LEO PAPER GROUP

Green Harmony®

Environmental Report 2010

Editor's Remarks

In light of our commitment to promote an understanding of our environmental initiatives, to achieve a greener supply chain, greener community, and a greener world, we published the first Environmental Report in 2010 (Leo Green Harmony® Environmental Report 2009). This year the report has been published on the basis of last year's report.

This report mainly covers our core manufacturing plant in Heshan City Guangdong and Hong Kong Office, with subsidiaries' activities mentioned in relevant sections.

Reporting Period

This report focuses on our environmental initiatives for the calendar year 2010. Continuing initiatives from the prior year and more recent activities are also included.

Publication

Current issue: March 2011
(next issue scheduled in March 2012)

Green Harmony®

- ✓ Being a Green Manufacturing Company Beyond Standards
- ✓ Contribute to Sustainable Development
- ✓ Create a Green Harmony® World

"Zero Waste Factory"

Promotion of Green Harmony® Zero Negative Impacts

Green and Lean Supply Chain Eliminates Waste

Breakthrough of "Zero": Zero Wastage, Zero Emissions, etc.

Contents

Corporate Profile

Leo Paper Group (hereinafter referred to as Leo) was established in Hong Kong in 1982. Since its establishment, Leo has invested in building factories in the Guangdong Province, including the cities of Nanhai and Heshan City, where Heshan Astros, our largest factory, is located. Currently, the Heshan plant covers an area of 667 thousand m^2 with approximately 20,000 workers. With advanced production technologies and extensive production capabilities, Leo offers professional, one-stop-shop services including pre-press, printing and production, and secondary processing. Our products include case-bound books, childrens' board books, pop-up books, book plus, educational kits, stationery sets, gifts and premiums, game sets, packaging products, and gift bags. The majority of these products are exported to the U.K., the U.S., Australia and Europe.

Leo has set a high standard for our decision making principles. Using the advantages and strengths of the local and overseas scientific community, as well as advanced technology, Leo has developed rapidly and grown from a factory with only a few production lines into one of the largest printing manufacturers in Asia, earning the Group an outstanding reputation in the printing industry.

In pursuing economic efficiency, Leo also focuses on the protection of the environment, and emphasizes the importance of sustainable development. Since we began building factories, Leo continuously increases its environmental protection input. As early as 2001, in order to obtain the ISO14001 certification for its Environmental Management System, Leo established the first phase of the water treatment plant and waste treatment center. At the same time Leo introduced environmentally-friendly machines, equipment and materials, installed an exhaust dust collection system, carried out R&D on environmentally-friendly materials and techniques, etc. We set both production and environmental sustainability as common development goals of our company, and strictly enforce international environmental standards.

Today, under the leadership of Mr. Samuel Leung, the Chairman of the Group, Leo has achieved remarkable results in environmental protection. Leo not only obtained multiple certifications, including ISO14001, Green-Mark, FSC-COC, PEFC-COC, and ISO14064 for its environmental management systems, but also established substantial measures for environmental protection. We have taken the lead in launching and implementing cleaner production programs, and formulating multi-level pollution prevention and control measures. Leo took part in the Cleaner Production Pilot Scheme of Hong Kong in 2007, and won the Grand Award of the HangSeng Pearl River Delta Environmental Award in 2008. In early 2009, Leo was awarded the Grand Award of the Hong Kong Awards for Industries – Environmental Performance, and in November 2009, Leo was named a Cleaner Production Enterprise in Guangdong Province. In 2010, our environmental performance has gone a step further, we became the Gold Award winner of the "Hong Kong Awards for Environmental Excellence"HKAEE Sectoral Awards" in the manufacturing sector.

To achieve harmony and common prosperity in society and the global environment, Leo has set zero pollution, zero emissions and zero energy waste as the ultimate goal, striving to create economic benefits for society and to achieve the dream of creating a sustainable living environment!

Message from the Chairman

Chairman of Board
Mr. Samuel Leung

As a member of the global village, we have the responsibility to protect the environment. Being green has become more and more important for sustainable development of a company. Green Harmony® is the philosophy for our environmental initiatives, driving us to contribute to sustainable development and create a Green Harmony® world.

Over the years, we have been committed to green manufacturing and implemented a number of green initiatives for continuous improvement each year. Leo has been widely recognized as a foremost green manufacturer in the region. In 2010, Leo was recognized under different schemes, such as the "Hong Kong Awards for Environmental Excellence", the certification of "China Environmental Label Products", and the Gold Label of the "Low-carbon Office Operation Programme" of WWF.

In light of such recognition, we are dedicated to influencing more organizations and individuals to join the green movement. We have made efforts across the supply chain, throughout the community, and in our industry. It is our mission to be an environmentally-friendly company that drives employees, suppliers, customers and the community, as well as stakeholders to jointly practice the "zero" philosophy.

In the future, Leo will continue to strive for continuous improvement through dedicated research and development, innovative technological application, enhanced resource utilization and waste reduction. We will also influence more and more organizations and individuals to work together to achieve a low carbon circular economy, to build a harmonious and environmentally-friendly community and to achieve sustainable development.

Message from the Managing Director of Heshan Production Plant

Managing Director of
Heshan Production Plant
Mr. Simon Fung

Green is the most common color in nature; it is full of vitality and strength, and represents health, recovery and hope. In the traditional Chinese culture, green also has a connotation of "life," which is the symbol of harmony. As a modern printing company, Leo Paper Group respects the natural environment, pursuing sustainable development, and a harmonious co-existence of business, society, and the environment.

In 2001, Leo established a management system for air emissions, sewage, waste disposal, etc., and obtained the ISO14001 certification. In 2005, the Energy-Saving Commission was established as an independent steering committee for environmental protection and energy-saving projects at Leo. In 2007, the introduction of Cleaner Production Management Model was introduced to promote green production. In 2008, the Zero Waste Factory concept was introduced for promoting cleaner production. In 2009, carbon inventory and assessment mechanisms were introduced for the full implementation of a zero waste manufacturing plant. In 2010, the Group established the Green Harmony® Steering Committee for R&D and promotion of environmentally-friendly products, and the introduction of environmentally-friendly materials, technologies, and equipment.

As a company, Leo is committed to promoting employees, suppliers, partners, customers, and other stakeholders to practice a culture of environmental protection, because we all know that it is extremely important to protect our planet. With the advancement of industrialization and social development, the air, water, and soil have suffered serious damage. Everyone living on Earth has the responsibility to protect the mountains, water, plants and trees for the livelihood of our homeland.

In recent years, the Chinese government has highly emphasized the development of a green and low-carbon economy, promoting energy saving and emissions reduction in all areas and attracting worldwide attention. Leo has also become more concerned with green issues, embracing the responsibility to build a vibrant, happy and harmonious working environment, and to help sustain the most beautiful planet in the universe, the Earth!

"Green Harmony®" Highlights 2010

Green initiatives are being carried out at Leo every day. In the year 2010, a number of environmental projects were implemented. We have selected one for each month, to outline our environmental journey.

January	Proposal of the "Green Harmony®" philosophy and adoption by the Board of Directors
February	Establishment of the "Green Harmony®" Steering Committee
March	Completion of the assessment of ISO14064 Greenhouse Gas (GHG) Quantification And Reporting at the organizational level. Leo is the first ISO 14064 certified printer in Hong Kong
April	Successful commencement of the "Green Harmony®" Steering Committee
May	Launch of 45 specific innovative environmental projects
June	Release of the bi-annual internal Green Harmony® Report
July	Establishment of the PAS 2050 (assessment of the lifecycle carbon emissions of products) Management System, the first one of its kind in the region
August	Successfully passes the assessment of Class A export-oriented enterprise of Guangdong Province
September	Leo is the first printer in China to pass the Environmental Label Products Certification
October	Publishing of Leo's first environmental report (Green Harmony® Environmental Report 2009) Obtains the QC080000 Hazardous Substance Process Management Certification
November	Awarded with Gold Label for the Low-carbon Office Operations Program (LOOP) by WWF
December	Leo is the winner of the Hong Kong Awards for Environmental Excellence for the Manufacturing Sector

Green Products

Green Products – Life Cycle Perspective

Leo devotes its efforts to creating a "Green Harmony®" business model, aimed at the promotion of environmental measures in every step of production, minimizing carbon emissions, saving energy, reducing waste, and penetrating the "zero" concept (zero emissions, zero pollution, zero energy consumption). This allows us provide total green solutions to our customers.

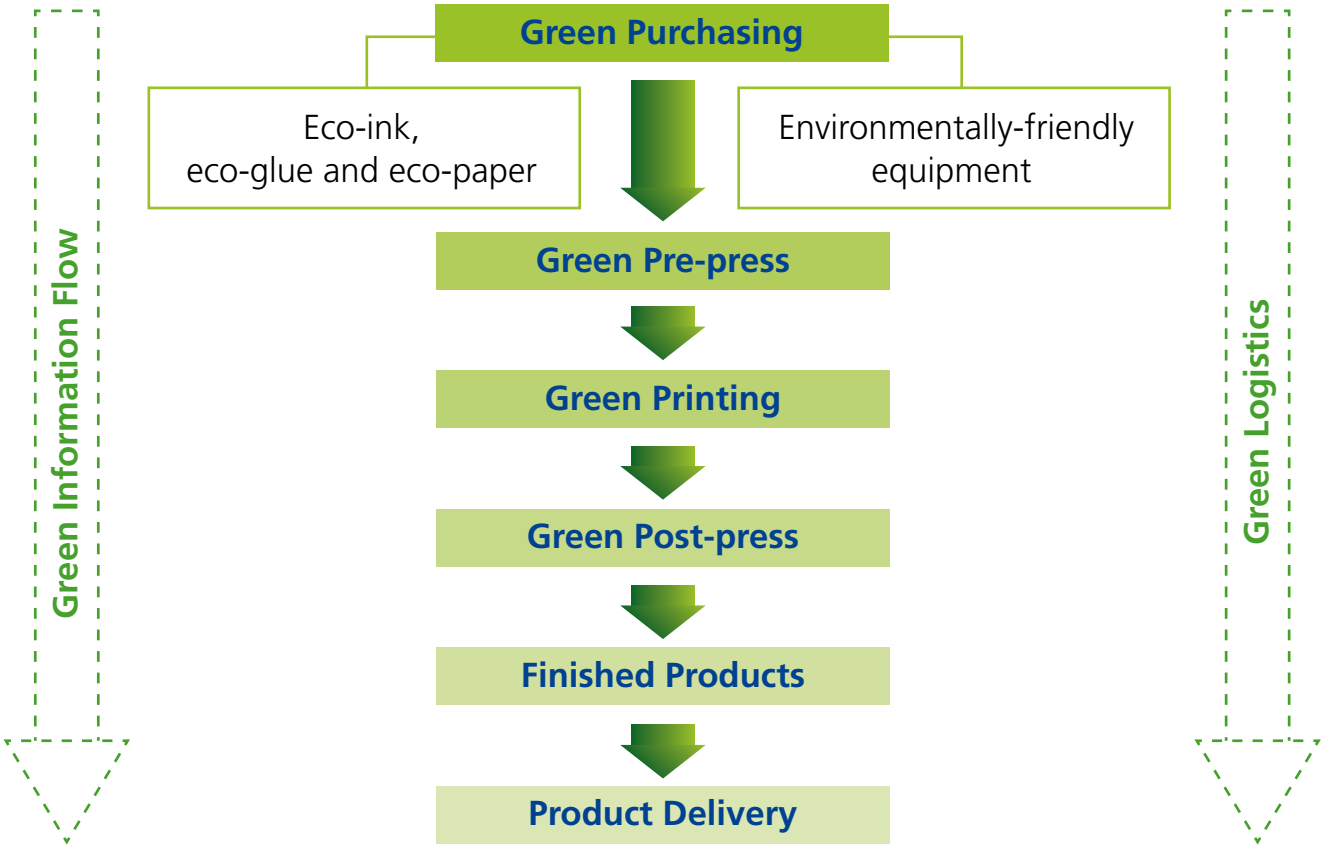
In 2010, we adopted the standard of PAS 2050 (Specification for the assessment of the life cycle greenhouse gas emissions of goods and services) to conduct a lifecycle analysis of a product's environmental impact from the perspective of carbon emissions.

At our factory, the lifecycle of a product includes the procurement of materials, the green pre-printing process, the printing process and the post-printing process. Logistics arrangements and information flow have also played an important role in the environmental impact of our production process.

Green initiatives for the following aspects of a product's lifecycle have been implemented at our factory to contribute to greener manufacturing.

- Green Purchasing
- Green Printing
- Green Logistics
- Green IT

Green Products – a Lifecycle Perspective



Green Purchasing

Raw materials and equipment have a direct and key impact on the environmental aspects of finished products as well as production processes. Green purchasing is our most important measure for "controlling at the source". By sustainable and environmentally-friendly purchasing, we push environmental initiatives across the supply chain.

Leo's Green Purchasing Policy and General Measures:

- Development of green procurement guidelines
- Provision of green training and organization of environmental conference and visits for suppliers.
- Environmental protection agreement signed by suppliers
- On-site environmental assessments of suppliers conducted by Leo's audit team to ensure compliance with environmental requirements

Green Paper Policy

- We are committed to the adoption of green paper, and are dedicated to promoting the use of green paper to our clients.
- Promoting FSC-certified paper or other paper from sustainable sources is an important measure for green paper. The purchase of FSC-certified paper increased by 134.2% in the year 2010 compared with 2009. The purchase of PEFC-certified paper increased by 418% in the year 2010 compared with 2009.
- We conduct a traceable analysis for paper sources.

Green Ink Policy

- All printing inks are required to undergo "heavy metal printing ink testing".
- More water-based ink is being used in place of solvent-based ink. Water-based inks were 15% of total ink usage in 2010. This reduces VOC (volatile organic compounds) emissions from the source.

Water-based Lamination

- 100 % replacement from solvent-based lamination to water-based lamination. This reduces VOCs from the source of materials.

Green Equipment Procurement

- Environmental specifications (e.g. energy saving) are one of the key factors in the sourcing of production equipment. Priority is given to energy saving, less noisy and lower emission equipment. Leo possesses the most advanced 8-color printing presses and presses that support waterless printing. In addition, we have the most advanced production line for producing hardcover books.

Process Management of Chemical Substances

Following the "control from the source, process prevention, green printing" philosophy, we are committed to reducing the usage of hazardous chemical materials from raw material purchasing, production, logistics and other related processes in order to continuously reduce their environmental impact and health and safety risks. We encourage and support the environmental initiatives of suppliers, and cooperate with the ones who follow "hazardous chemicals reduction" initiatives.

QC 080000 Hazardous Substance Process Management Certification

In October of 2010, we obtained the QC080000 Hazardous Substance Process Management certification. This system helps to implement a well-structured technical approach for chemical management. It also strengthens the performance capabilities of our laboratory and laboratory professionals.

With the implementation of the Hazardous Substance Process Management System, Leo's products comply with the latest international regulations regarding product safety. Leo's products also comply with the "Consumer Product Safety Improvement Act of 2008" (CPSIA) established by the U.S. Consumer Product Safety Commission (CPSC). Our laboratory has been recognized by the CPSC.

Registration of Legal and Regulated Controlled Substances

- ASTM F963 08
- CPSIA 2008
- REACH
- EN 71
- ISO 8124
- Canadian C.R.C.c931
- RoHS
- DMF (Dimethyl Fumarate)

Leo Green Purchasing Technical Specification

At Leo, the standard of "Leo Green Purchasing Technical Specification" is in place. Controlled substances are classified into 3 categories:

Level 1 (Forbidden): The substance and its application are not allowed.

Level 2 (Restricted): The substance and its application will be prohibited after a prescribed time period, then the substance will be classified as a Level 1 substance.

Level 3 (Monitored): At present there is no specific date to reduce the amount and purpose of usage. When substitutes are available, such substance will be classified as Level 2.

QC080000 Internal Auditor Training

In January 2010, staff members involved with chemical management or operations attended the QC080000 internal auditor training. The training aimed to educate relevant staff for futher understanding of the requirements of QC080000 and for better performance in daily operations.

Hazardous Substances Seminar

On August 17, 2010, we organized a seminar for "Controlling Hazardous Substances across the Supply Chain" at our production plant in Heshan. We introduced to our suppliers the mechanisms for harzardous substances control and discussed how to improve the control process in the supply chain. After the seminar, the participants visited our laboratories on site. Through this seminar, the communication with our suppliers has strengthened the implementation of green purchasing.

Green Printing

Pre-press Process

Environmentally-friendly Resin Plate Cleaner

Resin plate cleaner generates much lower VOC content compared with the traditional one, while simplifying the work process and increasing production efficiency. Lower temperatures also imply lower energy consumption. Successful adoption of resin plate cleaner is one of the breakthroughs for pre-press production at Leo.

Color Management System

Color management information is entered into the computer system. The color management system formulates the optimal combination of different inks. The system helps to reduce waste during the color management process, increasing the reuse rate of waste ink, and increasing the color management process speed.

Computer-to-plate System

Computer-to-plate (CTP) replaces traditional film-to-plate, which consumes less chemicals, materials and water in the pre-press production process, achieving the target of "reducing at the source".

Printing Process

Adoption of the latest printing technologies and materials is important for environmental breakthrough. Some of the newest technologies include rubber blanket auto cleaning modules, flexographic printing and waterless printing. Together with the green management at the printing workshop, such measures help to further enhance low-carbon and green printing.

Automatic Blanket Cleaning Module

The automatic blanket cleaning module installed to offset printing presses uses 25% less of the solvent-based cleaning agent resulting in less VOCs generated during the cleaning process. The module reduces the consumption of resources and improves production efficiency.

Flexographic Printing

Flexographic printing uses water-based ink which generates no VOC emissions during the printing process. The solvent-based cleaning agent used after the printing process is also eliminated. Leo has widely adopted this printing technology.

Waterless Printing

Waterless printing reduces the usage of water and chemical solutions. With a silicon printing plate, specific inks and special temperature control, waterless printing consumes no water during the printing process. There are a number of printing presses capable of waterless printing at our production plant.

Leo is the first printing company in China to join the Waterless Printing Committee. Products produced with the Waterless Printing technology may have the Waterless Logo printed on them.

Activated Carbon Filter at Silk Screen Printing Workshop

An activated carbon filter is in place at our silk screen printing workshops to absorb VOCs. The activated carbon filter reduces approximately 60% of VOC emissions.

Post-press Process

There are a number of post-press processes at our production plant, including laminating, silk screen printing, flocking, and bronzing. We have implemented a number of measures for these processes, such as continuous research of environmentally-friendly materials to replace polluting materials, including materials to help reduce VOC emissions. In the lamination process, solvent-based lamination has been totally replaced by water-based lamination, which minimizes impact on the environment.

Replacement of Solvent-based Lamination with Water-based Lamination

Solvent-based lamination has been completely replaced by water-based lamination since 2008, reducing the VOC emissions during the post-press process.

Water-based Laminating Technology

The adoption of acrylic glue eliminates the use of volatile solvents, lowering the risk of static fire accidents during the lamination process, and increasing occupational health and safety in the workplace.

Varnishing Process

Traditional varnish has been replaced with water-based varnish. Water-based varnish does not contain any volatile solvents. It is low in VOCs and also biodegradable. This not only reduces pollution, but also protects the health of the workers.

Green Logistics

As part of our product lifecycle analysis, logistics arrangements and processes have been analyzed in order to reduce energy usage, resource consumption and carbon emissions during transportation. Logistics efficiency was improved by restructuring material flow, improving packaging mechanisms and developing the RFID warehouse.

Bridges Connecting Factory Buildings and Loading Platform

Bridges connecting factory buildings and workshops were built, significantly reducing the transport distance between different workshops. The loading platform is located at the product packaging areas, so finished products can be loaded for shipping without having to be moved to the warehouse. This greatly improved efficiency, saved storage space, streamlined the shipping process and reduced carbon emissions.

Replacement of Diesel Forklifts

To reduce exhaust gas emissions, most of the diesel forklifts in the factory have been replaced by electric forklifts, helping reduce VOC and carbon emissions during the transportation process.

Supplier Cooperation - Carton Box

With cooperation from suppliers, a new carton box production line has put in place next to our production plant. The distance between suppliers and our plant has been reduced from 200km to 30km, significantly reducing the carbon emissions and energy consumption in the logistics processes.

Supplier Cooperation - Circular Logistics

Paper suppliers deliver materials to our factory in the morning while picking up the waste paper generated during the manufacturing process from the previous day for recycling. This new arrangement avoids the use of empty trucks, reducing 179.7 tons of carbon emissions in 2010.

Green IT

IT is an important tool for the enhancement of productivity and product and service quality. At Leo, it is also an important tool for environmental protection and carbon reduction. Green IT has helped us reduce electricity consumption, paper consumption, air travel, wasted space, etc. More importantly, it demonstrates to our suppliers and counterparts how the utilization of IT improves operations in the printing industry.

Green IT for Manufacturing Process

RFID Two-dimensional Warehouse

The RFID-ready forklifts, together with 2D visualization allow for visual management of the warehouse at our factory. The system can automatically reserve and allocate storage space, which can significantly enhance the utilization of our warehouse

RFID Sensing Production Network

With sensors installed at the workshops, production status can be closely monitored. Warning signals will be released whenever defects occur, significantly reducing waste. In addition, the RFID technology helps monitor the production progress to achieve an even production schedule. Together with the RFID-ready forklifts, the entire production process is well traced at the factory.

Intelligent Traceability

With the integration of sensing technology and information systems, the physical location of production materials can be tracked in a real time manner. This reduces the chance of losing materials as well as saves time searching for materials.

Green IT Office

Green Data Center

By migrating physical computing servers into virtual servers, electricity consumption and carbon emissions were substantially reduced. The project was started in 2009 and has saved 183,926 KWh to date. The project continues and we expect the whole data center to become a green information platform within 5 years.

Green Communications

Different IP communication appliances have been installed, such as IP Phone, instant messaging system, and a video conferencing system, for easier communication with clients, suppliers and overseas offices. This helps reduce travel frequency, resulting in a considerable reduction of carbon emissions.

Paperless Office

With the promotion of the Electronic Approval, Document Management and E-Fax, paper consumption for approval, filing, and storage processes was reduced by 50%.

Green IT Supply Chain

Mass Transit Data Exchange Platform

A file transfer [Mass transit] electronic data exchange platform has been developed to provide rapid file exchange service for customers and suppliers. This system helps to reduce usage of CDs and increases the efficiency of data transmission.

B2B E-commerce Platform

The construction of the B2B (Business-to-Business) E-commerce Platform for green information flow in the supply chain started in 2007. The platform not only facilitates communication in the supply chain, but also more importantly, helps to reduce and avoid waste due to inefficient information flow. The platform has been widely promoted to our suppliers, increasing operations efficiency and reducing usage of paper for both Leo and the suppliers.

Recognition for Green IT

With the comprehensive and in-depth research and application of RFID technology, especially, the RFID Real-time Production Line Monitoring System, Leo was awarded with the "Gold Award of Best EPC/RFID Implementation" in 2010, which is organized by the Hong Kong Article Numbering Association (the only organization in Hong Kong authorized to issue GS1 and Electronic Product Code (EPC) identification numbers for trade items, locations and logistics units).

Environmental Management

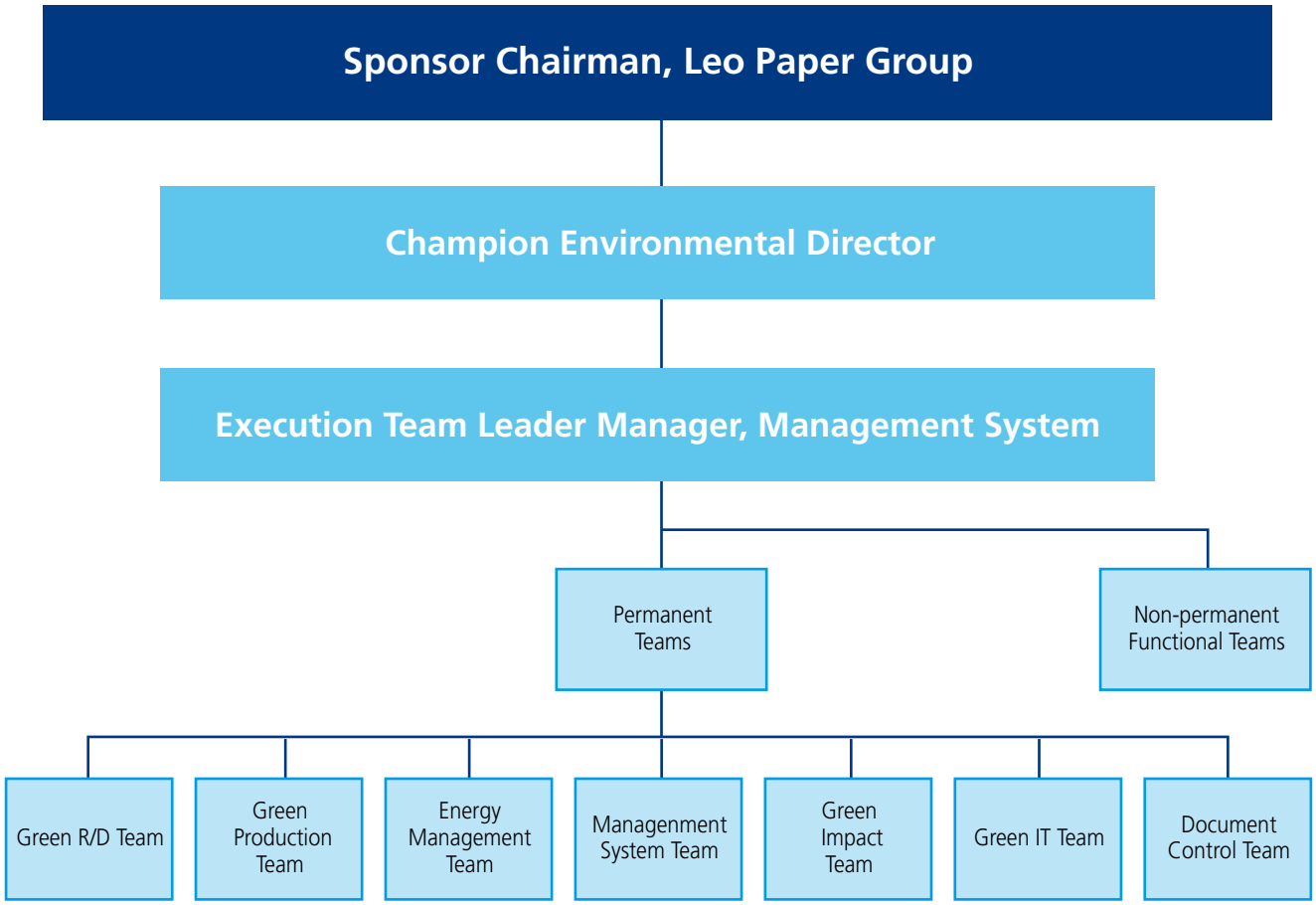
Management Systems & Green Harmony Committee

Environmental Management Systems

For the systematic management of environmental affairs and improvement of environmental performance in various areas, in addition to the ISO14001 Environmental Management certification in 2001, Leo has attained the following certifications: FSC-COC, Green-Mark, PEFC-COC, Clean Production, ISO14064, and more recently the PAS2050 Product Carbon Footprint. With implementation and maintenance of the environmental management systems, our environmental management fully complies with the latest international standards.

Green Harmony® Steering Committee

Leo has set up a designated environmental management committee, the Green Harmony Steering Committee, which coordinates the planning and implementation of environmental management systems. Green meetings are held regularly to review the status of various environmental projects. This committee joins staff from various departments, with the top management as the sponsor and the Environmental Director as the committee chairman. The committee consists of working teams which are responsible for managing Green R & D, Green Production, Energy Management, Environmental System, Green Impact, Green IT and Document Control (see the diagram).



Environmental Aspects

The environmental aspects not only cover production processes, they cover all operations at the factory, including the dormitories. By analyzing the entire production and services process chain, including process input and output, we identified the significant environmental aspects. Then, we developed environmental management programs and action plans to continuously improve the environmental performance, by applying the Plan-Do-Check-Act (PDCA)" model and statistical analysis on the environmental management effectiveness.

Currently the company's major environmental aspects include energy consumption, solid wastes, waste water, and air emissions.

Waste Water Treatment

By adhering to the environmental policy "Recognize environmental responsibility and create a better future", Leo invested more than 80 million dollars in building first class wastewater treatment plants as detailed below. The wastewater treatment plants' total capacity has reached 7500m³/d. The water discharged from the plants meets the standards of the Guangdong Province "Water Pollutant Discharge Limits" (GB44/26-2001), Level 1 and "Pollutant Emission Standards of Municipal Wastewater Treatment Plant" (GB18918-2002) Category 1, Class B standards. The capacity of the water treatment plants is sufficient to cover the company's development in the next 5-10 years.

Domestic wastewater and industrial wastewater

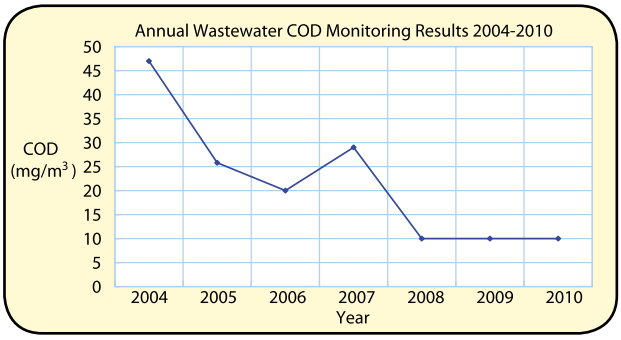
Wastewater Treatment Plant Phase 1

Enter Phase 2 after pre-treatment

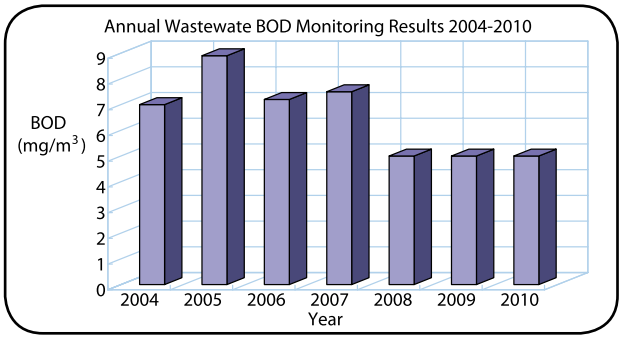
Wastewater Treatment Plant Phase 2

Wastewater Treatment Plant Phase 3

Trends of discharge concentration of key factors (mg/m³)



From 2004 to 2010, the COD value and BOD value of treated a wastewater (reclaimed water/ greywater) showed a significant downward trend, far beyond the requirement of the most stringent national and local government standards.



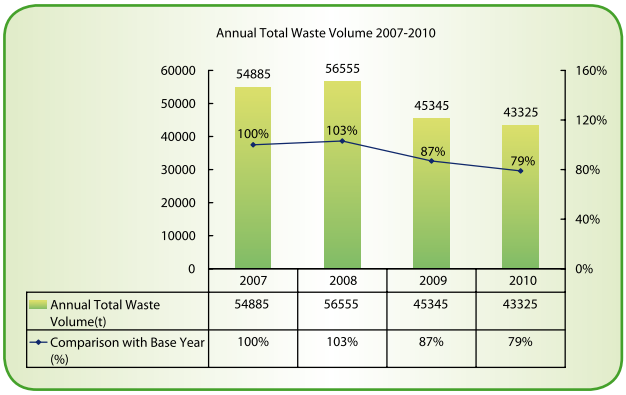
Meanwhile, the reclaimed wastewater (greywater) was reused for toilet flushing, cooling of roads and roof-tops during the summer and watering plants. 276,497 tons of reclaimed water were used in 2010, thus reducing the use of fresh water.

Waste Reduction

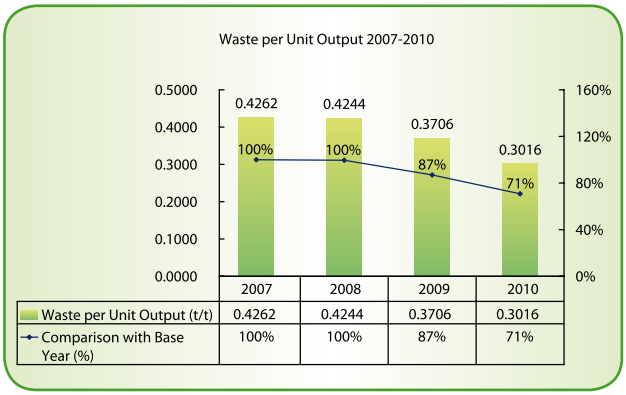
In 2010, a series of effective measures were implemented based on the 5R and zero waste principles, aiming to achieve maximized utilization of resources and zero emissions of harmful materials.

1. The total waste amount in 2010 was 21% less than the base year of 2007 and 8% less compared with year 2009.

Comparison of Annual Total Waste

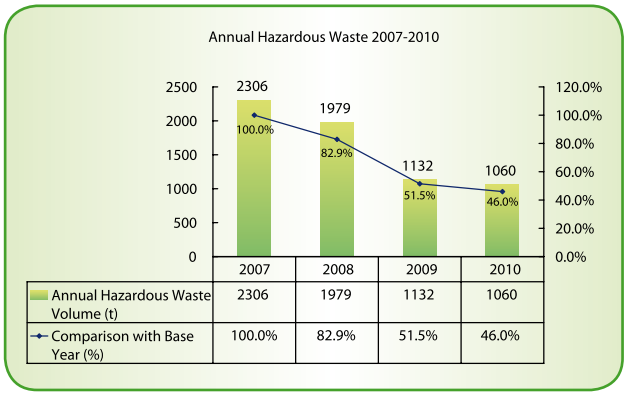


Comparison of Annual Waste per Unit Output

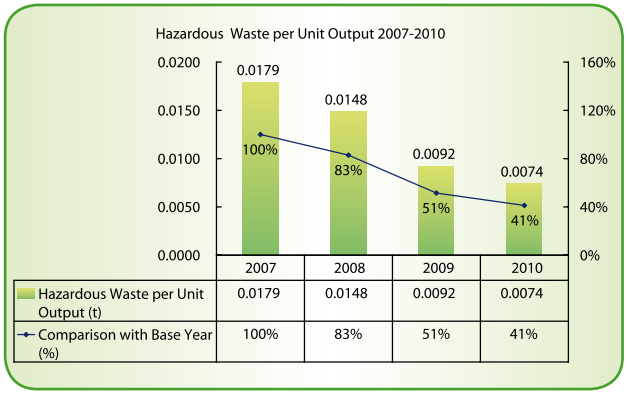


2. The total amount of hazardous waste per unit output and the trend analysis of amount per unit output of hazardous waste are critical areas of the company's waste management. In addition to the detoxification of harmful waste by nationally qualified organizations, we highly emphasize waste reduction at the source.

In 2010, the total amount of hazardous waste was reduced 1,246 tons compared with 2007, which is a decrease of 54%.



The amount of hazardous waste per unit output was decreased by 59%.



After years of ingrained 5R management, we have achieved a significant reduction of waste, thus reducing the impact on the environment.

Air Emissions Control

Employees are our foundation. Therefore, we place a great deal of importance on occupational health and safety, including the impact of air quality in the workplace due to air emissions in the production processes. Effective control measures were implemented at the major processes of emissions, such as: printing, flocking, silk screening, and fuel trucks. Significant improvement has been achieved.

Dust Control in the Printing Workshop

We have set up water curtain style powder collection rooms in the workshops in order to collect the excess dust and powder at the printing workshops and maintain the air quality inside and outside the workshop. The collection rooms are set up to serve more than 30 printing presses.

Suction is installed at the paper delivery position of each printing press to collect the excess powder for double filtration by the water curtain and filters before discharge. The filters are cleaned and replaced regularly to prevent accumulation of dust and powder.

Printing powder collection devices are also installed, each of which can collect an average of 0.455 kg of dust each day, greatly improving emission conditions.

Air Emissions Treatment Device for the Silkscreen Printing Process

Automatic drying ovens with controlled outlets for exhaust were installed at the silkscreen workshops. Through this measure, the disorganized emission of exhaust gases is replaced by organized and controlled emission, thus improving air quality.

Exhaust gases at the plant meet "The Provisional Standard of Cooking Fumes Emission", or "The Standard for the Limits of Air Pollutant Emission" (DB44/27-2001), Level 2.

Dust Control at Flocking Workshop

The whirlwind dust collection system was introduced in the flocking workshops. It is installed on 14 flocking machines to collect the dust generated during the flocking process. This measure effectively protects the health of employees. At the same time, the flocking collected is reused to reduce the consumption of raw materials.

(mg/m^3)	Benzene	Toluene	Xylene	Particles	Ammonia
Standard	0.4	2.4	1.2	1.2	2
2010	0.01	0.01	0.01	0.354~0.568	0.394

Energy Management

Currently energy shortages are a major concerns. Optimized utilization of resources and the minimization of energy consumption have become key topics in enterprise development. Leo continually seeks to achieve maximum economic efficiency to reduce our energy consumption.

In 2005, we developed and implemented an energy management system, and set up an energy management committee, which includes a Technology Transformation group, a Process Research and Development group, a Technology and Process Inspection group, and a Statistical Analysis group. Comprehensive technological transformation, analysis and monitoring of energy usage at the plant were achieved. According to the energy saving requirements of the local government, a production plant's target for saving energy is 1,900 tons of standard coal in the Eleventh Five-Year (2006-2010) Strategic Plan. With the efforts of all Leonians, 8,819 tons of standard coal were saved during the period from 2006 to 2007, far ahead of the government's schedule.

Energy Consumption in 2010

In 2010, comprehensive energy consumption per RMB10,000 output was 0.065 tons of standard coal, which is a 29% reduction compared with the base year.

In March 2010, our energy saving performance scored 99 marks during an audit by energy experts, recognizing Leo as the business model on energy consumption and carbon reduction in the region.

Innovative Energy Management

Energy management has been a very important aspect for our environmental initiatives. Reduction of energy consumption has been achieved in various ways, including prevention of energy wastage, and energy recycling. The latest technologies are adopted to achieve innovative breakthroughs. The initiative has extended to the local power station to help reduce energy consumption in the community.

Integrated Energy Saving System

By applying a variable frequency technology and a harmonic control technology among others, the integrated energy saving system recorded a 7.25% power savings. Complete data has been recorded for further analysis and improvement.

Grid electricity network system

The advanced automation system enables non-stop electricity supply by switching electricity between the power station and our in-house power generator. This system helps to avoid the loss of electrical power which results in material wastage, including paper, ink or glue, during the planned power outages.

Slurry Ice Air-conditioning System

This air conditioning system makes and stores ice overnight. During the day, the ice melts to become a chilled water supply for cooling the air. This lowers the electricity load at the local power station during peak hours. The construction of the Slurry Ice Air Conditioning System at the 2nd Phase of the Super Canteen was completed in August, 2010. The system for the manufacturing plant, Phase IV was completed in November, 2010.

Real-time Energy Monitoring System

With GPRS sensors monitoring the high electricity consumption machinery, our computer system can retrieve the real-time GPRS data for further analysis. This provides a more comprehensive analysis which leads to electricity saving opportunities.

Leo is the first company to adopt this energy monitoring system in the Guangdong Province.

Recognition for Energy Management

In June 2010, Leo was awarded with the Guangdong Energy-saving Projects Fund, in recognition of project achievements of the Slurry Ice Air-conditioning System, Luminosity Enhancement Jacket, Adoption of Induction Cookers, and other energy saving initiatives.

Carbon Footprint Management

We are well aware of the impact of climate changes on human beings and the natural environment. In response to the principles of the United Nations Convention on Climate Change and the Kyoto Protocol, and to fulfill business social responsibility, we launched a series of carbon measurement and reduction projects, including the ISO14064 and PAS 2050 certifications, which systematically measure the carbon emissions on both the corporate and product level to create a low-carbon facility.

ISO14064 Greenhouse Gas Accounting and Reporting on Organizational Level

The total emissions of greenhouse gases have been measured scientifically consistently, and systematically since the year 2007 based on the ISO 14064 standards. Carbon reduction plans were then set up to promote continuous improvements.

PAS 2050 Product Carbon Footprint (lifecycle greenhouse gas emissions assessment of goods and services)

In addition to the measurement of green house gas emissions on the organizational level we have further extended the measurement to the product level by adopting the standard of PAS 2050. We strive to reduce carbon emissions throughout the entire life cycle of a product, from raw material to final disposal. Leo is the first Chinese printer to achieve the PAS 2050 certification.

Low-carbon Office Operation Program (LOOP)

By measuring the office's carbon emissions, implementation of best practices in management and technologies, and the promotion of green behavior to all employees, Leo has reduced the greenhouse gas generated from office operations. Leo was awarded with Gold Label in the program.

Carbon Reduction 2010

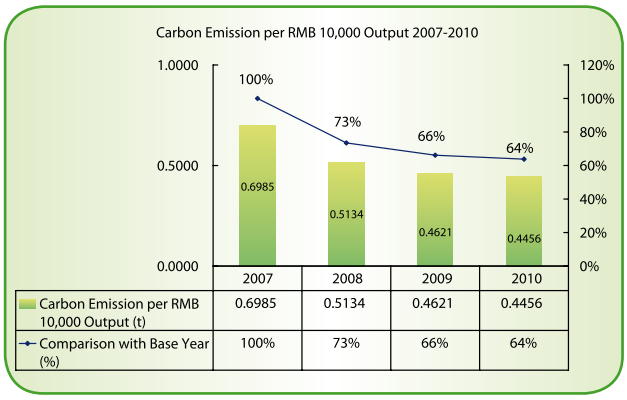
A number of carbon reduction measures were promoted in year 2010.

Carbon Reduction Measures

- Replace the diesel cookers with induction cookers
- Reduce staff traveling by further promotion of video conferencing
- Promote the use of public transportation
- Maintain a comprehensive energy-saving plan at office
- Carry out tree planting reforestation program
- Reduce transportation by choosing suppliers within a shorter distance
- Promote low-carbon lifestyle to staff
- Other energy-saving initiatives

Carbon Emissions of Heshan Production Plant 2007-2010

The carbon emission per unit output in 2010 was 24% less than that in 2007 (base year).



	2007	2008	2009	2010
Carbon Emission per RMB 10,000 Output (t)	0.6985	0.5134	0.4621	0.4456
Comparison with Base Year (%)	100%	73%	66%	64%

Leading the **I**ndustry toward **G**reen **D**evelopment

Research & Technological Innovation

Over the past few years, Leo has put a great deal of effort into environmental initiatives, many of which are innovative and totally new in the industry. In the past year, we have implemented a number of projects to help lead the industry towards green development. In addition we have continued to conduct R&D on the adoption of new technology and materials; and participated in formulating industry standards for the promotion of good practice. We have also shared our green practices by providing on-site visits to our facilities, and collaborated with green partners for environmental promotion.

Laboratory

In recent years, we have constructed a new and well-equipped R&D building. The new research center, Leo Innovation and Technology Research Center, commenced use in September 2009, and was fully operational in 2010. The center is equipped with research and testing labs, facilitating scientific research and materials testing. The lab has been accredited by the China National Accreditation Board for Conformity Assessment (CNAS). Our testing and calibration reports were internationally recognized by the International Laboratory Accreditation Cooperation (ILAC), based on the ISO / IEC 17025 standards. Moreover, our lab reports also complied with the U.S. Consumer Product Safety Commission (CPSC) requirements. The labs facilitate us in conducting environmental research.

Measurement Laboratory

Leo established 11 sets of certified measurement equipments under the ISO10012 Measurement Management system. With the ISO17025 certification, the laboratory may issue nationally recognized test reports for 16 subjects.

Testing Laboratory

Our testing lab is capable of testing a variety of materials with high precision that assures our product quality and safety. The testing lab has been to ISO17025 certified, qualifying it to issue third-party lab test reports.

The lab is equipped with four different environmental testing rooms to test products under different environmental conditions, for example simulating different conditions during transportation and storage.

New Technologies/New Materials

The R&D Center

The R&D Center of Leo carried out a series of research projects in new technology, new processes, new materials, and new equipment. The Research Center has successfully introduced and developed more than 80 new technologies and techniques.

R&D of New Materials

Research of new materials is one of the missions of the research team. In March 2010, the research team successfully developed a resin plate making solution with a lower VOC content. The recovery temperature is lower than that of the traditional solution which helps to save energy.

R & D of Pre-press Technologies

The research center has continually introduced new technologies to improve the information processing system for pre-press, hence saving resources:

- Pre-press Automation System: Computerized and standardized working processes help to eliminate human error and enhance efficiency.
- Color Matching System: A computer aided program helps to formulate color precisely, thus eliminating ink wastage.
- Remote Software Proofing System: Our clients can log in to our server to retrieve proofs, thereby saving two sets of blueprints each time.

R&D for Green Living (Cooperation with HKPC)

In the past year, we have developed a system to convert kitchen waste into fertilizer at the production plant, as the kitchens at plant the serves thousands of staff members each day.

The project was in cooperation with Hong Kong Productivity Council (HKPC). With the system, residual foods are converted into fertilizer by means of yeast fermentation. The fertilizer is used then at our on-site farm and garden.

Innovative products

AR (Augmented Reality) Products

AR products are successfully integrated with traditional printing paper-based products, raising the product value for children's books, greeting cards and other products. AR technology facilitates the display of interactive information on computer screens for paper products. It gives readers an opportunity to experience greater value from the traditional paper products. This technology enriches the functions of a product without consuming extra resources and also extends the life cycle of a product.

Smart Packaging Products

The purpose of traditional packaging is for protection of products, transporting products, or providing an attractive appearance for sales promotion. "Smart packaging" (or "wise packaging") shows the status of a product, ensures the availability of the product, and increases the attractiveness of the product. Leo has begun to apply smart packaging in corrugated boxes, gift boxes, and luxury food packaging. Smart packaging helps extend the life cycle of the product while reducing its carbon footprint.

Developing Industrial Standards

Standardization is widely accepted as a scientific and effective way of technical advancement and business management improvement. It is also a good way for experience sharing and knowledge management. With the environmental management experience we obtained over the last year, we have participated in the development of a number of environmental standards, leading the industry towards green development.

Development of International Standards

In February 2010, some of Leo's technical experts were appointed as ISO/TC130 registered experts, participating in SAC/TC170 and ISO/TC130 activities, such as ISO/TC130 meetings in April and October 2010 for review of terminology, pre-press data exchange, process control and related metrology, media and materials, as well as post-press and carbon footprints for the printing industry.

Development of National Standards

We proactively participate in the development of national and international standards. The "Technology Promotion Base for National Standardization of Printing & Packaging" was established at our Heshan production plant in 2006. In cooperation with the Printing Standardization Committee, the following environmental standards were developed between 2008 and 2010.

1. Lamination Process Control and Testing Methods for Printing Paper Products - Part 1: Basic Requirements

2. Lamination Process Control and Testing Methods for Printing Paper Products - Part 3: Water-based Glue Laminating

3. Technical Requirements for Environmental Labeling Products - Printing : Planographic Printing

4. Printing Standard System Tables

5. Operation Requirements and Testing Methods for Ultraviolet (UV) Curing Varnish for Post-press Process

Development of Local Standards

In 2010, Leo participated in the development of the VOC emission standards for the Guangdong Province printing industry, provided research data for the standards, and proposed amendments to the emission standards.

We have also assisted in the development of the "Cleaner Production Guideline for the Printing Industry" standard.

Experience Sharing within the Industry

Sharing in Public Seminars

In the past year, we have shared our environmental experience with many of our counterparts and representatives from different industries at green seminars and conferences. By mutually sharing our experience, Leo, along with other companies in the industry, can learn from each other for greener operations.

China "Poyang Lake Cup" Printing Development Forum

- A value-added Green Printing Development Forum

On September 3, 2010, Leo representatives attended the first Jiangxi provincial "Poyang Lake Cup" Printing Development Forum. As an environmental pioneer in the industry, we introduced applications of environmental technology in the printing industry, and demonstrated how to achieve energy-saving and low carbon production.

Guangdong Annual Printers Meeting 2010

- Innovation Management and Low-carbon Economy

On October 20, 2010, Leo representatives introduced innovative energy saving and green manufacturing technologies in the "Innovation Management and Low-carbon Economy" forum for the Guangdong Annual Printers Meeting. We encouraged our counterparts to start green initiatives based on our experience with activities that are easily done.

Enterprise Cooperation Week with Beijing Institute of Graphic Communication

- Special Forum on Green Printing

On November 13, 2010, Leo representatives were invited to attend the Sixth Enterprise Cooperation week organized by the Beijing Institute of Graphic Communication. We discussed the topic of "School-Enterprise Cooperation and Creation of a New Era for Green Printing".

Jiangmen City Printers Association 2010 Summary Meeting

On December 21, 2010, Leo joined in the Jiangmen City Printers Association Summary Meeting, sharing our experience on environmental protection and energy saving to local printing enterprises. In the meeting, we called for the companies to join us to work together to achieve for environmental protection.

RFID Technology and Promotion Conference

In the "Jiangmen City RFID Technology Promotion Forum 2010", we shared with the participants how RFID technology helps to achieve quality and environmental benefits.

On-site Environmental Visits

In the year 2010, we accepted a number of visit requests for on-site environmental studies of our production plant in Heshan. Visitors toured different environmental facilities and observed activities, which will help them better understand the green initiatives at our factory and apply relevant initiatives within in their organizations.

The Earth Partner Program

In April 2010, visitors from the Earth Partner Program our factory to learn about environmental communication, and to visit the environmental facilities on site. The Earth Partner Program has been an effective programme to facilitate environmental communication.

Hong Kong Productivity Council

In June 2010, the Hong Kong Productivity Council toured our plant to study the Cleaner Production projects on site, sharing with the printing industry the Cleaner Production model.

Hong Kong Government Logistics Department

In October 2010, guests from the Hong Kong Government Logistics Department visited the Heshan Astros factory and were introduced to our of environmental philosophy and projects. The visitors were especially impressed by our corporate environmental culture, green communication and corporate social responsibility initiatives. The guests visited our waterless printing, automatic blanket washer, and water-based laminating facilities and other environmental facilities.

Recognition of Green Initiatives

In the past year, Leo participated in several environmental awards and recognition programs. Through these programs, we have shared our green philosophy and experience with the industry, and the community, aiming to work together toward the construction of a Green Harmony® world.

Hong Kong Awards for Environmental Excellence - Gold Award

In October 2010, we passed the assessment for the "Hong Kong Awards for Environmental Excellence 2010" and received the Gold Award in the manufacturing sector. "Hong Kong Awards for Environmental Excellence" is one of the most prestigious environmental award programs in Hong Kong, organized by the Hong Kong government and different environmental organizations, associations, NGOs, and consulting firms. The Gold Award further recognized Leo's commitment and performance on environmental initiatives.

香港環保卓越計劃
Hong Kong Awards for Environmental Excellence

HKQAA CSR Advocate

In October 2010, Hong Kong Quality Assurance Agency (HKQAA) finished their assessment of Leo for the HKQAA CSR Advocate Program. We scored full marks for the section concerning environmental protection in their assessment of our mature environmental management systems. Environmental issues are an important part of our CSR initiatives.

CSR advocate
HKQAA-HSBC CSR INDEX

Environmental Labeling Printing Products Certification – The First Certified Printer

In September 2010, Leo became the first printer that passed the China Environmental Labeling Printing Products Certification assessment. The assessment results recognized our green initiatives for product life cycle perspective.

Low-carbon Office Operation Programme – Gold Label

In August 2010, we passed the assessment for the Low-carbon Office Operation Program (LOOP), and were awarded with the Gold Label under the program. LOOP is the first carbon reduction labeling program launched by WWF. This Program aims to encourage companies to reduce carbon emissions from office operations through a series of tools and guidelines, such as change of staff behavior, adoption of technology and management tools. The LOOP program is one of our carbon reduction initiatives following the implementation of the ISO 14064 management system.

Guangdong Top Ten Innovative Enterprises

In order to promote company innovation initiatives, the Propaganda Department of Guangdong Province Committee organized the first "Guangdong Top Ten Innovative Enterprises" program in 2010. For our innovation initiatives, Leo was selected as one of the ten "Guangdong Top Ten Innovative Enterprises", selected from the screened and recommended enterprises, through committee assessment and pubic voting.

Promotion of Green Harmony®

"Green Harmony®" for Everyone

Environmental Education

The protection and sustainable development of the global environment requires not only efforts of an individual enterprise, but also efforts and support from every one, every stakeholder, including suppliers, customers, local government, the community, environmental organizations, educational institutes, NGOs, etc.

Since obtaining the certification for the ISO14001 environmental management system in 2001, Leo has always put social responsibility as its core value, and put great effort into promoting the "Recognize Environmental Responsibility and Create a Better Future" policy to every Leonian.

In 2010, the "Green Harmony" philosophy was promoted to all Leonians through various channels such as company newsletters, and meetings, environmental messages and green activities. In order to promote the "Green Harmony" philosophy to our stakeholders, Leo has organized experience sharing meetings, environmental education, distribution of environmental pamphlets, desert-into-green-farms-campaign, street cleaning, tree planting activities, and so on. We hope we can work together with our stakeholders to make this world a green garden where all things on Earth live in harmony.

Environmental Education

For enhancing the environmental awareness of Leonians, we have developed a comprehensive set of environmental management training programs, which includes initial training programs for new employees and annual advanced training for existing employees. Nationally recognized professional training courses and examination are provided to the staff that are directly responsible for environmental management jobs.

New Staff Induction Training

Pre-job training courses for the introduction of Environmental management System are provided to new employees to give a preliminary understanding of the company's environmental policy and responsibilities.

Advanced Environmental Training

Apart from Induction Training, we organize and provide advanced training with specific topics to existing staff members. From August to September 2010, advanced environmental training was provided to around 2,000 employees who were Grade 5 or above. In order to strengthen the control on materials sources, in July 2010, specialized training on FSC product management and the Lacey Act were provided to over 500 staff in the Sales Department, Purchasing Department, and Electrical and Mechanical Divisions.

Professional Training for Leonians in Specific Positions

For Leonians who are directly responsible for management of significant environmental aspects, such as waste water treatment, waste classification and handling, and storage and handling of chemicals, regular professional training is provided to enhance their skills. Staff members who are transferred or rotated to these specialized positions are required to pass the qualification examination before being allowed to take these posts.

Environmental Professionals

The colleagues engaging in environmental protection are scheduled to take part in external training courses and seminars on "National Cleaner Production" training, and registered environmental auditor training to enhance Leo's practices in environmental management. In 2010, there are 2 National Cleaner Production professionals and 6 registered environmental auditors.

Annual Environmental Lecture of the "Earth Partner Program"

Since 2008, we have annually invited Mrs. Mei Ng, the "Earth Partner Program" former general secretary, to visit our production plants and give wonderful environmental lectures on different topics regarding the latest environmental issues.

Green Promotion

We are well aware that promotion is important for total participation. Over the years, we have conducted a series of promotional activities both internally and externally, calling everyone to join in our green initiatives.

Through the "green" promotion, we have shared our experiences and commitment to society and at the same time strengthened the relationships and communication channels with different stakeholders to facilitate mutual growth.

Internal Promotion

A number of green promotional initiatives are conducted each year to promote Leo's environmental philosophy, environmental knowledge, low-carbon operations, and information on the latest trends. These promotions have been made through e-mail, Intranet, publications (such as Leo Express), on-line employee journal, posters, brochures, etc.

The section on "Environmental Understanding" in our online employee journal introduces the latest environmental knowledge and information to Leonians on a regular basis. At the same time, special information on environmental protection is sent out to Leonians through e-mail and posters. There were a number of promotional initiatives with specific themes in 2010.

Please see table below for reference.

Date	Theme of Promotion
March-October , 2010	• "Earth Hour" program • ISO14064 Corporate Greenhouse Gas Emissions • Promotion of Leo 5R Environmental Practice • World Environment Day on June 5th • Promotion of Low-carbon Office Operations • FSC Products • Energy-saving

Public Promotion through Media

In 2010, we promoted our environmental philosophy and experiences through various media in Hong Kong and mainland China, to extend our environmental vision to different industrial sectors and the whole society. Leo was also invited to share our green experience at events organized by different media in 2010.

Date	Topic	Media /Organizer
February 2010	Implementation of Environmental Management in printing production: Sharing of Leo environmental philosophy, technologies, and experiences	Printing Resources Monthly Journal
April 2010	Leo's green initiatives in water conservation, electricity saving, fuel saving, etc.	Jiangmen Daily
April 2010	Leo's environmental philosophy and control measures for critical environmental aspects in printing process.	Guangdong TV
May 2010	Leo's energy saving system, reduction of wastes and emissions	China Press and Publishing Journal
April 2010	Leo's electricity saving initiatives for Cleaner Production.	Environmental Protection Department, HKSAR Government/ Guangdong Economic and Information Technology Commission/ Hong Kong Productivity Council
June 2010	Carbon Neutral: An introduction to Leo's implementation of environmental projects,	"Printing Manager" magazine

Promotion to Clients

Apart from promotion of green development to our suppliers, we have also actively promoted environmental initiatives to our clients. Our corporate newsletter, the "LEO EXPRESS", is published every 6 months, and provides information about our latest environmental activities, achievements, products, and management systems. We have also actively collaborated with our clients in the adoption of green technologies and materials for green products.

Promotion to Academic Sector

In the past years, we have also promoted environmental initiatives to students, aiming to encourage them to practice and experience green activities. We have also collaborated with schools on some academic research, and shared with them our experience.

Hong Kong Polytechnic University MBA Student On-site Study

In October 2010, Hong Kong Polytechnic University MBA students visited our environmental facilities to study our green operations.

Environmental Training Course Offered to School Students

In December 2010, our environmental professionals offered training courses more than 800 students in the Jiangmen Astros Technical School. Through lectures and interactive activities in the classroom, the students learned more about the application of environmental technologies, and became better aware of the importance of environmental protection.

Support to Graphic Arts Association of Hong Kong

We have provided support to the "Environmental Education Program" organized by The Graphic Arts Association of Hong Kong. The support and sponsorship have included children's educational books, special articles on the environmental protection of graphic arts, a youth environmental web site, and environmental graphic arts exhibitions. It is important for young people to understand the importance of protecting our environment.

School-Enterprise Cooperation

In recent years, we have established relationships with different universities and institutions to enhance personnel training, research collaboration, application of R&D research results, and resource sharing on green development. The combination of production, teaching, and research helps scientific and technological achievements, such as the development of environmental materials.

There are a number of universities collaborating with Leo at the moment, including Wuhan University, Beijing Institute of Graphic Communication, Hunan Industrial University, South China University of Technology, and Sun Yat-Sen University. Our production plant has become a teaching and research base. We provide internship opportunities to the students and at the same time, the research projects can be applied and adopted at the plant. In year 2010, there were a total of 3 R&D projects.

Leo - Green in Action 2010

At Leo, green initiatives are not just corporate social responsibilities, they are also an important part of our Leonians' daily life. Over the years, we have organized diversified environmental activities, that bring Leonians great enjoyment.

Eco-tour

In Hong Kong, the deterioration of the wild environment during economic development has created serious survival threats to the white dolphins, which have been listed as an endangered species by the United Nations. In October 2010, Leo sponsored and participated in a white dolphin study tour held by WWF in Hong Kong, to contribute to the protection of the Hong Kong species.

Be a Happy Farmer

In March and September 2010, to enrich the leisure life of our employees, Leo held vegetable planting activities in our vegetable field. More than 50 employees and their families, were able to select their own garden area in which they planted green vegetables.

Environmental Month, Volunteers in Action - Green Volunteers Forests

In March 2010, Leo Astros's Volunteers Team planted 300 bauhinia blakeana trees in an open area of the Greenfield Garden Phase I of the Heshan production plant, under the theme "Green, Health, and Fashion".

In March 2010, the in house political committee at our production plant and the Ruyuan County Youth League jointly organized the "Planting and Reserving Green, Restoring Green Hills and Clear Waters for our Home" tree planting activity, in which 1,000 camphor, pine, and redwood trees were planted in Leo's forest in Shaoguan.

Environmental Hand Craft Competition – Turning Waste into Wealth

From September to November 2010, Leo held the first "Golden Touch" environmental hand craft product design competition, and collected more than 200 arts and crafts. Leonians were encouraged to turn waste paper, bottles, plastic cups, etc., into originally-designed products that were green, practical, and beautiful.

Build a Green Community

To create a comfortable living environment for employees, Leo has built a harmonious green living area. We have adopted a variety of environmental actions to create a green and low-carbon environment and lifestyle for Leonians. In 2010, we planted at the factory: 1,481 trees, 1,960 shrubs, 120,000 square meters of lawns, 20,000 square meters of groundcover plants, and 160,000 cultivated seedlings. These plants cover more than 99 species. At the end of 2010, the green area within the factory was 167,580m^2.

Cleaning Day

In April and November 2010, Leo organized Cleaning Day activities and signed a pact called the "Environmental Hygiene Cleaning and Maintaining Convention for Gulao Street" with the local village committee. The goal was to improve the cleanliness of our surrounding environment, to raise environmental awareness of the neighboring community, and to improve personal health habits of local citizens.

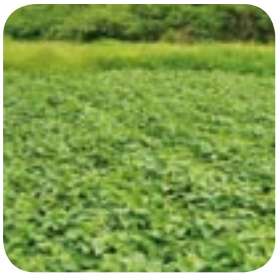
Convey a Green Message

In December 2010, during Leo's Annual Carnival, the "Green Harmony®" Steering Committee carried out an environmental protection exhibition, and launched the "Leo Green Harmony® - Employee's Environmental Message Collection Activity" in which many employees expressed their ideas and feelings on environmental protection.

Convert Desert into Green Farm

In the response to the international community and China's sustainable development strategies and policies on environmental protection, in May 2008, Leo Agricultural and Forest Products Company was established in Shaoguan, North Guangdong. Since then great efforts have been made for ecological forest growth, development of specialized plant breeding and pollution-free vegetable planting in the region. A forestry research and teaching base along with a green industry demonstration base were established as a place for the local community to study agriculture and the opportunity for ecological tourism.

In October 2010, the "Desertification Governance Office" was established. Together with local experts, Leo began the study of the rocky desertification phenomenon. Projects for water and soil conservation were carried out to improve the ecosystem. 3,000 acres of afforested area have been completed, planting over 300,000 trees as one of the initiatives for desertification control.



Leo Purple Sweet Potato
(From Leo Agricultural and Forest Products Company)

Green Harmony®
Future Plan

Acknowledging responsibilities,
showing dedication to
environmental protection,
creating a Green Harmony® future

Green Initiatives for the Future

I. Development of Green Technology and Environmentally-friendly Products

We will pursue the development of green technologies to achieve continuous improvement in aspects of pollution prevention, energy saving, raw material selection and process design, leading the printing industry for green development.

With new technology and new materials, we will continue to develop environmentally-friendly products that provide total green solutions to our clients.

II. Application of Green Technology

Green technology will be applied in the following areas:

1. Green printing technology
2. Technology for enhanced treatment of wastes, which include treatment of biomass, waste water, emissions and solid waste
3. Renewable clean energy
4. Energy efficiency and carbon reduction
5. Technology to facilitate green living
6. Establishment of real-time monitoring platforms for environmental aspects

III. Development of Environmental Standards and Leading the Industry

Leo will continue to participate in the development of national and industry standards, and will promote the adoption of green technology as a best practice for environmental management across the industry.

IV. Environmental Collaboration

We will continue to participate in international, governmental, and NGO environmental initiatives, such as the Clean Development Mechanism (CDM), the Hong Kong Awards for Environmental Excellence, the Integrated Resources Business Model, the Environmentally-Friendly Business Model, and the Earth Partner Program. We will actively support international and domestic environmental policy.

V. Green Promotion across the Supply Chain and the Community

We will continue to conduct our green promotion across the supply chain in order to provide total green solutions to our clients. The construction of a global information-sharing platform will increase clients awareness of worldwide environmental trends.

We will work with the community to launch more environmental initiatives since our green experience is a useful reference for other local industries.

Environmental Plan 2011

Carbon Emissions and Energy Reduction Targets

Indicator	Targets for year 2011 (compared with base year*)	Action Plan for year 2011
Energy consumption per unit output	16% reduction	- Develop and implement energy management system; - Promote total participation energy saving activities
Carbon emissions per unit output	25% reduction	- Enhance energy management for production processes; - Further analyze carbon footprint on product level through enhancement of the management system of PAS 2050; - Reduce carbon emissions for travel and transportation; - Carry out afforestation plan

Waste Reduction Targets

Indicator	Targets for year 2011 (compared with base year*)	Action Plan for year 2011
Waste generation per unit output	30% reduction	- Total implementation of the green production plan; - Further enhance the "5R" policy
Hazardous waste generation per unit output	60% reduction	- Improvement program for waste glue; - Improvement program for waste ink

Promotion Plan

Promotion	Targets for year 2011
Internal promotion	Implement 4 promotion programs in 2011
External promotion and collaboration	Implement 4 promotion and collaboration program with outside parties in 2011
Participation in formulation of industrial standards	Participate in formulation of 3 industrial standards in 2011

Promotion Plan (with specific theme)

Promotion	Targets for year 2011
One square meter environmental campaign for Leonians	Establish a personal environmental performance standard for every Leonian, further enhancing environmental activities in daily life.
Carbon reduction plan for car owners	Promote monthly "No-Driving Day", and carry out tree-planting projects by car owners
Office greening program	Develop and implement greening standard for office
Cool-Kitchen Program	Implement programs for energy conservation and kitchen waste elimination, reducing of kitchen waste by 10%

Appendix

Leo's environmental achievements over the years:

1. 2004: Awarded the plaque for Excellent Model in Environmental Protection (Guangzhou Association of Environment Protection/ Guangzhou Construction Industry Association)

2. 2005-2009: Named a "Caring Company" every year (Hong Kong Council of Social Service)

3. 2006: Awarded with the "Promotion for UN System Procurement in China" (American International Chamber of Commerce)

4. 2006: Awarded with the "Guangdong Environmental Protection Charity" (by the Guangdong Environmental Protection Foundation)

5. 2006: Named a "Guangdong Environmental Protection Charity Unit"(by the Guangdong Environmental Protection Foundation)

6. 

2008: Received the plaque "Green-Mark" (The Federation of Hong Kong Industries)

7. 2008: Received the Grand Award for the "Hang Seng Pearl River Delta Environmental Award"(The Federation of Hong Kong Industries and Hang Seng Bank)

8. 2008: Received the "Hang Seng Pearl River Delta Environmental Category Award" (The Federation of Hong Kong Industries and Hang Seng Bank)

9. 2008: Received the "Environmentally-friendly Outstanding Contribution Award" (Environmental Education Center of Guangdong Province)

10. 2009: Received the Grand Award for the "Hong Kong Awards for Industries – Environmental Performance Award" (Trade and Industry Department of the Hong Kong Government / Hong Kong Business Environment Council)

11. 2009: Named a "Guangdong Cleaner Production Enterprise" (Economic and Trade Commission of Guangdong Province Department of Science and Technology of Guangdong Province Environmental Protection Bureau of Guangdong Province)

12. 2009: Named a "Hong Kong–Guangdong Cleaner Production Partner (Manufacturing)" (Economic and Trade Commission of Guangdong Province Department of Science and Technology of Guangdong Province Environmental Protection Bureau of Guangdong Province)

13. 2010: Named a "Guangdong Top Ten Innovative Enterprises" (Guangdong Provincial Party Committee Publicity Department)

14. 2010: awarded with the Gold Medal for the Low-carbon Office Operations Programme (LOOP) (WWF)

Leo's Environmental Management Systems

Since our establishment, Leo has adopted the latest management models to strengthen operations and to achieve continuous improvement. With regards to environmental management, the following management systems have been implemented over the years.

- 2001: Obtained the ISO 14001 Environmental Management System certification
- 2007: Obtained the Forest Stewardship Council (FSC) - Chain of Custody certification
- 2008: Obtained the Hong Kong Green-Mark certification
- 2009: Obtained the Programme for the Endorsement of Forest Certification (PEFC) schemes - Chain of Custody certification
- 2009: Obtained the "Guangdong Clean Production Enterprise" certificate
- 2009: Obtained the ISO 14064 Greenhouse Gas emissions and Removal Quantitative and Reporting certification
- 2010: Obtained the QC 080000 Hazardous Substance Process Management certification
- 2010: Implemented the Low-carbon Office Operations Programme (LOOP) of WWF for the Hong Kong office
- 2010: Implemented the management system of PAS 2050 Product Carbon Footprint.

Reference

- Corporate Environmental Reporting Guidelines
- Global Reporting Initiative (GRI)
- Green Harmony® Environmental Report 2009 – Leo Paper Group
- Guidelines to Account for and Report on Greenhouse Gas Emission and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong 2008
- Sustainability Reporting Guidelines(G3)
- United Nations Convention on Climate Change - Kyoto Protocol

Leo's Important Environmental Events

2000

- Further emphasized environmental issues as an important part of our Code of Conduct
- Completed phase I and phase II of the wastewater treatment plants
- Established the dust handling system for the printing workshop
- Adopted water-based ink at laminating division to reduce the generation of volatile organic gases

2001

- Established a temporary transfer station for the recycling of hazardous waste
- Obtained the ISO14001 certificate for our environmental management system

2002

- Completed phase II of the reclaimed water system

2003

- Built a dust removal system in the flocking room to improve emissions
- Expanded the wastewater pretreatment facilities and increased the treatment volume to 600 tons per day

2004

- Installed solar water heaters at the Greenfield Garden

2005

- Completed the new warehouse for dangerous goods
- Created a new waste room
- Established an energy-saving committee

2006

- Completed phase III of the wastewater treatment plant

- Awarded with "Guangdong Environmental Protection Charity Unit"

2007

- Introduced the FSC certification for environmentally-friendly products
- Introduced the clean Production Management model
- Implemented VOC reduction projects in various sources and introduced wet roller-cleaning technology in the printing division.
- The laminating division fully adopted water-soluble adhesive for coating
- Implemented various large-scale energy saving projects such as the projects for the residual heat recovering system and the central vacuum pump system

2008

- Received an award as the role model of clean production in Hong Kong
- Further promoted the adoption of waterless printing and plate-making technology
- Promoted green printing by using activated carbon absorption device in silk screen-printing workshops to reduce VOC emission
- Fully implemented the clean production program
- Introduced the concepts of "zero waste factory" and reduction of carbon emissions
- Green Harmony® was registered
- Received the Grand Award for the HangSeng Pearl River Delta Environmental Award
- Replaced all of the T8 fluorescent tubes with T5 tubes

2009

- Obtained the PEFC certification for environmentally-friendly products
- Received the Grand Award for the Hong Kong Award for Industries Environmental Performance.
- Implemented the sludge reuse program and turned sludge into fertilizer
- Implemented the program of turning residual food into organic fertilizer
- Implemented the air conditioning project with ice storage system in the main plant and promoted implementation of energy management
- Introduced the electricity monitoring system, improved the energy management system and increased the use of fluorescent tubes and reflective panels to reduce electricity consumption
- Participated in the preparation of the Guidelines of Clean Production for the Printing Industry in China
- Introduced the corporate carbon inventory and audit system and expanded wind and solar power technologies
- Named "Guangdong Clean Production Enterprise"
- Participated in the development of national environmental standard for the printing industry

2010

- Introduced carbon inventory and audit systems for products
- The Hong Kong office obtained the ISO14064 certification for corporate greenhouse gas inventory and audit
- Established the Astros Vocational School as a demonstration project for green construction
- Established the "Green Harmony®" Steering Committee
- The Heshan plant obtained the ISO14064 certification for corporate greenhouse gas inventory and audit
- Published the first environmental report (Green Harmony Environmental Report 2009)
- Passed the Environmental Product Assessment, being the FIRST printer in China to pass the assessment
- Awarded the Gold Medal for the Low-carbon Office Operations Programme (LOOP) by WWF
- Scored 4.9 out of 5 marks during the "Corporate Social Responsibility Advocate Index" assessment by HKQAA (Hong Kong Quality Assurance Agency)
- Obtained the QC08000 Hazardous Substance Process Management certification
- Passed the assessment for the award of Hong Kong Awards for Environmental Excellence, and won the Gold Award of the Manufacturing Sector.

LEO PAPER GROUP

Group Head Office:
LEO PAPER PRODUCTS LTD.

U.S.A. Head Office:
LEO PAPER USA

New York Sales Office:
LEO PAPER USA

U.K. Sales Office:
LEO PAPER PRODUCTS (UK) LTD.

Europe Sales Office:
LEO PAPER PRODUCTS (EUROPE) B.V.B.A.

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ISO 14001:2004
OHSAS 18001:2007
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