Environmental, Health and Safety Report 2008
In this Environmental, Health and Safety report we have selected the theme ‘Four Seasons’, which highlights some of the natural beauty in our environment that exist today. These natural surroundings can only continue to be around for future generations if we limit the negative externalities which is exerting pressure on them. JEC takes the responsibility of promoting awareness to environmental protection and energy conservation strongly, and takes pride to ensure we are responsible for the influence we make to our environment, and that we make a positive impact where we operate.
Scope of this Environmental, Health and Safety Report


Compared to previous annual environmental reports, this edition includes a Social Responsibility section, a Health & Safety section and a GRI Key Indicator to demonstrate our current performance and refers to the Global Report Initiative (GRI) G3 reporting framework. Although we are currently not in a position to meet GRI requirements, we intend to incrementally build on this framework in future years.

This report has not been verified independently. Internal assurance is provided through scrutiny at multiple levels, including an analysis of our practices in relation to JEC’s screening criteria by the various departments. We intend to continue to review this process. It also acts as a communication channel for stakeholder engagement, and addresses the community’s increasing awareness of environmentally viable products and solutions.

Since 2006, JEC has provided all its corporate reporting online. Together with other information, the Environmental, Health and Safety Report 2008 can be found on the company’s corporate website at www.jec.com.

Objectives and Highlights

Objectives

The objective of this report is to demonstrate our commitment to, and performance in protecting the environment, and ensuring health and safety in our operations, as well as address the broad range of key environmental issues and safety risks relevant to our business in 2008. It summarises the company’s management approach to environmental issues and demonstrates, through project case studies and performance analysis, how these have become part of JEC’s business operations. In addition, we also present our Management System and Key Performance Index Improvement Plan 2009 for the environmental and safety sections.

Highlights of 2008

• Saved 46,351 kWh of electricity in our Hong Kong offices, which equates to a total reduction of 34.5 tonnes of CO₂ emission;
• Increased the quantity of paper recycled by 7%;
• Maintained a zero rate of environmental related conviction cases;
• Achieved a Group Safety Index of 2.08/1000;
• Maintained a zero rate of fatal accidents; and
• Attained OHSAS 18001, the international standard for the Occupational Health & Safety Management System.

1 Visit http://www.globalreporting.org for more details.
Established in Shanghai in 1923, Jardine Engineering Corporation (JEC) is now one of the region’s leading engineering companies. JEC employs more than 3,000 staff in Hong Kong, China, Macau, Thailand, the Philippines and Singapore. It has extensive expertise in multiple engineering disciplines, including Building Services, Air-Conditioning, Building Automation, Material Handling, and Environmental and Industrial Engineering. Services offered include Contracting, Material & Building Product Sourcing, Operation & Maintenance and Renovation. It has joint ventures with Trane in the region, and an agricultural and construction chemical distribution business in the Philippines.
Chief Executive’s Statement

Over the past year, we have seen a greater level of turbulence in the global economy than has probably been experienced for several decades, and it is clear that many challenges still remain. Despite this, JEC continues to commit to the highest environmental, health and safety standards, a commitment that is reflected in our achievement of all of our environmental targets set for 2008, as well as our lowest rate of personnel injury in recent years.

In this report, you will find our environmental policies, our environmental, health and safety performance, and references to our renewable energy equipment and Green Olympics projects. We are aware that our operations can impact the environment; we are committed to understanding these impacts, and to minimising and preventing adverse consequences from our activities.

JEC takes its commitment to the environment seriously and we make that commitment a core value of how we do business. JEC pledges to:

• Conserve resources by continuously reviewing opportunities to reduce the use of energy and raw materials;
• Prevent pollution;
• Reduce waste;
• Go beyond compliance with environmental legislation and regulation; and
• Educate our employees and inform the community about responsible environmental practices.

In addition to environmental management, JEC strives to continually provide a safe and healthy environment for our stakeholders through safe work behaviours, practices and systems. In 2008, we established and implemented the OHSAS 18001 Safety Management System to manage our health and safety performance, risks and impact. The expertise of the management system is integrated into normal daily business, services and line organisation.

Looking forward, we will undoubtedly face a variety of new challenges. We will meet these head-on in order to exceed the expectations of our shareholders, customers, employees and communities.

If you have any comments or suggestions, please do not hesitate to communicate them to me directly at ceo@jec.com.

Alex Newbigging
Chief Executive
August 2009
JEC achieved the distinguished international environmental management systems standard ISO 14001 in 2007, and considers health and safety one of its top priorities. We therefore aggressively set ourselves the goal of achieving registration of the international standard set for the management of health and safety before the end of 2008. We made continuous efforts in planning and implementation over eight months and, in September 2008, JEC passed the certification audit of OHSAS 18001:2007 standard by the Hong Kong Quality Assurance Agency. This further emphasises JEC’s commitment to providing and maintaining a safe and healthy working environment, preventing the occurrence of accidents, and continuously improving occupational health and safety performance.

**Environmental Policy**

JEC’s commitment to the continuous improvement of environmental issues is clearly stated in our environmental policy, which was revised recently in 2009. JEC’s management and employees are jointly responsible for implementing this policy.

The basic principles of JEC’s environmental policy include the following:

- Sharing of three common attributes - green leadership, performance management and partner synergy - by successful businesses;
- Maintaining an active, open and ethically sound approach to environmental protection; and
- Pursuing the objective of sustainable development.

**Health & Safety Policy**

JEC fully recognises health, safety and hygiene at work as an integral part of its business strategy. The seventh Health & Safety Policy was issued in August 2008, and JEC management is committed to maintaining a climate of safety awareness, and employing house rules and a health and safety management system that leads to continuous improvement of occupational health and safety performance.

The basic principles of JEC’s health and safety policy include the following:

- Keeping abreast of best practices in health and safety management;
- Applying a risk-based approach to setting health and safety objectives;
- Consulting and involving employees, sub-contractors and suppliers in health and safety issues; and
- Providing adequate and appropriate resources.
In early 2007, JEC met the international standards set for the management of environment systems and achieved certification for ISO 14001:2004. Since then, we have achieved the OHSAS 18001:2007 requirements set by the Hong Kong Quality Assurance Agency. The bottom line is that both these certifications will provide JEC with the drive needed to continue to exceed expectations and demonstrate the highest performance.

The EHS Management Systems make up a systematic framework designed to manage our environmental, health and safety performance, risks and impact. The expertise of the EHS Management Systems is integrated into normal daily business, services and line organisation.

Both systems have helped to demonstrate to external stakeholders the extent of our commitment to environmental and social issues, and to providing and maintaining a safe and healthy working environment for our employees, sub-contractors, suppliers and the public. They also provide a point of reference for our objectives and targets.

**Principles of Implementation**

The following principles guide the implementation of JEC’s Environmental, Health & Safety (EHS) policies:

- The Environmental, Health & Safety policies are part of the general management process;
- JEC manages, plans and implements work programmes according to the best practices’ guideline provided in the Environmental Management System and Health and Safety Management System;
- JEC’s action programmes are based on a thorough understanding of the environmental impacts and risks of our engineering services and solutions; and
- JEC routinely conducts internal combined audits to verify that our activities comply with our management systems and to determine if the systems have been implemented properly.

**EHS Management Systems**

JEC applies global standards for business practices and management systems throughout its business units. These standards are applied when a new project site is established in any location. JEC has a large number of business partners and contractors who share the company’s technology and expertise. We encourage our contractors to adopt JEC guidelines, where applicable, taking into account contract requirements.

In early 2007, JEC met the international standards set for the management of environment systems and achieved certification for ISO 14001:2004. Since then, we have achieved the OHSAS 18001:2007 requirements set by the Hong Kong Quality Assurance Agency. The bottom line is that both these certifications will provide JEC with the drive needed to continue to exceed expectations and demonstrate the highest performance.

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Stakeholder Engagement
Engaging with the different groups that have an interest in the way we operate is an important part of responsible business practice. Our stakeholders include employees, customers, shareholders, suppliers, trade organisations, authorities and local communities. By listening to them, and being open about our views and actions, we can build trust and address their concerns.

**Internal Stakeholders**

Employees at all job levels are held accountable for compliance with environmental and safety requirements, as well as the achievement of continuous improvement objectives and targets appropriate to their function. JEC provides relevant environmental, health and safety training, and communication channels to its employees.

**Communication**

JEC uses a number of ways to engage employees on matters that impact them and the performance of the company. These include the internal intranet site that covers environmental and health and safety (EHS) issues and activities within the Group. This is a channel for the dissemination of news and information about EHS matters. Employees also have access to the overview of JEC’s relevant planning, objectives, targets, activities and management systems, as well as company policies.

The JEC magazine, which is published three times a year and distributed to internal and external stakeholders, reports EHS performance and environmentally sustainable technology. In issue 13 in 2008, an article focused on the Integrated Building Management System (IBMS), which offers increased efficiency and cost-effectiveness, as well as significant savings in administrative resources and energy.

**Training**

The Independent Development Plan (IDP) and the Employee Engagement Survey (EES) are conducted regularly to gather and act on employees’ opinions and thoughts. The key areas covered include competence development and training.

EHS issues are included in many of JEC’s regular management training programmes, while the induction of new employees includes information about EHS matters during face-to-face briefings.
External Stakeholders

JEC engages with a range of stakeholders to share information, better understand their views on JEC’s EHS performance, and determine opportunities for collaboration and reaching goals. JEC appreciates the important role that each of its stakeholders plays in the company’s continued success and strives to take into account their varied perspectives.

Customers

JEC promotes two-way communications with customers through comprehensive regional customer satisfaction surveys and customer visits. The Customers & Markets Department conduct customer-specific discussions to carry out these tasks and our Chief Executive reviews the results of the customer satisfaction surveys in person. All of this provides a good insight into JEC as it stands today, and as we plan our directions for 2009 and beyond.

JEC’s corporate website, www.jec.com, contains extensive information about the company’s environmental, health and safety goals and principles.

Service Suppliers and Contractors

Communication tools for keeping all parties continuously informed about JEC’s requirements have been developed and it is essential that business partners are provided with this information in a manner that is consistent with JEC’s EHS Policy & Management System Guidelines.

Governments and Authorities

JEC engages in extensive dialogue with the Hong Kong Special Administrative Region (HKSAR) Government and is committed to the Clean Air Charter. JEC continues to participate actively in the HKSAR Government’s environmental engineering projects to develop the renewable energy and recycling industries (a case study is described later in this report).

Community

JEC also participates actively in the communities in which it operates, with the promotion of environmental awareness and mental health the key element in these community-based activities.

In 2008, JEC was awarded the Caring Company logo by the Hong Kong Council of Social Services for demonstrating good corporate citizenship, and satisfying the criteria in Volunteering, Employee Friendly, Employing the Vulnerable, Caring for the Environment and Giving categories.
Environmental Targets and Achievements

The objectives reported below were derived from targets adopted by JEC and cover the period January to December 2008.

<table>
<thead>
<tr>
<th>Environmental Objectives</th>
<th>Target Completion</th>
<th>Status</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electricity Consumption KPI</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>December 2008</td>
<td>• Consumption has been reduced by about 5.4% compared to 2007 consumption</td>
<td>100%</td>
</tr>
<tr>
<td>• Reduce electricity consumption by 2% in headquarters and branch offices by the end of 2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Resource Conservation KPI</strong></td>
<td>December 2008</td>
<td>• Letterhead paper is now all recycled-content paper</td>
<td>100%</td>
</tr>
<tr>
<td>• Look at the feasibility of supplying recycled-content paper instead of regular bleached paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Waste Collection KPI</strong></td>
<td>December 2008</td>
<td>• Percentage of paper recycling versus paper consumption is 7% more than 2007</td>
<td>100%</td>
</tr>
<tr>
<td>• Increase the percentage of paper recycling by an additional 5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> KPI: Key Performance Index / Indices
### Environmental Objectives

<table>
<thead>
<tr>
<th>Environmental Incidents KPI</th>
<th>Target Completion</th>
<th>Status</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure zero environmental incidents, and meet and exceed relevant environmental legislation</td>
<td>December 2008 and ongoing</td>
<td>• Zero environmental incidents achieved and compliance with relevant environmental legislation met</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communications</th>
<th>Target Completion</th>
<th>Status</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participate actively in outreach activities to promote environmental protection</td>
<td>December 2008</td>
<td>• “Save The World” Children’s Drawing Competition</td>
<td>100%</td>
</tr>
</tbody>
</table>
Case Study – Animal Waste Recycling

Animal Waste Recycling at the Ngau Tam Mei composting facility in Hong Kong.

Abstract
One of the three main concepts of the Beijing Olympic Games was to be a “Green Olympics”. To achieve this, the Equestrian Company, the Hong Kong Jockey Club (HKJC) and the HKSAR Government explored and adopted all possible environmentally friendly designs, measures and practices for the Olympic equestrian events held in Hong Kong. The Environmental Protection Department (EPD) recommended the development of a new composting facility at Ngau Tam Mei to handle the horse waste arising from the events and turn it into useful compost products, as well as reduce the need for its disposal in landfills. Construction work on the composting plant was completed in the first quarter of 2008 for testing before it began operation.

Project Information

Client: Environmental Protection Department (EPD), HKSAR Government
Main Contractor: Jardine Engineering Corporation
Commencement of Project: July 2007
Construction Phase: July 2007 – April 2008
Trial Commencement: April 2008 (2 years)
Completion of Project: April 2011
Animal Waste Treated: 20 tonnes per day
JEC was very proud to support the “Green Olympics” concept by providing sustainable and recycling facilities to the Olympic equestrian events.

The Animal Waste Recycling project at the Ngau Tam Mei composting facility was designed to treat about 20 tonnes of horse waste every day, and turn it into useful organic compost suitable for landscaping, horticultural and agricultural uses. The plant adopted rotary in-vessel composting technology to ensure the effective elimination of all harmful pathogens and contaminants, as well as the treatment of potentially odiferous emissions during the composting process.

As the contractor for the design and construction of the plant, including the two-year trial operation, JEC demonstrated its ability and technical know-how in creating a useful product from organic waste.

Benefits of Recycling Animal Waste
The benefits of recycling animal waste include helping to reduce the dumping of biodegradable waste into landfills and minimising methane (a potent greenhouse gas) emissions. A wide range of animal waste is suitable for composting, such as horse, cow and pig manure.

Remarks
In 2001, the HKSAR Government commissioned a consultancy company to study the latest international developments in composting technology and practices at Ngau Tam Mei, and to review their suitability for operation in Hong Kong in order to process organic waste (mostly food waste). A part of the waste that is dumped in landfills every day comprises organic materials that may be suitable for composting to produce such usable materials as fertiliser, soil improvers or animal feed.

The success of the Ngau Tam Mei composting facility was the driving force behind speeding up the development of the animal / organic waste recycling industry in the future.

Composting Process
Composting is a biological process in which microorganisms convert biodegradable organic matter into a stabilised residue known as compost. The process uses oxygen drawn from the air, and produces carbon dioxide and water vapour as by-products.

In-Vessel Composting Process
JEC used an in-vessel composting method to treat animal waste in this facility and turn it into organic fertilisers that can be used in gardens, parks and local farms, and provide households with compost to enrich and regenerate poor soils. The temperature inside the vessel is maintained at 65°C or above and all harmful pathogens are killed during the process.

What is Composting?

**Organic Matters**
**Air**
**Water**
**Stabilised Organic Matters (Organic Fertiliser)**

- **Release of Heat and CO₂**
  - About 1 to 2 months
The objectives reported below were derived from targets adopted by JEC and cover the period January to December 2008.

### Health and Safety Objectives

<table>
<thead>
<tr>
<th>Health and Safety Objectives</th>
<th>Target Completion</th>
<th>Status</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieved H&amp;S Accreditation To OHSAS 18001:2007</td>
<td>September 2008</td>
<td>• Accredited in September 2008</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Safety Index</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 2.44 for JEC Group (including JVs)</td>
<td>December 2008</td>
<td>• 2.08</td>
<td>100%</td>
</tr>
<tr>
<td>• 2.33 for Wholly-Owned Unit (WOU) Hong Kong</td>
<td></td>
<td>• 3.04</td>
<td>76%</td>
</tr>
<tr>
<td><strong>Fatal &amp; Serious Incidents</strong></td>
<td>December 2008</td>
<td>• Zero fatal and serious incidents were recorded, and compliance with relevant health and safety legislation was met</td>
<td>100%</td>
</tr>
<tr>
<td>• Ensure zero fatal and serious incidents, and meet and exceed relevant health and safety legislation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td>December 2008</td>
<td>• The EHS handbook was distributed to all staff and workers</td>
<td>100%</td>
</tr>
<tr>
<td>• Ensure that all employees and sub-contractors receive health and safety training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: 12-month moving average = (Total no. of workplace incidents in the past 12 months DIVIDED BY the average headcount over the past 12 months) x 1,000
Promoting Environmental Awareness to Children

JEC understands that educating the community, especially children, is a vital component of moving our society towards sustainable development. In 2008, JEC launched a regional competition inviting all children aged 3 to 15 of JEC staff to present through drawings their ideas to “Save the World”. The competition aimed to raise environmental awareness among children, demonstrate ways to follow a sustainable lifestyle, and teach the children of today how to live for tomorrow.

Renewable Energy Equipment and Solutions

The First Sustainable Development Strategy for Hong Kong was suggested by the Council for Sustainable Development, setting a target of generating 1%-2% of Hong Kong’s total electricity supply using renewable energy by 2012.

Renewable energy is one of the major areas in Hong Kong’s sustainable development strategy. JEC presented its latest range of money-saving, environmentally friendly technology, and the application of renewable energy systems to reinforce local commitment to, and confidence in, using renewable energy products through various exhibitions and sectors in 2008.

Our leading-edge technology, energy-improvement solutions and products to support our customers’ sustainable development projects include:

- Building Integrated Photovoltaic (BIPV) Power System
- Solar Lighting
- Wind Turbine
- Gas Engine Genset
- Solar Heater

Supporting Research and Development

The Ninth Mechanical Design Innovation Competition at Tsinghua University took place in March 2008 and our executive staff were invited to be judges for the competition. Three prizes, namely the Jardine Engineering Award, The Innovative Environmental Award and The Best Team Award, were presented to three innovative projects.

JEC Caring Team

The JEC Caring Team is led by a group of community-minded individuals who have dedicated their time and energy to giving back to society since 2006. The team collaborates with different non-government organisations to provide services and assistance for various groups in society.

Project Details and Features:
- A new hospital building project;
- The system peak power of the PV panels is about 18.7kW and the total area is about 180 square metres;
- The PV panel system was installed as a canopy on the roof level of the building and is a kind of BIPV system;
- It is a Grid-connected system;
- The PV panels are custom-made glass type panels;
- The mono-crystalline cells are laminated between two sheets of glass, with the gaps between the cells allowing light to pass through; and
- The availability of custom sizing and the limitless designs of the panels make them suitable for a building integrated system.

Project Benefits:
- The BIPV system generates an estimated total of 20,000kWh of electricity annually and can lower the CO₂ emissions by a conventional power station by 12 tonnes per year; and
- Silent, maintenance-free operation.
Environmental issues are managed together with Health and Safety through an EHS Management System that aims to ensure that issues and risks are identified, standards are established, training is provided, targets are set and audits are conducted.

**Recycling**

JEC has run a number of schemes for recycling in its office premises since 2006. The active support of all employees is very important in this area and heartening results were achieved in 2008.

In 2008, JEC recycled 33% of the paper products it consumed. Compared to 2007, when we recycled 3,340kg, we collected and recycled over 4,180kg of paper waste in 2008, a 25% increase.

<table>
<thead>
<tr>
<th>Year</th>
<th>Recycled</th>
<th>Paper Consumption (80gsm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>3,340kg</td>
<td>12,647kg</td>
</tr>
<tr>
<td>2008</td>
<td>4,180kg</td>
<td>12,479kg</td>
</tr>
</tbody>
</table>

*Paper Recycling at Office Premises*
**Energy Consumption**

JEC managed to reduce the overall energy consumption in kilowatt hours across its portfolio by 5.4% compared with 2007 thanks to our energy-saving programme, implemented in 2006.

### Annual Energy Consumption

<table>
<thead>
<tr>
<th></th>
<th>Jan - Dec 2007</th>
<th>Jan - Dec 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Consumption (kWh)</td>
<td>857,506</td>
<td>811,155</td>
</tr>
<tr>
<td>Floor Area (sq m)</td>
<td>5,484</td>
<td>5,510</td>
</tr>
</tbody>
</table>

### Operation Hours

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday to Friday</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Saturday</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Sundays and Public Holidays</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Full Time Office Staff</td>
<td>487</td>
<td>542</td>
</tr>
<tr>
<td>Electricity Consumption / head / month (kWh)</td>
<td>147</td>
<td>125</td>
</tr>
<tr>
<td>Electricity Saving (kWh)</td>
<td>33,320</td>
<td>46,351</td>
</tr>
<tr>
<td>Reduction of CO$_2$ emission$^1$ (tonnes)</td>
<td>24.7</td>
<td>34.5</td>
</tr>
<tr>
<td>Equivalent to Planting Trees$^2$ (unit)</td>
<td>1,074</td>
<td>1,500</td>
</tr>
</tbody>
</table>

**Note:**

1. CO$_2$ emission = activity data (kWh) x emission factor (kg CO$_2$ / kWh). The emission factor is 0.57 kg CO$_2$ / kWh and 0.54 kg CO$_2$ / kWh as advised by China Light & Power (CLP) for 2007 and 2008, respectively. The emission factor was 0.83 kg CO$_2$ / kWh by HK Electric (HKE) for 2007.

2. Guidelines to account for and report on greenhouse gas emissions and removals for buildings (for commercial, residential or institutional purposes) in Hong Kong 2008 Edition, Annex A (iv): The removal potential of each unit of tree is 23kg / year based on Hong Kong’s location, woodland types and estimated density of trees.

### JEC Energy Consumption and Carbon Dioxide emission reduced at Hong Kong offices in the past three years:

![Energy Consumption and Carbon Dioxide emission reduced at Hong Kong offices](image)
The importance of a safe and healthy working environment has grown strongly in recent years in a number of industries, not merely due to increased safety legislation and the desire to reduce occupational safety risks, but also because it can help boost staff motivation and business efficiency.

The incidence rate for the JEC Group was 2.08 / 1,000 in 2008. This is the lowest figure in recent years and met the target adopted by management, demonstrating that our efforts have been successful. We aim to reduce these figures even further in coming years.

**JEC Aims for Zero Accidents in 2012**

JEC has made great progress, but has set another bold goal – zero accidents by 2012. There are six key themes in the “Health and Safety Strategy”, which can be summarised as follows:

- Encourage the building of better working environments;
- Enhance the contribution of workplace health and safety to productivity and competitiveness;
- Encourage and secure the engagement of subcontractors;
- Promote a workplace preventive safety culture of self regulation through the integration of health and safety in management systems;
- Promote greater participation in health and safety issues between employers, employees, and other health and safety players; and
- Headquarters leading workplace health and safety improvement by demonstrating best practice and promoting this to regional offices.
### Environmental Key Performance Index (KPI) Improvement Plan 2009

<table>
<thead>
<tr>
<th>Environmental Improvement</th>
<th>Responsibility</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electricity Consumption KPI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reduce electricity consumption in Headquarters, branches and regional offices by 2% compared to 2008 by the end of 2009</td>
<td>EMR, DEMR</td>
<td>December 2009</td>
</tr>
<tr>
<td><strong>Resource Conservation KPI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Look at the feasibility of supplying recycled-content paper instead of regular bleached paper</td>
<td>EMR, DEMR</td>
<td>December 2009</td>
</tr>
<tr>
<td><strong>Waste Collection KPI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Increase the percentage of paper recycling by an additional 3% compared with 2008</td>
<td>EMR, DEMR</td>
<td>December 2009</td>
</tr>
<tr>
<td><strong>Environmental Incidents KPI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ensure zero environmental incidents and meet relevant environmental legislation requirements</td>
<td>EMR, DEMR</td>
<td>December 2009</td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Participate actively in outreach activities to promote environmental protection</td>
<td>EMR, DEMR</td>
<td>December 2009</td>
</tr>
</tbody>
</table>

EMR: Environmental Management Representative  
DEMR: Deputy Environmental Management Representative

### Health and Safety Targets 2009

<table>
<thead>
<tr>
<th>Health and Safety Performance</th>
<th>Target</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety Index</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• JEC Group, including JVs and sub-contractors</td>
<td>1.64</td>
<td>OHSMR, DOHSMR</td>
</tr>
<tr>
<td><strong>Man-day Loss</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reduce the percentage of man-day losses by 15% compared with 2008</td>
<td>374</td>
<td>OHSMR, DOHSMR</td>
</tr>
<tr>
<td><strong>Fatal &amp; Serious Incidents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ensure zero fatal and serious incidents, and meet and exceed relevant health and safety legislation</td>
<td>Zero</td>
<td>OHSMR, DOHSMR</td>
</tr>
</tbody>
</table>

*Note: 12-month moving average = (Total no. of workplace incidents in the past 12 months DIVIDED BY the average headcount over the past 12 months) x 1,000

OHSMR: Occupational Health & Safety Management Representative  
DOHSMR: Deputy Occupational Health & Safety Management Representative
### GRI – Key Indicators

The selected key indicators listed below from the GRI G3 Guidelines provide a quick overview of our performance in 2008.

<table>
<thead>
<tr>
<th>GRI reference</th>
<th>Performance indicators</th>
<th>2008</th>
<th>2007</th>
<th>2006</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EN1</strong></td>
<td>Material use – paper consumption</td>
<td>12,479</td>
<td>12,647</td>
<td>13,059</td>
<td>kg</td>
</tr>
<tr>
<td><strong>EN4</strong></td>
<td>Indirect energy consumption – electricity consumption</td>
<td>811,155</td>
<td>857,506</td>
<td>890,826</td>
<td>kWh</td>
</tr>
<tr>
<td><strong>EN7</strong></td>
<td>Initiatives to reduce indirect energy consumption and reductions achieved – electricity consumption</td>
<td>46,351</td>
<td>33,320</td>
<td>-</td>
<td>kWh</td>
</tr>
<tr>
<td><strong>EN16</strong></td>
<td>Total CO(_2) emission – electricity consumption</td>
<td>606</td>
<td>655</td>
<td>-</td>
<td>Tonnes</td>
</tr>
<tr>
<td><strong>EN18</strong></td>
<td>Initiative to reduce CO(_2) emission and reduction achieved – electricity consumption</td>
<td>34.5</td>
<td>24.7</td>
<td>-</td>
<td>Tonnes</td>
</tr>
<tr>
<td><strong>EN22</strong></td>
<td>Total weight of waste by type and disposal method – paper to recycle</td>
<td>4,180</td>
<td>3,340</td>
<td>2,670</td>
<td>kg</td>
</tr>
<tr>
<td><strong>EN28</strong></td>
<td>Monetary value of significant fines, and total number of non-monetary sanctions for non-compliance with environmental laws and regulations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Case</td>
</tr>
</tbody>
</table>

**Social Performance**

<table>
<thead>
<tr>
<th><strong>LA1</strong></th>
<th>Total employees:</th>
<th>1,345</th>
<th>1,222</th>
<th>1,110</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Hong Kong</td>
<td>1,188</td>
<td>1,139</td>
<td>1,092</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Regional</td>
<td>898</td>
<td>894</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Joint Ventures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LA7</strong></td>
<td>Fatalities (employee only)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>Man-days lost (employee only)</td>
<td>440</td>
<td>292</td>
<td>304</td>
<td>Day</td>
</tr>
<tr>
<td><strong>LA10</strong></td>
<td>Training per employee</td>
<td>7</td>
<td>7</td>
<td>7.5</td>
<td>Average man-days</td>
</tr>
<tr>
<td><strong>LA12</strong></td>
<td>Percentage of employees receiving regular performance and career development reviews</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>%</td>
</tr>
</tbody>
</table>

*Note: All data from JEC Hong Kong except indicator LA1 and LA7.*
We Welcome Your Feedback

JEC is dedicated to improving its environmental, health and safety performance. As a reminder, JEC has a centralised customer suggestion channel that is read and answered by a fully manned 24-hour customer support call centre. Please do not hesitate to communicate to us any comments regarding JEC’s Environmental, Health and Safety Report 2008 and how JEC can continue to improve its performance.


Thank you for reading our report.

If you have any suggestions, please send us an e-mail or mail a letter to the following address:
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Website: www.jec.com
Tel: 852 2807-1717
Fax: 852 2887-9090