- Standardizing management of hazardous materials and promoting an accident-free work place
- Always keeping the workplace tidy and working together for a safe and healthy environment
- 2. Regular Inspections by Professional Consultants

Apart from the implementation of health and safety management at each factory, Delta has also retained professional OHS consultants to carry out regular diagnoses to identify and prevent potential risks. The consultants provide recommendations on Delta's existing OHS organization in response to changes in organization and production activities. This helps us make adjustments to ensure that the relevant departments have enough personnel to safeguard factory employees and company assets.

#### 3. Work Environment Quality Testing and Equipment Upgrades

Delta factory production lines are frequently adjusted to meet demand, or spaces are rearranged to optimize utilization. We regularly reassess health & safety risks as well as conduct work environment quality testing to safeguard operators' health by ensuring that concentrations of hazardous substances do not exist beyond statutory limits.





Air-extracting apparatus to a device.

Hermetical device for cleaning steel sheets.

We have installed local air-extracting equipment to remove hazardous substances before they can enter the work environment. Automation is used to keep sources of hazardous substances inside sealed compartments so that they do not come into contact with employees.

#### 4. Emergency Response Drills

For man-made or natural emergencies such as fires, explosions, flooding, typhoons, leaks, poisoning, mechanical injury, infectious diseases, earthquakes, lightning strikes and electric shocks, our factories have defined their own response plans for identification, handling and response to environmental health & safety emergencies, as well as post-incident feedback & review. We regularly conduct fire and emergency drills so if an accident does occur, its impact on employee health and safety as well as company property is minimized.



Fire drill is held at Delta's headquarters.

CPR is practiced in a regular training course.

For serious infectious diseases such as avian influenza and SARS, we have drawn up group and regional level response organizations, which ensure that information transmission, suspected cases handling, safety of employees and mutual production support between factories are covered and managed effectively.

#### 5. Occupational Accident Analysis and Prevention

"Zero Accidents" is Delta's goal for occupational health and safety. The number of workers injured at factory sites is reported to the government as required by law in Taiwan and Thailand, and internal records are maintained at our main factories in Dongguan and Wujiang. When an occupational accident occurs, OHS and Site Affairs staff request the involved unit to analyze the cause of the accident and propose corrective actions. They also alert the relevant personnel and put the necessary precautions into place. In addition, we regularly analyze our occupational accident statistics and strengthen OHS inspections to prevent recurrences.

#### 6. Employee Health and Leisure

Delta believes that only employees in good mental and physical health can approach their work in a positive manner and deliver optimum performance. In addition to regular employee health examinations, we also require new employees at main manufacturing sites to undergo a health check when they first report to Delta. Special operators who work in areas such as chemical operations, soldering operations, milling and shredding, magnifying glass visual inspections or in noisy environments, must also undergo checks each year to ensure that they are in good health. Catering contractors must also take health checks when entering factory facilities.



Chairman Bruce Cheng is leading stretching exercises at Delta's 35th Anniversary celebration.



On "Family Day", employees brought their families to visit the ecological pool on the roof of Delta's headquarters.

Besides our employees' physical health, we are also concerned with their mental health. Delta has provided a variety of facilities and methods to help relieve employee stress. At our main factories in Dongguan and Wujiang, for example, employees have access to permanently-staffed medical clinics as well as libraries, movie theaters, billiards rooms, canteens, employee service centers, and also a "Heart-to-Heart Station" for psychological counseling. These facilities are intended to offer employees places to relax outside of work or to further enrich themselves.



Professional psychological counseling is available at Delta's "Heart-to-Heart Station".



The bright and spacious library offers a supply of knowledge.

#### Employee Training and Development

Our employees are Delta's most valuable asset, and we pay much attention to employee training and development. We offer a variety of programs, ranging from improving individual skills to fostering future leaders, to meet the needs of employees in different countries and regions. These programs include:

1) Orientation: Newcomer Orientation, New Manager Orientation

2) Professional/Functional Training: Marketing/Sales, Development & Engineering, Finance/Administration, Logistics/Purchasing, IT etc.

3) Management Development: Middle Level Management and Senior Level Management Programs

4) General Training: Company Values, Customer Satisfaction, Quality, Safety & Health

- 5) Shop Floor Training: Workstation Skills Set Training
- 6) Issue-oriented Training: Business Issue Workshop/Seminar
- 7) Self Development: Language Programs, E-learning

To provide employees with a more integrated education & training system, Delta has established a new learning & development community on the Human Resources website for Taiwan. The website offers learner-centric training information such as course announcements, external courses, online learning materials and answers to frequently asked questions. We have also set up a "Learning Evaluation Area" so learners can measure their performance online at any time and have it recorded in the system.

Delta recognizes that an executive's management ability, knowledge and logical thinking are critical to the company's operations and the organization's future development. Apart from the internal training scheme mentioned above, we have contracted with National Taiwan University (NTU) to tailor an NTU-Delta Electronics EMBA Program, taught in person by NTU's distinguished EMBA professors. The program covers six management related courses including marketing, finance, strategy, accounting, technology and business, as well as international business administration, providing the basics of business



Delta's top executives are giving lessons to managers.

administration and further enhancing the company's global competitiveness. The Delta EMBA Program also pioneered the use of online courses and real-world teaching to make classes more accessible. By allowing the instructors and students to discuss real business cases in detail, the effectiveness of the program is enhanced.

Delta now has over twenty high-level executives enrolled in the dedicated corporate EMBA program. Once they complete the program, they will receive their certificates of graduation from NTU's continuing development department. By providing this excellent opportunity for executive training, Delta will improve management quality and build a solid foundation for the company's future.

### Delta and the Community

Delta has always been dedicated to energy conservation and environmental protection. With the corporate citizenship movement gaining wide acceptance in recent years, we have increased our community activities as well. As the world's No. 1 ODM power supply maker, improving energy efficiency and quality of life is Delta's core business and our primary mission. Delta has focused our community efforts on environmental education, energy conservation awareness, technology R&D sponsorship and the cultivation of talent. We hope, through the efforts of the Delta Electronics Foundation, we can help society step onto the path of sustainable development.

#### Environmental Education

Early in 2006, Delta Electronics and the Foundation jointly invited Dr. Amory B. Lovins, the author of "Natural Capitalism" to Taiwan. Here he spoke about the next industrial revolution and a new business model based on improving the efficiency of using natural resources, and shared his ideas on "Profitable Climate Protection" with Taiwan's business leaders. To further develop this philosophy, Delta sponsored the NTU EMBA and Graduate Institute of Business Administration to offer the "Natural Capitalism and Industrial Development" program in partnership with the Rocky Mountain Institute founded by Dr. Lovins. This serves to encourage future business leaders to begin thinking early about a win-win strategy for both the economy and the environment.



Delta invited Dr. Lovins to Taiwan to share the innovative concept of "Natural Capitalism".



The donation of movie ticket vouchers encourages Delta's employees to learn more about global warming.

Respect for energy and natural resources and their correct usage are concepts that should be instilled early. In 2006, the Delta Electronics Foundation introduced the KEEP (K-12 Energy Education Program) to Taiwan and began combining it with the elementary and junior high schools within the Taiwan Greenschool network via translation and localization. We expect to soon introduce it to all elementary and junior high schools so that the future heirs of Taiwan can learn about environmentallyfriendly ways of using our energy and natural resources.

When the documentary "An Inconvenient Truth" produced by former U.S. vice president Al Gore was premiered in Taiwan in 2006, the Delta Electronics Foundation held a special screening. The Foundation donated 6000 movie ticket vouchers to the general public to broaden the awareness of global warming issues and how we must face climate challenges ahead and leave our future generations with a habitable world.

#### Promotion of Energy Conservation

Though Delta is dedicated to the pursuit of energy conservation and environmental protection, this ideal must be realized in the everyday life of the general public for it to be truly effective. For this reason, since 2005, Delta Electronics Foundation has held a Lights Out activity on the longest day of each year to encourage the general public to save power. In 2006, over 3000 people participated in the "Lights Out Day" activity while over 20,000 people promised to do their part to save power on the official website. This was a significant effort that translated to around 9 million kilowatt-hours (kwh) of power saved in a month, or a reduction of 5,500 tons in  $CO_2$  emissions.

After our Tainan plant was certified as a Gold-rated Green Building, a survey showed that the employees there were highly satisfied with their work environment (rating over 90 on a 100 point scale). This result has encouraged the Delta Electronics Foundation to be even more active in promoting the green building concept to the world. The "Eco-energy Retrofit Initiative for Residential Bulidings", launched in 2005, has so far sponsored simple home improvements to four private living units in northern Taiwan. The techniques include improving roof insulation and replacing light fixtures to achieve the goal of energy saving by 20%. These practical tips have been reported to the general public through media such as the China Times Weekly, Public Television, and Da-Ai TV.





Besides Delta's offices, numerous famous buildings participated in the Lights Out activity.

Fire shows brought Lights Out Day a visual feast.

#### Technology R&D Sponsorship

Mr. Bruce Cheng, the patriarch of the Delta family, had these words of encouragement: "As a responsible corporate citizen, we must not only be aware of the problems, but we must also provide the solutions". This has led to Delta's unstinting sponsorship of technology R&D. To promote the development of sustainable energy and strengthen Taiwan's academic research capability in new energy and energy management, the Delta Electronics Foundation continued its Sustainable Energy Research Grant Program in 2006. The program partnered with top universities in Taiwan in technology research projects for solar power, fuel cells and improving energy efficiency.

#### Cultivation of Talent



Winners of Delta/NTIO Joint Environmental Scholarship.

To encourage interest in environmental issues among Taiwanese professionals and to promote environmentalism at work, the Delta Electronics Foundation and Netherlands Trade and Investment Office (NTIO) began jointly offering the Delta/NTIO Joint Environmental Scholarship (the Y.C.Lo Scholarship) in 2004. The scholarship is open to all professions and encourages those passionate about protecting the environment to study in the Netherlands, regardless of profession. Nine students have qualified for the scholarship so far, and are currently pursuing

degrees in the Netherlands. Their majors include architecture, landscape design, journalism, energy technology, civil engineering and tourism. When they complete their studies and return to Taiwan, we are confident that they will inject new ideas into Taiwan's environmentalist movement.

Apart from actively cultivating talented professionals with an interest in the environment, we also give back to the schools that nurture talent. Delta has so far established scholarships at 16 technical institutes, colleges or universities around Taiwan to encourage students to be dedicated to their studies. The Delta Electronics Foundation is also a strong supporter of local Chinese schools in northern Thailand. Beyond scholarships, every year

the Foundation provides support for 200 local overseas compatriot students and 10 studying in colleges or universities in Taiwan. In 2006, the Foundation set up a pilot teachers' training class in northern Thailand at Chienhua High School and donated computer equipment to three schools, including Chunying Middle School at Huangguoyuan Village. We hope that local teaching resources, in terms of both hardware and software, are supplemented through our donation.



The Foundation provides support for compatriot students from Thailand every year.

### **Delta and Shareholders**



Delta Electronics' annual shareholder meeting.

Delta places great importance on shareholder rights and interests. We have a team dedicated to communicating the company's results and long-term strategic direction to investors. Our goal is to provide outstanding service to investors, analysts, investment organizations and the media.

The most important aspect of Delta's investor services is information disclosure. In recent years we have devoted a great deal of resources to ensuring that information disclosed is complete, in-time, fair, and transparent. With the parent company Delta Electronics for example, not only are all announcements on the Taiwan Stock Exchange issued in a timely manner, but our Chairman's report to shareholders, financial statements, corporate governance regulations, share price and dividend information, as well as the content of analyst meetings are all available for download on Delta's website. Most of these are in both Chinese and English for the benefit of local and foreign investors. For the company's annual report, we continue to improve the content and layout every year. Our efforts were recognized by an "A+" rating by the Securities and Futures Institute's "Information Transparency and Disclosure" report in 2007, up from an "A" in 2006. Just twelve TSE listed companies received the "A+" rating in 2007 and Delta Electronics was the only large electronics company among them.

Additionally, Delta hosts analyst meetings on a regular basis where we announce and explain each quarter's consolidated financial data, business performance, and future plans. These meetings are webcast live over the Internet. As foreign investors hold the greater part of all Delta shares, communicating with foreign investors is especially important to us. We participate in a wide range of investment forums each year and visit foreign shareholders directly in Asia, Europe and America. Apart from providing them with updates on the company's operations, we also welcome constructive feedback on our operations, finance and governance. At the same time, Delta welcomes visits from local and foreign investors. We hold more than 300 meetings or conference calls with investors each year, and on occasion we arrange for investors to tour our Dongguan and Wujiang factory sites.

Individual shareholders are just as important to us as institutional investors. In addition to having staff dedicated to answering in detail inquiries from individual shareholders, we also actively

respond to questions and suggestions raised by shareholders at the annual shareholder meeting. These suggestions have included improving the content of the annual report as well as providing bilingual briefings in analyst meetings.

Our efforts have resulted in professional investment institutions increasing their stake in Delta Electronics shares over the past few years, and now the percentage of their shareholding in Delta is one of the highest among Taiwanese companies. Delta Electronics' share price and market value have, as a result, continued to rise. This has not only boosted our competitiveness in the capital market, but has also delivered improved returns for our shareholders' investment (please see the charts). Our goal is to deliver even better performance so that the efforts



Delta Electronics' analyst meeting.

of everyone at Delta Electronics are combined with the recognition from investors to create maximum value.









## **Delta and Customers**

#### Customer Satisfaction and Quality First

"Customer Satisfaction" and "Quality First" are key elements of Delta's corporate culture. At Delta our priority is on understanding and meeting customer requirements and doing things right the first time.

### **Corporate Culture**

Dare to change, and pursue sustainability.



#### **Customer Satisfaction**

Fully understand and fulfill customer needs.

#### Quality

Do things right the first time.

#### Innovation

Anticipate trends and develop competitive products.

#### Teamwork

Maintain effective communication, delegation, and collaboration.

Agility

Act quickly in a rapidly changing environment.

In recent years, Delta has focused on achieving zero defects in quality. Apart from receiving ISO 9001 certificates at our main factories in Taiwan, China, and Thailand, Delta Electronics' Chief Operations Officer began promoting a quality diagnosis initiative in 2005. By reinforcing the execution of a function-based organization, this will integrate the value chains of Delta's business groups and ultimately complete the strategic link between Delta Group and each business group. To date, four quality diagnosis meetings have been held with the heads of each business group/unit and level-one regional managers' participation. Through the sharing of information and best practices, the meetings identified opportunities for improvement and created synergies from each business division's quality system and activities.

Apart from the above, our business groups have launched initiatives aimed at improving quality and meeting customer requirements. For example, the Power System Business Group I (PSBG I) and the Component Business Group (CPBG) have run a Six Sigma Program since 2005. This trains our employees to use systematic Six Sigma methods (such as DMAIC and DMADC) and statistical tools to carry out quality improvement activities. As of the end of 2006, a total of 32 employees in PSBG I had received black belt certification; CPBG has also completed a Six Sigma training program and certification counseling is underway. Business groups have set up a Six Sigma committee and program office in Dongguan. Ten sessions are scheduled between 2007 and 2011 as part of a company drive on Six Sigma black/green belt training and certification.

Thanks to the efforts of all Delta employees, we have achieved significant gains in quality management. Quality costs decreased from 2.7% in 2005 to 1.9% in 2006. We continue to invest in quality diagnosis and quality improvement activities to realize our ideal of "do things right the first time" and thus enhance the capabilities of the organization as a whole.

Delta's business divisions are also reaching out to understand customer needs through a variety of methods, such as customer satisfaction surveys. At the same time, Delta has health & safety emergency response plans at our factory sites to prevent disasters such as the SARS epidemic from affecting Delta's production lines and customer interests, as well as mutual production support plans to minimize any delivery problems.



Six Sigma methods and training programs are carried out at manufacturing sites.



#### The Restriction of the Use of Hazardous Substances (RoHS)

Even before hazardous substances in products became an international issue, Delta was at the forefront of the trend to reduce the impact of manufacturing on the environment. In 2000, Delta introduced the first lead-free soldering production line and established our own management standards for environment-related substances (10000-0162).

With the EU RoHS directive taking effect in July 2006, Delta revised management standards and gathered our customers' requirements. The information was distributed to RoHS management teams at our business groups, units, and factories to ensure that all Delta products conform to the EU directive and meet our customers' requirements. Legislation on restriction of the use of hazardous substances is a worldwide trend and countries outside of the European Union, including China, are beginning to



Restricted hazardous substances are carefully managed and tested.

announce their own regulations. Tracking all relevant legislation has become an important task at Delta.

#### Social and Environmental Responsibility

Beyond RoHS-like regulations, customers are paying more attention to a company's social and environmental responsibility. The Electronic Industry Code of Conduct (EICC), promoted by major electronics brands such as Dell, IBM and HP, covers labor rights, health and safety, environmental protection and business ethics. The major companies use the EICC to judge supplier performance in these areas and they consider the results when choosing a supplier. Delta has set up task forces drawn from our Sales, Human Resources, Purchasing and Site Affairs departments to carry out self-assessments and gap analyses, and to cooperate with customers' audits. This ensures that Delta continues to improve and to meet our customers' requirements.

Whether it is RoHS or the social and environmental expectations of our customers, the compliance of Delta's organization and operations as a whole depends on the compliance of Delta's suppliers. A description of our supplier management efforts is provided in the following section.

#### Customer Recognition

In recognition of our efforts, Delta has received best supplier awards from customers that include Nortel, Intel, and Siemens. This is an honor shared among all Delta employees and we continue to refine the quality of our products and services to ensure our customers' satisfaction.



2006 Nortel Supplier of the Year Award



2004 Cisco Systems Supplier of the Year



2006 Intel Preferred Quality Supplier Award



2004 Microsoft MSVP Vendor of the Year



2005 SIEMENS Communications Supplier of the Year



1999 Dell Platinum Supplier Award



### **Delta and Suppliers**

#### Supplier Composition

In 2006, Delta had around 3000 suppliers in total. Apart from management through a common platform within the Group, each business group/unit also maintains its own supplier management system to meet requirements unique to their operations. To ensure high quality products from our suppliers and reduce risk, our supplier management framework is based around "Key Suppliers" and "Critical Components" (see graphic). Apart from regularly evaluating our suppliers on key performance indicators such as price, quality, technology, delivery and service, we also emphasize risk management by managing supply and demand for critical components.



#### Management of the Use of Restricted Hazardous Substances (RoHS)

Delta has actively implemented RoHS control measures in our production processes and materials management through our management system since 2005. By taking a "Source Management" approach, the purchasing staff at all business divisions require our suppliers and even sub-tier suppliers to conform to standards based on RoHS. All suppliers are asked to carry out self-monitoring and self-testing. They are also required to sign and submit a RoHS compliance declaration and cooperate with Delta's audits to ensure that all materials used

by Delta meet RoHS and customer requirements. The management flow is shown below. If a supplier does not have the necessary equipment or testing capability, testing can be done by an internationally recognized third-party organization. Delta's own heavy metal analytical laboratory is also available for internal and external users. For suppliers interested in purchasing their own instruments, Delta can provide assistance. Worth mentioning is that the heavy metal analytical laboratory set up in 2001 at our Wujiang Factory was the first national level laboratory accredited by the China National Accreditation Board for Laboratories (CNAL). Delta also set up national level laboratories at our factories in Taiwan and Thailand.





Delta's CNAL accredited heavy metal analytical laboratory.



We have designed a global Alert System for use by Delta Group and have trained those authorized to use the system. All factories and subsidiaries have well established access to the system. When an abnormality is detected on the production line, an alert message is sent to the appropriate business divisions or product managers through this system. All alert messages issued are stored in the database for future review and for use in employee training.

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Delta established RoHS task forces at all factory sites in 2006. Their primary mission is to:

- Review suppliers' qualifications
- Review the status of suppliers' signing of environmental documents
- Assess suppliers' risk levels as shown below
- Convene supplier meetings and implement audits for high-risk suppliers
- Provide counseling or require improvements according to audit results
- Adjust supplier composition



There is also an audit team composed of members from each business group that is sent to the factories to check compliance on production lines. Delta factory audits focus on the following key items:

- Understanding of RoHS by the person-in-charge
- Condition of the factory's internal audit system
- RoHS planning and timetable
- Process of disqualifying suppliers
- Supplier audit results
- Material sampling plan and capability
- Tracing and alert system

The above procedural and operational areas are divided into 6 categories and 32 items for review. After a review, problems are listed and a deadline is set for corrective action and then followed up. Recommendations from factory personnel are collated for future reference.

#### Social and Environmental Responsibility

Delta launched a trial social and environmental responsibility program at our Dongguan factory site in March 2007. Surveys, questionnaires, audit schedules and goals based on the Electronic Industry Code of Conduct (EICC) were drawn up for use in understanding and improving suppliers' performance on labor rights, health & safety, and environmental issues.

Delta has shared the Dongguan experience with our main factories in Wujiang and Thailand. The exchange of information between units will help develop an optimal model to assist Delta's supply chain to meet its social and environmental responsibilities.



## **Delta and the Environment**

"Care for the Environment, Energy-saving and Our Green Earth" is a major theme of Delta's corporate social responsibility. This phrase sums up just how important the issue of environmental protection is to everyone at Delta. In the following sections we provide a brief outline of our environmental management system and Green Map efforts. We also present statistics on our resource consumption/procurement, greenhouse gas (GHG) emissions and waste generation in 2006. In addition we offer a graphical overview of Delta's environmental performance that shows trends over the past three years in the intensity of Delta's electricity consumption, water consumption and GHG emissions and provides a basis for future improvements.

### Delta's Environmental Management System

"Develop environmentally-friendly, energy-saving products and implement sound practices to reduce our impact on the environment" is Delta's commitment. Our factories in Taiwan, Dongguan, Wujiang, Thailand and Delhi (India) have all received ISO 14001 environmental management system certificates and are now taking a systematic approach to managing environmental issues.

With the increasing international attention to global warming, product design and substances used, we are closely monitoring the latest developments in relevant statutory and customer requirements (such as Taiwan's GHG Reduction Act, the EU's "Eco-Design Requirements for Energy Using Products (EUP)", and halogen free requirements), communicating with our customers, suppliers and employees at appropriate points in time, and providing necessary training. The goal of continual improvement is now being realized through the implementation of the PDCA (Plan, Do, Check, Act) cycle that forms the core of ISO management systems.

## Green Map and Training

In 2006 we published the world's first company-wide "Green Map<sup>3</sup>" project that introduces sites, facilities, and accomplishments in terms of environmental friendliness, energy conservation and ecological value. Covering Delta's 13 locations around the world, it was a pioneering effort in corporate environmental education.



Delta's employees are enthusiastic about producing green maps.



has created the first company-wide Green Map project in the world!

Delta initiated the world's first company-wide Green Map project.

The Human Resources Department has designed an interactive digital learning program called "Come Close and See Delta's Green Maps" based on our Green Map project. Delivered through the e-Learning platform on our intranet along with matching training CD, employees can see the process and results from the factories' participation in the Green Map project. This shows them how to design a Green Map and even to manage a more environmentally-friendly life. The goal is to give every Delta employee around the world an understanding of the Green Map's ideals and to instill in every employee the values of environmental protection and energy conservation. This will help promote the Green Living concept to our employees' families and communities.



Through Delta's e-Learning system, employees can learn about the spirit and content of Delta's green maps.



## Primary Materials and Resources Flow in 2006

In 2006, the main materials used in Delta's manufacturing and operations, energy/resource conservation and reuse results, as well as the volume of waste generated <sup>4</sup> were as shown in the diagram below. These are explained in greater detail further on.



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#### Energy and Resource Inputs

Energy and resource consumption statistics give us an understanding of Delta's eco footprint and further, our utilization efficiency. The energy and resources used in Delta's production and operations are divided into four categories: Metallic Materials, Non-metallic Materials, Materials for Packaging or Shipping Purposes, as well as Energy and Water. The statistics for 2006 are as follows <sup>5</sup>:

#### I. Metallic Materials

1. Iron: Mainly for cases and screws. Approximately 43,500 tonnes were purchased in 2006.

2. Steel: Mainly for Power Factor Correction units (PFC), transformers and fan blades. Approximately 11,900 tonnes were purchased in 2006.

3. Aluminum: Mainly for cases and heat sinks. Approximately 10,700 tonnes were purchased in 2006.

4. Copper: Mainly for wires, printed wiring boards and cables. Approximately 18,700 tonnes were purchased in 2006.

5. Tin: Mainly for solder wires, bars and pastes. Approximately 1,500 tonnes were purchased in 2006.

6. Core: Magnetic components made from a mixture of iron, manganese, zinc and nickel, used in electronic products. Approximately 6,400 tonnes were purchased in 2006.

7. Mercury: Used in Cold Cathode Fluorescent Lamp (CCFL) tubes. Approximately 0.23 tonnes were used in 2006.



Mercury consumption was estimated based on the production volume of CCFL in 2006. Consumption of metallic, non-metallic and materials for packaging/shipping purposes was estimated by purchase amount in 2006.

#### II. Non-Metallic Materials

1. Plastics: Mainly for cases, insulators and sockets. Approximately 16,200 tonnes were purchased in 2006.

2. Organic Solvents: Including thinners, cleaners and flux. Approximately 1,500 tonnes were purchased in 2006.

3. Glass: Mainly for visual display products and CCFL tubes. Approximately 680 tonnes were purchased in 2006.

4. Fluorescent powder: Used in Cold Cathode Fluorescent Lamp (CCFL) tubes. Approximately 28 tonnes were purchased in 2006.

5. Epoxy Resin: Mainly used for adhesion and insulation in electronic parts. Approximately 1,600 tonnes were purchased in 2006.

6. Asphalt: Used as filler in electronic ballasts. Approximately 2,400 tonnes were purchased in 2006.

7. Office Paper: Mainly photocopying or printing paper. Approximately 140 tonnes were purchased in 2006.





#### III. Materials Used for Packaging or Shipping

1. Cardboard/Carton: Mainly used for packaging when shipping products. Approximately 11,300 tonnes were purchased in 2006.

2. Filler: Mainly extruded polyethylene foam (EPE foam) and polyethylene foam (PE foam) used as buffer materials during product shipping. Approximately 3,900 tonnes were purchased in 2006.

3. Wood: Used for pallets and packaging when shipping products. Approximately 11,400 tonnes were purchased in 2006.

4. Paper: Used for product user manuals etc. Approximately 680 tonnes were purchased in 2006.



#### **IV. Energy and Water**

Energy used by Delta offices and factories come from purchased electricity and a variety of fossil fuels, depending on availability and needs<sup>6</sup>. The relevant statistics for 2006 are as follows:

1. Purchased Electricity:

In 2006 Delta purchased approximately 337 million KWH of electricity from external sources. The three main factories at Dongguan, Wujiang and Thailand accounted for about 80% of total electricity consumption.

2. Liquefied Petroleum Gas (LPG)

In 2006 Delta's Dongguan and Wujiang factories consumed approximately 36M<sup>3</sup> of LPG in total.

3. Natural Gas (NG)

In 2006 Delta consumed around 770,000M<sup>3</sup> of NG in total with the Wujiang factory accounting for nearly 60% of all NG use.

4. Diesel

In 2006 Delta's factory facilities (e.g. power generators) consumed around 3,600 KL of diesel, and Dongguan, Wujiang factories accounted for nearly 80% of the consumption. Around 300KL of diesel were used by Delta owned vehicles.

5. Gasoline

In 2006 Delta's factory facilities (e.g. power generators) consumed an insignificant amount of gasoline while around 450KL were used by Delta owned vehicles.

6. Heavy Oil

In 2006 Delta's factory facilities used approximately 36KL of heavy oil with most of it used at the Teningen factory in Germany.

7. Water

In 2006 Delta's total water consumption was around 5,340,000KL.



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#### Energy Conservation, Recovery and Effects of Solar Power Application

In addition to the energy/water conservation and resource recovery programs at all Delta factories, the factories at Dongguan (China) and Taoyuan II (Taiwan) use solar water heating systems for their employee dormitories. Solar panels are installed at our Taipei head office, and at our factories in Tainan (Taiwan) and Teningen (Germany). The results from energy/resources conservation, recovery, and solar power applications in 2006 are as follows <sup>7</sup>:

#### 1. Air-Conditioning Upgrades

Examples include the replacement of old equipment, and the addition of timers or converters. These measures are estimated to save around 1,300,000KWH of electricity a year.

2. Lighting Upgrades

Examples include the replacement of old lighting modules, the use of electronic ballasts, or the addition of timers and sensors. These measures are estimated to save around 3,150,000KWH of electricity a year.

3. Equipment Insulation

Having appropriate insulation not only reduces the ambient temperature around the machinery and makes the work environment more comfortable, but it also reduces the heat emitted, resulting in saving electricity used for air-conditioning. Equipment insulation is estimated to save around 900,000KWH of electricity a year.

4. Other Electricity-saving Measures

The addition of inverters to elevators and compressors is estimated to save around 590,000KWH of electricity a year.

5. Electricity Recovery

Delta saved an estimated 18,310,000KWH of electricity in 2006 by recovering over 70% of the electricity expended in the product burn-in process. The total benefit from electricity conservation and recovery measures implemented in 2006 was therefore around 24,250,000KWH, or 7.2% of the 337 million KWH actually consumed in 2006.

6. Water conservation measures

In 2006 Delta saved about 154,000 KL of water through water conservation and recovery

measures, or around 2.9% of the 5,340,000 KL actually used. The amount recovered was approximately 105,000 KL. These measures included recovery of rainwater and condensation as well as water-saving faucets and toilets.

Energy recovery system installed at one of Delta's factories.





Electronic Ballasts





Recycle bins made of recovered wooden pallets.



The light well at the underground parking lot at Tainan Plant is not only designed for lighting and ventilation, but is also used for rainfall recovery.

7. Wooden pallet recovery and reuse

In 2006 Delta factories recovered 730 tonnes of wooden pallets, which were converted into wooden products for reuse.

8. Solar power

In 2006, solar water heating systems at the Dongguan (China) and Taoyuan II (Taiwan) factories saved around 700KL in

diesel and 7000M<sup>3</sup> of natural gas. Solar panels installed at the Taipei head office, and the Tainan (Taiwan) and Teningen factories (Germany) generated 20,100KWH of power during the year.

Through energy saving and recovery measures as well as the use of solar panels and solar water heating systems, we reduced our GHG emissions by around 21,500 tonnes  $CO_2^{e}$  (carbon dioxide equivalent) a year.



Solar panels installed on the roof of the Tainan factory.



Solar water heating system installed at the employee dorm of the Dongguan factory.

#### Greenhouse Gas Emissions, Effluent and Wastes

In 2006 the main types of waste generated by Delta's offices and production lines included greenhouse gases (GHG), effluent, and solid wastes.



#### 1. Greenhouse Gases

The GHGs specified by the Kyoto Protocol are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF<sub>6</sub>). Carbon dioxide emissions associated with externally purchased electricity are the main source of GHG emissions from Delta Group. Our current GHG calculations only include externally purchased electricity and fossil fuels used by Delta, giving a total of 265,000 tonnes CO<sub>2</sub><sup>e</sup> for 2006<sup>8,9</sup>.

#### 2. Effluent

In 2006 Delta's total effluent volume was around 4,000,000 KL with most being domestic sewage. The effluent was discharged into the sewer system or industrial park treatment plants in accordance with regulations.

#### 3. Domestic Waste

In 2006 Delta generated around 4,200 tonnes of domestic waste, which was disposed by outside contractors through landfilling or incineration.

#### 4. Electronic Waste

Electronic waste includes scrap electronic materials, waste wires, cables and printed circuit boards (PCBs), etc. Disposal was handled by outside contractors and approximately 1,000 tonnes were generated in 2006.

#### 5. Metallic Waste

Metallic waste includes waste silicon steel, scrap iron, scrap aluminum, mixed metal, solder residues, etc. Disposal was handled by outside contractors. Approximately 5,100 tonnes were generated in 2006.

#### 6. Plastic Waste

Plastic waste includes scrap plastic reels, cases, etc. Disposal was handled by outside contractors. Approximately 1,000 tonnes were generated in 2006.

#### 7. Waste Glass Tube (CCFL tube) and Waste Glass

Waste glass tubes containing fluorescent powder or mercury are generated from CCFL

production process at the Taoyuan II (Taiwan) and Wujiang (China) factories. Disposal was handled by outside contractors. Approximately 30 tonnes were generated in 2006. Waste glass refers to glass tubes without fluorescent powder or mercury. Approximately 59 tonnes were generated in 2006 with disposal handled by outside contractors.

#### 8. Waste Solvents

In 2006 Delta generated around 71 tonnes of waste solvents. Disposal was handled by outside contractors.

#### 9. Waste Pallets

In 2006 Delta generated around 380 tonnes of waste pallets. Disposal was handled by outside contractors.

#### 10. Waste Paper/Cartons

In 2006 Delta generated around 8,300 tonnes of waste paper and cartons. Disposal was handled by outside contractors.



# Trends in Electricity/Water Consumption, Greenhouse Gas Emissions and Intensity

As Delta has grown over the years our electricity and water consumption have grown as well. The question is whether our use of water and electricity has become more efficient over time. We used Delta Group's revenues as a parameter to calculate electricity/water consumption and GHG emissions generated per millions of USD in production output between 2004 and

2006. The results of these calculations are provided below:

#### 1. Electricity Intensity

Delta's electricity consumption and intensity <sup>350000</sup> trends between 2004 and 2006 are shown in the <sup>300000</sup> graph. Electricity consumption per million USD <sup>250000</sup> 20000 of production grew from 71,100KWH in 2004 to <sup>150000</sup> 2004 and 2005 being higher than the increase between <sup>100000</sup> 2004 and 2005 being higher than the increase <sup>50000</sup> between 2005 and 2006. This indicates that <sup>0</sup> our electricity consumption has outgrown our revenues so we must pay attention to how efficiently we use electricity.

2. Water Intensity

Delta's water consumption and intensity between 2004 and 2006 are shown in the graph. Water consumed per million USD of production decreased from 1396KL in 2004 to 1252KL in 2006. This indicates that our revenue has outgrown our water consumption over the three years, representing around a 10% improvement in our water efficiency.

3. Greenhouse Gas Intensity

Delta's GHG emissions and intensity trends are shown in the graph. The amount of GHGs emitted per million USD of production output increased from 56.93 tonnes of  $CO_2^{e}$  in 2004 to 62.15 tonnes of  $CO_2^{e}$ , with the increase between 2004 and 2005 higher than the increase between 2005 and 2006. This corresponds to the previously stated electricity consumption and intensity trends and tells us that the amount of our GHG emissions is increasing at a faster rate than our revenues. This is a reminder that more effort is required.



### **Environmental Performance of Products**

Delta's Power System Business Group I (PSBG I) accounts for more than 40% of Delta's revenues. In 2006 it shipped over 100 million power supplies. If we consider only the PSBG I products used in notebook computers and assume 8 hours<sup>10</sup> usage every day during the year, then it is easy to calculate that over 5 billion KWH is consumed, which is a staggering amount of power. As Delta continues to increase the efficiency of our power supplies even an improvement of 1% amounts to substantial energy savings. With improved efficiency of products from Delta's other business divisions, greater energy savings and decreases in GHG emissions can be achieved. The environmental performance of several eco-friendly products shipped by Delta in 2006 is described below:

1. ADP-60 NH B Adapter for Notebook Computers (U.S. Energy Star Version 1.1 Qualified)

This product has a power output of 60W and an average efficiency of 87.9% <sup>11</sup>. For comparison, the threshold value for Energy Star is 84%. If average output during use is assumed to be 40W and the product is used for 8 hours every day, after one year the sum of the output of all products shipped in 2006 saves more than 6 million KWH of electricity beyond what the Energy Star standard calls for.

2. DPSN-186 & 216 Series Adapters for Game Consoles

Energy Star Version 1.1 requires products in this category to have a standby power consumption of under 0.75W. However, Delta's product achieves greater savings by reducing standby power consumption to under 0.35W. If each unit spends 20 hours in standby mode each day, the sum of the output from all products shipped in 2006 saves more than 20 million KWH of electricity over a year.

3. DC Fan Series (Larger or equal to 6cm in diameter)

The DC Fan Series launched in 2006 was at least 4% more energy efficient than the previous series. Fans larger or equal to 6cm in diameter in the new series made up around a quarter of all product shipments. If all fans of this series that were shipped in 2006 are used for 8 hours each day, over 220 million KWH of electricity can be saved after one year.



10. Assuming that out of 8 hours, 4 hours is at full load and 4 hours is at 20% load. 11. Average efficiency at 115V and 60Hz



High Efficiency ADP-60 NH B Adapter



Low Standby Power DPSN-186 and 216 Series



High Efficiency DC Fans

#### 4. Solar Cells (DelSolar)

Improvements in the conversion efficiency of solar cells meant that more power can be generated by solar cells while consuming the same amount of electricity to produce the cells themselves (the amount of electricity needed to produce each watt of solar cell was reduced – as low as 6KWH per watt). Use of silicon materials was also reduced by around 3%. Based on production capacity for 2006, this represents around 4.6 million KWH of electricity and nearly 7 tonnes of silicon materials saved.



Improvements in the conversion efficiency of solar cells lower electricity and silicon consumption during the process.

For products launched in 2007, Delta's environmentally-

friendly or energy-saving examples include: more efficient high-voltage Uninterruptible Power Systems (UPS), LCD TV power supplies and CCFL tubes, reduced mercury in CCFL tubes, higher energy intensity for power systems used in communications devices, super slim and highly efficient adapters for notebook computers, mercury-free flat backlight modules, solar power inverters with a conversion efficiency of over 95% and concentrating solar cell receiver assemblies with a conversion efficiency of over 35%.

Comparing the energy saved by our products as mentioned above with the energy conservation measures of Delta's factory sites, we can see that developing more efficient products delivers better results than the energy-saving measures at our daily operations. For the future, we will continue to evaluate and implement eco-friendly and energy-saving measures at Delta's offices and factories, and devote even more effort to developing innovative energy-saving products. This is essential to Delta's mission: "To provide innovative energy-saving products for a better quality of life".



Mercury-Free Flat Backlight Modules



LCD TV Power Supplies



Super Slim Adapters (for Notebook Computers)



Solar Power Inverters



Concentrating Solar Cell Receiver Assemblies



Uninterruptible Power Systems (UPS)

## **Plans and Prospects**

Looking back at Delta's CSR performance in 2006, with "Care for the Environment, Energysaving and Our Green Earth" as our core ideals, we have brought environmental-friendliness into our everyday operations and product designs. For stakeholders we have used a variety of channels and methods to create greater value and to fulfill our responsibilities as a corporate citizen.

Nevertheless, for 2007 and for the long term there remains much for us to do to improve our CSR efforts in a variety of areas in both depth and breadth. These areas include:

#### **Employee Occupational Health & Safety**

We continue to promote safety awareness in our factories and pursue the goal of zeroaccidents so that occupational injuries can be reduced to an absolute minimum. We also continue to strengthen our existing OHS organization to ensure that jobs are done properly.

#### **Employee Participation**

We will encourage or organize employees to take part in social welfare activities in a more systematic manner, such as through volunteerism or donations. We plan to work with Delta Electronics Foundation to provide employees with advice and suggestions.

#### **Customers and Supply Chain**

Apart from achieving our constant goal of "Customer Satisfaction", practicing good supplier management and ensuring sufficient supply of parts and materials, we also strive to convey the requirements of green design or green materials (e.g. halogen-free materials) in a more systematic manner to our suppliers. We are working with our suppliers on social and environmental responsibility issues to ensure that Delta's supply chain is not only a green supply chain but a supply chain that lives up to its corporate social responsibilities.



#### **Green Operations**

- We are planning a complete GHG emission inventory and its prerequisite work within Delta Group, such as training courses for responsible staff. Statutory developments will also be closely monitored.
- We are planning pilot runs on energy monitoring at chosen factory sites. If this proves to be successful, the scheme will be extended to others. By providing best practices for factories to learn from, this should improve results from energy-saving initiatives.
- We will evaluate and develop Delta's green design guidance to give all business groups and business units concrete guidelines to follow.
- We are planning to build an internal platform that will provide a channel for timely CSR information sharing to ensure that important messages are delivered to all relevant personnel and to allow them to share each other's resources.
- Based on the energy consumption and intensity statistics for this year, we will assess and set short, medium and long-term goals aimed at making more efficient use of resources.



#### Promoting Green Buildings

Delta will evaluate and develop Delta's green building guidance for future company construction projects. In addition, the Delta Electronics Foundation is taking a three-pronged approach by promoting green building ideals, carrying out on-site monitoring, and providing practical demonstrations. The foundation is gathering and promoting the latest green building techniques and performance data to encourage the general public to convert their homes into healthy, comfortable and environmentally-friendly green buildings.

#### **Environmental Education**

The Delta Electronics Foundation's translations of the KEEP (K-12 Energy Education Program) teaching materials will be experimentally taught, and a "whole school management" method will be introduced. Students not only learn about energy saving in class but also experience how it works in practice for the schools. Six schools in northern, central and southern Taiwan will be selected for the initial trial. Once the actual model of operation is established, the program can be expanded in the future.

#### Sponsorship on Sustainable Energy Research

We continue to emphasize the need for sustainability in science and technology. Talented people are encouraged to carry out innovative R&D in the fields of environmental protection and renewable energy.

As described above, our CSR goals are many as we dedicate our efforts to becoming a better corporate citizen. We look forward to sharing our accomplishments in the 2008 edition of this CSR report.



Delta's 2007 CSR Report is available at http://www.delta.com.tw/csr/csr\_report.asp. If you have any comments or suggestions to make about this report, please do not hesitate to contact us through csr@delta.com.tw. Thank you!



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