



2008 Sustainability Report

Promising to Deliver on our Sustainability Aspirations



Registered Office: 1 Nicholson Street, Melbourne, Victoria, Australia 3000
Postal Address: GPO Box 4311, Melbourne, Victoria, Australia 3001
Telephone: +61 3 9665 7111
Facsimile: +61 3 9665 7937
Email: companyinfo@orica.com

ABN 24 004 145 868

Table of Contents

<p>Message from our Managing Director and CEO.....3</p> <p>Introduction.....5</p> <p>Our Public Commitments</p> <p>Safety, Health and Environment (SH&E) Policy</p> <p>Our Sustainability Strategy</p> <p>Stakeholder Engagement</p> <p>Key Sustainability Challenges</p> <p>Targets and Measurement</p> <p>Our Top 10 Priority Actions</p> <p>Awards and Recognition</p> <p>Our Approach to Reporting.....31</p> <p>Sustainability Governance.....37</p> <p>Leadership and Accountability</p> <p>SH&E Policy</p> <p>Management Systems</p> <p>SH&E Standards</p> <p>Training</p> <p>Risk Management</p> <p>Due Diligence</p> <p>Health and Safety.....51</p> <p>Injuries and Illnesses</p> <p>Learning Incidents</p> <p>Process Safety</p> <p>Product Safety</p> <p>Occupational Health</p> <p>Hygiene Monitoring</p> <p>Travel Health, Safety and Security</p> <p>Case Studies</p> <p>Environment.....68</p> <p>Spills and Incidents</p> <p>Compliance</p> <p>Legacy Issues</p>	<p>Energy</p> <p>Greenhouse Gas Emissions</p> <p>Water</p> <p>Waste</p> <p>The Office Environment</p> <p>Case Studies</p> <p>Community.....87</p> <p>Community Relations</p> <p>Distribution Incidents</p> <p>Emergency Response Service</p> <p>Community Complaints</p> <p>Community Contributions</p> <p>Case Studies</p> <p>Working with Others.....98</p> <p>Industry Partnerships</p> <p>Research and Development</p> <p>Customers</p> <p>Suppliers</p> <p>Product Stewardship</p> <p>Case Studies</p> <p>Our People.....106</p> <p>Labour Practices and Decent Work</p> <p>Human Rights</p> <p>Our People in 2008</p> <p>Case Studies</p> <p>Economic Contributions.....115</p> <p>Financial Impact of Climate Change</p> <p>Previous Reports.....121</p> <p>Feedback.....122</p> <p>GRI Navigator.....123</p>
---	--

Message from the Managing Director and CEO

Orica has a long history of social and environmental responsibility. In very complex work environments, we have been proud of our ability to maintain world-class safety performance and introduce innovative ways to reprocess by-products into saleable products.

Our Approach

In recent years we have shifted from a sense of responsibility for social and environmental issues to an understanding of their importance to business viability. To remain cost competitive in a carbon constrained economy, to engage and retain staff in a competitive environment and to enhance our social "licence to operate" as we expand our global presence, our sustainability aspiration is clear and challenging: **No Harm to People and the Environment.**

While the actions required to truly achieve this aspiration are not yet clear, we are committed to demonstrating international leadership, consistent with our "**Deliver the Promise**" principles of commercial ownership, creative customer solutions, working together and valuing people and the environment.

Our "No Harm" sustainability aspiration is underpinned by our Safety, Health and Environment (SH&E) Policy commitments to:

- Value People and the Environment; and to achieve
- No Injuries to Anyone, Ever.

"No Harm" means a transition to:

- Carbon neutral;
 - Water neutral;
 - Zero waste; and
 - Environmentally friendly operations, products and services
- ...in a commercially responsible way.

Our Performance in 2008

We are committed to eliminating fatalities and serious injuries from our workplaces. In 2008 our people worked hard to continue implementation and compliance with our safety-related Model Procedures and improve reporting of "learning incidents". We continue to utilise the valuable input of our Expert Panels, utilize Periodic Hazard Studies and analyse Process Safety events to focus on process hazards and particular risks that have resulted in fatalities in the past. While there were no fatalities at our operations this year, we are disappointed to report that our headline "All Worker Recordable Case Rate" has increased from 0.60 in 2007 to 0.72 in 2008.

We are saddened to report that there were seven fatalities to members of the public in separate distribution incidents this year. Although no fault was attributed to either Orica or contracted drivers in any of the events, we will maintain our vigilance and rigorously apply our SH&E systems and tools to manage all distribution related risks under the company's control.

Our Emergency Response Service continued to provide a world-class service in 2008, handling 335 incident-related calls from customers and employees, transport carriers, emergency services, government authorities, hospitals, veterinarians, as well as members of the public.

Our carbon neutral aspiration underpins our regional climate change initiatives. This year we commenced nitrous oxide abatement at our Carseland operation in Canada. As our third largest emitter of greenhouse gases, the 80% abatement currently achieved at Carseland, with no production losses, is a significant achievement for our business.

We are following up on this success with plans for an abatement program at our Bacong operation in the Philippines. We aim to implement this program under the Kyoto Protocol's Clean Development Mechanism in early 2009. We expect to roll out the abatement program to all remaining Orica Nitric Acid plants over the next two years, with the potential to reduce our nitrous oxide emissions by up to 90% and overall greenhouse gas emissions by up to 55%.

In Australia, we are working with the Federal Department of Climate Change to ensure Orica is appropriately considered under the proposed Carbon Pollution Reduction Scheme. More broadly, we disclose our climate change commitments and activities on a global scale through our participation in the Carbon Disclosure Project.

We are reducing consumption of potable water through the supply of treated water from our Botany Groundwater Treatment Plant. In 2008 we supplied more than 460 ML to our nearby Chlorine Plant and third party users. This water reuse project resulted in Orica and Qenos (who also consumed GTP treated water) winning the Plastics and Chemicals Industry Association (PACIA) Environment Award. We also commenced the preliminary design for a project to supply 100% recycled water from the Hunter River to our Kooragang Island operation. If successful, this project will reduce Orica's total water use by 30%.

We continue to analyse the full lifecycle impacts of our major products. This year we worked with our customers and suppliers to define, and measure sales of, low-impact or "greener" products. These include our sustainable Blast Based Services for the world explosives market and our expanded range of "Green" paint products, including low-VOC and carbon-neutral paint products.

Our 2008 Sustainability Report has been prepared in accordance with the Global Reporting Initiative guidelines, achieving a "B" GRI-Checked Application Level. I thank you for your interest in our sustainability performance and welcome your feedback.

Graeme R Liebelt
Managing Director and CEO

Introduction

Welcome to our 2008 Sustainability Report.

We aim to meet the needs of our customers and the community in a sustainable manner, for the benefit of society and without compromising the quality of life of future generations. The successful management of safety, health and environment matters are vital issues for our employees, customers, communities and business success.

Highlights

We reduced our greenhouse gas emissions this year. Read more about our [Sustainability Performance](#).

Leadership is key to our sustainability success. Read a [message](#) from our Managing Director and CEO, Graeme Liebelt.

Our sustainability commitments drive real action. Read more in our [Case Studies](#). Our 2008 Sustainability Report has been prepared in accordance with the [Global Reporting Initiative](#) guidelines.

Please give us your [Feedback](#).

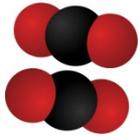
Our Sustainability Vision

We seek to be among the best sustainability performers internationally, consistent with our "Deliver the Promise" principles of commercial ownership, creative customer solutions, working together and valuing people and the environment.

We aspire to become a business that does no harm to people and the environment. Our sustainability vision is underpinned by our [SH&E Policy](#) commitments to:

- Value People and the Environment; and to achieve
- No Injuries to Anyone, Ever.

Going forward, we further aim to be:



Carbon neutral – no net generation of greenhouse gases to the atmosphere;



Water neutral – no net consumption of potable towns water;



Zero waste – no net generation of waste to landfill and requires innovative ways to prevent, reduce, reuse and recycle by-product streams; and



Environmentally friendly operations, products and services – no unintended consequences to the environment and the community

...in a commercially responsible way.

Our Public Commitments

Our commitment to sustainable development is underpinned by our public commitment to key initiatives and processes that drive best practice. Externally, we recognise and support:

- PACIA/International Chemical Council Responsible Care®;
- International Cyanide Management Code; and
- ISO 14001 Management Systems.

We do not supply our explosives products to the munitions industry.

Our external and internal commitments are underpinned by our [Sustainability Governance](#) approach.

Orica's Safety, Health and Environment (SH&E) Policy

At Orica we believe that all work related injuries, illnesses and environmental incidents are preventable.

We will manage all our activities with concern for people and the environment and will conduct our business for the benefit of society and without compromising the quality of life of future generations. In particular we will:

- Strive to ensure our facilities operate to the highest standards to protect our employees, contractors, neighbours and the environment.
- Continue to seek ways to efficiently use materials and energy.
- Sell only those products that can be produced, transported, stored, used and disposed of safely.
- Provide appropriate information and/or training on the safe use and disposal of our products to our customers and consumers.
- Seek to develop new or improved products and processes to improve the contribution we make to the quality of people's lives and to minimise the impact on the environment.
- Require every employee and contractor working for us to comply with relevant legislation and with this policy and we will provide them with the necessary training.
- Encourage employee initiatives that contribute to a safer and improved environment at work, at home and in the community.
- Set challenging targets and measure progress to ensure we continuously improve our safety, health and environmental performance.
- Communicate openly about our activities and report progress on our safety, health and environmental performance.

We make this commitment to our employees, contractors, customers, shareholders and the community as we work towards our vision of:

"No Injuries to Anyone, Ever"
"Value People and the Environment"

Strategy

Orica's strategy for meeting its SH&E commitments and for achieving the Vision is to have in place:

- Equipment and materials that are designed and maintained fit for purpose;
- Well communicated principles and behaviours that promote continuous SH&E performance improvement through leadership and personal responsibility; and
- A management system which describes systems of work that ensure the integrity of equipment and materials and people-based control measures is sustained.

Central to Orica's strategy is that:

- SH&E is a line management responsibility. Ownership and accountability for SH&E performance is embedded in the line at all levels;
- There is a consistent, risk-based approach to SH&E management. Resources are allocated and activities prioritised on the basis of risk; and
- Appropriate training is in place to equip all personnel to carry out their tasks so as to take care of themselves and others.

The Orica Group Executive and the Corporate SH&E Manager provides SH&E leadership. The Group Executive is a forum for strategy development as well as for SH&E governance of the company.

The Corporate SH&E Manager and Business SH&E Managers and SH&E specialists provide advice and support to the line managers. The Orica SH&E Managers' Team ensures the most effective use of resources by sharing best practice and standardising, streamlining and coordinating SH&E activities across the company and its subsidiaries.

The Elements of the Strategy

Plant Equipment and Materials

Orica's plant and equipment will be designed, constructed and operated to provide and maintain the engineering integrity and inherent safety required to minimise workplace SH&E risks. To achieve this Orica:

- Uses hazard identification, risk assessment and critical (HIRAC™) management techniques in design, construction, manufacturing, distribution and operations;
- Applies local and international standards as well as meeting statutory requirements;
- Sustains integrity by effective preventative maintenance systems and modification procedures; and
- Identifies critical systems and equipment and ensures their sustained integrity.

The Basis of Safety program equips personnel with an operational understanding of significant process hazards, the attendant risks, the corresponding controls to manage those risks and the individual's role in the application and maintenance of those controls.

Orica uses raw materials and produces intermediates and products only if they can be handled safely. In particular Orica meets its product stewardship responsibilities by:

- Specifying properties of raw materials and information to be supplied;

- Ensuring product properties are controlled through strict quality assurance;
- Undertaking product life cycle studies to ensure that SH&E risks are assessed and minimised as far as practicable;
- Using packaging, storage and transport fit for the purpose; and
- Collating and making available appropriate information on the materials.

People and our Behaviours

Orica seeks to foster a culture which promotes excellent SH&E performance through:

- Targeted selection and training of people to desired competencies;
- Line management leadership;
- Clear expectations for all employees and contractors;
- Rigorous adherence to company procedures;
- Participation in SH&E performance improvement;
- Promotion of SH&E awareness;
- Personal responsibility and a prevention mindset; and
- Encouraging SH&E awareness outside of the workplace.

Everybody is personally accountable for their own SH&E performance and for the SH&E performance of those whom they manage or supervise. In particular line managers are responsible and accountable for all aspects of SH&E in their operations and products. They are expected to demonstrate SH&E leadership at all times.

It is a fundamental belief that all work-related injuries, illnesses and environmental incidents are preventable. Unsafe acts prevention (UAP) and supporting programs for identifying and observing critical behaviours reinforce this message and raise hazard awareness and promote risk reduction.

Each year all employees or supervised contractors together with their line managers are expected to sign on to the Orica SH&E Charter. The Charter describes the company's expectations and impact as much on the line managers or supervisors as on individuals and will be an integral part of all job performance assessments. The SH&E performance of employees will be a major factor in their performance assessment and advancement.

The company formally recognises outstanding SH&E performance by individuals and teams of people particularly with respect to the prevention of adverse SH&E incidents. The Orica SH&E Managers Team recognises outstanding SH&E improvement initiatives.

Key Behaviours for Orica employees are summarised as:

- Take care of yourself and others;
- Meet the needs of our customers and the community in an environmentally sustainable manner; and
- Always improve our SH&E performance.

Our Systems and Procedures

Our SH&E Management System has been developed to manage the interaction between people and the work environment and to ensure sustained compliance with

legislative requirements, the 19 Orica Group SH&E Standards, the Responsible Care Codes of Practice and other external standards.

Performance Measures

We measure our SH&E performance and benchmark with the world's best companies and industry associations. Our Key Performance Indicators for SH&E and Sustainability are:

- All Worker lost workday/recordable case rates;
- Hygiene – performance sampling to plan (%) and samples < occupational exposure standard (%);
- Health assessment – performance to plan (%);
- Number of site losses of containment category 2 and higher;
- Number of distribution incidents category 2 and higher;
- Number of justifiable public complaints/prosecutions;
- Environmental licence non-compliance (%);
- Energy usage per tonne of production;
- Total Greenhouse Gas emission per tonne of production;
- Water usage per tonne of production;
- Waste generated per tonne of production;
- Sustainability Index;
- Audit programs completed;
- Compliance with procedures/standards; and
- Incident/audit actions overdue.

The Group Executive sets challenging short and long-term targets for the company for the key performance indicators.

At the site and operation level, measurement will also focus on positive performance measures including behavioural safety.

Performance Improvement

Each year “Letters of Assurance” are prepared by all operations and businesses declaring their compliance with the SH&E Policy and 19 SH&E Standards. The Orica Board reviews these “Letters of Assurance”, which draw from internal and external audit reports. The letters of assurance demonstrate due diligence has been exercised in SH&E management and they form the basis of SH&E improvement plans. The SH&E Management System is continually developed to reflect learnings, newly identified good practices and external requirements. Local procedures and work instructions are updated.

Particular focus is placed on:

- The attitudes and expectations of line managers and employees particularly with respect to adherence to procedures;
- The focus on risk-based activities and learning from significant events including those with no adverse outcomes; and
- Systematic SH&E training of all personnel.

Key Sustainability Challenges

Our key sustainability challenges describe our significant impacts in the broader context of global sustainability trends. Our challenges are identified through the development of our sustainability strategy, through the review of historical data trends and major opportunity identification at business and corporate levels. Our challenges are prioritized using our consistent, risk-based approach to business management, including SH&E risk.

Our Model Procedures require “ongoing systematic identification, assessment and management of SH&E risks associated with the company's activities, products and services”. Read more: Risk Management.

Our key sustainability challenges are:

- Safe Workplaces;
- Transport and Driver Safety;
- Health and Hygiene;
- Serious Site Losses of Containment;
- Environmental Licence Compliance;
- Legacy Issues;
- Engaging with our communities;
- Greenhouse Gas Emissions;
- Resource Efficiency; and
- Product Stewardship.

We are progressively addressing these key challenges through our Challenge 2010 milestones and our Top 10 Priority Actions.

Safe Workplaces

Background

We have made strong progress over recent years in reducing the numbers of injuries and illnesses amongst our workforce (comprising both employees and contractors). Our primary safety measure of the All Worker Recordable Case Rate (AWRCR) has decreased from 1.38 in 1999/2000 to 0.72 in 2008. Despite this progress, and a fatality-free year in 2008, seven company workers have been fatally injured during the last five years. The loss of our colleagues hangs heavily over our safety performance and is a constant reminder that even though our safety statistics are improving year by year, we have a long way to go to achieve our vision of "No Injuries to Anyone, Ever".

Going forward

Preventing further fatalities and reducing the recordable case rate over the coming years will require considerable effort, with a focus on both occupational and operational safety. In addition to maintaining our current focus, we will have to target specific areas of concern such as manual handling, trips and falls, and hand injuries, which collectively account for 75% of all injuries. It will be essential to continue our behavioural safety programs and to put greater emphasis on Job Safety and Environment Risk Analysis (JSERA) and Job Cycle Checks (JCC). We must maintain our awareness and

understanding of the risks associated with our activities, ensure the engineering integrity of our plant and equipment, and operate to the highest standards. This will require increased commitment to, and development of, Basis of Safety, hazard studies (project and periodic), audits, design review, and project management.

In addition to the specific key performance milestones for fatalities and recordable cases, the company will rigorously monitor and investigate all serious near misses and near hits (General Learning incidents), including Process Safety related incidents, in order to maintain the focus on prevention of high consequence-low probability events (e.g. fatalities, fires/explosions) and reduce the numbers of such incidents occurring.

Transport and Driver Safety

Background

Orica transports many thousands of tonnes of dangerous goods each year. We are committed to ensuring no harm comes to the community, our drivers or the environment as part of the transportation process. The design of our trucks, protocols for route assessment and our approach to the storage and handling of dangerous goods is critical in meeting this commitment.

Driving motor vehicles is one of the most significant risks faced by many of our employees and contractors. We aim to prevent accidents arising from the use of vehicles (including cars, vans, trucks, motor bikes, scooters and bicycles) by any employees or contractors who drive a company owned or leased vehicle or drive a privately owned vehicle on company business on a regular basis. Our Model Procedure on Driver Safety stipulates a range of mandatory requirements including the provision and use of seat belts, driver safety training and the registration, licencing, insurance and road-worthiness of all company vehicles.

We aim to learn from, and implement robust procedures to avoid a repeat of, the serious incident we experience in Mexico in 2007. Read more about this incident in our 2007 Sustainability Report.

Going forward

The company will strive for continuous improvement in driver safety, via ongoing promotion of voluntary driver safety education programs and monitoring of driver safety performance (as Category 2+ motor vehicle incidents per million kilometres travelled). The company will also endeavour to monitor average vehicle fuel efficiency, as driver safety literature supports a relationship between conservative driving behaviour (as indicated by lower fuel consumption) and reduced crash risk. This measure is also important in monitoring of greenhouse gas emissions from company vehicles (see "Environment").

Health and Hygiene

Background

During our "Challenge 2005" program, considerable progress was made in improving the integrity of our health assessment and occupational hygiene programs. It is essential that this good work is reinforced in the coming years. Businesses will be encouraged to maintain targeted health and wellbeing programs relevant to employees

and the locations in which they work.

Going forward

As part of Challenge 2010, Orica developed and has applied across its global operations, uniform occupational exposure standards for priority hazardous chemical and physical agents to ensure that all workers receive the same high level of protection. These standards will be determined by reviewing best practice – with scientific validation as appropriate – and in some cases may be more demanding than those required by the countries where we do business. Priority will be given to agents with significant potential for carcinogenesis, sensitisation, neurotoxicity or adverse reproductive effects.

In addition to the specific key performance milestones for health assessments and hygiene tests, the company will monitor and track reliance on personal protective equipment (PPE) as a means of exposure control in order to work towards the objective of further understanding the level of dependence.

Serious Site Losses of Containment

Background

The number of serious site losses of containment and distribution incidents involving our products remains unacceptably high. In some instances, distribution incidents have resulted in fatalities to contractor drivers or members of the public, which is clearly unacceptable. These incidents generally impact on the community, cause business disruption, and can adversely effect the company's public image.

Going forward

Achieving the 2010 milestones will require rigorous application of our SH&E systems and tools to identify and manage all risks under the company's control associated with both facility operation and distribution activities. It also needs to be recognised that in a number of distribution incidents there are some external environmental factors outside the company's control.

Environmental licence compliance

Background

Environmental licence compliance across the company's operations remains at >99%, however the level of non-compliance at a couple of sites remains unacceptably high. The clear expectation of regulatory authorities and the community is that our sites will fully comply with licence requirements.

Going forward

Work will need to be undertaken at some sites over the next two years to achieve the 2010 milestone of 100% compliance.

In addition to the specific key performance milestones for serious site losses of containment, distribution incidents, and licence non-compliances, the company will continue to monitor and track the performance of the following measures of community

safety, in order to work towards the objective of zero occurrences by 2010:

- Community Complaints (Category 1);
- Fines (Category 2);
- Prosecutions (Category 3); and
- Product Incidents (Category 2).

Legacy Sites

Background

With over 130 years of operation, Orica maintains responsibility for a range of sites that were contaminated through the course of historical operations. These legacy issues have the potential to impact local groundwater and ecosystems and, in response to this risk, Orica is committed to meeting its legal obligations for land remediation and rehabilitation.

Addressing legacy issues is challenging and takes time, however we are committed to cooperating with regulatory authorities and the community to achieve the required results.

Going forward

The company will continue to progress groundwater and land remediation programs associated with the consequences of historical activities at a number of sites, ensuring that regulatory and community expectations are met. This includes maintaining the focus and commitment to completion of major works associated with the Botany site, particularly groundwater remediation and hexachlorobenzene waste destruction.

The company will also continue to advance the elimination and reduction of risks associated with underground storage of hazardous materials, in order to prevent future contamination. During the last five years underground storage of hazardous materials has been eliminated at most locations across the company, however further work is required, particularly on elimination of highest risk storage tanks.

Engaging with our communities

Background

Many Orica sites are located near residential housing. We aim to maintain positive relationships with our local communities and are committed to mitigating the impacts of our operations on our neighbours, such as nuisance noise and odours, air pollution, soil and groundwater contamination and management of truck movements through residential areas.

Increasingly, Orica businesses are operating in more remote regions. This is presenting new challenges for an organisation that at its inception 10 years ago was primarily operating in Australia and communicating in a single language – English.

Today we have a presence in around 50 countries and publish company news in 13 different languages. It is critical that we succeed in promoting our core values to customers and employees in these regions, while remaining responsive to their concerns about the future of the environment and the communities in which they live.

We see our social responsibilities as being complementary to our financial performance and a critical component of both our licence to operate in all regions of the world and our ability to attract and retain the best employees.

Going forward

We will identify the emerging environmental trends in each region where we operate and find ways to successfully grow our business with less environmental impact. This includes upholding tough environmental standards and transferring new technologies that reduce impacts to developing parts of the world.

The company will continue to maintain and develop community relationships, particularly for major sites with neighbouring communities. This will typically comprise site community SH&E reports, formal community relations plans, and informal safety outreach activities.

Most major sites are expected to produce annual reports of their SH&E performance directed at their employees and the neighbouring communities. These are tailored to each particular site's situation and can take various forms (eg. brochure, letter, advertisement in local newspaper, community calendar, etc).

All major sites will develop and maintain community relations plans. These plans will give particular emphasis to sharing of information and involvement of the community in SH&E issues to improve the relationship between the company and the community.

All businesses, sites, and employees will be encouraged to participate in a variety of informal SH&E outreach activities. These activities may take the form of talks in schools, training programs or demonstrations to customers, presentations to industry peers, and special SH&E programs with family members or the general community (eg. community clean-up days, paint donations to community centres, rural youth driver safety sponsorship).

Resource Efficiency

Background

Energy

In 2008 the company's operations consumed 16 million gigajoules (GJ) of energy, with natural gas for ammonia production accounting for approximately 87% of this total and electricity use accounting for 10%. Large energy users such as Orica will continue to receive increased scrutiny from regulators and the community as sustainability issues develop further in coming years. While the company achieved an 18% reduction in energy usage per tonne of production between 2000 and 2004, achieving a further 15% reduction by 2010 will require a significant commitment.

Greenhouse Gas Emissions

In 2008 the company's operations emitted 3.9 million tonnes of carbon dioxide equivalent emissions; 32% as carbon dioxide emissions from energy use and 68% as nitrous oxide emissions from nitric acid manufacture.

Community and regulatory attention to emissions of greenhouse gases such as carbon

dioxide and nitrous oxide will continue to intensify in coming years as concern about global warming is maintained and progress against the Kyoto Protocol reduction commitments by 2008 – 2012 are assessed. Considerable effort will be required to achieve the company's 2010 milestones of a 50% reduction in emissions of nitrous oxide and a 15% reduction in emissions of carbon dioxide (equating to a combined reduction of 35% in total carbon dioxide equivalent emissions).

Water

In 2008 the company's operations consumed 8.8 million kilolitres of water. Pressures around consumption of water will increase in coming years as the limitations around sustainable use of this precious resource continue to be understood and appreciated by the wider community. The company achieved a 23% reduction in water consumption per tonne of production between 2000 and 2004, and maintained focus will be required to achieve a further 15% reduction by 2010.

Waste

In 2008 the company's operations generated an estimated 18.2 thousand tonnes of solid waste. Some sites have made significant progress in reducing waste generation during recent years, however there is a need to focus and drive reduction efforts on a company wide basis. The 2010 milestone of a 50% reduction is consistent with community expectations, growing pressures on landfill facilities, and the principles of sustainability.

Going forward

Sustainability Vision

In addition to "No Injuries to Anyone, Ever", Orica aspires to become a business that does no harm to people and the environment. This means a transition to:

- Carbon neutral – no net generation of greenhouse gas emissions to the atmosphere;
- Water neutral – no net consumption of potable towns water;
- Zero waste – no net generation of waste to landfill and requires innovative ways to prevent, reduce, reuse and recycle by-product streams; and
- Environmentally friendly operations, products and services – no unintended consequences to the environment and the community

...in a commercially responsible way.

Measurement

Effective performance measurement of energy consumption, greenhouse gas emissions, water consumption, and waste generation across the company requires consistent reporting by sites. Large sites representing >90% of the company's total consumption and emissions are required to report on a monthly basis, while all other sites are required to report every three months. The data is used in calculating and monitoring the company's progress via our Sustainability Index (V/I).

Emission Standards

During this period Orica will assess and review environmental emission levels for priority chemical releases from its operations. The review will consider best practice – with scientific validation as appropriate – to ensure that the environment receives a high level of protection throughout the company’s operations across the globe. Priority will be given to new plants and targeting priority chemicals (eg. carcinogens, greenhouse gases) at existing plants.

Investment

The company has continued to make good progress in decreasing our impact on the environment and reducing our consumption of valuable resources such as energy and water. However, in order to continue the transformation towards a truly sustainable company, significant effort is required in the years ahead. Achieving these milestones will necessitate considerable expertise, and in some cases, investment in capital and/or technology enhancements. Such achievements are expected to be consistent with societal expectations and to ultimately provide opportunities for the future in developing sustainable businesses.

Product Stewardship

Background

Product Stewardship has been defined as a demonstrable process which places an ongoing responsibility on a company to monitor and manage the health, safety and environmental (SH&E) issues concerning its products and packaging.

It is important that we take care considering SH&E impacts in developing products and introducing new formulations and packaging. Our Product Stewardship approach involves looking at where the raw materials come from and stipulating conditions on the suppliers. During manufacture, storage, handling and transport it necessitates having SH&E management systems in place which protect our employees, our plant and equipment, the community and the environment from damage. And after the products leave our direct control and are distributed, sold and used by our customers, it requires us to influence the use of the product right through to its eventual disposal.

Going forward

Product stewardship remains an important focus for the company over the next five years, supporting both community safety and sustainability improvements. A high level of compliance with the company’s product stewardship index has been maintained over the last five years, and life cycle risk assessments have been completed for a number of major product groups.

Targets and Measurement

Continuous improvement is driven through Orica's "Challenge 2010" five-year SH&E targets. These targets are a stepping-stone on the path to achieving our "no harm" sustainability aspiration.

Our SH&E Management System states that "SH&E objectives and targets, consistent with the company's SH&E Policy, shall be developed and periodically reviewed for each relevant function and level within the organisation. The development and review of SH&E objectives and targets shall consider:

- Legal and other applicable requirements;
- The company's significant SH&E hazards and environmental aspects;
- Recent audit findings and incidents;
- Technological options for improvement;
- Financial, operational and business requirements; and
- The views of interested parties."

In 2004 we released our Challenge 2010 milestones to drive our performance forward over the next five years.

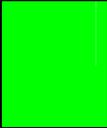
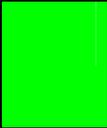
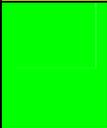
Orica sites communicate their performance against the Challenge 2010 targets on a monthly basis. This information is aggregated centrally and available to all sites on the company intranet.

Read more: [Challenge 2010.pdf](#) on our website.

Challenge 2010 Targets Scorecard (Baseline year 2004)

Overall performance against target:

-  Target exceeded or ahead of schedule
-  Target achieved or on track
-  Target behind schedule

Objective	2010 Target	2008 Performance	
Safety and Health			
No worker fatalities	All worker fatalities: 0		No fatalities reported during 2008
Reduce the recordable injury and illness case rate by >40%	All worker recordable injury and illness case rate: < 0.40 (per 200,000 hours)		Our overall recordable case rate increased to 0.72 in 2008, compared to 0.60 last year
Sustained compliance with our health assessment and occupational hygiene programs	Health assessments completed against plan: >99%		98.2% of health assessments were completed in 2008, compared to 97.4% last year.
	Hygiene tests completed against plan: >99%		95.4% of hygiene tests were completed in 2008, compared to 97.4% last year.
	Hygiene tests below the Occupational Exposure Limit (OEL): >99%		98.1% of hygiene tests were below OEL in 2008, compared to 96.2% last year.
Community Safety			
No distribution incident fatalities	Distribution incident fatalities: 0 (Contractor drivers or members of public)		Seven distribution incident fatalities in 2008, compared to 29 last year.
Reduce the number of serious site losses of containment	Number of site losses of containment (Category 2 or higher): <4		Five site losses of containment in 2008, compared to six last year.
Reduce the number of serious distribution incidents involving our products	Number of distribution incidents (Category 2 or higher): <12		24 distribution incidents in 2008, compared to 28 last year.
No environmental licence non-compliances	Number of environmental licence non-compliances: 0		17 environmental licence non-compliances in 2008, compared to 29 last year.

Resource and Operational Sustainability (all reductions are on a per tonne of product manufactured basis and are relative to 2004 baseline levels)

Reduce energy consumption	Reduction in energy consumption: >15%		14.0% reduction in energy consumption (per tonne of product) in 2008, compared to a 5.7% increase last year.
Reduce emissions of greenhouse gases	Reduction in emissions of total carbon dioxide equivalent gases: >35% comprising:		21.6% reduction in total greenhouse gas emissions (per tonne of product) in 2008, compared to an 18.8% increase last year.
	- Reduction in emissions of carbon dioxide equivalent gases (excluding nitrous oxide): >15%		20.2% reduction in carbon dioxide equivalent gases, excluding nitrous oxide (per tonne of product) in 2008, compared to a 20.4% increase last year.
	- Reduction in emissions of nitrous oxide: >50%		22.0% reduction in emissions of nitrous oxide (per tonne of product) in 2008, compared to an 18.0% increase last year.
Reduce water consumption	Reduction in water consumption: >15%		26.9% reduction in water consumption (per tonne of product) in 2008, compared to a 10.9% reduction last year.
Reduce waste generation	Reduction in waste generated: >50%		55.0% reduction in waste generation (per tonne of product) in 2008, compared to a 50.7% reduction last year.

Our Top 10 Priority Actions

Our objectives and targets are developed with due consideration for:

- Legal and other applicable requirements
- The company's SH&E hazard and environment aspects;
- Audit findings and incidents;
- Technological improvement;
- Financial, operational and business requirements, and
- The views of interested parties.

Through this process we have identified 10 priority actions that will help us progress towards our aspiration of no harm to people and the environment.

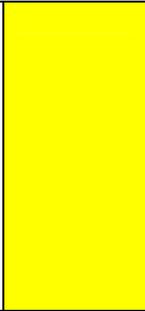
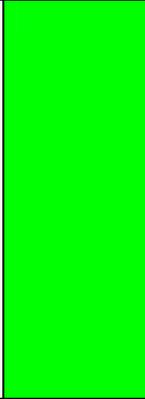
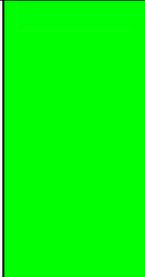
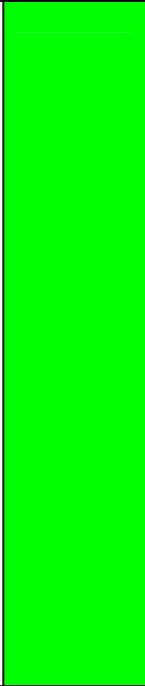
Our progress in 2008 is as follows:

Overall performance against target:

- Target exceeded or ahead of schedule
- Target achieved or on track
- Target behind schedule

Top 10 Priority Actions	Time	2008 Status
<p>Priority Action 1. Abate nitrous oxide (N₂O) emissions – reducing N₂O emissions in our operations is the best way to reduce global carbon dioxide equivalent (CO₂e) emissions</p> <p><i>Carseland, Canada</i> – Secondary abatement technology was installed on Nitric Acid Plant 1 at Carseland in Canada in May 2008. As Orica's third largest emitter, Carseland contributes almost 20% of Orica's total greenhouse gas emissions. This abatement technology breaks down the N₂O molecule into harmless nitrogen and oxygen and is expected to reduce emissions from the plant by an average of 80% when compared to normal operation. This will reduce Carseland's gross greenhouse gas emissions by more than 50% when operated for a full year.</p> <p><i>Bacong, Philippines</i> – preparation is underway for approval of the abatement program at Bacong under the Kyoto Protocol's Clean Development Mechanism. Abatement is targeted for early 2009.</p> <p><i>Other Sites</i> – the abatement program is expected to be undertaken at Orica's remaining Nitric Acid plants over the next two years.</p> <p>If successful, the N₂O abatement program has the potential to reduce Orica's N₂O emissions by up to 90%, and overall CO₂ equivalent emissions by up to 55%.</p>	1 – 3 years	
<p>Priority Action 2. Conduct energy assessments – detailed energy assessments will identify significant savings at our larger sites</p>	1 – 3 years	

<p>In 2005 Orica volunteered to be a trial company for the Australian Federal Governments Energy Efficiency Opportunities (EEO) program. An assessment identified more than 70 energy efficiency opportunities at Kooragang Island during the trial. It is expected that implementation of these opportunities will lead to a reduction in site energy use of up to 200,000 GJ per year, with reduction in energy costs of almost \$1M per year. (You can read about Kooragang Island's EEO trial on the EEO website: http://www.energyefficiencyopportunities.gov.au). The EEO process was carried out at our facilities at Yarwun (Queensland, Australia) in 2007. Yarwun is our second most energy and emissions intensive site. More than 300 sustainability-related opportunities were identified, which are being consolidated and revised during 2008. Preliminary estimates of opportunities identified at Yarwun indicate potential site energy reduction of up to 10%.</p> <p>Orica intends to run a similar process at Carseland.</p> <p>Laverton Chloralkali is currently developing an Energy and Resources Efficiency Plan (EREP) in accordance with State legislation.</p> <p>The sustainability team also ran an initial EEO workshop at Botany in February 2007.</p>		
<p><i>Priority Action 3. Improved gas efficiency at our Ammonia Plant – as ammonia plants have a significant emissions profile, we are investing special attention in identifying efficiency gains at our Kooragang Island plant in Australia</i></p> <p>An assessment to integrate site steam systems has been completed at Kooragang Island. The project is awaiting completion of another assessment on site before engineering requirements can be finalised and a cost estimate generated for the business.</p>	1 – 3 years	
<p><i>Priority Action 4. Capture waste heat – investigating ways of capturing wasted heat energy</i></p> <p>This opportunity is in progress at Yarwun. A sustainability strategy and planning workshop was undertaken by Mining Chemicals in late January 2008. Site energy reduction is estimated at 0.5%.</p>	3 – 6 years	
<p><i>Priority Action 5. Identify “blue-sky” ideas – research and develop alternative long-term sustainable energy and raw material sources for future production</i></p> <p>These ideas are being generated through site energy assessments and business sustainability workshops.</p>	3 – 6 years	
<p><i>Priority Action 6. Reuse groundwater treated at Botany – identify where treated groundwater can be used to offset potable, towns’ water</i></p> <p>Up to 45,000 kL of treated water per month from Botany’s Groundwater Treatment Plant (GTP) is being consumed by Orica’s Chlorine Plant and Genos. This project to reuse treated groundwater to offset towns’ water consumption (as well as reuse waste steam and acid streams) won the 2008 PACIA Environment Award. The reuse of treated water at our Chlorine Plant has reduced Orica’s gross water consumption by more than 1% to date.</p>	1 – 3 years	

<p>Priority Action 7. Use recycled water at Kooragang Island – investigate the viability of replacing process water (potable, towns’ water) with recycled water from Hunter Water</p> <p>Discussions are taking place between Kooragang Island and Hunter Water into the viability of this project. If all towns’ water were replaced by recycled water, the potential reduction in Orica’s gross water consumption would be in excess of 30%.</p>	<p>3 – 6 years</p>	
<p>Priority Action 8. Price emissions and water use – implementation of a shadow price on expenditure proposals and contracts for carbon emissions and water use to better inform decision-making now and position us for future legislative changes</p> <p>Shadow prices for carbon emissions and water consumption are now required in key expenditure proposals and contracts. Worked examples are being prepared by Orica Finance for use on the sustainability website.</p> <p>In addition sustainability impacts are being considered in more depth as part of the approval process for major projects.</p>	<p>1 – 3 years</p>	
<p>Priority Action 9. Conduct lifecycle assessments – lifecycle assessments show where further reductions in waste, water and energy use can be made</p> <p>Lifecycle assessments have been completed on: numerous Dulux paint and Powder and Industrial Coating products, Chlorine and its associated products and ammonium nitrate.</p>	<p>1 – 3 years</p>	
<p>Priority Action 10. Develop “low impact” products and services – support our customers and benefit the community by concentrating on developing a larger range of “greener” products.</p> <p>Many low impact products have been and are being developed, including:</p> <ul style="list-style-type: none"> • Recycled paint and powder board – utilizing recycled paint, powder coatings and wood waste to develop commercially viable particle board, this project has been trialed in New Zealand; • Waste paint and packaging – Consumer Products are market leaders in driving waste paint and packaging recycling projects; • Enviro Solutions – Consumer Products acquired Enviro Solutions and its EnviroWash™ treatment system in 2008. EnviroWash™ is an innovative, water-based treatment system that turns paint washout into clean water and inert solid waste, allowing for easier and safer disposal; • Creation of low-VOC paint products; • Re-certification of two Dulux paint products as Greenhouse Friendly™ (carbon-neutral) through the Australian Federal Governments Greenhouse Office; and • Sustainable Blast Based Services. 	<p>3 – 6 years</p>	

Sustainability Index

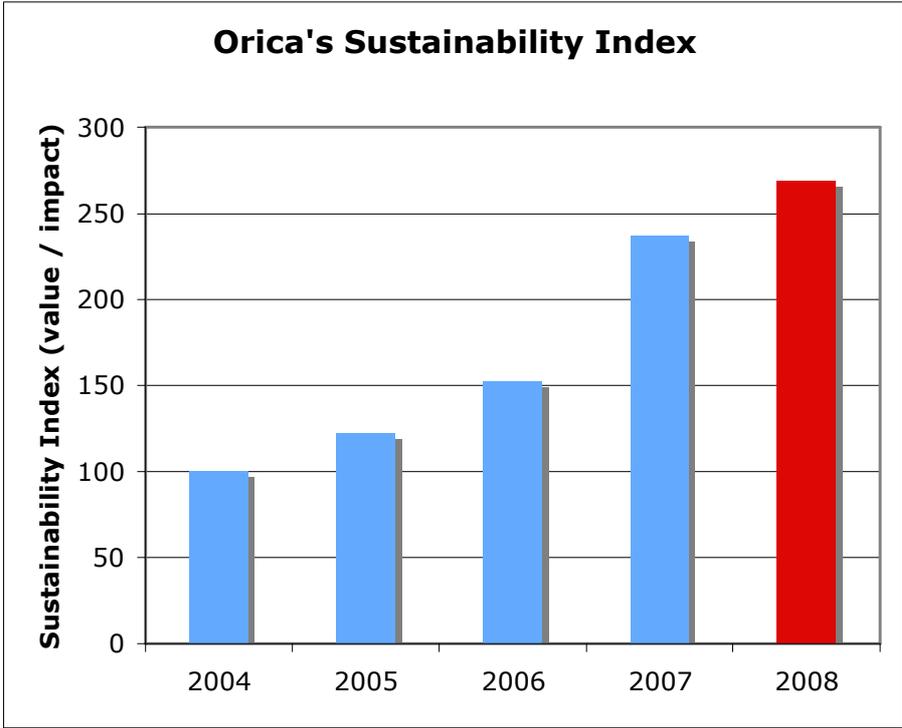
In 2005 we created an index designed to measure the value (V) we create over the direct impacts (I) we generate. Value added is measured as gross margin and impact is a measure of our energy and water consumption, waste generation and emissions – indexed to 100 in 2004.

Our aim is to broaden this measure so that it includes the lifecycle impacts of our products, in addition to those we currently measure from our sites. This means including the impacts of raw materials sourced to manufacture our products and impacts arising from the disposal of our products after use.

We are continuing to develop the Sustainability Index so that it encompasses a wide range of factors relevant to:

- The nature of our operations; and
- The sustainable supply of our products.

The company's Sustainability Index for this period was 269, a significant increase from the 2007 V/I index of 237 and 2008 milestone of 250. This reflects the high demand for Orica products in the mining sector and increased value being generated per unit of product as well as the significant reductions in water consumption, greenhouse gas emissions and waste generation since 2004.



Stakeholder Engagement

Orica is committed to conducting business in accordance with high standards of corporate governance and aims to be open and transparent with all stakeholders regarding its sustainability aims and achievements.

Information on Orica's approach to sustainability and general operations is communicated through a range of forums, publications and online sources.

These include:

- www.orica.com;
- Annual General Meeting (also webcast);
- The Annual Report – available in hard copy or on-line as an interactive report;
- An annual, online Sustainability Report; and
- Disclosures to the Australian Stock Exchange.

Our SH&E Policy identifies our key stakeholders as our employees, contractors, customers, shareholders and the community.

Employees and Contractors

Our approach to engagement with employees and contractors is driven by our Model Procedure 14: Communication, which states "Processes shall be established and maintained to regularly communicate SH&E information within and between relevant sections of the company".

Our employees and contractors key concerns are typically our safety performance, human resources policies and our sustainability reputation.

They are kept up to date on our sustainability performance through regular newsletters, intranet material, workshops and conferences. Our monthly "Orica Update" newsletter and regular "Deliver the Promise" magazine cover a range of initiatives across our operations, while our quarterly "Sustainability Newsletter" provides a comprehensive overview of our sustainability programs and achievements.

Our Sustainability Intranet provides access to our guidelines and procedures, including our new Carbon Shadow Pricing requirements for significant new contracts and investments.

Our Sustainability Champions provide a point of senior, business-specific contact for queries and suggestions from our people. We are developing the capacity of our champions at each operation.

We also seek to engage with our contractors. Our Model Procedures state that "Contractors shall be given all relevant information regarding the company's materials, products and activities which may impact on the safety, occupational health and environmental impact of the work to be performed" and "Contract employees shall receive appropriate induction training prior to commencement of work."

Community

Our approach to engagement with our local communities is driven by our Model Procedure 15: Community Relations Program, which states that each site shall “establish and maintain channels of communication with the community; and coordinate responses to requests for information from the community.”

The key concerns of our local communities are typically our local operational impacts (i.e. noise, odour and contamination) and employment opportunities.

Many Orica operated businesses pro-actively engage the community around their sites. The Dulux facility in Rocklea, Australia has been involved with Rocklea State Primary School’s annual sports day since 1997 and in 2007 provided students with drinks and refreshments on the day along with presenting the Dulux Shield.

Botany site, Australia

Our contaminated site in the inner suburbs of Sydney, Australia, has received an understandable amount of community interest. We actively engage the local community around the Botany site in an effort to listen to their concerns, questions and suggestions regarding the Botany Groundwater Treatment plant.

We provide regular updates on the progress of the project through a column in the Southern Courier newspaper and a newsletter for local residents. We have also produced a comprehensive suite of fact sheets, which are designed to provide the community with simple and easy to understand information on the environmental science and technology involved in the project.

Our Board receives regular updates on the progress of works and stakeholder engagement at our key legacy sites including Botany. Read more at our dedicated website.

Shareholders and Investment Community

We engage and respond to our shareholders sustainability queries at our half-year and end-of-year road show meetings. In 2008 we noted a significant increase in awareness and questions from our shareholders regarding our climate change exposure and opportunities.

Our performance against key sustainability indices and reputation assessments are also publicly available:

- Dow Jones Sustainability Index;
- FTSE4Good; and
- Carbon Disclosure Project.

Government

We work proactively with local regulators, State and Federal Governments to meet local requirements and participate in the development of sustainability policy and initiatives.

The key concerns of government where we operate are typically regulatory compliance, our ability to demonstrate innovation in research and development and our ability to maintain positive relationships with our local communities.

We actively engage with relevant public agencies in all countries where we operate. These agencies include law enforcement, counter-terrorism, sustainability and climate change. For example:

- North America – we have a regular program of engagement and information sharing with law enforcement agencies;
- Philippines – we coordinate all movements of mining explosive products under police and/or military escort;
- Papua New Guinea – our Country Manager is a member of the PNG Chamber of Commerce and Industry (PNGCCI) Standing Board/Committee; and
- Australia – we engage with the Australian Government on possible responses to climate change. We engage individually and through industry associations with the Australian Department of Climate Change regarding their plans for a National Emissions Trading Scheme, and the Department of Resources, Energy and Tourism about the new Energy Efficiency Opportunities legislation. We also regularly interact with government through our role as a pilot participant in the Australian National Greenhouse and Energy Reporting System.

Stakeholder Grievances and Concerns

Mechanisms to address grievances and concerns have also been established. Our Model Procedures require that “Public complaints (both written and verbal) shall be registered, investigated and responded to promptly.”

We have also established the Orica Integrity Hotline for internal and external confidential feedback.

Awards and Recognition

Westpac Enterprise North Shore Business Excellence Awards (New Zealand)

Orica Power Coatings New Zealand were recognised with the following awards

- Winner 2008 Westpac Supreme Business Excellence Award – recognition of all-round and superlative business excellence;
- Winner 2008 Category Award (Environmental Management) – recognises a business that demonstrates the highest level of commitment to continuous improvement in Environmental Management and ensuring that the business does not negatively impact the environment; and
- Winner 2008 Category Award (Excellence in Design, Research and Development) – recognises a business that values Design, Research and Development who, through investment in these areas, has created a new or improved product, process or service that has added significant value to the business.

2008 Premier's Sustainability Award – Products and Services (Victoria, Australia)

Dulux Powder Coatings and CSIRO were the winners of the 2008 Premier's Sustainability Award – Products and Services, with our entry "Zero Waste Powder Coatings".

Agribusiness Awards for Excellence (Australia)

Orica Watercare's Remediation business was awarded the prestigious Technology and Innovation Award for their Landguard technology.

Australian Organisation for Quality (AOQ) Awards (Australia)

Orica Emergency Response Service (ERS) were recognised for the third consecutive year as both the Victorian and the Australian Gold Award winner in the category of Micro Organisation – Private Sector awarded by the Australian Organisation for Quality (AOQ). ERS have been inducted into Victorian and Australian Hall of Fame.

2008 PACIA Environment Award (Australia)

Orica's Botany Groundwater Treatment Plant (GTP) and Chloralkali Plant won the 2008 PACIA Environment Award, in recognition of their work on the GTP integration project.

Packaging Evolution Awards (Australia)

Dulux Australia was a finalist in the Household Goods Packaging Action category of the *Packaging Evolution Awards* for implementing successful waste management initiatives, including product stewardship policies and practices, and innovative recycling programs.

2008 Logistics Development Award, Logistics Association of Australia Ltd (LAA Ltd) (Australia)

Michel Jungo, Demand Planner for Selleys based in Padstow, NSW, Australia was recognised as a finalist for his entry "Supply Chain Odyssey 2025".

Our Approach to Reporting

Our SH&E Policy states that we will “communicate openly about our activities and report progress on our safety, health and environmental performance”.

We publicly report on our sustainability performance in a variety of ways, including:

- This web based, company-wide Sustainability Report, which has been prepared in accordance with the Global Reporting Initiative (GRI) 2006;
- Relevant sections of our Annual Financial Report and Annual Business Overview; and
- Site SH&E Reports – our operations produce their own reports that are specific to their site circumstances, regional context and stakeholder needs.

The purpose of Orica’s annual sustainability reporting is to provide our stakeholders with an overall picture of relevant aspects and results for 2008. We have endeavoured to provide information that is in accordance with sound reporting practice. We have not sought independent verification of information contained in this web-based 2008 Sustainability Report.

Information about our current performance is also available through various industry reporting initiatives, including the Carbon Disclosure Project.

Read more: Our 2008 Sustainability Report and other previous reports.

Feedback

We welcome your feedback on our 2008 Sustainability Report. Contact us:

Email: sustainability.team@orica.com

Telephone: +61 3 9665 7111

Report Boundary

In accordance with GRI Guidelines, our web-based 2008 Sustainability Report covers all entities that generate significant sustainability impacts (actual and potential) and all entities over which we exercise control or significant influence with regard to financial and operating policies and practices.

Entities over which we don’t exercise significant influence and control (e.g. supply chain) are included in our narrative disclosures due to the materiality of their impact on our business.

The statistics in this Report cover sites owned and operated wholly by Orica Limited or operated by Orica Limited in a 50% or more joint venture operation during the 12-month period to 30 September 2008, with the exception of energy, greenhouse gas emissions, water and waste data, which includes only those operations operated wholly by Orica Limited. Data is reported on a 100% basis for facilities operated by Orica Limited irrespective of our equity share, unless otherwise stated. Joint venture projects that are not operated by us are excluded unless expressly stated. All monetary amounts in the Report are in Australian dollars unless otherwise stated.

There are no significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report. Total 2007 greenhouse gas

emissions have been amended in this Report from 4.7 million tonnes of CO₂e to 4.3 million tonnes, reflecting an improvement in our measurement accuracy.

While every effort has been made to ensure the accuracy of the information, anyone seeking to rely on information in this Report or seeking to draw detailed conclusions from the data should contact the company for verification and assistance.

Mergers, Acquisitions and Development

- The purchase of Excel for approximately \$781 million was completed on 26 October 2007;
- Minova acquired Strata Control Systems (SCS) in May 2008 and in the September quarter has acquired more small complementary bolt-on businesses in Africa, Germany and Poland;
- Mining Services is progressing well on the development of the 300 ktpa AN manufacturing facility in Bontang, Indonesia with cumulative spend to date of \$76 million;
- Given the tight market conditions, other AN expansion options continue to be progressed;
- Mining Services announced the Nanling Initiating Systems JV in China with a new plant expected in 2010, a JV with Southwest Energy in the USA and the acquisition of an additional 49% interest (taking Orica's interest to 99%) in Samex, an explosives distribution business in Peru (to be completed in November 2008);
- Chemical Services' Watercare division continues to successfully work on the commercialisation of new technologies with MIEX® and Advanced Water Treatment's product and services offerings continuing to gain market acceptance; and
- Consumer Products has made steady progress in developing a business in China and in November 2008 acquired Sopel, a small decorative coatings company.

Materiality

In accordance with GRI Guidelines, our web-based 2008 Sustainability Report covers attempts to cover topics and indicators that reflect Orica's significant economic, environmental and social impacts or that would substantively influence the assessments and decisions of stakeholders.

In defining our material topics, we have taken into account various factors, including:

External factors

- Sustainability concerns raised by stakeholders through our ongoing community consultation programs;
- The main topics and future challenges for the sector, as reported by peers and competitors and through our ongoing involvement in key industry forums, such as PACIA Responsible Care®;
- Relevant laws, regulations and international agreements, such as our voluntary commitment to the PACIA Responsible Care®, the Australian Greenhouse

- Challenge Program and the International Cyanide Management Code; and
- Reasonably estimable sustainability impacts, risks, or opportunities identified by our network of SH&E professionals, often in partnership with independent recognised experts. (e.g. climate change, HIV/AIDS education).

Internal factors

- We take a risk-based approach to defining the materiality of our sustainability issues. Business risk, including SH&E risk, is defined within our Business Groups and consolidated into a company-wide overview to inform our Board's decisions. These include our key sustainability challenges;
- Our Deliver the Promise principles, Code of Ethics, SH&E Policy and Challenge 2010 targets;
- The interests/expectations of stakeholders specifically invested in the success of the organisation (for example, our employees and contractors, customers and shareholders);
- Critical factors for enabling organisational success, such as our SH&E Line Accountability model, our SH&E Model Procedures and our professional networks; and
- The core competencies of the organisation (i.e. Board and governance structure, sustainability, accounting, supply, marketing, operations etc) and the manner in which they can or could contribute to sustainable development.

Prioritising

The report prioritises material topics and GRI Indicators. "Core" and "Additional" indicators have been addressed where they are material to our business.

Stakeholder Inclusiveness

Our Report aims to meet the various information expectations of its broad stakeholder audience by drawing upon feedback from our:

- Regular consultation with our host communities and partners;
- Annual general meeting and regular contact with the investment community; and
- Interactions with regulatory bodies, host government, special interest groups and industry programs.

To comprehensively meet the information needs of all our stakeholders, particularly at the local and regional level, our operations also produce annual public site SH&E reports that are specific to their site circumstances, regional context and stakeholder needs.

Sustainability Context

We have attempted to present our performance in the wider context of sustainability. Key performance measures are reported on a global and a regional basis to reflect the magnitude of impact in both geographical contexts. For example, see Our People.

The Report describes how sustainability topics relate to long-term organisational strategy and risks and opportunities, including supply-chain topics.

Completeness

We have endeavoured to ensure that our Report coverage is sufficient so that stakeholders can confidently assess our sustainability performance during the reporting period.

The Report was developed taking into account our supply chain and customer relationships and reasonably covers all material information relevant to these stakeholders.

Case study information, performance data and incident summaries are included to reflect all significant actions or events in the reporting period.

The Report does not omit relevant information that would influence or inform stakeholder assessments or decisions or that would reflect significant economic, environmental, and social impacts.

Balance

The Report reflects positive and negative aspects of our performance to enable a reasoned assessment of overall performance. Positive aspects include external recognition, the Orica Giving Program and some aspects of performance against our Challenge 2010 targets. Negative aspects include incidents, injuries and some aspects of performance against our Challenge 2010 targets.

Trend information is presented for all key sustainability information.

The emphasis on the various topics in the Report is proportionate to their relative materiality, given our broad scope of operations, locations and the number of internal or external stakeholders impacted. Our traditional reporting areas of governance, health, safety, environment and community are underpinned by our SH&E Model Procedures and form the basis of our performance and reporting focus. In more recent years, we have broadened the scope of our Report to include human resources, economic contributions and product stewardship.

Comparability

Since commencing sustainability reporting in 1996, the issues and information we present has been selected, compiled and reported consistently to enable stakeholders to analyse:

- Changes in our performance over time (i.e. year-to-year trend information to support our Challenge 2010 targets);
- Our performance relative to other organizations; and
- Our information is grouped to reflect our performance against appropriate benchmarks using our GRI Navigator tool.

Any significant variations between reporting periods (for example, Report boundary or scope) are identified and explained in [Report Boundary](#).

Accuracy

Our Report aims to provide accurate and detailed information for our stakeholders to assess our performance.

Data have been measured and collected at all of our operated assets and aggregated to provide Group level performance information. Our approach to measurement and calculation, for example, the measurement of our Sustainability Index and the application of greenhouse gas factors, are footnoted throughout the Report.

We do not believe our margin of error for quantitative data is sufficient to substantially influence the ability of stakeholders to reach appropriate and informed conclusions on performance.

Timeliness

Our Report is produced on our annual, financial year basis (i.e. 1 October 2007 to 30 September 2008). The collection of sustainability data from our operated sites is aligned to the reporting schedule so that all information in the Report is relevant to the reporting period.

Clarity

We have endeavoured to ensure that the information in our Report is readily understandable and accessible to our stakeholders. While the scope of information required by our broad range of stakeholders requires that our web-based 2008 Sustainability Report be quite extensive, we have attempted to avoid excessive and unnecessary detail by focusing on the information requirements expressed in stakeholder feedback and appropriate benchmarks (Read more: Stakeholder Inclusiveness and Comparability)

Reliability

The qualitative statements in the Report are valid on the basis of other reported information and other available evidence. In 2008 data collection processes for the Sustainability Report was internally audited by Deloitte. In response to the audit findings, we will continue to improve the systematic application of internal controls to our key sustainability challenges. We will consider moving to external assurance of future Sustainability Reports.

Explanation of Company terms

Orica is an Australian-owned, publicly listed global company with headquarters in Melbourne, Australia.

Orica Limited shares are listed on the Australian Stock Exchange (ASX) and are traded under the code ORI.

The company's financial year runs from 1 October to 30 September with half-year results announced in May and results for the full financial year announced in November each year.

Orica Limited Contact Details

Registered Office: 1 Nicholson Street, Melbourne, Victoria, Australia 3000

Postal Address: GPO Box 4311, Melbourne, Victoria, Australia 3001
Telephone: +61 3 9665 7111
Facsimile: +61 3 9665 7937
Email: companyinfo@orica.com

ABN 24 004 145 868

Sustainability Governance

Overview

Orica’s directors and management are committed to conducting the company’s business ethically and in accordance with high standards of corporate governance. Orica considers the successful management of safety, health and environment matters as a vital issue for our employees, customers, communities and business success.

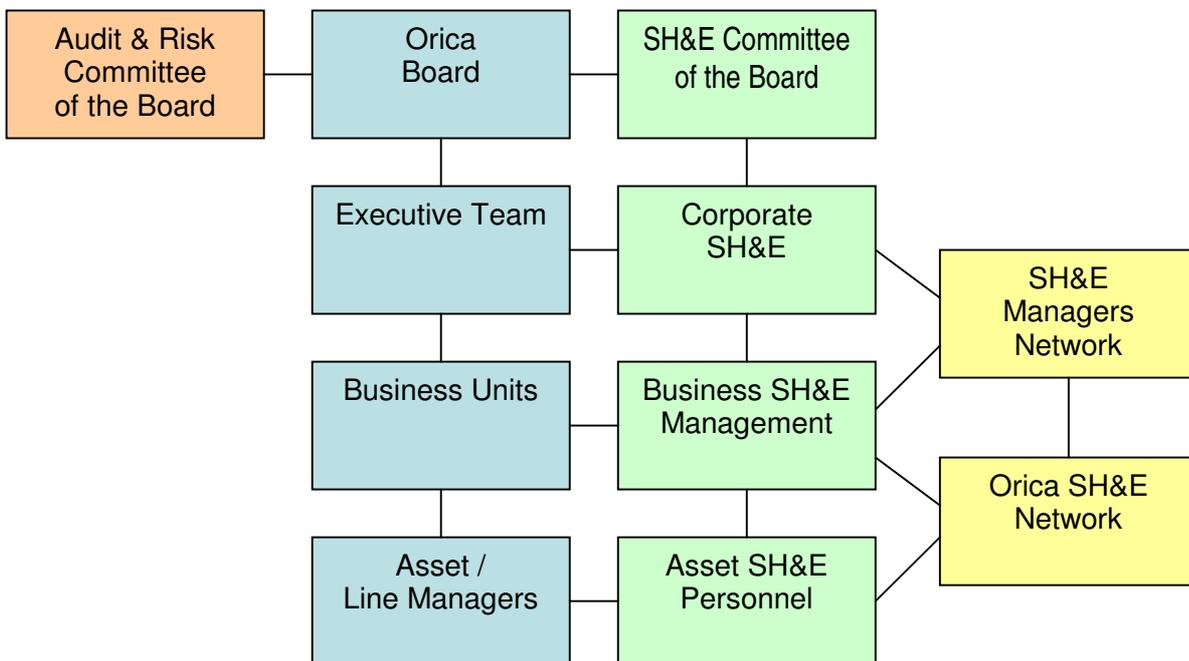
Leadership and Accountability

SH&E is a line management responsibility. Ownership and accountability for SH&E performance is embedded in the line at all levels.

Directors, executives and employee performance is appraised against the “Deliver the Promise” principles and behaviours. These principles and behaviours refer specifically to commercial ownership, creative customer solutions, working together and valuing people and the environment.

Organisational Structure

Our commitment to sustainability is demonstrated through clear definition of roles and accountability throughout our organizational structure.



Orica Limited Board

The primary role of the Orica Limited Board (the Board) is the protection and enhancement of long-term shareholder value. We believe that good corporate governance practices and strong sustainability performance protect and enhance our value to shareholders.

The Board receives monthly reports and detailed, six-monthly presentations in relation to safety, health and environment issues and performance in the group.

The majority of our Board members are independent (including a non-executive Chairperson) and two are female. Read more about our Board Members.

The composition of the Board seeks to provide an appropriate range of experience, skills, knowledge and perspective to enable it to carry out its obligations and responsibilities, including its commitment to sustainability performance. The balance of skills and experience of the Board is critically and regularly reviewed by the Corporate Governance and Nominations Committee. Processes are in place to ensure conflicts of interest are avoided in our Board appointments. Read more about our approach to Independence in our Corporate Governance Statement.

The Orica Board has four committees:

- Corporate Nominations and Governance;
- Audit and Risk;
- Remuneration and Appointments; and
- Safety, Health and Environment.

The remuneration of our senior management team and our Board is linked to some aspects of our sustainability performance.

Read more about our senior management remuneration policies and performance in our 2008 Remuneration Report.

Safety, Health and Environment (SH&E) Committee of Board

The Safety, Health and Environment (SH&E) Committee has been established to assist the Board in the effective discharge of its SH&E responsibilities. The SH&E Committee consists of four non-executive Directors (including a non-executive Chairperson) who meet at least four times annually or more frequently as required.

Read more: *Safety, Health and Environment Committee Term of Reference* on our website.

Group Executive

The Orica Group Executive and the Corporate SH&E Manager provides SH&E leadership. The Group Executive is a forum for strategy development as well as for SH&E governance of the company.

In particular, the Group Executive:

- Recommends SH&E and Sustainability Policy to the Board;

- Approves the strategy and sets performance targets;
- Monitors SH&E compliance and governance through audit reviews and SH&E letters of assurance;
- Endorses actions to address company wide improvement opportunities; and
- Endorses company positions on significant external SH&E and Sustainability issues at governmental and industry associations.

The Corporate SH&E Manager, in association with the Business Group SH&E Managers and associated SH&E specialists, provides technical policy and strategy support and advice to the Group Executive. The Corporate SH&E Manager provides the formal reporting of the company's performance.

SH&E Managers' Network

The Orica SH&E Managers' Network ensures the most effective use of resources by sharing best practice and standardizing procedures and coordinating SH&E activities across the company and its subsidiaries. Corporate and Business SH&E Managers participate in a monthly teleconferences and provide advice and support to our line managers.

Business Group General Management Team

The Business Group General Management Team, and their Group SH&E Managers, are accountable for the implementation of the SH&E and Sustainability Policy within the respective business. The business commitment to SH&E management is succinctly expressed in the policy statement and is communicated to all people in the business.

Line Managers and All Employees

Our SH&E Policy states that we “require every employee and contractor working for us to comply with relevant legislation and with this policy, and we will provide them with the necessary training.”

All Orica line managers and employees are signatories to our SH&E charter, which details what is expected of them and also what they can expect from us in providing a safe and environmentally responsible workplace.

Our Model Procedure for Site SH&E Committees requires all sites to have an SH&E Committee. Our site committees include representatives from management and elected representatives from each of the workgroups on site. Elected workgroup representatives make up at least 50% of the committee members. We consult with our employees and contractors during the establishment of SH&E objectives and targets, regarding changes to workplaces and operations and to resolve SH&E issues.

Site and business management teams are supported by:

- The Corporate SH&E group;
- Business Group SH&E Manager and business based SH&E advisers; and
- Technical specialists.

Management Systems

Our SH&E Management System has been developed to manage the interaction between people and the work environment. The System aims to ensure sustained compliance with legislative requirements, our Group SH&E Standards, the Responsible Care Codes of Practice and other external standards.

The System consists of the SH&E Model Procedures which define the key requirements of the SH&E Policy and provides guidance on how the requirements can be met. The Model Procedures capture good practice across the company.

Management attention is focused on critical SH&E procedures which control significant risks and for which a high level of compliance needs to be assured. These critical procedures usually require customisation to meet local needs, widespread training of personnel and in-depth internal and external auditing.

Compliance with the key requirements of both critical and non-critical procedures is mandatory for all businesses unless formal exemption is given by the Corporate SH&E Managers.

The SH&E Model Procedures provide the processes for:

- Identification, assessment and minimisation of risks from company operations and products;
- Compliance with legislative requirements;
- Specification and implementation of safe systems of work;
- Job cycle checks and job safety analysis;
- Establishing health and hygiene programs;
- Provision of information and training;
- Conservation of energy and other resources;
- Protection of the environment;
- Safe storage, transport and use of the company's products;
- Investigation and follow up of incidents and improvement opportunities;
- Establishing SH&E plans and objectives;
- Setting targets and monitoring SH&E performance;
- Internal auditing and company auditing (Business SH&E Reviews, Management Systems, Specialist, Significant Risks and Regulatory Compliance);
- Preparation of the SH&E letter of assurance;
- Demonstration of due diligence; and
- Communicating to stakeholders the company's SH&E activities and performance.

The requirements of the procedures are followed through work instructions and local practice. Systematic training programs including competency-based training are developed and implemented to assist all employees and contractors to carry out their tasks safely.

The SH&E Management System is continually developed to reflect learnings, newly identified good practices and external requirements.

According to our Model Procedures, all sites prepare Letter of Assurance annually, detailing the level of compliance with each of the SH&E Standards and actions plans to close any gaps. Further, the suitability, adequacy and effectiveness of the company SH&E Policy, Standards and SH&E Model Procedures and local SH&E management systems is reviewed at least every two years.

Activities in 2008

The Model Procedures are updated to reflect changes in reference documents, lessons learned from incidents, benchmarking studies and the results of employee feedback and management reviews. In 2008, our procedural update activities included the following:

- Major Hazard Facilities – updated in response to new Australian legislation;
- Incident Management – further clarification of incident types;
- Working from home – further clarification of process and company expectations; and
- Acquisitions and Divestments – improvements to our risk profiling approach for new acquisitions.

Training

Central to Orica's SH&E strategy is that appropriate training is in place to equip all personnel to carry out their tasks so as to take care of themselves and others. Our Model Procedure on SH&E Training states that "SH&E training needs for contractors and employees, including requirements for periodic re-training, shall be assessed at the time of employment and on appointment to new positions. Requirements for additional training shall be assessed whenever new materials, products, processes, equipment or systems are introduced in the workplace."

The Orica Corporate SH&E group develops, maintain and assist in the facilitation of SH&E Leadership Training modules including:

- Senior Manager and Business Management Leadership (one day);
- Operations Managers and Senior Manufacturing/Production Leadership (two day or three days if full Sustainability content included); and
- Commercial/Business Product Manager Leadership (one day).

All staff in positions of leadership are expected to complete the appropriate SH&E Leadership course every four years. Our Business Groups are required to nominate the appropriate personnel for training and to ensure training records are maintained. They can also initiate, and facilitate if required, additional courses as necessary based upon demand.

It is essential that all new Managers, either upon joining the company or for those moving into new senior manager/leadership roles, attend SH&E Leadership training within the first year of appointment. These courses aim to explore and develop the "leadership" characteristics of SH&E within the various roles, as opposed to delivering solely the technical aspects of SH&E. The modules are not intended to replace the business/site specific responsibility to train people in the necessary day-to-day aspects of SH&E.

Additionally, all principal Site Managers undergo a Site Manager's Competency Assessment, and preparation of a development plan, at least every four years.

Our Activities in 2008

Over the last two years our corporate sustainability team has developed and delivered a one-day Sustainability Workshop for our site managers and at six of our major operations. Together we explored sustainability trends, relevant legal obligations, the development of Orica's sustainability strategy and project brainstorming. Brainstormed ideas were scored on environmental and social benefit, cost and ease of implementation, with the top scoring projects being presented back to the group. These projects were given owners and implementation actions for the site and corporate sustainability team to track. Implemented projects include:

- Waste reduced by 240 tonnes per year at Gracefield site;
- Reuse of waste steam acid at Botany site;
- Reuse of filter cake waste in compost manufacture at Laverton site; and
- Many sites now have Sustainability Champions.

Risk Management

We use a consistent, risk-based approach to business management, including SH&E risk. Our company-wide Risk Policy has been updated to reflect the Australian Stock Exchange's Principles of Good Corporate Governance. Principle 7 requires that we review our approach and expand our disclosure on financial and non-financial risk. Our Sustainability Report is our primary mechanism for disclosure on non-financial risk.

We undertake annual risk assessments across all of our businesses. Assessments are undertaken at a Board, Group Executive and Business Group level and, where material, at a Business Unit or regional level.

Sustainability/SH&E Risk

Our SH&E Model Procedures require "ongoing systematic identification, assessment and management of SH&E risks associated with the company's activities, products and services" including:

- New facilities and equipment;
- Physical security risk assessment;
- New products and services;
- Job design and unusual activities; and
- Performance of individual tasks.

We aim to identify and prioritise attention on "critical" risk control measures such as design verification, training, scheduled inspection, testing and/or replacement, auditing and change management.

Critical risk control measures are typically those:

- Which protect against major incidents, including high severity, low probability events; and
- Which could be prone to loss of integrity.

Orica businesses are required to prioritise their implementation of the Model Procedures based on a risk profile of their activities and hence they logically address the most serious hazards first. It is a long-term goal to achieve and sustain compliance with the key requirements of all the applicable Model Procedures. This exercise involves the systematic splitting of the Model Procedure into four categories, defined as follows:

Category	Definition
<p align="center">Core</p>	<p>Eight Model Procedures that represent the key, basic tools that are common to every Orica site. The full implementation of these is mandatory for all Orica sites. They are: Modifications, Clearance to Work, Vehicles on Site, Forklift trucks, Emergency Plans, Incident Management, Job Safety and Environmental Risk Analysis (JSERA) and Hazard Studies.</p>
<p align="center">Critical</p>	<p align="center">Technology Critical</p> <p>High priority Model Procedures that are mandated by the relevant Expert Panel and deal with the management of risks inherent with the technology used on site. The set is common for all facilities utilising the same technology.</p> <hr/> <p align="center">Local Critical</p> <p>Any remaining Model Procedures that manage local-specific high-risk scenarios, as identified by site risk profiling. The implementation of these Model procedures is mandatory.</p>
<p align="center">Regular</p>	<p>These cover lower risk scenarios, but must still be implemented after the Critical categories have been addressed. The exception is certain Model Procedures that represent legal obligations, which must be in place.</p>
<p align="center">Reference</p>	<p>These are the Model Procedures that would be applicable to a site or Business Group's activities on a rare basis. These Model Procedures, if required can be accessed, read and implemented if the need arises, but would otherwise not be necessary to implement as part of normal SH&E management activities.</p>

Expert Panels

Expert Panels have been established to develop and set out the detailed requirements for the design and control of specified major hazard processes. The responsibilities of the Expert Panels are:

- To detail the “Basis of Safety” on which the processes should be designed and operated;
- To define the Critical Model Procedures which must be fully implemented for a particular technology;
- To authorise any major process changes;
- To audit compliance with Expert Panel mandated standards;
- To develop the technology specific engineering standards which must be applied;
- To review the process safety sustenance capital requirements and sign off that these are adequate to maintain integrity; and
- Approval of major projects from a process safety perspective.

Technology-based Expert Panels

Our Technology-based Expert Panels currently focus on:

- Ammonia;
- Ammonium nitrate and nitric acid;

- Chloralkali and Chlorine;
- Cyanide;
- Explosives;
- Initiating systems (IS); and
- Underground mining.

Functional Expertise Panels

Functional Expertise Panels have been established to support process integrity in the following areas:

- Instrument, electrical and control engineering;
- Mechanical engineering;
- Process engineering; and
- Project management.

The Functional Expertise Panels have been established to identify best practice standards in their discipline to ensure optimum asset integrity. They work with the technology based Expert Panels to keep them abreast of functional technical developments and provide a conduit for implementing external best practice.

Significant Risk Working Groups

Orica is also involved in other generic activities that involve significant risk. Significant Risk Working Groups have been established to develop the standards that will be applied across the company. These groups may change as the company's asset base develops. Our current Significant Risk Working Groups are:

- Dust;
- Flammables;
- Product control;
- Working underground; and
- Storage and handling of Dangerous Goods.

Our Manufacturing and Supply Chain Council is responsible for ensuring consistency across the network of panels.

Our Activities in 2008

An Expert Panel workshop was held in December to standardise approach and format. All four expert panels in the Orica Mining services business have made significant progress. All have agreed annual work plans against which progress is measured. Some examples of the work carried out to date are:

- Development of global standards for ammonium nitrate storage;
- Creation of new initiating system Process Safety Guides;
- Assessment of new technology by the explosives expert group; and
- Review of global standards for underground haulage vehicles.

The newly established Underground panel includes personnel from the Minova business. All panels are actively engaged in providing guidance in the design phase of major new projects.

Across OCP a number of active significant risk working groups designed to complement key improvement initiatives and recommend ongoing system improvements have been established. These include Ergonomics and Manual Handling, Traffic Management and Forklift Trucks, Clearance to Work, and Risk Assessment. Further groups will be launched in the coming year.

Good progress has been made at one of the company's highest risk facilities, Wurgendorf, Germany. New equipment was implemented for the laboratory nitration test. The Corporate Audit of the facility found that management of the core procedures was of the highest standard in comparison to any of the facility audited in the last three years.

Incident Management and Reporting

Our Model Procedures define our requirements for immediate action, classification, investigation and reporting of SH&E and Physical Security incidents. Corrective and preventive actions are then taken, and learnings are shared.

We collect and report all significant (Category 2 or above) SH&E incidents across the organization, in our Sustainability Report and, where required by our licencing agreements, directly to our relevant regulator. Category 2 SH&E incidents include:

- A significant loss of containment;
- Injury and/or damage to equipment, property or the environment;
- Major traffic disruption or involvement of local media; or
- A non-conformance with environmental legislation, standards or licence conditions which at some time (eg annual licence report) will need to be reported to an authority.

General learning incidents are captured at a lower threshold (Category 3). These events are recognized as events that should prompt corrective actions to be taken to prevent a serious incident in the future.

Due Diligence

Our SH&E due diligence processes are a vital part of our internal benchmarking and compliance assurance approach.

Corporate SH&E Auditing

Our Corporate SH&E Auditors perform their auditing activities at the request of the Orica Limited Board of Directors. They gather information on the effectiveness of sites SH&E management systems, their compliance with the Model Procedure key requirements and their potential environmental legacy issues.

Sites are selected for audits using a risk-based prioritisation system, which aims to best utilise the resources available. The results of the prioritisation exercise are published as an annual auditing plan, which is approved by the Corporate SH&E Manager as being representative of Orica's risk profile. The findings of these audits are initially reported to the site teams, Business Group General Manager and the Corporate SH&E Manager. They are then logged in the Corporate Auditing Database for reference purposes.

Each audit is accompanied by a series of recommendations for prioritisation and action by the site and Business Group management teams.

2008 Performance

The new risk-ranking model for Corporate Auditing is now well established and has facilitated long range scheduling. Consequently the compliance to auditing schedule performance has improved with a reduction in the number of audits cancelled/deferred and the ability to more efficiently plan cost effective travel schedules and maximise auditor utilisation. Risk profiling of newly acquired sites has occupied a sizeable portion of the half year schedule, but has been critical in developing a broad understanding of the full spectrum of risk management issues for the company and associated Site Managers. This has been evidenced most recently with the ex-Dyno Nobel sites, as well as Minova and Excel Mining Systems. Accompanying this has been the well established Significant Risk Audits (SRA) and SH&E Management System (SHEMS) audits, with developments in the former being linked to the generation of a more coordinated approach with the PHS process, which has also alleviated site concerns about resourcing.

The Environmental Impact Audit program continues to deliver strong results. The generation of very detailed assessments of selected sites (based on a risk exposure analysis derived from the Site Contamination Surveys) has resulted in the identification of issues allowing effective remediation plans to be developed and intervention at as early a stage as possible.

Letters of Assurance

Each year our Business Groups are required to prepare Letters of Assurance to the CEO on their SH&E, Physical Security and Financial performance. This process enables the CEO is able to assure the Board that our systems are being implemented effectively.

The process is a holistic statement of compliance and performance as well as a gap analysis for operating sites, which can be used by management to quickly identify areas for

focus. It also assists in providing assurance that our employees work in a safe environment and in accordance with legislative requirements.

The SH&E Letter of Assurance submissions from each Business Group are reviewed each year by the Corporate SH&E and Manufacturing Manager.

Code of Ethics

We are committed to operating to the highest standards of ethical behaviour and honesty and with full regard for the safety and health of its employees, customers, the wider community and the environment. Orica directors, executives and employees must act with integrity and honesty in the day-to-day performance of their jobs and in any situation where their conduct and behaviour could influence respect for the company. All of our people are trained in the use of our Code of Ethics when they join the company.

Our global “Speak Up” Hotline receives reports concerning instances of non-compliance with Orica’s Code of Ethics, standards and policies. We have created communication materials in 18 languages to improve awareness, and encourage use, of the service by our employees.

All of our Business Units are analysed for risks related to corruption through our Letters of Assurance process and concerns raised through our Hotline. All legitimate issues are brought before an internal panel of senior management representatives including the Company Secretary and Legal Counsel. We have a “zero tolerance” policy on confirmed instances of fraud. Such breaches of our Code of Ethics result in immediate dismissal and broad internal communication about the application of our Code.

We do not make political donations. We do, however, actively engage with relevant public agencies in all countries where we operate.

Activities in 2008

In 2008 we conducted a global internal engagement campaign to increase the understanding and application of our Code of Ethics and use of the “Speak Up” Hotline.

In 2008 we received two calls to our Hotline; one grievance regarding smoking in the workplace and another regarding a sick leave application.

Our Code of Ethics has been expanded to include a user-friendly “question and answer” section on each major topic.

Health and Safety

Overview

We are committed to valuing people and the environment, and in particular, achieving our goal of No Injuries to Anyone, Ever.

Our SH&E Policy states that we will:

- Strive to ensure our facilities operate to the highest standards to protect our employees, contractors, neighbours and the environment;
- Sell only those products that can be produced, transported, stored, used and disposed of safely;
- Provide appropriate information and/or training on the safe use and disposal of our products to our customers and consumers; and
- Encourage employee initiatives that contribute to a safer and improved environment at work, at home and in the community.

Our commitment to Health and Safety is an integral part of our Sustainability Strategy. Key elements include:

- Line management responsibility and employee accountability for health and safety performance;
- Effective implementation of our SH&E Management System and Basis of Safety Program;
- Setting and achieving health and safety key performance indicators;
- Effective reporting and follow up on health and safety incidents; and
- Recognition of efforts to improve our health and safety performance.

Contractors

Our contractors are an integral part of our workforce. Our SH&E Model Procedures state that “Contractors shall be given all relevant information regarding the company's materials, products and activities which may impact on the safety, occupational health and environmental impact of the work to be performed”. Our contracted employees receive appropriate induction training prior to commencement of work.

Hazardous Processes

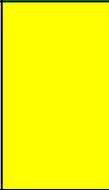
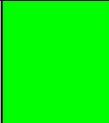
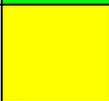
Our SH&E Model Procedures aim to provide guidance to the management requirements of hazardous processes. Given the critical nature of safety risks in our businesses, Expert Panels and Significant Risk Working Groups have also been established to detail the “Basis of Safety” on which the processes should be designed and operated.

Read more about how our Expert Panels provide the detailed requirements for the design and control of specified major hazard processes at Risk Management.

Our Performance in 2008

Challenge 2010 Milestones (Baseline year 2004)

Overall performance against target:	
	Target exceeded or ahead of schedule
	Target achieved or on track
	Target behind schedule

Objective	2010 Target	2008 Performance	
Safety and Health			
No worker fatalities	All worker fatalities: 0		No fatalities reported during 2008
Reduce the recordable injury and illness case rate by >40%	All worker recordable injury and illness case rate: < 0.40 (per 200,000 hours)		Our overall recordable case rate increased to 0.72 in 2008, compared to 0.60 last year
Sustained compliance with our health assessment and occupational hygiene programs	Health assessments completed against plan: >99%		98.2% of health assessments were completed in 2008, compared to 97.4% last year.
	Hygiene tests completed against plan: >99%		95.4% of hygiene tests were completed in 2008, compared to 97.4% last year.
	Hygiene tests below the Occupational Exposure Limit (OEL): >99%		98.1% of hygiene tests were below OEL in 2008, compared to 96.2% last year.

Disclosure on management approach

2008 was the first time in seven years that the company recorded no fatalities to either employees or contractors. Our All Worker Recordable Case Rate was 0.72 compared to 0.60 last year and a target of 0.58. There were seven fatalities to members of the public as a result of distribution incidents; however in none of these cases was the Orica contracted haulier or Orica driver at fault. Substantial progress continued in reducing Orica's environmental footprint; in particular there was an absolute reduction in the company's total greenhouse gas emissions. The integration of the recently acquired Minova Excel business proceeded to plan. Health monitoring and general awareness of health issues continued to develop proactively.

Strong leadership, clear standards and thorough training are the foundation of achieving good safety performance. Application of these principles in a culturally sensitive manner is also vital for long-term improvement. Orica Mining Services (OMS) has introduced the

“Take 5” program globally to embed these principles. Its success can only be measured over a period of years but it is an excellent step to underpin personal safety across the organisation.

The AWRCR in Orica Consumer Products (OCP) has moved sharply upwards, with a frequency rate of 2.57 compared to 1.67 last year. A thorough “back to basics” strategy is now in place to help our organisation more effectively read the safety warning signals and act. The initiatives, some of which have been completed in 2008, include:

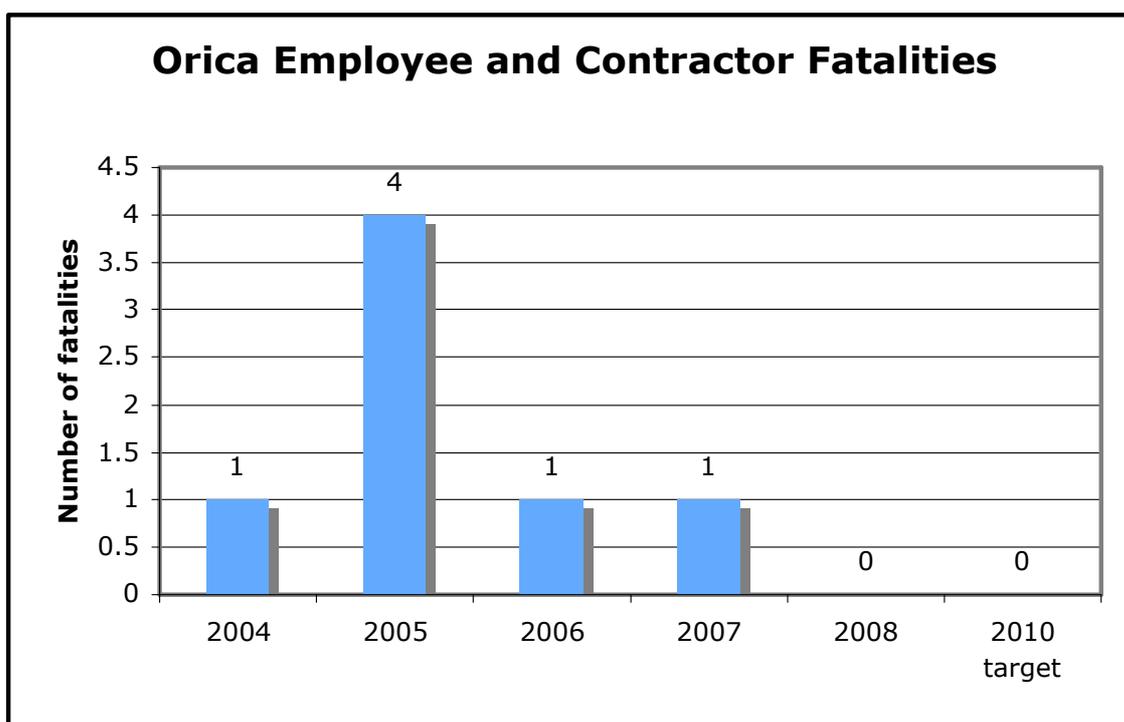
- Developing a comprehensive Personal Safety Improvement Strategy focusing on nine key areas to give systemic, sustainable improvement;
- Cross-site audit program of common OCP critical model procedures;
- Behavioural Safety leadership and Root Cause Analysis training for operations managers and supervisors;
- Appointment of additional SH&E resources; and
- Site safety days for all employees at key operational sites (similar to OMS’ *Stop and Think*) with an external speaker and group activity to develop site safety “Golden Rules”.

There was significant progress during 2008 in the management and reporting of company health and hygiene programs. For the first time 100% compliance was reported in health and/or hygiene programs in a number of businesses. Particularly pleasing has been the progress made in a number of the company's operations where the establishment, maintenance and reporting of these programs required significant logistical difficulties to be overcome. Given the continuing expansion of the company's operations into remote areas with limited resources, continuing focus on implementation and reporting of health and hygiene programs will be required.

Injuries and Illnesses

Fatalities

In 2008 there were no fatalities to either employees or contractors. While we are pleased with this result, we recognise that this is the first time this has occurred since 2001. There have been twelve fatalities to Orica employees and contractors since the company started in 1997. We will continue to work towards our SH&E Policy aspiration “No Injuries to Anyone, Ever”.



Injuries and Illnesses

Our overall recordable case rate frequency increased to 0.72 this year, compared to 0.60 last year and our target of 0.58.

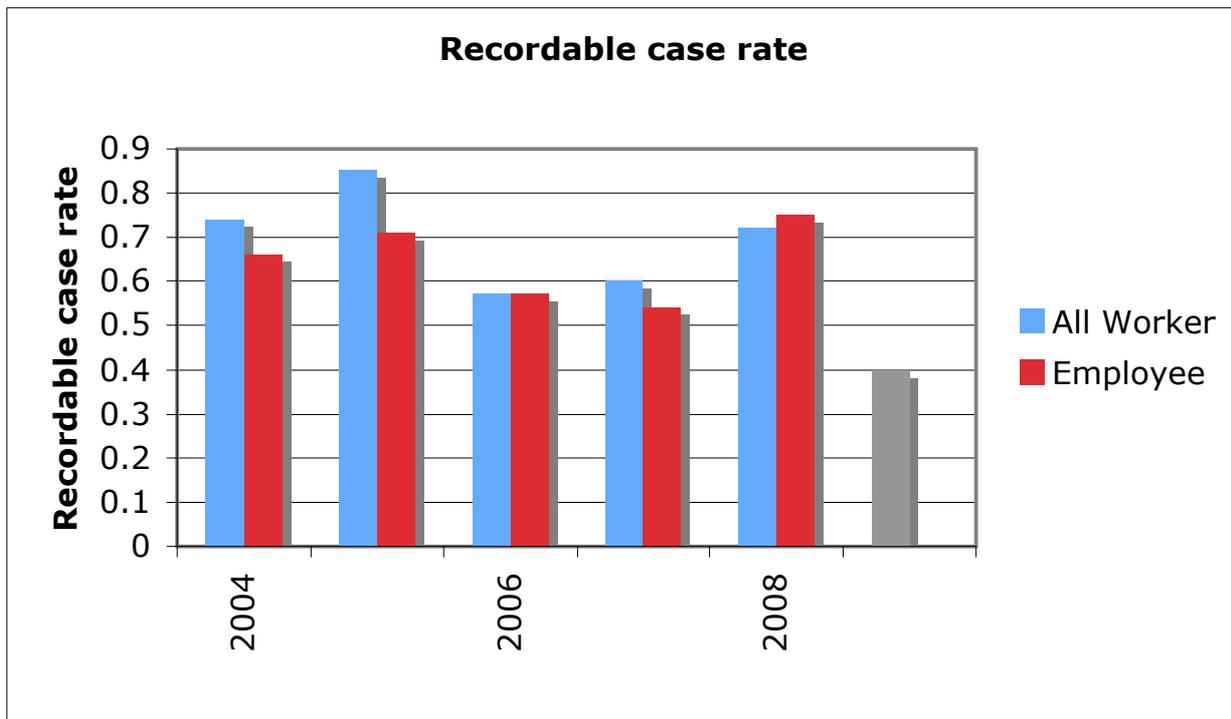
At an individual business level:

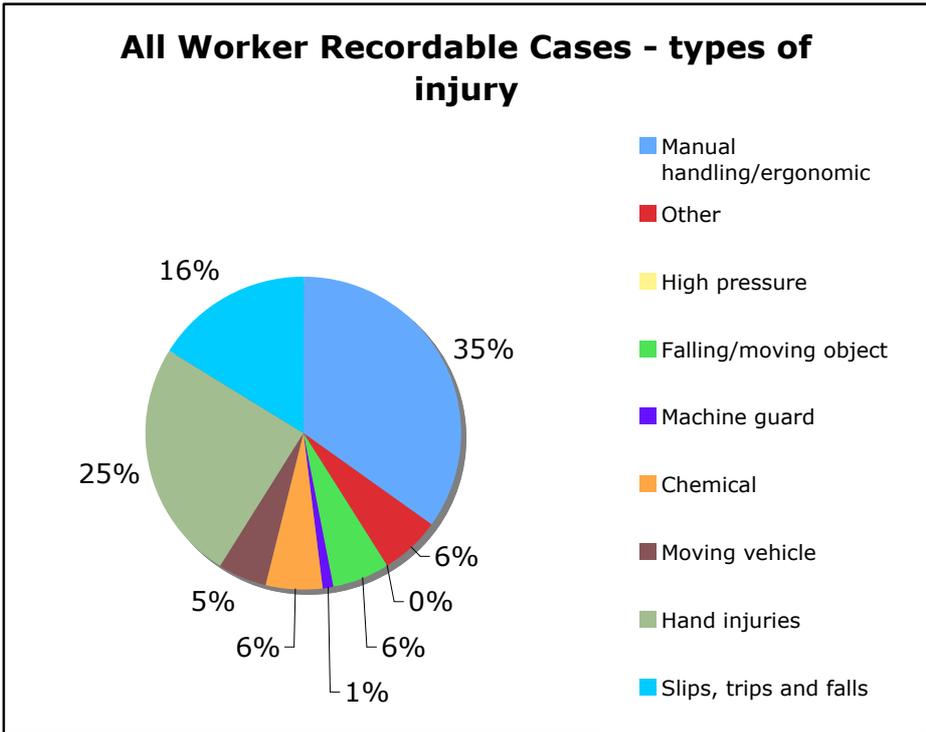
- Orica Mining Services (OMS) demonstrated strong performance with their frequency rate decreasing from 0.36 in 2007 to 0.35 in 2008. OMS has introduced the “Take 5” safety program globally;
- Chemical Services and Chemnet demonstrated excellent performance with very low recordable case rates (0.46 and 0.36 respectively);
- The recently acquired Excel/SCS business had a historical recordable rate of approximately 7.0. This is a reflection of the high level of manual activity and older assets in the business. Under Orica ownership the rate has already reduced to 4.6 as the company’s culture starts to have an effect; and
- Orica Consumer Products’ (OCP) performance deteriorated, with a frequency rate of 2.57 compared to 1.67 last year. Most of the incidents were of the sprain and sprain type. OCP has undertaken a fundamental analysis of their performance and has implemented a thorough “back to basics” safety strategy.

The major incidents that occurred in the company during 2008 were:

- **Gomia** – an explosion in the detonator assembly building caused one operator to lose his hand and another to suffer burns to his chest. Both operators were hospitalised but have since made a full recovery. The root cause was failure to properly define basis of safety principles, which led to the operators being placed in an unsafe environment;
- A contractor fractured his skull when he fell nine metres from a bench at the **Beenleigh quarry in Queensland** owned by Boral. The root cause was failure to carry out a proper risk assessment and as a result failure to provide any kind of physical barrier between the operator and the edge of the bench face; and
- Two employees required treatment (and in one case hospitalisation) after being exposed to the biocide “Proxel” when a spillage occurred whilst washing out vessels on the **Rocklea, Brisbane** paint manufacturing complex. Another fifty operators were affected by the incident which lasted well over a week. Root cause was failure to implement satisfactorily the basic core procedures which included clearance to work, incident investigation and modification. Disciplinary action was taken against several employees as a result of the incident.

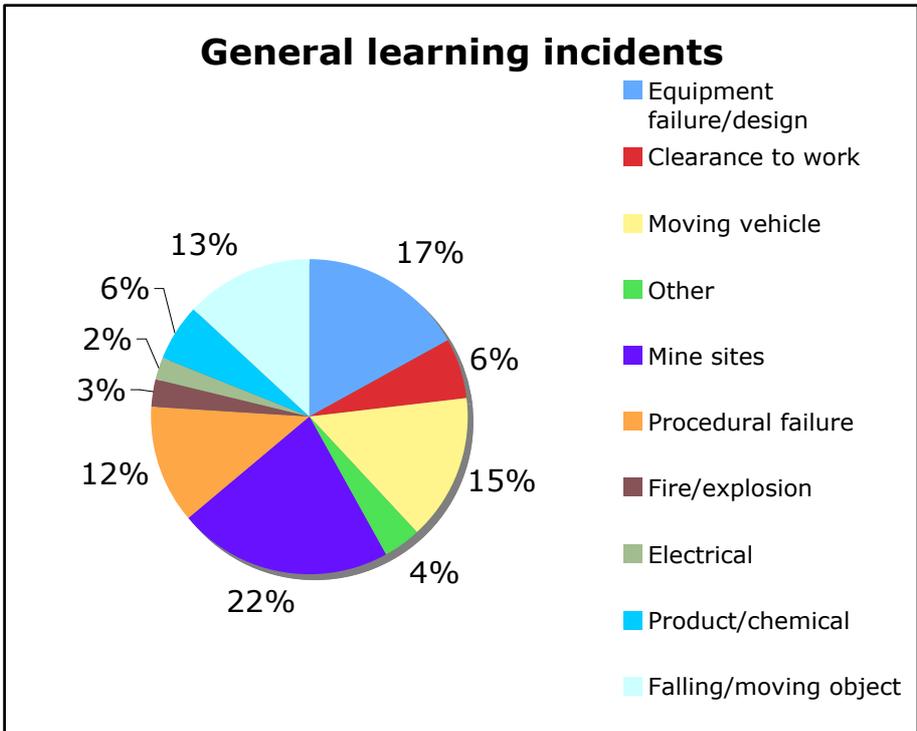
Although there has been an increase in recordable case rate over the last two years, the absolute level is still very good when benchmarked with other companies and the severity of incidents is reducing. We will continue to reinforce safety leadership and drive the implementation our SH&E Model Procedures.





Learning Incidents

There were 145 major learning events across the company in 2008, a similar rate to last year. The majority of incidents involved moving vehicles or forklifts on sites, equipment failure or type/design, and falling objects. A large number of incidents also occurred on mine sites, involving misfires, unauthorised movement of vehicles into blast areas or flyrock extending from the blast area.



External Events

Orica monitors safety incidents in peer organizations with the aim to integrate lessons learned into our own practices. In 2008 there were a number of serious incidents in peer organizations that resulted in multiple fatalities and serious injury.

The learnings for Orica moving forward are clear:

- Ensure that our managers know and understand the lessons from the past, and why so much emphasis is placed upon basic core procedures. Programs are being deployed to cover both these issues; and
- Process Safety continues to be a major focus throughout our industry. The rigour applied needs to be of the highest quality to avoid continued failures.

Process Safety

The main aspects to developing the company's performance in this area are:

- Establishment of *Expert Panels* that determine the Basis of Safety in each major process area;
- Periodic Hazard Studies, which involve a holistic review of all the changes and modifications that have occurred in a plants basic design; and
- Analysis of Process Safety events

Read more about our process safety performance in our case studies:

- A safe approach to blasting in an urban environment;
- Yarwun Cyanide Plant Shutdown;
- Robot improves mine safety; and
- Relocating Head Office staff and equipment.

Process Safety Incidents

A process safety incident is one that would typically involve the failure of a key control measure that may lead to an actual or potential major consequence or major risk event such as a loss of containment, environmental discharge or significant injuries. We recorded 402 process safety-related incidents in 2008, most of which were minor in nature.

All process industries have significantly increased their activity in this area following a serious incident at BP, Texas City in 2005. We are working together with other industries to define common metrics including sharing best practice. The Centre for Chemical Process Safety in the USA have published a methodology for categorizing process safety incidents; our major incident at Gomia in 2008 would fall into their top tier incident measure.

The initial review of the 2008 process incidents indicates that less than twenty-five incidents had a failure of a crucial control or protective system that could have resulted in a major event. The most serious were:

- An ammonium nitrate oxidiser pump was dry pumping for about two hours because of blockage of the suction line;
- Nitric acid back flowed into an absorber through the absorber's discharge non-return valve whilst the plant was shut down. The acid then penetrated the air and gas trains

of the plant damaging the waste heat boiler and contaminating the process gas pipe work and vessels;

- Nitric acid had no flow path out of the plant so filled the absorber to a level that resulted in the surge control system operating to protect the machine and hence tripped the Nitric Acid Plant;
- Several relief valves on ammonia pumps were found to still have the original protection plug on the inlet side when removed for overhaul. The relief valves had not been removed since they were installed during commissioning;
- A bleed valve on the discharge side of a cyanide solids dissolving tank pump released cyanide solution when the pump automatically started for a wash down, resulting in a loss of containment within the surrounding area and near where two E&I technicians were working on the solids dissolving tank level transmitter;
- Five ammonia relief valves were found to be isolated under clearance whilst the ammonium nitrate plant was still online;
- Water and sulfuric acid mixed in a secondary chlorine drying tower that resulted in damage to a pump tank through an exothermic reaction;
- A chlorine plant tripped when the pressure rose because a chlorine compressor overfilled with sulfuric acid and resulted in carry over of acid into the Chlorine Liquefier, storage tank and associated plant; and
- Hammering in an ammonia manifold and pipeline was detected upon commencement of unloading a ship due the discharge pressure exceeding the agreed three bar maximum pressure at the manifold.

Expert Panels

Expert Panels have been established to develop and set out the detailed requirements for the design and control of specified major hazard processes.

Read more at: [Risk Management](#)

Periodic Hazard Studies

Periodic Hazard Studies is an ongoing process being implemented across the company. These studies test how process hazards have changed from the original design over the life of a plant. Studies result in an updated risk profile and a review of the effectiveness of relevant controls on the site. Our SH&E Model Procedure for Hazard Studies states that our approach "...is based on the premise that the preferred approach to the control of hazards is their elimination where reasonably practicable. This is aided by application of the hazard study process from the earliest stages of project development where the application of the concepts of inherent safety and corresponding techniques for protection of the environment and health can be utilised."

In 2008 these studies continued to be one of the basic foundations of ensuring process safety. The program schedule is on track and resourcing has been increased to meet demand.

Product Safety

Product Incidents

10 significant (Category 2+) product incidents were reported in 2008 compared with 14 in 2007. Three incidents were the result of product detonation or firing failure during mining blasts, two due to blast holes being incorrectly loaded with the wrong grade of product, two instances of chlorinated products leaking from tanks at customer sites, a fire occurred onboard a customer contracted truck carrying company product, the cross contamination of a customer's storage tank and one instance of poor quality print durability on product bags.

Material Safety Data Sheets

Over the past few years, it has become increasingly important that users of all types of materials, including chemicals, paints, agricultural chemicals etc., obtain a Material Safety Data Sheet (MSDS) prior to the use of a product.

Why do we need a MSDS?

Although many substances may present hazards when used at work or at home, provided these hazards are firstly known and understood and then secondly appropriate precautions taken, hazardous substances can be used safely. The key to this safe use is the provision of adequate information about the substance, effective dissemination of this information, followed by its proper use. Material Safety data Sheets (MSDS) are a critical part of the information cycle. Internationally, MSDS are used by suppliers and manufacturers of chemical substances to provide the information required to allow the safe handling of substances wherever they are used, be it at work or around the home. In fact, in many countries throughout the world, including Australia and New Zealand, there is a legal obligation to make such information available within the workplace. MSDS thus assist employers to discharge their legal obligations under workplace health and safety legislation in respect of the general duty of care to employees by providing them with the information on the hazardous substances that they are working with and the hazards associated with those substances.

What information is provided by an MSDS?

The MSDS provides information on:

- Product identification including:
 - Product name
 - Physical description and properties
 - Uses; and
 - Composition
- Health hazard information;
- Precautions for use; and
- Safe handling information.

The information provided on the MSDS will assist those who use the substance to develop correct occupational hygiene and safety procedures and to exercise the desired degree of care. With this appropriate information users can:

- Use substances correctly and safely;

- Understand safety recommendations and the rationale for these recommendations;
- Be aware of the results of failure to comply with these recommendations;
- Recognise symptoms of over exposure; and
- Take part in informed employer-employee discussions.

What information does Orica provide?

The MSDS must be written in an approved format and contain the information specified by law. Orica's MSDS are formatted in the internationally recognised 16 point style, and so the information is presented in a uniform manner under the following headings:

1. Identification of the Substance/Preparation and the Company/Undertaking;
2. Composition/Information on Ingredients;
3. Hazards Identification;
4. First Aid Measures;
5. Fire Fighting Measures;
6. Accidental Release Measures;
7. Handling and Storage;
8. Exposure Controls/Personal Protection;
9. Physical and Chemical Properties;
10. Stability and Reactivity;
11. Toxicological Information;
12. Ecological Information;
13. Disposal Considerations;
14. Transport Information;
15. Regulatory Information; and
16. Other Information.

Why is a MSDS so complicated?

The information which a supplier must make available is very complex. The range of information is also extensive to reflect the broad range of people to whom the MSDS is targeted, and not just those handling and using the substance concerned. For example, a MSDS must be sufficiently detailed to enable a workplace health and safety expert within a factory situation to give informed guidelines to workers; a doctor needing to refer to a MSDS in the case of a poisoning incident, or a user wanting to know the recommended personal protection to use.

How often is a MSDS updated?

If a change is made to the product such as its composition or there are changes to Government regulations, a review of the MSDS is required to be undertaken. In any case, suppliers and manufacturers must update their MSDS at least every five years unless there is new applicable information. In this situation, the MSDS must be updated immediately.

How do I obtain an Orica MSDS?

If you require a MSDS for an Orica product, please refer to the appropriate Orica business web sites for contact details.

Occupational Health

Our occupational health strategy is consistent with contemporary occupational health practice in hazardous industry and based upon the principles of:

- Assurance of control of exposure to hazardous agents and working environments;
- Fitness for work, including safety critical workers and travel health; and
- Health and wellbeing.

The company's occupational health programs are directed towards:

- Risk management of hazards eg chemical, physical and psychological hazards;
- Ensuring that employees are fit to perform their work tasks without increased risk to the health and safety of themselves or others with whom they work; and
- Active rehabilitation of employees with work related injuries or illnesses to minimise disability and promote a prompt return to their normal work and social activities.

Fitness for Work

Our fitness for work program aims to ensure the integrated application of measures required to ensure the ongoing fitness for work. This is commensurate with the risk management consequence of the activity being undertaken, and include:

- Health surveillance and monitoring programs;
- Pre-placement and work transfer medical reviews;
- Fatigue risk management;
- Drugs and alcohol; and
- Recording, analysis and management of absences and sick leave etc.

Health Promotion

Health promotion is part of the company's approach to the support and development of its people. Parameters for delivery of health promotion activities have been defined which take into account health issues in different countries, the size and nature of sites and businesses, individual needs and the needs of work groups. The company's Intranet site enables employees in a number of countries to have ready access to health information from reputable sources.

A number of Personal Safety and Health programs and initiatives have been undertaken across the organisation during the year. Notable examples include Padstow, Selleys, Deer Park, Gracefield and Chemical Services.

Within Mining Services, increasing attention is being placed on company drivers of heavy vehicles, not just in the area of medical fitness, but also the impact of drugs and alcohol and fatigue.

We have education, training, counselling, prevention, and risk-control programs in place regarding serious diseases. For example:

- Free HIV Aids testing and education is offered to our employees in Zimbabwe;
- We are continuing to develop our response plans for potential pandemic influenza

- outbreak; and
- We have enhanced our safety rules and advice for travelling employees.

Read more in our health case studies:

- Chemicals Group promotes good health; and
- Dulux helps make New Zealand sun-safe.

Psychological Health

Balance between work and social activities and commitments and stress prevention are addressed through a management training package and advice on stress minimisation is also provided to individuals. Where Employee Assistance Programs are available, free access is provided to employees and their immediate family members.

Rehabilitation

Rehabilitation programs minimise disability through early intervention and close cooperation between treating medical and paramedical personnel, the employee and company rehabilitation staff to progressively increase work and non-work related activities consistent with a person's physical and mental capacity. Active rehabilitation is undertaken not just for work related injuries or illnesses, but also for non-work related medical problems wherever practical.

Health Assessment Programs

Health assessment programs are targeted to specific jobs and potential exposures. They also comply with state and national regulations in the countries in which the company operates. Program performance is systematically monitored during the year using our safety, health and environment data management system (SHERMIS) to ensure program compliance.

There was significant progress during 2008 in the management and reporting of company health and hygiene programs. For the first time 100% compliance was reported in health and/or hygiene programs in a number of businesses. Over 7,500 health assessments were conducted across the company's operations in 2008 with a 98.2% compliance with plan overall compared with 97.4% in 2007, and 100% compliance was achieved across two business groups. Particularly pleasing has been the progress made in a number of the company's operations where the establishment, maintenance and reporting of these programs required significant logistical difficulties to be overcome. Given the continuing expansion of the company's operations into remote areas with limited resources, continuing focus on implementation and reporting of health and hygiene programs will be required.

Hygiene Monitoring

Our "assurance of exposure control" processes includes:

- Setting of appropriate global exposure standards to priority hazardous agents;
- Comprehensive hygiene assurance processes to be in place at sites; and
- Control of workplace hazardous substances (chemicals and materials) within the company operations.

Hygiene programs are subject to regular systematic review to ensure they remain closely aligned to the hazards in the workplace and to enable them to be promptly modified to take into account new controls or the introduction of new agents. Program performance and compliance with exposure standards are also systematically monitored throughout the year using SHERMIS to enable any areas requiring attention to be promptly identified.

Orica maintains comprehensive exposure monitoring (occupational hygiene) programs across its operations where indicated by the nature of exposure. These programs monitor exposure to noise, solvents and other chemicals and dusts. In 2008 over 2,900 samples were taken. Overall, compliance with the relevant occupational exposure standards was 98.1% compared with 96.2% in 2007. In 89.7% of cases exposure control was achieved by use of engineering and other means, with the dependence on the use of personal protective equipment (PPE) for the control of exposure in only 8.4% of cases.

Very substantial progress has also been made in controlling exposure to lead. All sites worldwide – except for one – are now fully compliant with Orica's rigorous blood lead standard. This is a major achievement. Considerable attention and resources have been directed by the business to exposure control measures at the remaining site, with the intent to achieve compliance with the Orica standard in the near future.

This year 2,908 hygiene samples were taken, representing 95.4% compliance with the company's hygiene sampling plans. 98.1% of samples taken were within the relevant exposure standards.

Travel Health Safety and Security

As an international company with an increasing diversity of operations, Orica employees may be seconded or required to travel to areas where specific health, safety and security hazards may be present and where the level of medical support in the event of illness or injury may vary significantly, and be sub-optimal in some cases.

Processes are in place to ensure that Orica employees travelling internationally are fit to travel, appropriately medically prepared, fully informed of any health, safety and security hazards and the relevant precautions and/or local procedures to be followed. Information on health, safety and security risks is also readily available to company employees via the company Intranet and in some areas of the company, employees have access to personal on line specialist Travel Medical assessment and support.

An Orica global Travel Health, Safety and Security booklet has been launched targeting the health and security issues of foreign travel and encompassing the scope and diversity of the company's global operations.

This booklet supplements the information available through the Orica Travel Health Safety and Security database.

There is increasing evidence that travellers are taking greater responsibility for their Travel Health Safety and Security and it has been given a high level of attention by the OMS EMEA business given the frequent travel undertaken to high-risk locations eg. Africa and some remote areas of Eastern Europe.

Pandemic Influenza

Orica has developed a Corporate Pandemic Influenza Contingency Plan supported by plans that have been developed by each business group.

A standing Corporate Pandemic Influenza planning committee is in place, chaired by the General Manager, People and Community, and comprising senior management responsible for SH&E, risk and communications and functional occupational health resources.

Case Studies

Safety

A safe approach to blasting in an urban environment

Orica Mining Services

Our SH&E risk management approach ensured the successful excavation of a new multi-storey multiple building complex on the Gold Coast, Australia. Located in the busy central business district, we faced many environmental and public safety risks; the project required blasting adjacent to existing building walls and within twenty-five metres of surrounding residential and commercial buildings. Public evacuation during blasting was not an option. Our Job Safety and Environmental Risk Assessment approach was undertaken with our customer, Raptis Group, resulting in the firing of twenty-six blasts fired without incident during the project. Mark Mossop, the Construction Manager for the Raptis Group said, "Safety is the biggest thing to us and it is to them (Orica) as well. Orica took the job seriously to the point that we didn't have any more questions!"

Yarwun Cyanide Plant Shutdown

Orica Mining Services

We have achieved one of our most complex and extensive upgrades ever attempted on one of our existing plants. Our Yarwun Cyanide plant is a hazardous operating environment, and the surrounding major hazards facilities made this task an extremely challenging project. We undertook a collaborative approach, establishing alliance contracts with various parties and securing an over-riding agreement from the project manager to complete the work safely and surely, regardless of cost and time pressures. By working together, without incident, the business saved possibly \$1-2 million in reduced downtime. The new work environment is safer, quieter, and with production capacity expanded by 20,000 tonnes per year.

Robot Improves Mine Safety

Orica Mining Services

Orica's Kurri Kurri technical team has developed a robot to enhance mine efficiency and improve worker safety.

One of the greatest risks associated with hard-rock mining is the process of drilling through rock and then inserting explosives, a task normally completed manually by Orica employees. The highly developed robot will now complete this task.

"Kurri Kurri" the robot, fittingly named after its "birthplace", began full operation this year after completing gruelling testing in simulated conditions. Manager, David Randall, said, "After locating the existing holes which have been drilled manually by Orica employees, the machine automatically places the detonator and primer at the bottom of the hole and fills it up with explosives. Originally, we were thinking about how to make the task safer for people to carry out, but gradually our thinking moved to the idea that we could remove the need for people to be involved at all in this part of the job. If the roof fell on the robot it would mean a loss of money, but no one would be hurt and that was the main thing for Orica."

The Kurri Kurri team is now working to improve the robot so that it is capable of drilling holes before inserting the explosives, further reducing the risks associated with hard-rock mining undertaken around the world by Orica.

Relocating Head Office staff and equipment

Orica, Melbourne, Australia

We relocated 180 staff members from our Melbourne Head Office to a temporary office without any recordable safety incidents. To allow for building refurbishment, we moved all staff and their associated equipment and furniture in one weekend. Critical procedures were reviewed and a Safety Management Plan was created for office refurbishment works. Continuous communication with our staff about their safety was our priority before and during the move. We also briefed our removalists and IT contractors regarding our safety expectations.

Health

Promoting good health in the workplace

Orica Chemicals

In 2008 our Chemicals Group engaged 210 Australian employees in their Health Promotion program.

The health checks involved a 45-minute consultation conducted at Orica locations in NSW, Queensland and Victoria. Its primary objective is to provide each employee with a basic understanding of their current state of health, their health risk profile and a plan of action of future benefits. Our employees participated in:

- Questionnaire-based risk profiling;
- Physical measurement of health parameters;
- Reporting and action plans; and
- Doctors referrals and follow up.

A full report was presented to the Senior Management team that described participation in the program by location, age and gender, risk factors (e.g. blood glucose, BMI, cholesterol levels, blood pressure, physical activity, eating habits) and recommendations for improvement. In response to the programs findings we are now developing our approach to promoting:

- Increased physical activity;
- Improved nutrition and dietary habits;
- Weight management; and
- Support for employees wishing to quit smoking.

Dulux helps make New Zealand Sun Safe

Dulux, New Zealand

Dulux New Zealand partnered with the New Zealand Cancer Society to help ensure trade and do-it-yourself painters were sun-safe this summer. We donated NZ\$1 to the Cancer

Society each time particular Weathershield products were sold during the 2008 summer period, raising over NZ\$85,000.

Retail and trade stores gave away nearly 2,000 litres of free sunscreen during the three-month campaign. We also ran advertisements in national media to raise awareness of the need to be sun-safe.

General Manager Dulux New Zealand Greg Warren said the project came about from a genuine desire to make a wider contribution to the New Zealand community. Cancer Society chief executive officer Dalton Kelly says it is an ideal relationship as both organisations have a culture that focuses on people and their environment. "This is an important issue we need to continually address and with Dulux's help we will do that, especially with do-it-yourself and trade painters," he said. For more information on how to be sun-safe visit www.sunsmart.co.nz.

Environment

Overview

Orica aspires to be a business that does no harm to people and the environment. This means a transition to:

- Carbon neutral – no net generation of greenhouse gases to the atmosphere;
- Water neutral – no net consumption of potable towns water;
- Zero waste – no net generation of waste to landfill and requires innovative ways to prevent, reduce, reuse and recycle by-product streams; and
- Environmentally friendly operations, products and services – no unintended consequences to the environment and the community

...in a commercially responsible way.

Our SH&E Policy states that we will:

- Strive to ensure our facilities operate to the highest standards to protect our employees, contractors, neighbours and the environment;
- Continue to seek ways to efficiently use materials and energy;
- Sell only those products that can be produced, transported, stored, used and disposed of safely; and
- Seek to develop new or improved products and processes to improve the contribution we make to the quality of people's lives and to minimise the impact on the environment.

Our commitment to the environment is an integral part of our Sustainability Strategy. Key elements include:

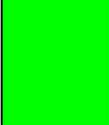
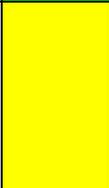
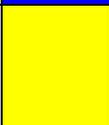
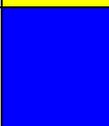
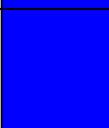
- Line management responsibility and employee accountability for environmental performance;
- Effective implementation of our SH&E Management System;
- Undertaking product life cycle studies to ensure that SH&E risks are assessed and minimised as far as practicable;
- Setting and achieving environmental key performance indicators;
- Effective reporting and follow up on environmental incidents (within our operations and during product distribution); and
- Recognition of efforts to improve our environmental performance.

Our SH&E Model Procedures address the management of legacy sites, ongoing environmental management, design issues and safe movement of product from supplier to customer. All of our facilities, as a minimum, must comply with the legal requirements of the jurisdiction in which they operate.

Our Performance in 2008

Challenge 2010 Milestones (Baseline year 2004)

Overall performance against target:	
	Target exceeded or ahead of schedule
	Target achieved or on track
	Target behind schedule

Objective	2010 Target	2008 Performance	
Reduce energy consumption	Reduction in energy consumption: >15%		14.0% reduction in energy consumption (per tonne of product) in 2008, compared to a 5.7% increase last year.
Reduce emissions of greenhouse gases	Reduction in emissions of total carbon dioxide equivalent gases: >35% comprising:		21.6% reduction in total greenhouse gas emissions (per tonne of product) in 2008, compared to an 18.8% increase last year.
	- Reduction in emissions of carbon dioxide equivalent gases (excluding nitrous oxide): >15%		20.2% reduction in carbon dioxide equivalent gases, excluding nitrous oxide (per tonne of product) in 2008, compared to a 20.4% increase last year.
	- Reduction in emissions of nitrous oxide: >50%		22.0% reduction in emissions of nitrous oxide (per tonne of product) in 2008, compared to an 18.0% increase last year.
Reduce water consumption	Reduction in water consumption: >15%		26.9% reduction in water consumption (per tonne of product) in 2008, compared to a 10.9% reduction last year.
Reduce waste generation	Reduction in waste generated: >50%		55.0% reduction in waste generation (per tonne of product) in 2008, compared to a 50.7% reduction last year.

Disclosure on Management Approach

In 2008 Orica demonstrated excellent performance across all environmental measures. Energy consumption, greenhouse gas emissions, water consumption and waste generation were all considerably lower than baseline values. This year we included treated water sales from the Botany Groundwater Treatment Plant (GTP) in production figures.

Senior management tracks Orica's sustainability performance quarterly. From June 2008 we commenced the inclusion of quarterly reports from small sites, which previously reported six-monthly. This move will increase the accuracy of our mid-term reporting. In Australia, this will enhance the accuracy of data reported to the National Greenhouse and Energy

Reporting System (NGERS), which came into effect July 1st 2008.

Spills and Incidents

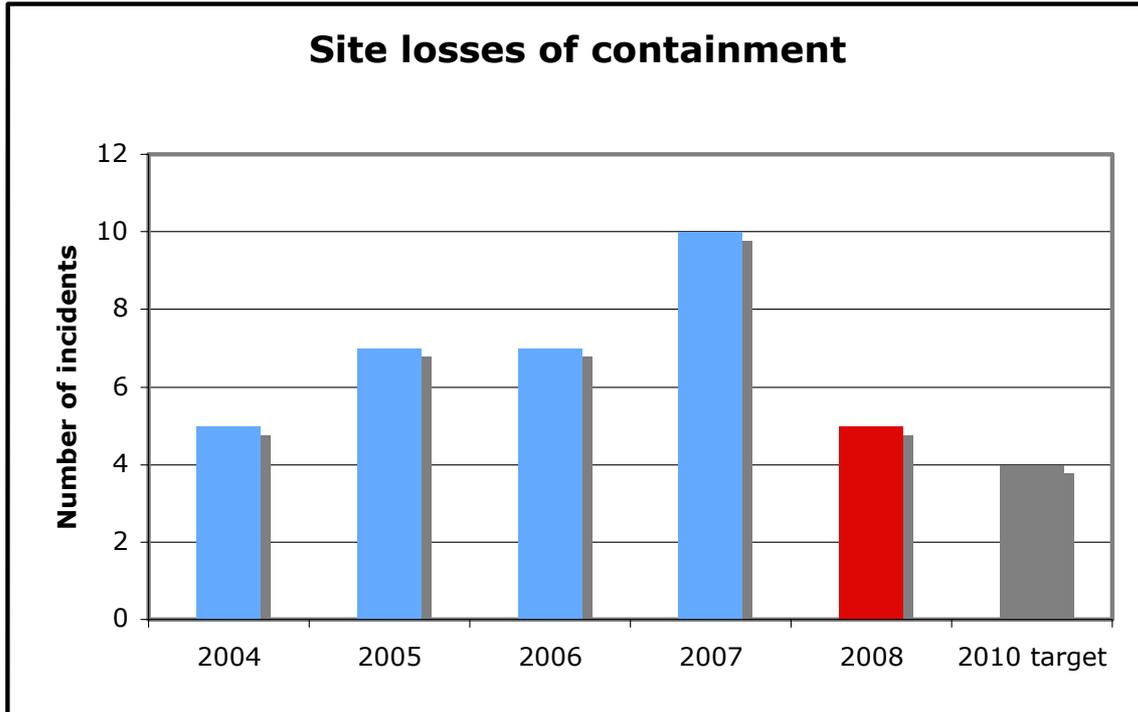
Losses of containment

There were five serious (Category 2+) site losses of containment recorded at our operations in 2008, compared with 10 in 2007. There were no injuries as a result of the losses. Incident investigations were undertaken in each case and appropriate corrective actions implemented to prevent further recurrences. Sites also record and investigate minor leaks or spills of product that are quickly brought under control.

Location	Volume (kL)	Material (oil, fuel, waste, chemical, other)	Description
Morrinsville, New Zealand	1	Aluminium sulphate	The seal of a transfer pump failed and 1,000L of aluminium sulphate was lost from a storage vessel to a bund. The spill had the potential to breach the site's pH storm water discharge consent.
Itauna, Brazil	12	Ammonium nitrate solution	During the unloading operation from a truck 12 tonnes of ammonium nitrate solution was lost from a storage tank when a valve was inadvertently left open. The AN liquor drained to the effluent treatment plant where some of the liquor then flowed down a paved path and reached a nearby creek before it was contained.
Brownsburg, Canada	0.002	Lead azide	The funnel from a lead azide charging vessel was missing and resulted in a 1.5 kg spill during loading.
Mt Druitt, Australia	0	Bittering agent (denatonium benzoate)	Production staff were evacuated due to reports of bitter tastes in their mouths. The taste was attributed to the spill of very small quantities of the bittering agent (denatonium benzoate) used in some products.
Rocklea, Australia	2	Process wash water	2,000L of wash water dosed with a biocide additive was lost from a mixer when an open inspection hatch on the base of the mixer was left open after cleaning.

Read our spills management case study:

- HSNO Project Team improves chemical storage.



Read more about our Distribution Incidents in the Community Section of this Report.

Compliance

Where applicable, manufacturing licences and consents are in place at each Orica site, in consultation with local environmental regulatory authorities. Monitoring data is collected to measure compliance with licence conditions. Any breach of licence limits is reported to authorities as required and is investigated to determine cause and ensure the risk of recurrence is minimised.

There were 17 instances of licence non-compliance compared to 29 last year, which is a significant improvement. The most serious Category 2+ incidents were:

- Yarwun, Australia – four non-compliances relate to low-level cyanide in the Yarwun storm water system. This is an ongoing problem during periods of heavy rain, which causes the ingress of ground water into the storm water piping; and
- Port Kembla, Australia – two instances in which sulphur dioxide stack emissions breached the site licence limit.

Monitoring

During 2008, in excess of 39,800 tests, most involving continuous sample monitoring and automatic analyses were completed across the company's operations in order to assess compliance of emissions (e.g. air, water, noise) with environmental licences and regulations. There were 34 environmental non-compliances reported to our internal management system during 2008 (compared with 29 in 2007 and 15 in 2006), representing a compliance rate of >99.9%. 17 of these non-compliances were also reported to external regulators in accordance with our licencing agreements.

Environmental Prosecutions

There were no environmental prosecutions in 2008. Our Marion, Illinois USA facility was fined US\$11,000 for a number of infringements as a result of a general inspection by the U.S Department of Labor (Occupational Safety and Health Administration (OSHA). All matters identified have since been addressed to OSHA satisfaction. The facility has since entered into a voluntary inspection regime with OSHA to take a more proactive stance in the management of regulatory SH&E compliance.

Regulatory authorities issued two infringement notices for the following licence breaches:

- Botany, Australia – Groundwater Treatment Plant for licence non-compliances listed in site Annual Return; and
- Morwell, Australia – clean up notice for spill of brine solution into storm water drains.

Our Yarwun site in Queensland, Australia site was charged with 14 breaches of environmental licence for activities in the 2008 year. This has yet to be heard in the Land and Environment Court.

Read our compliance case study:

- Ferric Scrubber reduces acid mist.

Legacy Issues

We manage legacy issues associated with historical operations at a number of our sites. Increasing attention has been given to recording the history and known contamination of such sites, the assessment of risks and the management of those risks, and recording any protective or remediation measures.

Our SH&E Model Procedures state:

- Land Protection Management – a Land Dossier shall be compiled and maintained indefinitely under secure document control to record information about known or potential contamination of such sites, the assessment of risks and the management of those risks; and
- Remediation of Land – a Responsible Manager shall be appointed to manage any significant decommissioning, decontamination and removal projects and/or the remediation of land.

Examples of where we progressed our SH&E Policy commitment of “no harm to people and the environment” in 2008 are as follows:

- The Botany Groundwater Treatment plant in New South Wales (NSW) is fully operational and is successfully treating contaminated groundwater;
- Treated water is being recycled for industrial use;
- We are continuing to seek approval for the export of HCB waste for treatment in Europe. The material continues to be stored safely and securely at Botany;
- Planning approvals are in progress to treat contaminated soil at our Botany, NSW, site. It is expected that treatment of the soil will commence in 2009;
- We will soon be seeking planning approval to treat contaminated soils for the implementation of the proposed Remediation Action Plan for the Villawood, NSW,

site;

- The demolition, investigation and cleanup at our Seneca site in USA are proceeding to schedule. This has included the emptying of an 18 million gallon water lagoon containing low levels of nitrogen and applying the water as a fertilizer; and
- The clean up of two sites in Norway, Gullaug and Engene, is advancing with removal of old equipment and the disposal of contaminated soils. Investigations and remediation activity are continuing.

Read our legacy issues case study:

- Site closure and environmental clean up in the United Arab Emirates.

Energy

Our Model Procedure for Resource Conservation states that each of our facilities will “minimise the consumption of energy and non renewable resources, consistent with its SH&E policy, objectives and targets. Where appropriate, individual targets and action plans to meet the company's targets shall be included in the short and long term SH&E plans for the Facility”.

The company's energy consumption for this period was 4.25 gigajoules per tonne of production, a 14.0% decrease compared to the 2004 baseline. Inclusion of production figures from the Groundwater Treatment Plant at Botany, combined with incremental efficiency improvements across many of our sites, has improved our overall energy efficiency. These activities have brought us very close to achieving our Challenge 2010 energy target of a 15% reduction in energy consumption per tonne of product.

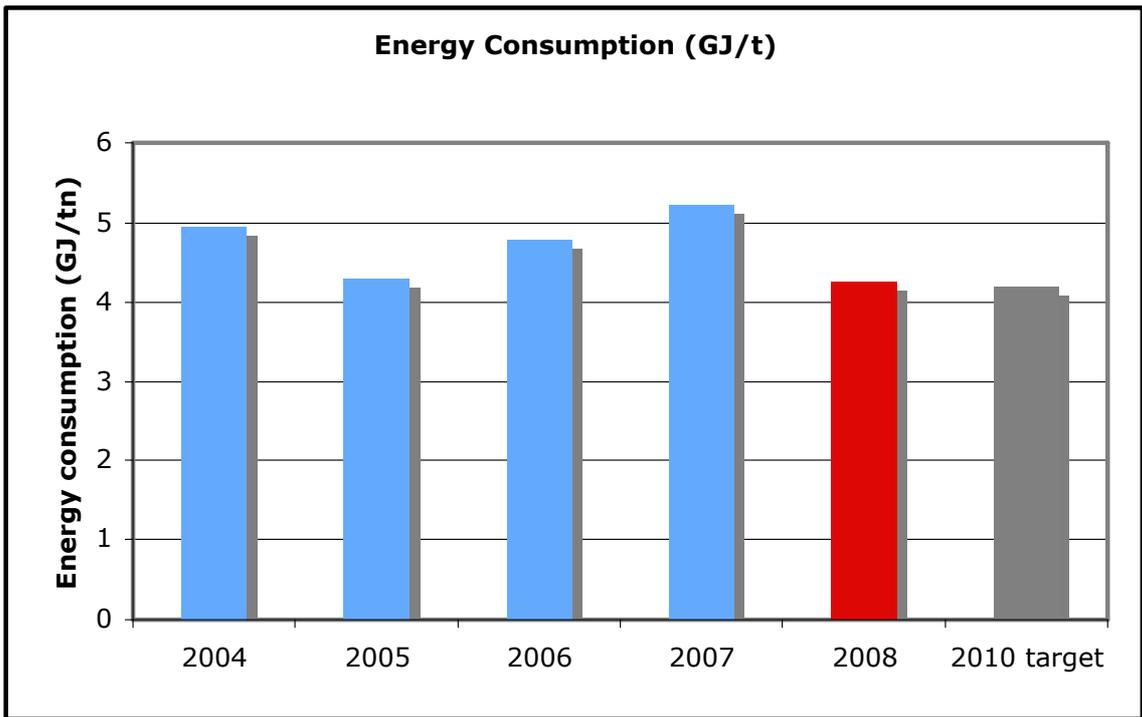
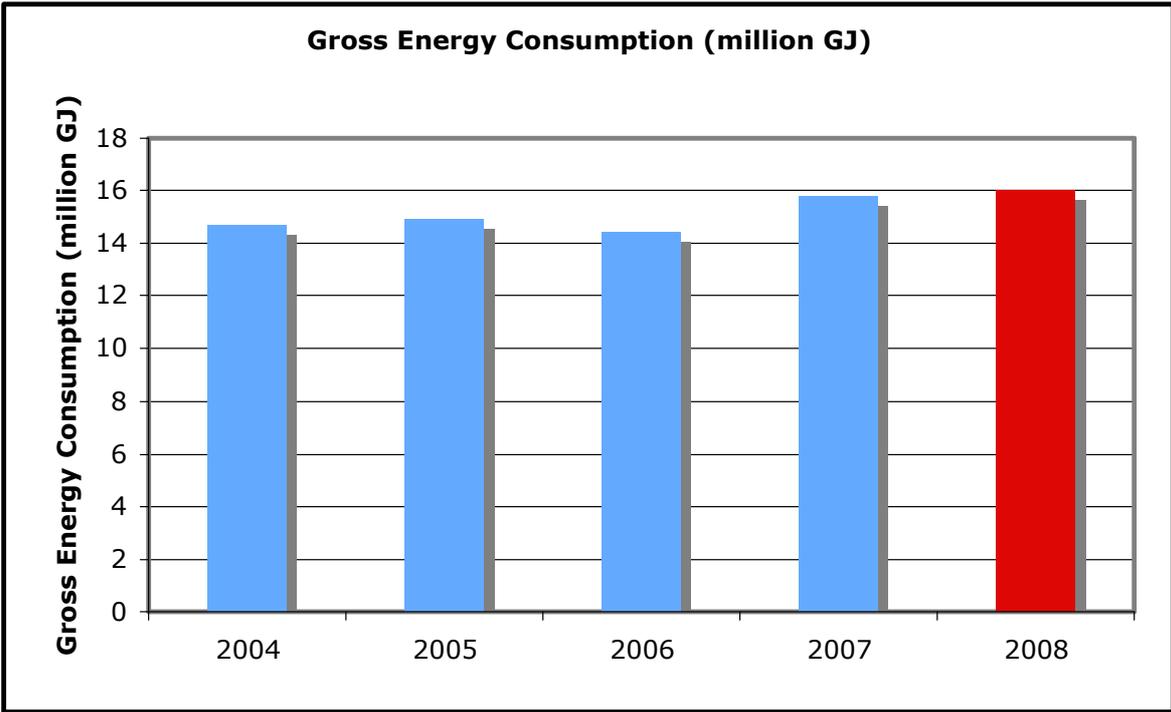
Gross energy consumption was 16 million gigajoules for the period, 1% more than over the same period last year. Of this, approximately 78% was natural gas and 20% was electricity, with the remainder being a mix of LPG, diesel, oil, steam and coal. Most of the natural gas is consumed by the Ammonia Plant at Kooragang Island as fuel and as feedstock for the process. Orica uses a small proportion of renewable energy, primarily at our Latin American sites, as part of our overall energy mix. We do not produce or sell direct energy (i.e. coal, natural gas or LPG).

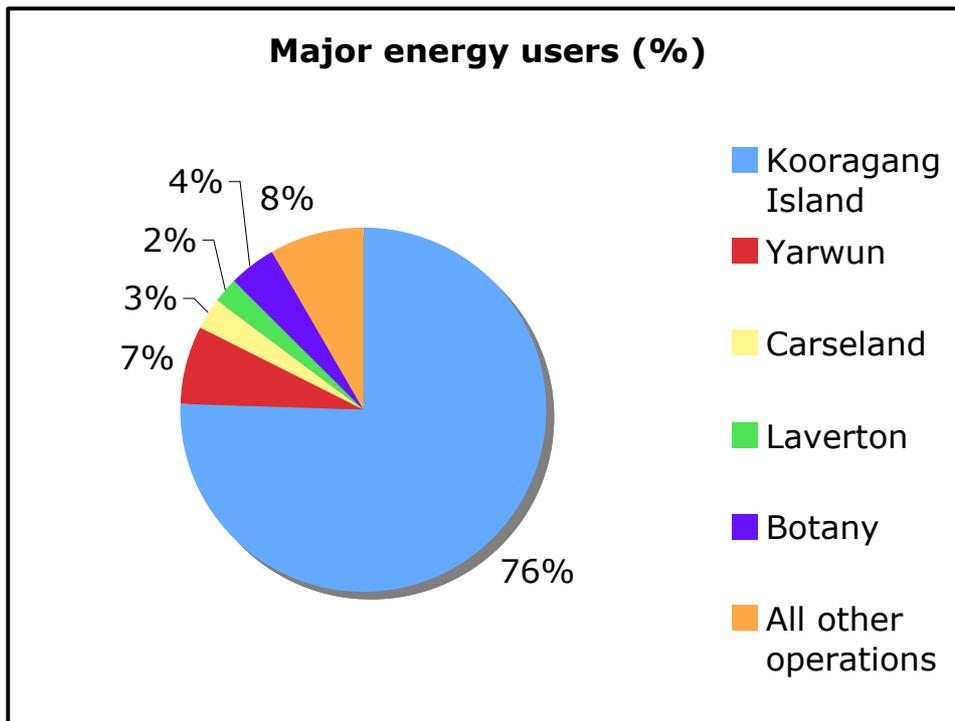
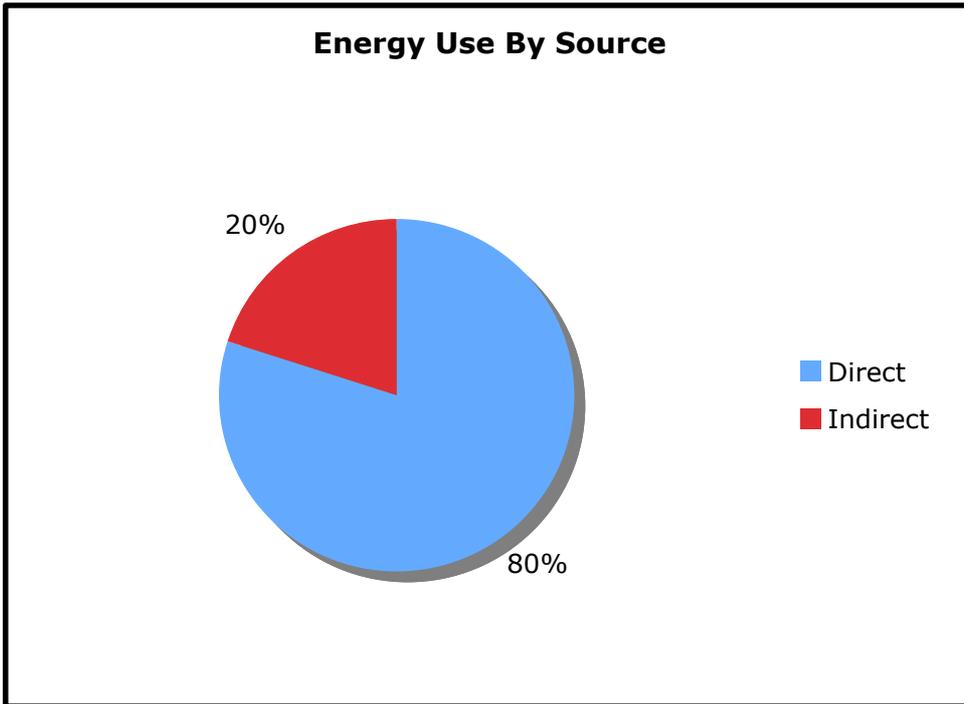
Kooragang Island consumed the majority (75.6%) of the company's total energy, followed by Yarwun (6.9%), Botany (4.2%, split between the Groundwater Treatment Plant and the Chloralkali Plant), Carseland (2.7%) and Laverton (2.2%).

A new internal additive pump has been installed to replace an oversized pump at Carseland. Estimated annual energy savings are 325,000 kWh.

Read our energy management case study:

- Greening IT.





Greenhouse Gas Emissions

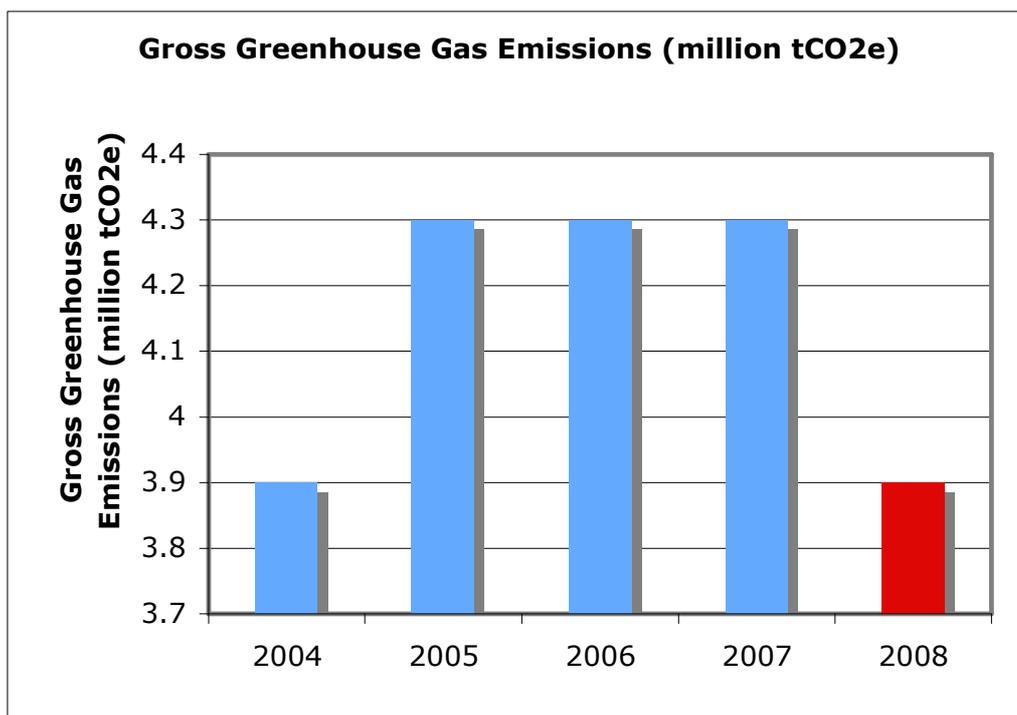
Orica currently measures and reports two greenhouse gases: carbon dioxide (CO₂) and nitrous oxide (N₂O). CO₂ is generated when energy is consumed and is measured in tonnes of CO₂ (tCO₂). N₂O is emitted as a by-product of nitric acid manufacture and is measured in tonnes of carbon dioxide equivalent (tCO₂e). Total greenhouse gases (CO₂

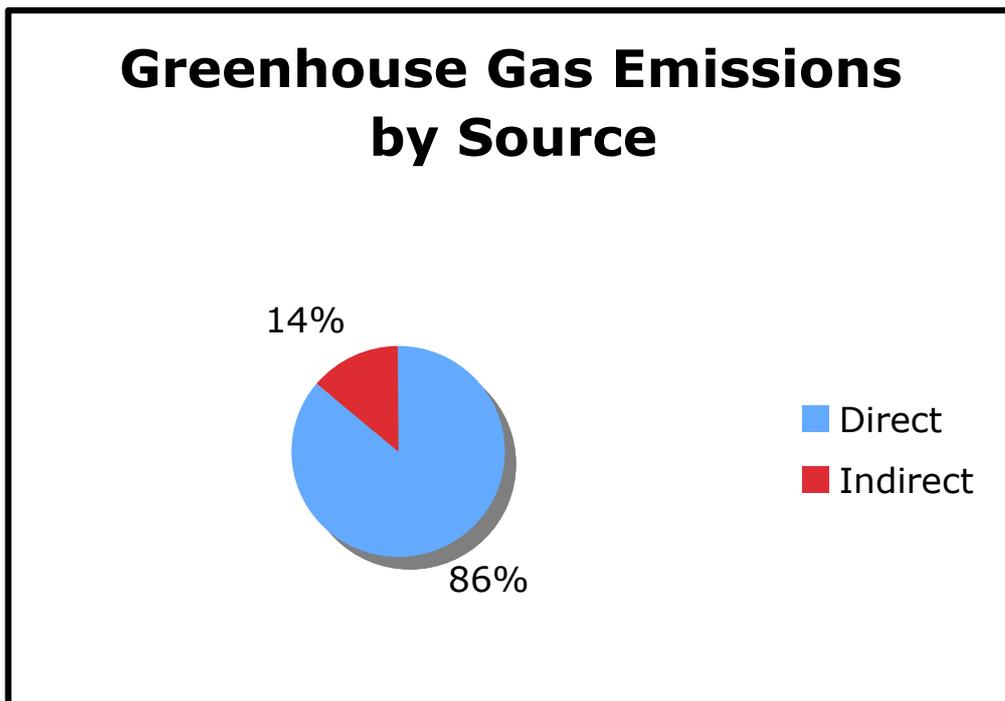
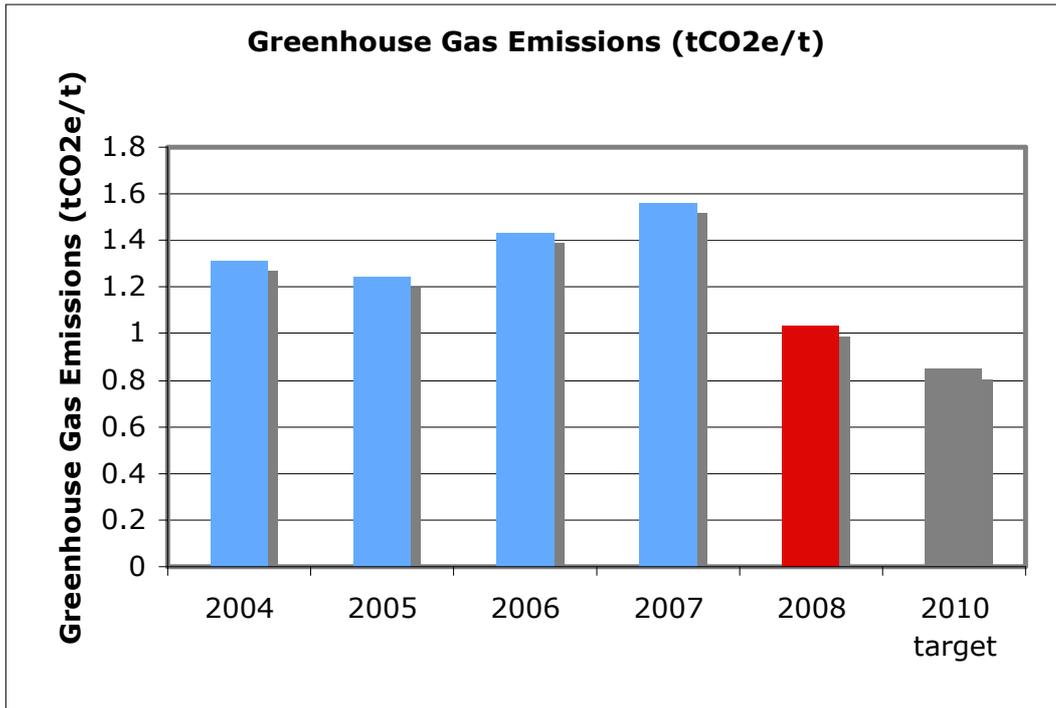
and N₂O combined) are reported in tCO₂e. In 2008, 32% of greenhouse gas emissions were CO₂ and 68% were N₂O.

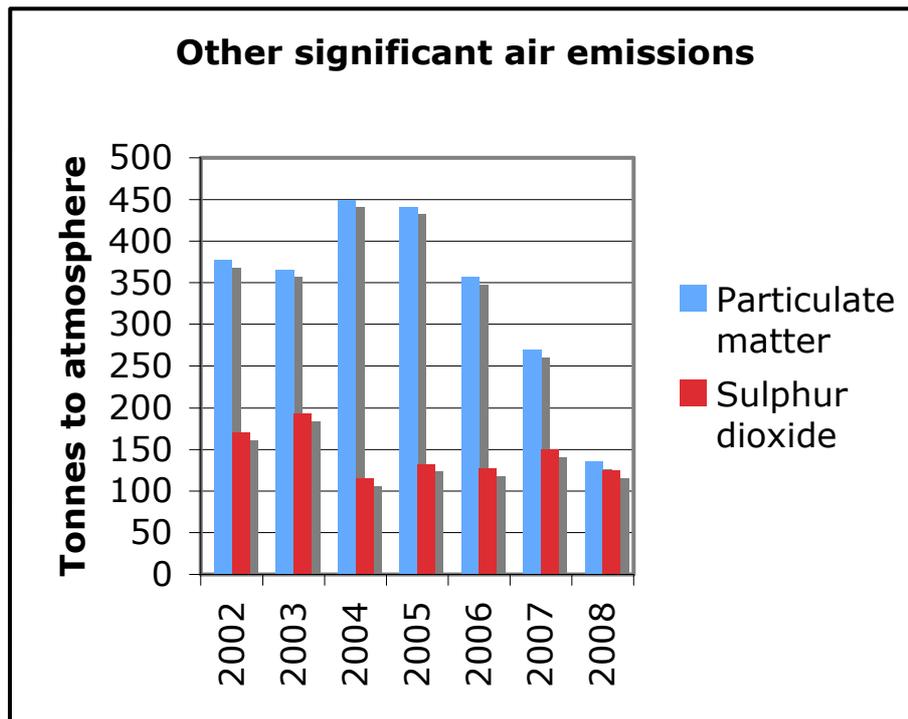
Our total greenhouse gas emissions (comprising carbon dioxide and nitrous oxide expressed as carbon dioxide equivalent) for the 2008 financial year were 1.03 tonnes of carbon dioxide equivalent per tonne of production, a 21.6% reduction on the 2004 baseline. The installation of N₂O abatement technology on Nitric Acid Plant 1 at Carseland has reduced gross greenhouse gas emissions by an average of 50,000 tCO₂e per month. Further installation of abatement technology should see us meet our Challenge 2010 target of a 35% reduction in total greenhouse gas emissions (and 50% reduction in N₂O emissions).

Emissions of CO₂ and N₂O were 20% and 22% lower respectively than the 2004 baseline.

Kooragang Island is our most greenhouse-intensive site, contributing 39.8% of Orica's total greenhouse gas emissions in 2008. Yarwun contributes 30.8% and Carseland contributes 17.7%. Reducing the impact of emissions from these sites has been recognized as a priority. Secondary nitrous oxide abatement commenced in late May 2008 at Carseland.







Water

Orica consumes water for use in cooling towers, as a raw material for product manufacture, for washing equipment and process areas, for safety showers and eye wash stations as well as other uses such as employee amenities.

Our Model Procedure on Resource Conservation states that “each Facility shall monitor progress against its objectives and targets and shall report electricity, fuel and water consumption “.

The inclusion of water sales from the Groundwater Treatment Plant has improved water efficiency in 2008. Combined with the improved collection of water consumption data and various efficiency projects, we are very pleased to report that we have exceeded our Challenge 2010 water target of a 15% reduction in water consumption per tonne of production.

The company’s water consumption for this period was 2.33 kilolitres per tonne of production, representing a 26.9% decrease compared to the 2004 baseline.

Gross water consumption for the period was 8.9 million kilolitres (kL), a 2% increase compared to last year.

The highest water consuming sites for this period were Kooragang Island (36.6%), Yarwun (20.3%), Carseland (13.0%), Gomia (6.2%) and Monclova (4.9%).

We are reducing consumption of potable water through the supply of treated water from our Botany Groundwater Treatment Plant. In 2008 we supplied more than 460,000 kL to our nearby Chlorine Plant and third party users. This water reuse project resulted in Orica and Genos (who also consumed GTP treated water) winning the Plastics and Chemicals

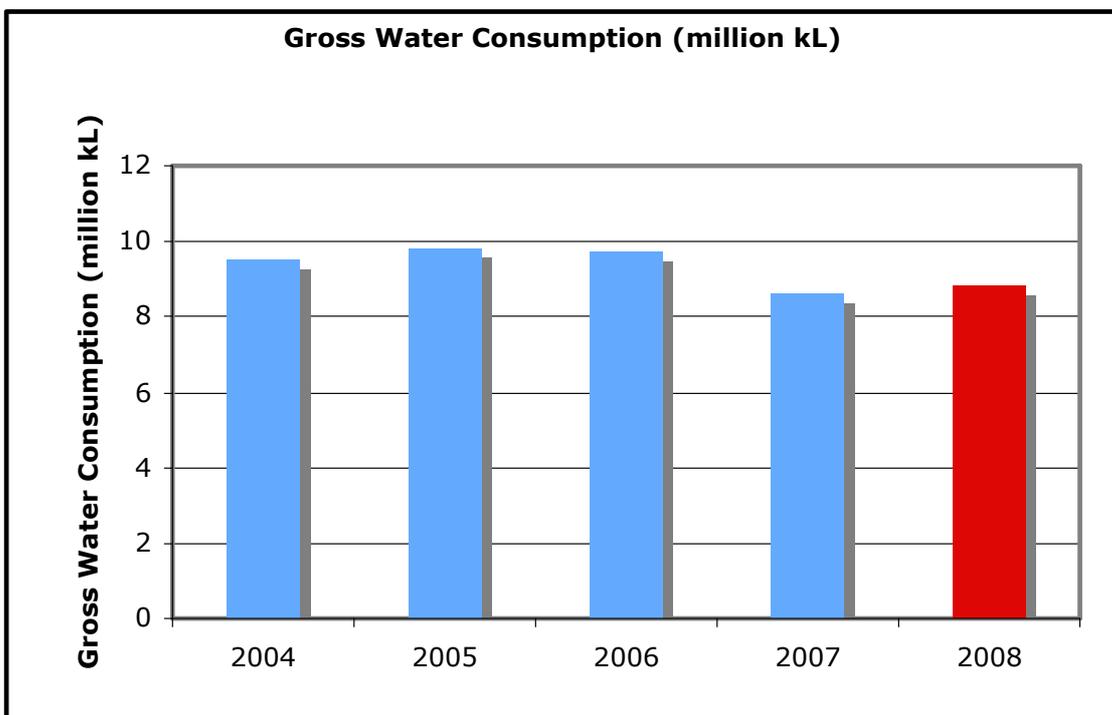
Industry Association (PACIA) Environment Award.

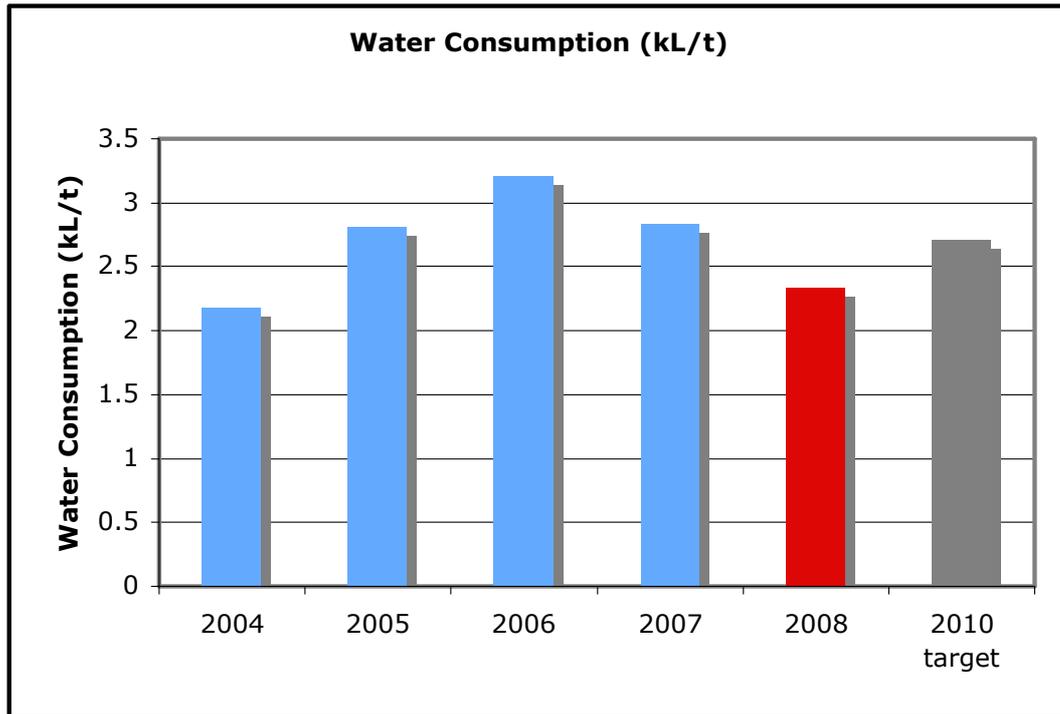
Kooragang Island commenced preliminary design for the supply of 100% recycled water from the Hunter River. If successful, this project will reduce Orica's total water use by 30%.

Laverton reduced their use of potable water consumption in cooling tower water make-up by 10,000 kL over the period through improved management of cooling tower blowdown.

Read our water management case studies:

- Melbourne Water Treatment Plants Project;
- YATES Wyee Dam Overflow; and
- Separating storm water and wastewater at Mt Maunganui.





Waste

Our guiding principle of waste treatment and disposal is to, as far as practicable, minimise the impact of waste on the environment and the community. Waste management options are selected in the following order of priority:

1. Cleaner Production – the elimination and minimisation of waste streams (usually at source);
2. Reuse and Recycling – to be considered where cleaner production options are not practicable; and
3. Treatment and Disposal – to be considered where cleaner production, recycling and reuse options are not practicable.

Our Model Procedure on Waste Management states that “Each site shall establish and resource waste minimisation targets, consistent with its SH&E policy, objectives and targets and any local environmental licence and legislative requirements.”

Waste generation is reported in the Waste and Energy Database by more than 200 sites on average every month. Waste is classified as either hazardous or non-hazardous, and is then reported in one of the following five categories: waste sent to landfill; waste recycled; waste reused; waste destroyed or treated on site; and waste stored on site.

Since 2004 there has been a considerable improvement in waste data collection, along with an increase in the number of sites reporting waste. Many waste reduction projects have been implemented and, as a result, we achieved our Challenge 2010 waste target in 2005, 2007 and 2008.

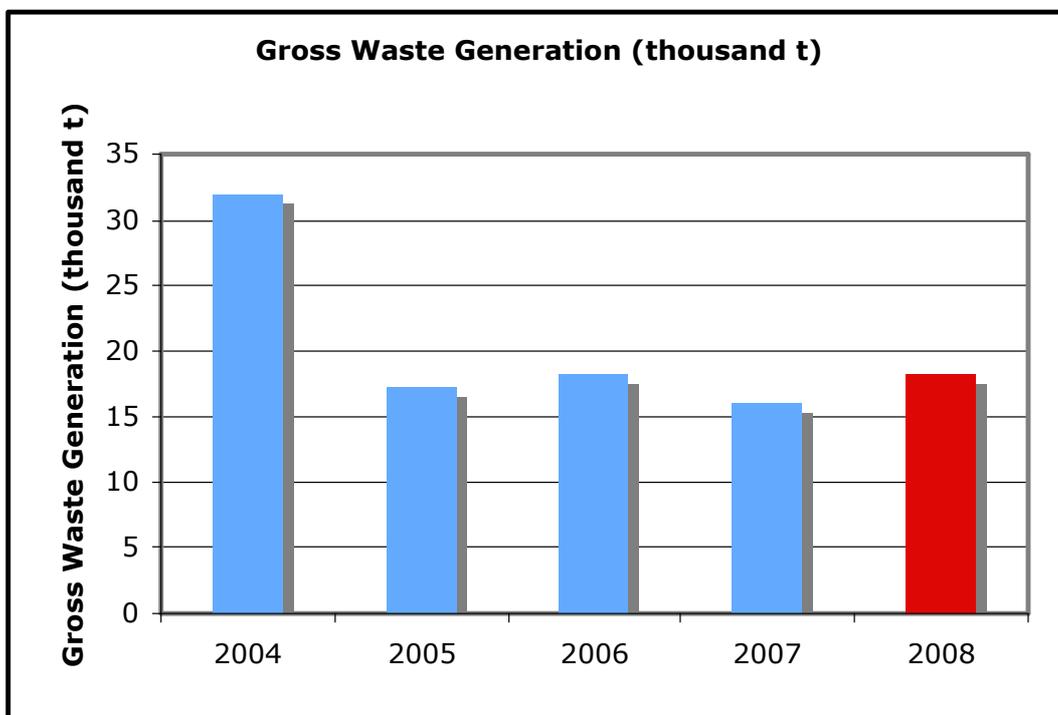
The company’s waste generation for this period was 4.83 tonnes per kilotonne of production, representing a 55% decrease compared to the 2004 baseline.

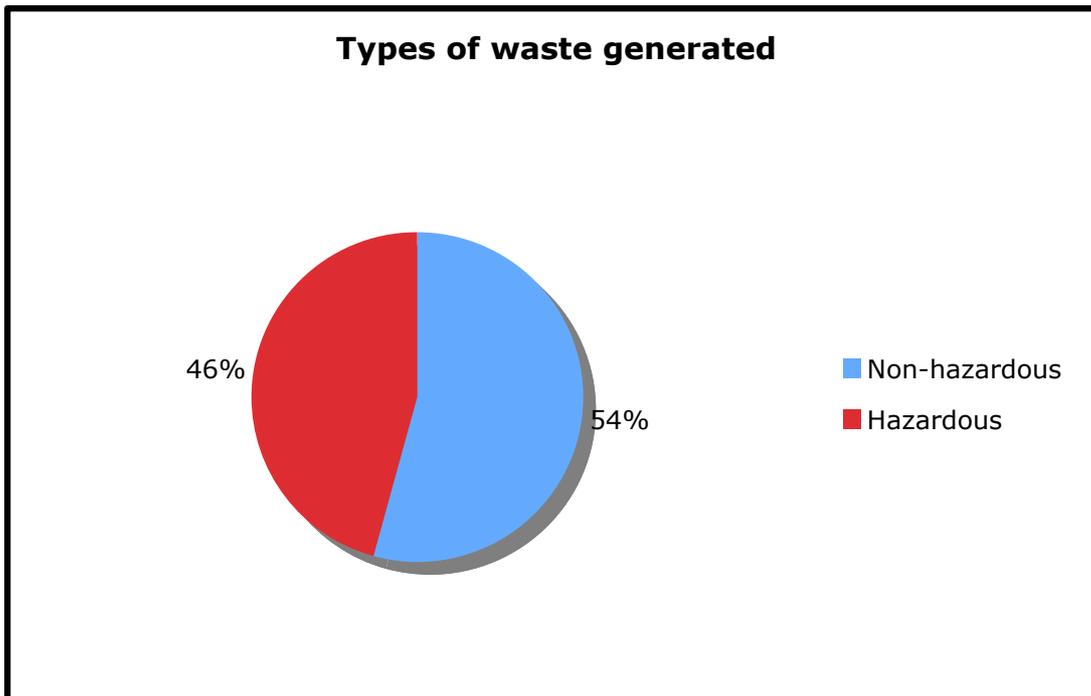
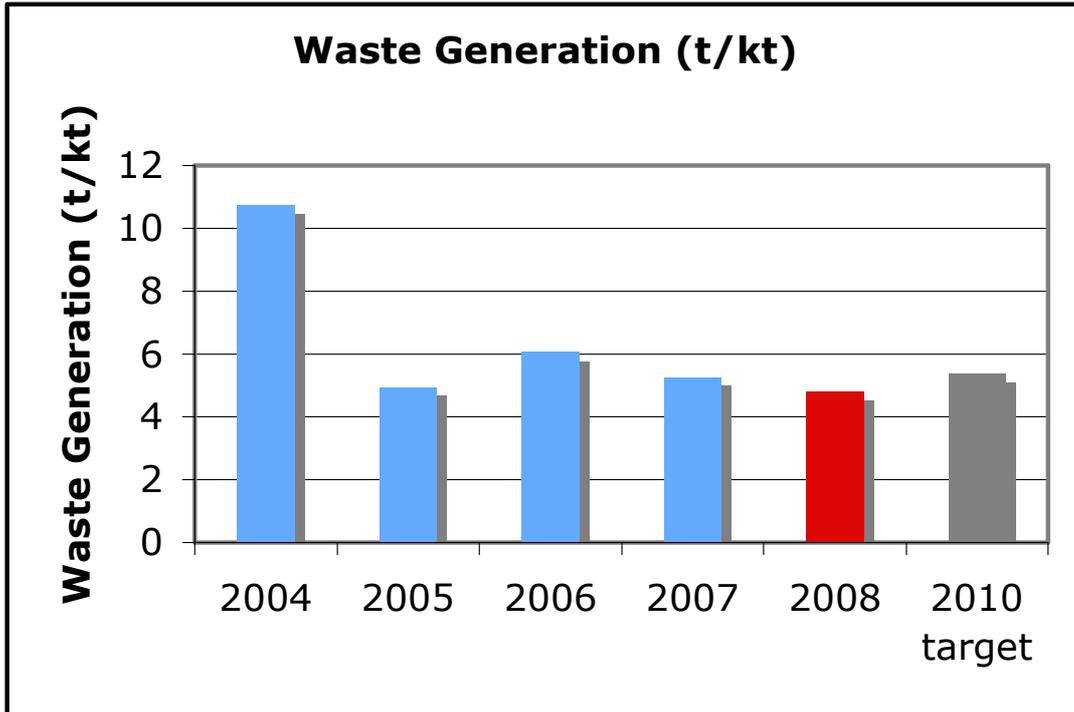
Gross waste generation for the period was 18,224 thousand tonnes, 14% higher than last year. New reporting from OCP trade centres has contributed over 750 tonnes (4.2% of company total).

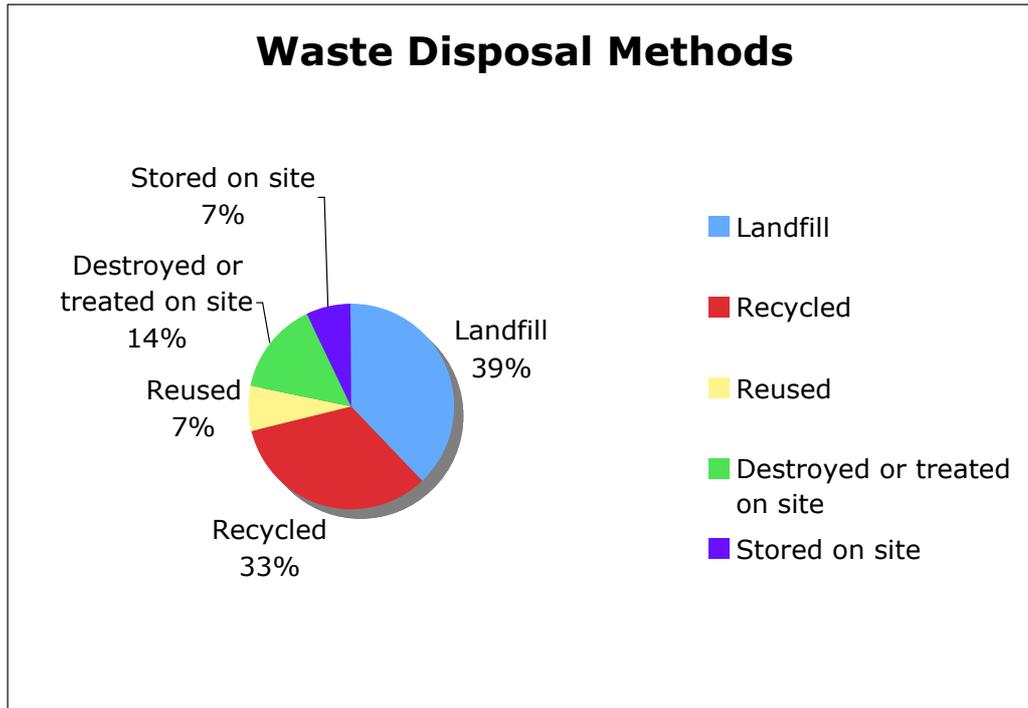
The highest waste generating sites for this period were Laverton (13.0%), Rocklea (12.0%), Padstow (4.3%), and Brownsburg (4.2%). Rocklea generation of waste to landfill has decreased by 15% due to ceased treatment of wash water on site that was creating a filter cake. Washings are now used in manufacture of compost.

Read our waste management case studies:

- Orica Brazil reduces waste and improves productivity;
- Safe disposal of 60 tonnes of semi-solid emulsion residue; and
- Re-working Cereclor waste saves time and storage space.







The Office Environment

In 2007, Orica’s sustainability team created a “Global Green Office Program” which aims to reduce the impacts of our office environments as well as create a culture consistent with our “no harm” aspiration. The Green Office Program was trialed at two sites in New Zealand – Newmarket in Auckland and Mount Maunganui. After successfully running the 100 day programs, the package has now been made available on-line for implementation at every Orica office. Gracefield in Wellington, New Zealand is completing the program in 2008, as is Orica’s head office in Melbourne, Australia.

To date, we have implemented a range of initiatives including office paper recycling systems and the retrofitting of light sensors. We also recycle toner cartridges, duplex printing trays and other similar office supplies.

Case Studies

Spills Management

HSNO Project Team improves chemical storage

Orica, New Zealand

The New Zealand government introduced new dangerous goods legislation in January 2005. The Hazardous Substances and New Organisms (HSNO) legislation aims to ensure the integrity and safety of process chemicals storage. We established a HSNO Project Team to evaluate 152 tanks and process containers across our six New Zealand sites. The project also included a review of our site bunding, associated piping, segregation of certain chemicals and seismic compliance (the latter for zones prone to earthquakes such as the Bay of Plenty). With our HSNO compliance plan submitted to government, we will spend a further NZ\$17M on improvement projects over the next 13 years.

Compliance

Ferric Scrubber reduces acid mist

Watercare, Australia

In late 2006 our Morwell site exceeded their environmental licence limit for emission of sulfuric acid mist to air. Acid mist is created when we make our ferric sulfate product. It is a health risk to our employees and local community, and damages our physical plant. Recognising that the situation was unacceptable, we acted quickly to design and implement a unique scrubber system to reduce emissions to atmosphere. Our scrubber system has a range of advantages over conventional designs; it is self cleaning so does not require an additional pump or cleaning chemicals, it is small and can be fitted on top of existing equipment to save space, all trapped sulfuric acid mist is returned to the process so there is no wastage, it is much quieter than the previous system, it is about \$600,000 cheaper than a conventional scrubber and health and corrosion risks have been avoided.

Legacy Issues

Site closure and environmental clean up in the United Arab Emirates

Orica Mining Services, Dubai

After decades of manufacturing explosives in Dubai, our Mining Services site was contaminated with highly sensitive explosive residue. We cleaned up the site this year, in conjunction with on-going production to meet a peak in demand. The number of people on site increased by over 400% and we faced a challenging environment of extreme heat and sand from desert winds.

With no regional environmental clean up standards in place, we lobbied local government to adopt the British standards – a benchmark for future remediation activities in the Middle East. We also engaged with Civil Defence, Civil Aviation, Dubai Investments Park (the developer and shareholder) and the Dubai Police and Bomb Squad – the latter signing off

on the site being clear of detonators.

Most importantly, the project was completed in time and budget, without safety, environmental or security incident.

Energy

Greening IT

Orica, Melbourne

Our Melbourne Data Centre has reduced power usage and greenhouse gas emissions by seventy-six%. An assessment of our server infrastructure in 2007 led to a major consolidation of equipment and improvement in performance. Servers that are not fully utilized are now dynamically re-allocated to workloads requiring additional support. Our disaster recovery process has improved, with our Windows servers now being housed across two data centres. Data centre operating costs have also reduced by over \$250,000.

Water

Melbourne Water Treatment Plants Project

Watercare, Australia

In July 2007 Melbourne Water storages experienced unusually high rainfall over a short period of time, resulting in a rapid rise in dam levels with turbid water. Melbourne Water customers were facing health risks, being warned to boil the poor quality water they were receiving before using it. We were engaged to design and build five water treatment plants within a three-month timeframe. To meet the urgent demand, we divided the work between between five of our workshops across Australia. The project was our first full scale integrated package water treatment plant to be completely designed, fabricated and commissioned by us. We delivered on time, with no safety, health or environmental incidents, allowing Melbourne Water customers to return to high water quality supply as fast as possible.

Yates Wyee Dam Overflow

Orica Consumer Products, Australia

In June 2007 our Yates Wyee site experienced unusually high rainfall over a short period of time. During the storm, our main containment dam filled to capacity with water and the secondary containment dam also started to fill. With more heavy rain forecast and the dam water contaminated with process chemicals, we acted quickly to avert a major spill incident. Working closely with our environmental regulator, our short-term solution was to transport water away by truck. Our permanent solution was to reconfigure our site odour control system, which normally uses process water, to use dam water as well. This approach has many benefits; it can be implemented at any time to control dam levels, normal operation can be maintained during high rainfall events, and, through the reduction in process water use at the odour control system, approximately 4.4 megalitres of freshwater is saved each year.

Separating storm water and wastewater at Mt Maunganui

Chemnet, New Zealand

We are spending NZ\$10 million over the coming years to fully separate wastewater and storm water from our Chemnet Mt Maunganui site. Site storm water will be discharged to the harbour and treated wastewater will be piped to a nearby council treatment plant. In collaboration with the local environmental regulator and city council we have:

- Studied the effect of discharge on marine flora and fauna;
- Negotiated with all affected parties, including two local Iwi (Indigenous representatives), Harbour Watch and the Department of Conservation;
- Redesigned our water management processes to meet new council discharge limits; and
- Investigated options for reduction in water use, or increased recycling.

Waste

Orica Brazil reduces waste and improves productivity

Orica Mining Services Brazil

Orica Mining Services, Brazil has improved productivity by 21.5% in one year, while reducing raw materials and electricity use. Faced with low productivity levels, high costs, declining volumes and an uncertain future, we implemented a Lean Six Sigma project to eliminate time and material wastage such as excessive production, stock and rework, waiting time between operations and unnecessary movement of people and products.

Safe disposal of 60 tonnes of semi-solid emulsion residue

Orica Mining Services Argentina

Storing process residues on site wastes valuable production space, is costly and is an on-going spill risk. Our SH&E Corporate Audit process identified an opportunity to clean up sixty tones of emulsion residue, save US\$30,000 in annual storage costs and free up six hundred square metres of Orica land for other production activities.

A process called semi-solid emulsion residue burning was used to treat 10 years worth of waste collected on site. Orica SH&E standards were followed to ensure the safety of our operators and protection of the environment. Going forward, the residue storage area has been upgraded with a concrete floor and bunding.

Re-working Cereclor waste saves time and storage space

Orica Chemicals, Laverton, Australia

Testing and re-working 100 tonnes of waste product back into the process at our Laverton site saved over \$150,000 and made valuable onsite storage space available. The removal of 430 drums of waste Cereclor product greatly reduces the risk of on site spillages and overall environmental impact was reduced as the waste was reworked, rather than sent to landfill.

Community

Overview

We are committed to valuing people and the environment. We aim to ensure no unintended consequences to the environment and the community. Our commitments to carbon, waste and water neutrality will also have a positive, indirect effect on our local and global communities.

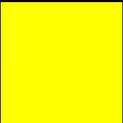
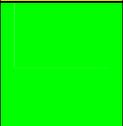
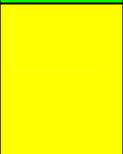
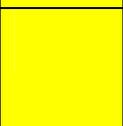
Our SH&E Policy states that we will strive to ensure our facilities operate to the highest standards to protect our employees, contractors, neighbours and the environment.

Our commitment to the communities in which we operate is an integral part of our Sustainability Strategy. We recognise and value our employees for their ability to meet the needs of our customers and the community in an environmentally sustainable manner. All sites are required to develop good working relationships with their neighbouring communities. This includes site Community SH&E Reports and formal Community Relations plans.

Our Performance in 2008

Challenge 2010 Milestones (Baseline year 2004)

Overall performance against target:	
	Target exceeded or ahead of schedule
	Target achieved or on track
	Target behind schedule

Objective	2010 Target	2008 Performance
No distribution incident fatalities	Distribution incident fatalities: 0 (Contractor drivers or members of public)	 Seven distribution incident fatalities in 2008, compared to 29 last year.
Reduce the number of serious site losses of containment	Number of site losses of containment (Category 2 or higher): <4	 Five site losses of containment in 2008, compared to six last year.
Reduce the number of serious distribution incidents involving our products	Number of distribution incidents (Category 2 or higher): <12	 24 distribution incidents in 2008, compared to 28 last year.
No environmental licence non-compliances	Number of environmental licence non-compliances: 0	 17 environmental licence non-compliances in 2008, compared to 29 last year.

Disclosure on Management Approach

We are saddened to report that there were seven fatalities to members of the public during the distribution of our products in 2008. While no fault was attributed to Orica drivers (employees or contracted-drivers) in the events, we will continue to review our approach and seek to avoid these incidents in the future.

An Explosives Expert Transport group has been formed in response to a serious distribution incident in Mexico last year.

This year we received 14 justified community complaints, a strong decrease compared to previous reporting periods. We believe this reduction reflects our vigilance in the ongoing conduct of our operations and the success of improvement projects and procedures at some sites.

Our Emergency Response Service (ERS) responded to 335 calls in the Australasian region relating to our products and facilities in 2008. The ERS was announced as the State and National Gold Award winner in the 2007 Australian Quality Awards provided by the Australian Organisation for Quality (AOQ). Three back-to-back wins for the National Gold Award (2005, 2006 and 2007) granted the ERS entry to the Hall of Fame.

We will continue to develop our approach to community engagement in 2009.

Community Relations

All of our major sites have a designated Community Liaison Officer who establishes and maintains relationships with the local community.

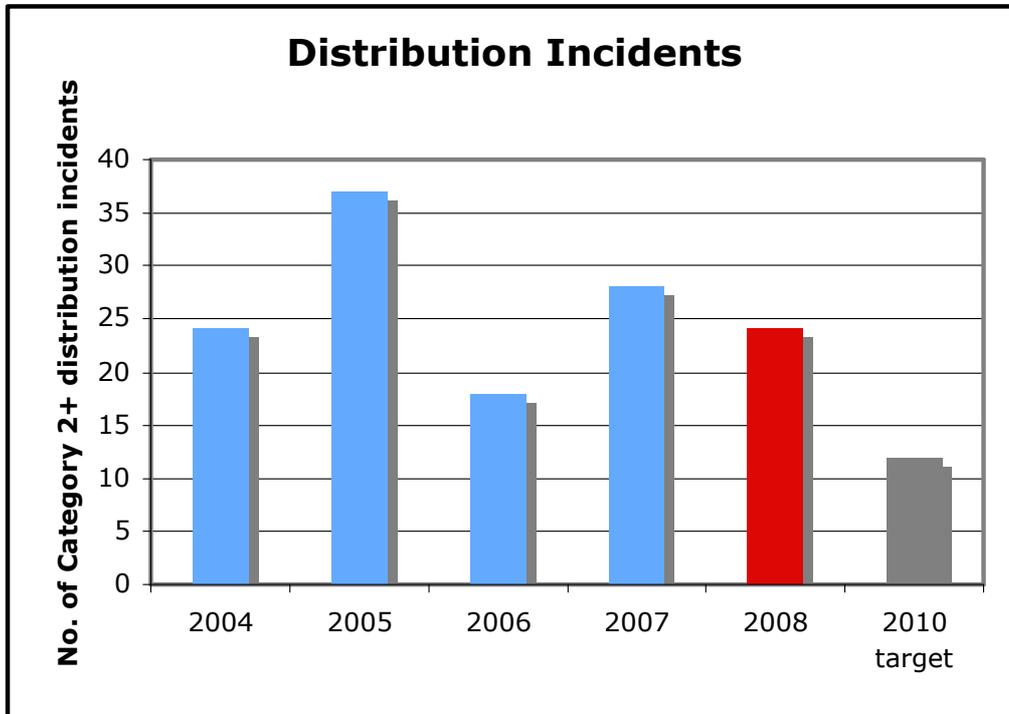
Orica is a signatory to the Responsible Care® “Community Right to Know” Code of Practice. Major sites are expected to communicate their safety, health and environmental performance to their neighbours on a regular basis. In addition, our Model Procedures require that the following information is made available to the community:

- Site Inputs, processes and outputs and materials stored on site;
- Material Safety Data Sheets for hazardous materials on site;
- Transportation to and from the site;
- Waste treatment and disposal;
- Licences and permits from statutory authorities;
- Fugitive and licensed emissions to the environment;
- Reportable incidents involving the site or its products;
- Future plans for the site and products, including the site SH&E improvement plans;
- Emergency response arrangements;
- Aggregated occupational health monitoring data;
- Risk assessment results; and
- Industry profiles of compliance with the Responsible Care codes.

Read more about how we engage with our local community in the “Stakeholder Engagement” section of this Report.

Distribution incidents

A distribution incident is one that does not occur on one of our sites. It arises from the transport or storage of raw materials, products, intermediates or wastes owned by the company or prior to delivery to the customer.



In 2008 we recorded 24 (Category 2+) distribution incidents, compared to 28 last year. As a result of these incidents we are saddened to report that there were seven fatalities to members of the public. While no fault was attributed to Orica drivers (employees or contracted-drivers) in the events, we will continue to review our approach and seek to avoid these incidents in the future. The fatal incidents were:

- Queensland, Australia – a member of the public was killed after colliding head on with a distribution sub-contractor. The sub-contractor's driver was also killed;
- Ghana – an escort vehicle struck and killed a pedestrian during the transportation of product to a mine site;
- New Zealand – the driver of a vehicle was killed when he pulled out in front of a Bulk Liquids Tanker;
- Lima, Peru – a vehicle driven by an employee killed an elderly pedestrian who tried to run across a busy highway;
- USA – the driver of a vehicle was killed after colliding into the rear of a stationary Explosives truck waiting to turn from the median strip; and
- Chile – the driver of a vehicle was killed after colliding head on with a distribution contractor carrying ammonium nitrate to a mine.

Of the 24 Category 2+ distribution incidents reported, seven occurred in Australia, four in North America, three in each of New Zealand, Latin America and Europe, two in Asia and one in Africa and Fiji.

Following a serious distribution incident in Mexico last year, an extensive programme of recommendations was established. All actions are on track for completion on schedule.

An Explosives Expert Transport group was formed in September 2007 with representation from all regions across our Mining Services business. The work commenced with the preparation of a detailed risk assessment on transportation of Class 1 explosives on public roads. From the risk assessment the team developed their:

- Basis of Safety (BOS) for the transport of Class 1 explosives;
- Training module for the BOS;
- Safety awareness presentation for transportation contractors;
- Design basis and engineering standard for Class 1 transportation units; and
- Checkpoint audit module for use both on Orica vehicles and third party transporters.

A transport policy has also been drafted for use within the business. The work from this team is now being reviewed and the learning will be implemented during the next 12 months.

Read our Distribution Incident case studies:

- Highway Tanker Crisis in Eastern Canada; and
- Safe ship to tanker transfer of sulfuric acid.

Emergency Response Service

The Orica Emergency Response Service operates on behalf of over 100 subscribing client companies across a broad range of industries including the agricultural, chemicals and plastics, petrochemical, pharmaceutical, consumer products, transport, manufacturing and construction sectors.

The Orica Emergency Response Service (ERS) operates 24 hours a day, seven days a week, providing telephone advice and assistance to the public, emergency services and others on incidents relating to the transport, storage and use of chemical products and raw materials in emergency situations. The service has over 25 years experience in provision of emergency response across Australia, New Zealand and Asia-Pacific. Over 23,900 emergency incidents have been handled by the service since its inception. Callers to the service include customers and employees, transport carriers, emergency services, government authorities, hospitals, veterinarians, as well as members of the public. The ERS Coordinators are trained to handle a wide range of incidents from human exposures to transport emergencies.

The service can be accessed 24 hours a day from Australia and New Zealand via toll free numbers (1800 033 111 or 0800 734 607), as well as via international access numbers from the Asia Pacific region. These numbers are typically displayed on client company Material Safety Data Sheets, product labels, Emergency Procedure Guides, Emergency Information Panels, shipping documentation, client entries in telephone directories, emergency response plans and on after hours recorded messages. Callers to the service initially hear a recorded message, before being connected directly to an ERS Coordinator within approximately 20 seconds. All incoming calls to the service are recorded.

Trained ERS Coordinators (chemists/engineers) quickly assess the risks associated with

any emergency situation by asking appropriate questions, using risk assessment checklists and referring to information databases as required. ERS Coordinators provide advice to help the caller establish priorities and rapidly bring the situation under control, while minimising any associated impact. Such advice typically includes instructions and guidance relating to:

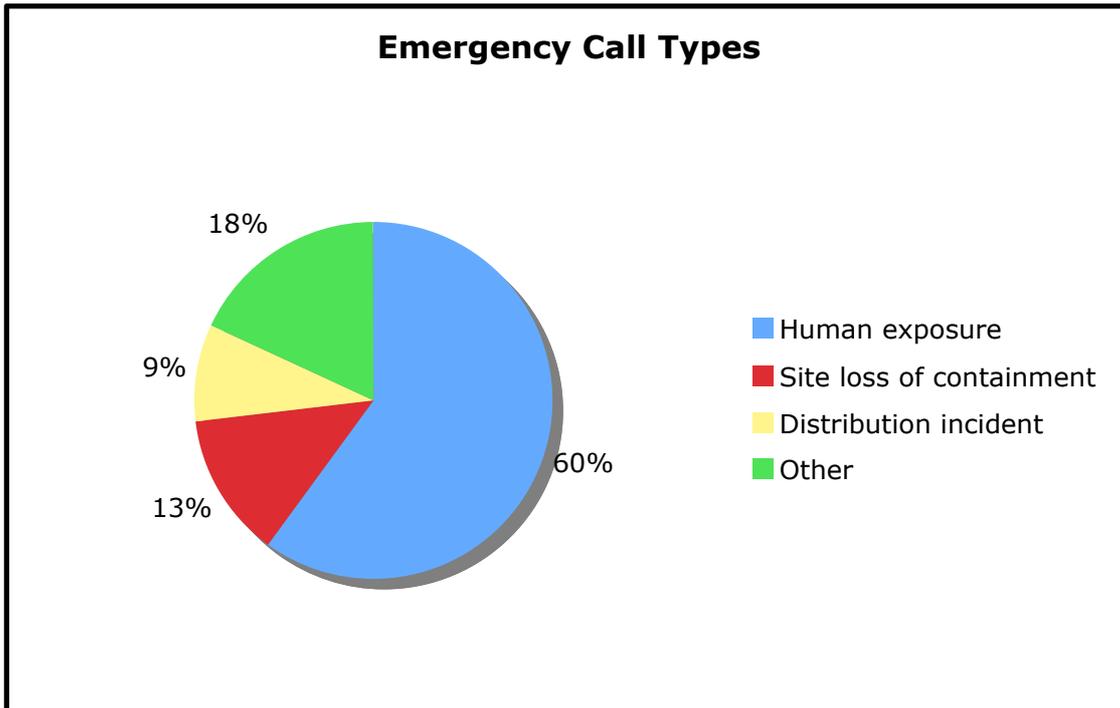
- First aid, health effects and seeking medical help;
- Product hazards;
- Environmental protection;
- Personal protective equipment;
- Contacting emergency services;
- Evacuation;
- Spill clean-up methods; and
- Crisis management.

ERS Coordinators have immediate access to Material Safety Data Sheets and chemical information databases, as well as contact details for key personnel within client companies (in case further information or assistance is required). ERS Coordinators typically remain involved in the handling of the incident until the situation is under control, liaising with all involved parties. This involvement ranges from liaising with emergency services and treating doctors, to organising contract cleanup resources on behalf of client company personnel and informing client company representatives of progress.

The ERS carries quality certification to ISO9001:2000, ensuring that the systems and procedures of the service represent best practice and are subject to continuous improvement. Its flexible systems ensure that specific requirements can be readily integrated into the service provided.

2008 Performance

ERS responded to 335 calls in the Australasian region relating to the company's products and facilities in 2008. This compares with 331 calls in the previous corresponding period, and 315 in 2006.



Of the 335 emergency calls during the year, 60% related to human exposures (mostly paint and DIY product exposures in the home). The ERS service is also provided to over a hundred external clients at a fee. Outside of Australia and New Zealand the businesses take direct responsibility for their emergency response.

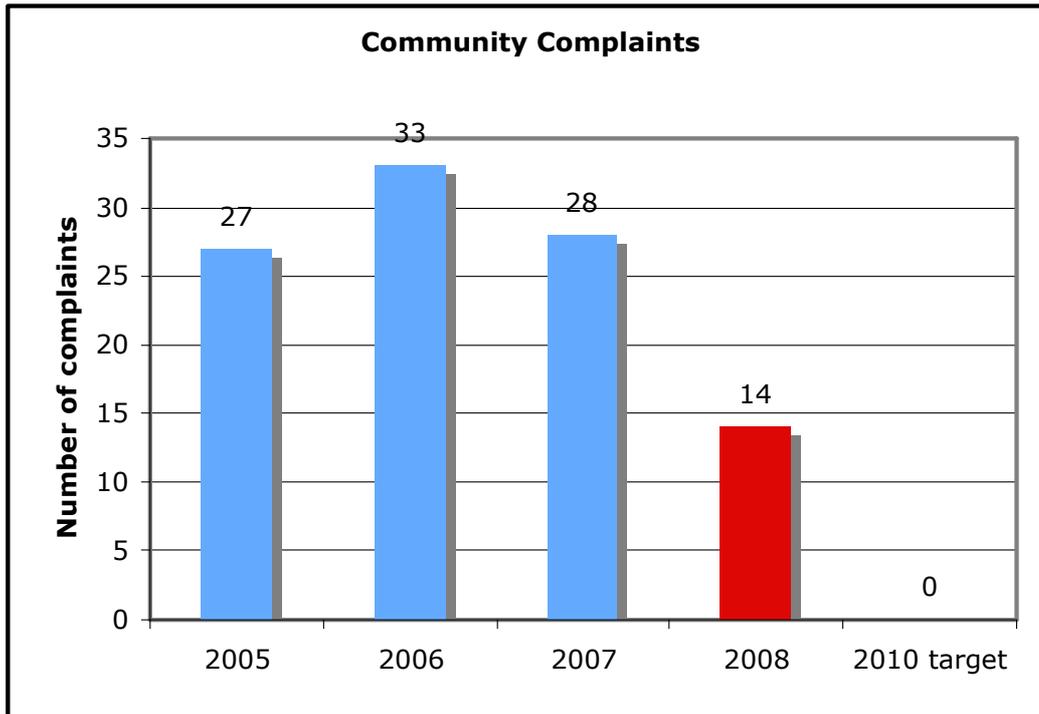
The ERS was announced as the State and National Gold Award winner in the 2007 Australian Quality Awards provided by the Australian Organisation for Quality (AOQ). Three back-to-back wins for the National Gold Award (2005, 2006 and 2007) granted the ERS entry to the Hall of Fame.

Read our Emergency Response:

- Managing a cyanide spill in the Northern Territory, Australia.

Community Complaints

All sites are required to record and address community complaints, with the objective of eliminating all complaints by 2010. We received 14 justified complaints in 2008, a decrease compared to previous reporting periods (29 in 2007 and 33 in 2006). We believe this reduction reflects our vigilance in the ongoing conduct of our operations and the success of improvement projects and procedures at some sites. All complaints are investigated, causes are identified and actions taken to avoid further community concern. Eight of our complaints received in 2008 related to odour, three to noise, two related to instances of a nitrous oxide cloud drifting over a neighbouring industrial site and one related to the spillage of brine solution from one of our sites into a nearby creek.



Community Contributions

Orica operates a corporate donations program that is funded to the equivalent of dividends payable on a shareholding of 0.5% of the company's issued capital for donation in accordance with published criteria at the direction of the Corporate Governance and Nominations Committee of the Orica Board.

Funds are also allocated to support the employee workplace giving program, called "Dare to Share", by matching donations up to a certain value, across all of the eleven charities selected by our employees to receive donations under the program. In 2008 approximately \$120,000 was donated by Orica to match employee contributions.

In 2008, the Orica supported the following organisations:

- Habitat for Humanity whose vision is to build decent, affordable houses in partnership with those in need of adequate shelter, Orica is the principle sponsor of Habitat for Humanity Australia's international program;
- Landcare Australia in partnership with Yates is supporting the Landcare Gardening initiative to encourage sustainable gardening;
- The Australian Science Media Centre (AusSMC) which supplies high quality and timely scientific information to journalists, Orica is a foundation sponsor;
- The Nature Conservancy provides a strategic, science-based approach to conservation, identifying and protecting the highest-priority places. Orica is supporting project work in the Murray Darling basin;
- Earthwatch Institute Climate Change at the Arctic's Edge, working to quantify the impacts of climate change on northern American ecosystems;
- Schools of the Universe an Indonesian foundation focusing on educating five to 15 year olds in an environmentally friendly manner; and

- A scholarship program for undergraduate students in areas of study related to Orica's business in Asia and Latin America.

All the projects supported are related to Orica's commitment to sustainability and fit in the Orica Community Foundation's philosophy of building long-term relationships with a small number of selected organisations in order to help more enduring projects to be established. Orica does not make political donations.

The Orica businesses also make significant contributions to the local communities in which they operate. Examples of this type of contribution are:

- Orica Mining Services' sponsorship of three orphanages in Africa, providing bedding, clothing, food and water;
- Orica Consumer Products' donation of educational books to local schools in Papua New Guinea;
- Orica Mining Services' support of the Colegio Hellen Keller School in Chile, assisting with volunteers and educational materials;
- Orica Consumer Products' partnership with the New Zealand Cancer Society, donating part of all proceeds to help prevent skin cancer in outdoor workers;
- Minova's Marion plant's ongoing support of the Muscular Dystrophy Association;
- Orica Consumer Products' support of Youngcare, an organisation providing Australians with high-care needs in Queensland; and
- Orica's Weihai site in China collecting and distributing donations to the victims and families affected by the Sichuan earthquake in May.

Read our community case studies:

- Habitat for Humanity International Program;
- Supporting a local orphanage in Zambia;
- Supporting a local kindergarten in Argentina;
- Supporting local high schools in Papua New Guinea; and
- Supporting young Australians with high care needs.

Case Studies

Emergency Response

Managing a cyanide spill in the Northern Territory, Australia.

Orica Emergency Response Service

Early this year there was a major cyanide spill at our customers' site. Experienced Orica personnel worked with the Northern Territory Emergency Services (NTES) to coordinate an effective and rapid response. We conducted safety awareness training with the clean up volunteers.

Before starting the clean up, we established safety controls and systems for all Orica and NTES personnel. We then worked together to safely decontaminate the spill, dispose of all contaminated soil and remediate the site. There were no recordable injuries or health exposure incidents during the clean-up activity.

Distribution Incidents

Highway Tanker Crisis in Eastern Canada

Orica Mining Services, Canada

Ensuring that our products are transported safely is critical to the protection of the community and environment, and to the reputation of our customers, transporters and ourselves. After two serious distribution incidents in twenty-four hours in Eastern Canada, we worked swiftly to identify the issues with our highway tankers and ensure our customers continued to be supplied safely, in time and in full. Working with regulators and alternative international carriers, we worked as a team to ensure our customers were satisfied, the public was protected from further distribution incidents and our tanker fleet was thoroughly inspected, repaired and approved as "fit for service" once again.

Safe ship to tanker transfer of sulfuric acid

Orica Mining Services, Northern Territory

Sulfuric acid is a critical input to the Ranger uranium mining process. With the shutdown of their onsite sulfuric acid plant a week before the replacement supply method was ready (i.e. the construction of a bulk acid import terminal at Darwin Wharf), we had to think quickly and carefully about an interim solution. We partnered with Stolt-Nielsen (the shipping provider) and Chemtrans (the transport provider) to directly transfer 3,600 tonnes of sulfuric acid from a ship into road tankers on the wharf. Two purpose built gantries were constructed for the acid loading operation. All parties participated in Hazard Studies to ensure safe access and spill avoidance. Sulfuric acid was transported to Ranger mine using this approach without any loss of containment, allowing the mine to continue operation without delay. The portable acid loading gantries may help avoid similar short-term supply issues in other locations.

Community Investment

Habitat for Humanity International Program

Orica, Global

As principal sponsor of the Habitat for Humanity International Program, we have contributed more than \$300,000 over the past three years, helping to improve the lives of more than 2,000 people. We are supporting Habitat for Humanity's efforts to address housing needs in Cambodia. The Siem Reap Integrated Community Development Project is addressing the needs of 338 poor families through improved housing and construction of sanitary toilets in 2007. As a result of the program, a further 620 families have access to safe drinking water through installations of community water pumps. *Habitat for Humanity* is currently assisting 324 families living in substandard conditions in Phnom Penh, the country's capital. They assist with core house construction, house completions and renovations. We provided funding support for an external evaluation of the Phnom Penh project in December 2007. The results of the evaluation will inform the future development of ongoing housing projects in Cambodia.

Supporting a local orphanage in Zambia

Orica Mining Services EMEA

This year our Mining Services' Europe, Middle East and African business (EMEA) began working with a rural orphanage in Zambia to help improve the standard of living for more than 60 children.

Located 550 kilometres from Lusaka, Zambia's capital city, and near our operation in the Zambian copper belt, the Chambishi Orphanage provides bedding, food and shelter for young orphans whose parents have either died or are too poor to provide for them.

Through our support, 30 bunk beds have been installed in the orphanage, providing bedding for 60 children. A manual water pump has also been installed at an outside well to provide access to water and eliminate safety risks.

Knut Reed, President OMS EMEA, believes it is an important initiative to develop strong relationships and provide assistance to local communities. "As Orica, we have a responsibility beyond pure business returns. The intent is to give practical help and assistance."

EMEA also provided personal protection equipment for the orphanage, to protect the lungs and eyes of a local operator using a maize grinder, which grinds corn that is then sold to provide the orphanage with money for food.

Supporting a local kindergarten in Argentina

Orica Mining Services, Argentina

The Orica Argentina team worked with the local community this year to help a kindergarten and its 70 students.

The nursery school, No 901, is located in Sierras Bayas, a town in the province of Buenos Aires where Orica Argentina has an office. When Orica employees received a letter asking for help, they stepped in to buy a much-needed gate and then arranged for it to be safely installed.

The aluminum gate, now in place at the main entrance of the school, helps to ensure the safety of the kindergarten's students and their belongings. A number of employees' children are educated at the centre and Orica Argentina has further plans to donate goods to more kindergartens throughout the region.

Supporting local high schools in Papua New Guinea

Orica Papua New Guinea

Orica Papua New Guinea has donated a range of reference and technical books to schools around Lae. Approximately US\$3,500 worth of books were purchased in partnership with the Huon Gulf Rotary Club during the visit of the MV Doulos floating bookshop. The MV Doulos is the world's oldest active ocean-faring passenger ship and is owned by German Charity Gute Bücher für Alle (Good Books for All). It travels the world providing access to books for regional and isolated communities.

One recipient, the Dregerhafen Technical High School in Finschhafen, received a number of books on home repairs, painting techniques and decoration.

Nellie McLay, director of the high school, was delighted to receive the books on behalf of the school and organised for their immediate placement in the library. "The books will make a great contribution to the reading materials available to year 11 and 12 students," Nellie said. "Orica's support has ensured that schools far from the centre of Lae will also benefit from the MV Doulos visit."

Supporting young Australians with high care needs

Dulux, Australia

Dulux has partnered with not-for-profit, Youngcare and a number of local businesses, to develop Youngcare's first purpose-built apartment complex in Brisbane. Youngcare raises awareness and funding to provide relevant and dignified lifestyles for young Australians with high care needs. The apartments provide young Australians, who would normally be forced to live in aged-care facilities, with purpose-built modern apartments.

Dulux donated more than 1,000 litres of paint, enabling Youngcare to finish all 14 apartments in the first complex of its type in Australia.

Hiro, Production and Maintenance Manager at Dulux Rocklea, recently visited the finished apartment complex and said, "It is totally different from a traditional nursing home – they are more like one- bedroom apartments. This is a great way for Dulux to give back to the local community and with the facility only five kilometres away from our site in Rocklea, we definitely feel like we are making a difference."

Planning is under way to develop similar facilities in Sydney, Melbourne and the Gold Coast.

Working with Others

Overview

Our sustainability challenges are complex. We work with others to identify and implement opportunities for improvement throughout the supply chain. In support of this collaborative approach, our SH&E Policy states that we will:

- Continue to seek ways to efficiently use materials and energy; and
- Seek to develop new or improved products and processes to improve the contribution we make to the quality of people's lives and to minimise the impact on the environment.

Industry Partnerships

Our industry partnerships help us improve our sustainability approach through collaboration and sharing of ideas.

The International Council of Chemical Associations

The International Council of Chemical Associations (ICCA) is the worldwide voice of the chemical industry, representing chemical manufacturers and producers all over the world. It accounts for more than 75% of chemical manufacturing operations with a production exceeding US\$1.6 trillion annually. ICCA promotes and co-ordinates Responsible Care and other voluntary chemical industry initiatives. We are a signatory to the ICCA Global Charter and have adopted their Responsible Care program.

Responsible Care®

The Responsible Care® program is an initiative of the international chemicals industry aimed at improving its safety, health and environment performance and communicating openly with all sections of the community. The program was started by the Canadian Chemical Producers' Association in the mid eighties. There are now chemical industry associations in 45 countries participating in the program. As a participant in Australia, New Zealand and Latin America, we are required to sign on to a set of Guiding Principles and to implement a series of Codes of Practice:

- Community Right to Know;
- Environment Protection;
- Manufacturing Process Safety;
- Employee Health and Safety;
- Storage and Transport Safety; and
- Product Stewardship.

We incorporated the commitments of the Guiding Principles and the requirements of the Codes of Practice in our Safety, Health and Environment Management System. This System is adopted by all Orica operations.

In addition to meeting the commitments and requirements of the program, Orica participates in local community liaison groups, Open Door programs and safety, health and environment performance surveys.

Plastics and Chemicals Industries Association (PACIA)

We are a member of PACIA, the pre-eminent national body representing Australia's fourth largest manufacturing sector. PACIA members include importers and distributors, raw material suppliers and chemical manufacturers, plastics fabricators and compounders, plastics and chemicals recyclers and service providers to the sector.

In addition, Orica is represented on PACIA's Sustainability Leadership Implementation Council.

In 2008 we participated in the development of the PACIA "Sustainability Leadership Framework". The framework aims to provide the platform for PACIA to take a leadership role in delivering programs, tools and policy, and for members to take leadership actions in sustainability.

Coatings Care®

The Coatings Care® program is an initiative of the international coatings industry aimed at improving its safety, health and environment performance and communicating openly with all sections of the community. The program was launched internationally in 1996 with Australia being one of the first countries to commit to Coatings Care®. Coatings Care® is now well established in the United States, Canada, Europe, Japan and Mexico.

Coatings Care® is administered in Australia by the Australian Paint Manufacturers Association Inc. (APMF). Participating companies are required to commit to a set of guiding principles and to implement a series of Codes of Practice relating Manufacturing Management, Transport and Distribution, Product Stewardship, Community Responsibility Code and Evaluation and Improvement.

Orica Consumer Products has incorporated the commitments of the guiding principles and the requirements of the Codes of Practice in its Safety, Health and Environment Management System. This System is adopted by all Orica Consumer Products operations. Orica Consumer Products is a signatory to the Guiding Principles and participates fully in the program.

Research and Development

We partner with universities, government agencies and other businesses to conduct research and development on our products. We have Research and Development (R&D) Centres in:

- North America – Brownsburg and Watkins;
- Europe – Gyttop;
- Africa – Capricorn Park;
- India – Gomia; and
- Asia Pacific – Kurri Kurri and Melbourne.

A recent example of our R&D success is our "Zero Waste Power Coatings" product. Dulux Powder Coatings, the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Sustainability Victoria partnered to develop the product, which won the 2008 Victorian Premier's Sustainability Award – Products and Services Category.

Suppliers

Our Model Procedure on Product Stewardship requires that “Past SH&E performance, SH&E management practices and commitment to Product Stewardship shall be included in the selection criteria for:

- Suppliers of goods and services involving significant SH&E risks; and
- Contract manufacturers, warehouses, distributors and agents.

“The SH&E performance of such suppliers of materials and services shall be periodically reviewed. Suppliers of products and services which involve significant SH&E risk shall be required to maintain and provide up to date information regarding the hazards and appropriate use of materials, equipment and services purchased by the company.”

Read more about how we worked with our suppliers in 2008:

- Water recycling opportunities at Kooragang Island; and
- Improving supply quality and reducing waste at Laverton.

Customers

We work with our customers to mitigate the sustainability impacts of the products we provide. Our Model Procedure on Product Stewardship states that we will “work with customers (and any other people who receive products/services from the business) to ensure the adverse SH&E impacts associated with the distribution, storage, use, recycling and ultimate disposal of products are minimised as far as practicable.”

We understand that there is a greater waste impact associated with our consumer products, while our Mining Services products are more energy, greenhouse and water intensive. Our approach to working with customers reflects this understanding. For example, we have worked with:

- Bunnings, the largest paint retailer in Australia, on waste minimisation and recycling schemes; and
- Zinifex, a global, diversified base and precious metals mining company, to significantly improve their productivity and safety performance at the Century Zinc mine in northern Australia. Read more: case study.

Product Stewardship

Our Approach

Product Stewardship has been defined as a demonstrable process which places an ongoing responsibility on a company to monitor and manage the health, safety and environmental (SH&E) issues concerning its products and packaging. This relates as far as practicable to the product life cycle from the conception of the product to its disposal or in other words from “cradle to grave”.

Orica's SH&E Standard on product stewardship states:

“All Orica controlled businesses shall ensure that they manage, in an ethical and responsible manner, all the SH&E aspects of a product from its initial conception to its ultimate use and disposal. The SH&E implications shall be taken into account prior to the

launch of new products and in the selection and development of new processes. The hazards from new products and processes, and the consequent risks, shall be reduced so far as is reasonably practicable to reduce potential SH&E impacts."

It is important that we take care considering SH&E impacts in developing products and introducing new formulations and packaging. The life cycle stages of all of our products are assessed for improvement. This involves looking at where the raw materials come from and stipulating conditions on the suppliers. During manufacture, storage, handling and transport it necessitates having SH&E management systems in place which protect our employees, our plant and equipment, the community and the environment from damage. And after the products leave our direct control and are distributed, sold and used by our customers, it requires us to influence the use of the product right through to its eventual disposal.

Development and Introduction

Before developing or introducing a new product considerable attention is given to determine the physical, chemical and biological properties and assessing the potential risks to people and the environment. This activity is regulated under chemical control legislation such as the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) for industrial chemicals and the National Registration Authority for Agricultural and Veterinary Chemicals (NRA) for agricultural chemicals. These schemes relate to Australia only, but other countries have similar chemical control legislation.

Manufacture

Before a product is produced on a plant a number of formal hazard studies are conducted to identify any potential SH&E risks and to put in place measures to eliminate or minimise them. Major suppliers of goods and raw materials are assessed on the merits of their SH&E performance. Processes are optimised to ensure maximum efficiency opposite usage of energy and raw materials and to minimise waste. Packaging options are assessed with the aim of ensuring the security of the product and minimising transport and handling issues.

Distribution

SH&E performance is an important factor when selecting transport companies for distribution of the products and warehouses for the storage of products. Transport drivers are trained to identify potential SH&E risks at customer bulk storage and other facilities. Desktop emergency exercises are conducted with the transport companies and the emergency authorities. Records are kept of transport and storage incidents involving the company's products.

Information

Provision of information is an important part of the product stewardship strategy. The label and the material safety data sheet (MSDS) are the primary sources of information provided to the user of all of our products. This is supplemented in some cases with further literature, special training on the handling and use of products, safety posters, videos and direct advice from expert occupational hygienists and others. Product stewardship programs such as Ammsafe for ammonia, Chlorine Safeguard for chlorine and Solvent Care for chlorinated solvents are designed to ensure the customer has the latest information on the products

and how they are safely used. Orica's Emergency Response Service is a further source of information particularly in emergency situations. Customer feedback and complaints and incidents involving the company's products are recorded and the learnings used to improve performance. Read more about our Material Safety Data Sheets in the "Health and Safety" section of this Report.

Disposal

Advice is provided on the safe disposal of the products where appropriate. This advice is provided on the label, the MSDS or directly to the customer. All major product groups have been, or are being, subjected to a life cycle assessments as part of Orica's Challenge 2005 program. The actions arising from the life cycle assessments are fed into product and marketing strategies and into business product stewardship plans.

Management

Product stewardship in the company is everyone's responsibility, but each business has appointed a product stewardship coordinator who makes sure that the various aspects of product stewardship are being attended to and that product stewardship plans are in place. Every year each business undertakes a self-assessment based on the Responsible Care Product Stewardship Code of Practice and sets goals for performance improvement. An Orica Product Stewardship Team led by the Corporate SH&E Manager makes sure that good practices are shared across the company and the manufacturing industry.

In Conclusion

Synthetic chemicals are very much part of our modern lives. Chemicals, such as fertilizers, pesticides, pharmaceuticals, paints, adhesives, sealants, pigments, dyes, plastics, explosives, solvents, surfactants, disinfectants, and so on contribute to basic human needs and improve the quality of our lives. However in some cases the very properties that make these chemicals useful to us, can also make them a threat to human health or the natural environment, if the products are poorly designed, mishandled, misused or disposed of inappropriately.

Assessing the risks associated with the products and ensuring that these risks are eliminated or properly managed through the supply chain and, as far as practicable, the entire life cycle is seen as being essential to ensure the full benefit of the products is gained at no cost to the community and the environment.

Our Performance in 2008

Our Dulux Professional EnvirO2™ and Dulux Aquanamel® products are the first consumer products in Australia to be certified 100% greenhouse neutral by the Australian Greenhouse Office.



The Dulux Eco Choice symbol is displayed on our paint products with lower in Volatile Organic Compounds, i.e. less emissions and odour.



Some of the activities undertaken to reduce environmental impacts and improve stewardship of products this year include:

- Working to improve the safety and reliability of our distribution fleet;
- Life cycle analyses completed for our chlorine and ammonium nitrate products;
- A variant of our CarboStop product was developed by Minova Essen to comply with the environmental regulatory requirements in northern Europe. The alteration entailed an actual change to the product formulation, with the new formulation now being trialed for broader commercial application;
- Watercare performed self-assessment of the business with excellent results. Their Product Stewardship database covers all requirements of the company model procedure and each Product Manager has a Product Stewardship Plan;
- Mining Chemicals completed their Product Stewardship self-assessment last year and a gap analysis was undertaken. Regular progress reviews have since been undertaken in 2008 the business is tracking well against targets; and
- Chemnet held a Product Stewardship workshop for 25 managers in New Zealand.

Read our Product Stewardship case studies:

- Our product stewardship approach is valued in the Indian marketplace;
- Sharing safety expertise through the supply chain; and
- Purifying Drinking Water in China.

Read about our Product Incidents in 2008 in the Health and Safety section of this Report.

Case Studies

Our product stewardship approach is valued in the Indian marketplace

Orica Mining Services, India

Despite a highly competitive local market for mining explosives, our product stewardship approach has helped to improve our share of the private sector Indian market by 20%. New business was won through the development of solid customer support relationships and demonstration of the superior safety features of our products.

Udit Baluja, Orica India's Commercial Manager says that the results "Strengthened the conviction within our team that quality products and services can command a price-premium".

Sharing safety expertise through the supply chain

Orica Mining Services, Australia

Australia's booming mining industry needs the support of safe and efficient explosives technology. Orica Mining Services has developed a more efficient and safer method of loading our explosives products into mines on our customer's sites. Working at the Zinifex Century mine using a "two companies, one goal" approach, we have delivered a sixty% increase in our customer's productivity, along with an improved safety performance. We are proud to now be considered an integral part of the Century mine planning and engineering team. To improve knowledge sharing and employee development, we share our technical expertise through the Zinifex graduate engineering training program and we have a Zinifex Mining Engineer graduate in our Century mine blast team.

Purifying Drinking Water in China

MIEX, Australia

An agreement made between Orica and China Water this year will see the establishment of a large demonstration water treatment plant in Jiangsu Province. The plant, with a daily capacity of 100 megalitres, will use Orica's patented MIEX technology that is used by municipal customers for purifying drinking water and in sewage treatment systems.

Graeme Liebelt welcomed the agreement, saying, "This is a wonderful story about Orica's scientific research and expertise with very good global growth potential. There are 13 additional systems approved to be installed across the US, Europe, the United Kingdom, Australia and New Zealand over the next 12 to 18 months."

The Victorian State Water Minister, Tim Holding, oversaw a signing ceremony for our Managing Director Graeme Liebelt and Zhai Haohui, Chairman of the China Agricultural Water-saving Technology Association. Mr Holding said, "Orica's MIEX technology would be of great benefit because it was both innovative and environmentally friendly."

Water recycling opportunities at Kooragang Island

Orica Mining Services

Our Kooragang Island operation in Australia is working with the Hunter Valley Water Authority to explore water-recycling opportunities on site. We are working with our water

supplier to identify water quality and quantity requirements and innovative solutions to reduce the use of potable water in industrial processes.

Improving supply quality and reducing waste at Laverton

Orica Chemicals

Smooth running of the Laverton Brine Plant requires a consistent quality of salt. Inconsistent quality causes process upsets, resulting in increased purging of the brine and discharge of salt to sewer.

We worked with our supplier, Cheethams, to overcome high levels of unwanted magnesium in our salt supply by:

- Investigating and understanding the reasons for quality variations from suppliers perspective;
- Helping Cheethams to understand the consequences of the quality variations; and
- Assist them to develop processing methodologies that could eliminate the observed quality defects.

We now receive consistent salt quality from our supplier, resulting in a:

- 15% reduction in solid waste from brine plant; and
- 55% reduction in salt purged to sewer.

Our People

Overview

Orica employs more than 15,000 people with operations in over 50 different countries and servicing customers in more than twice that number.

We are committed to valuing people and the environment achieving No Injuries to Anyone, Ever. Our SH&E Policy states that we will:

- Strive to ensure our facilities operate to the highest standards to protect our employees, contractors, neighbours and the environment;
- Require every employee and contractor working for us to comply with relevant legislation and with this policy and we will provide them with the necessary training; and
- Encourage employee initiatives that contribute to a safer and improved environment at work, at home and in the community.

Culture

Our Code of Ethics requires that all Orica employees “have due regard for cultural diversity in the workplace”.

Much of our growth has come from geographic expansion spanning cultural, language and workplace relations diversity. Having a strong culture within the organisation is critical to ensuring that we all share a common approach to the way we do business. The four “Deliver the Promise” principles that support our performance based culture and against which our performance is measured, revolve around:

- Safety, Health and Environment;
- Commercial Ownership;
- Creative Customer Solutions; and
- Working Together.

Our culture empowers and motivates Orica’s people to achieve long-term, sustainable results.

Labour Practices and Decent Work

Equal Employment Opportunities

Orica formally supports the principles of Equal Employment Opportunity (EEO) through its EEO policy and recruits staff purely on a merit basis. Orica has not set any objectives for recruiting people from minority or marginalised sectors of the community.

Harassment

We strongly believe that all people have the right to work in an environment free of discrimination and harassment. We will not tolerate harassment to our employees or members of the general public. We support your right to object to harassment or discrimination, and undertake to protect people who use this right responsibly against backlash or subsequent, unfair treatment.

Commitment to Employment

Although Orica does not provide union information, employees are free to join unions and other associations and Orica work sites range from completely non-unionised to entirely unionised. All Orica contractors are subject to the same opportunities and conditions as Orica staff.

Upon offer of employment, new staff are required to commit to Orica's "Deliver the Promise" principles and behaviours. They are also required to adhere to Orica's Code of Ethics which prohibit discrimination and harassment. All staff sign a Safety, Health and Environment Charter which commits them to engaging in safe and environmentally responsible work practices.

Orica has adopted a consultative approach to advising employees about operational changes that affect them. While the minimum notice period varies between business units, the company as a whole aims to inform employees about relevant changes as soon as practicable.

Our SH&E Model Procedures require that all of our employees are represented in formal management-worker health and safety committees. In 2008, these committees were established and functional at most of our sites.

Each Orica business has a dedicated Human Resources department to handle employee grievances and complaints.

Workplace Flexibility

Orica values our people and is committed to providing and maintaining a flexible work environment that enables staff members to manage their work, family and lifestyle responsibilities whilst maintaining business requirements. We understand that employees work more effectively when their life is in balance and recognises that employees have different needs and personal commitments.

Workplace flexibility is about thinking innovatively about the way employee's working conditions are structured. It is an approach whereby managers and employees work

together to agree on workplace arrangements that are suitable for both the employee and business requirements. Benefits include:

- Attracting and retaining skilled and motivated employees;
- Increased productivity by more energetic and focused employees;
- Reduced Absenteeism;
- Increased employee engagement, satisfaction, trust and respect; and
- Improved work-life balance and alignment with our sustainability strategy.

Orica's Flexible Work Practice Policy covers part-time employment, job sharing arrangements, flexible working arrangements, flexible return from family leave, phased retirement and working from home.

Family (Maternity/Paternity) Leave

Orica offers one week unpaid paternity leave, six weeks paid maternity leave and a further 46 weeks unpaid maternity leave. In cases where the father is the child's primary care giver, Orica offers up to 52 weeks unpaid paternity leave.

In 2008, 22% of women returning from family leave resumed full-time work, with the remainder returning to part time or casual roles. Most employees returning from Family Leave rated the Orica Leave Policy highly.

Staff Training and Development

Orica staff training and development aims to develop a broad range of competencies and is tailored to meet the specific needs of individual staff members. Formal objectives for staff development are mutually agreed upon by the individual and their manager, and performance is appraised against these objectives.

Approximately 40% of Orica employees are required to undertake additional training specific to their job category within a defined time period after taking up their position. Approximately 40% of employees have clearly defined career paths.

Employee Assistance Program

From time to time, employees may have issues in their personal lives which impact on their health, wellbeing and ability to perform their work effectively. Such issues can range from drug or alcohol dependence of the employee or of a family member, to marital breakdown.

Orica offers assistance to these employees. At most of our sites either one or both of the following services are provided:

- "Referral" or "self referral" to an Occupational or Employee Assistance Service (i.e. professional counsellor); and
- Chaplaincy Service.

142 new clients accessed our EAP program in 2008 (112 employees and 30 family members). This represents a periodic usage rate in Australia of 3.59%, a decrease from 4.17% in 2007.

In addition there were seventeen continuing clients from a previous reporting period. 43 of the employees were female and sixty-nine were male. Their average age was 38 years.

Integration of Sustainability

Roughly 60% of Orica's worldwide staff have formalised annual objectives. These staff members have training and personal development incorporated into their annual objectives and performance reviews, and all staff members must have at least one annual objective (which is incorporated into their annual performance review) relating to an issue of environment, health and safety.

Human Rights

Increasingly, Orica businesses are operating in more remote regions. This is presenting new challenges for an organisation that at its inception 10 years ago was primarily operating in Australia and communicating in a single language – English.

Today we have a presence in around 50 countries and publish company news in twelve different languages. It is critical that we succeed in promoting our core values to customers and employees in these regions, while remaining responsive to their concerns about the future of the environment and the communities in which they live. We see our social responsibilities as being complementary to our financial performance and a critical component of both our licence to operate in all regions of the world and our ability to attract and retain the best employees.

Our Performance in 2008

In 2008 we are not aware of any incidents of discrimination within our business. We have consistent policies in place globally to ensure reasonable working hours and conditions and minimum age for employment.

Orica takes all reasonable steps to ensure that we don't employ child, forced or compulsory labour. Our Code of Ethics requires that we "comply with the letter and spirit of the laws affecting Orica's businesses". We do not currently operation in any countries where these practices are condoned.

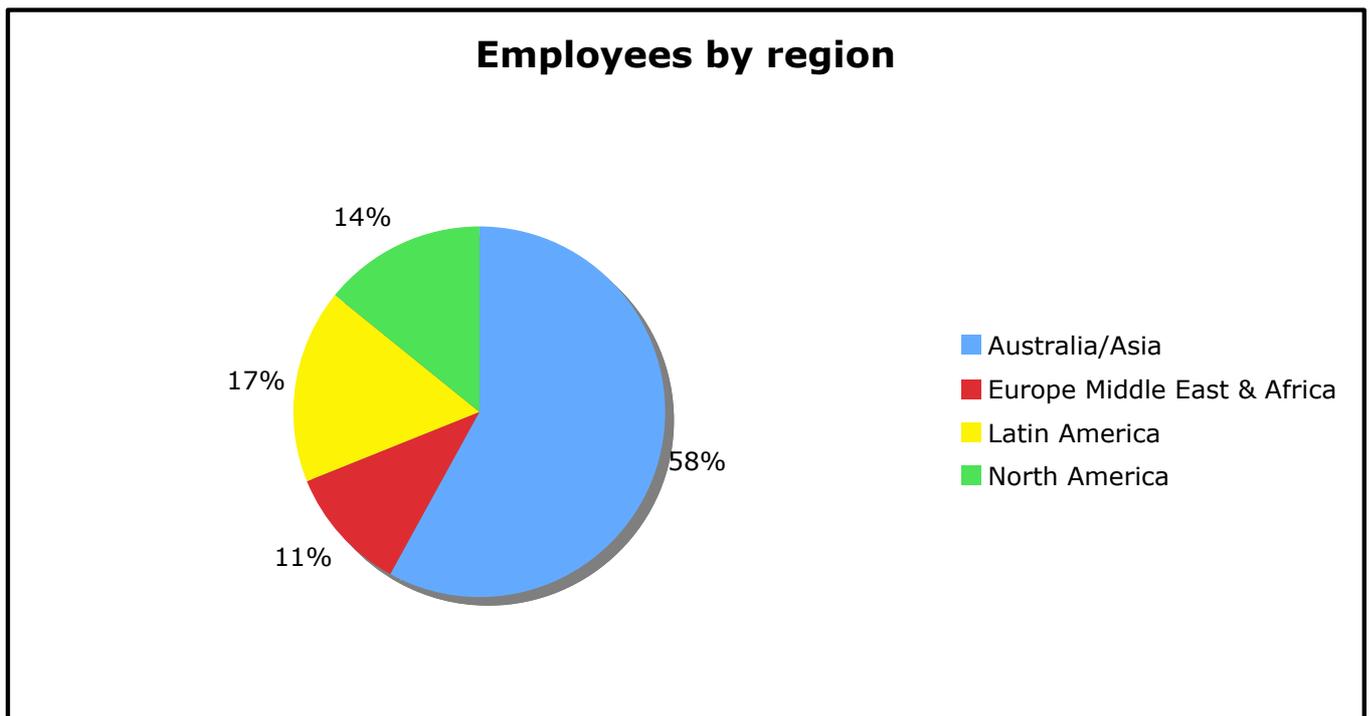
Our People in 2008

It is the calibre of our people that has largely driven our success in 2008 and will determine how well we take advantage of the very strong strategic position we have achieved. Today we employ about 15,000 people around the world and more than half of our business now takes place outside of Australia and New Zealand – a very marked change from our beginnings.

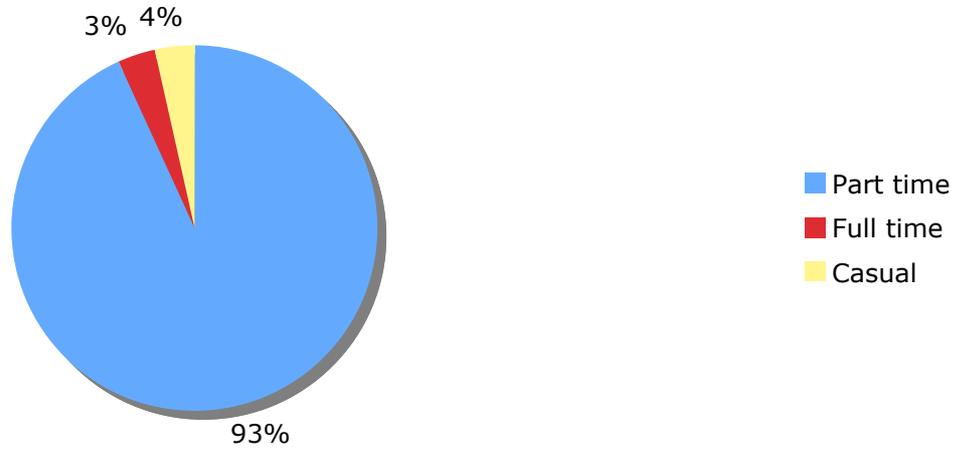
Despite the dozens of different languages and diverse backgrounds of our global workforce, our employees are united by a common commitment to our “Deliver the Promise” principles. These principles are intended to guide all of our employees in their day-to-day decisions and empower them to perform to the best of their ability.

Recruitment, professional development and talent management programmes are very important. Our graduate recruitment and development programme has further expanded to operations around the world this year, ensuring that we attract the best and brightest to build an even stronger, more competitive Orica.

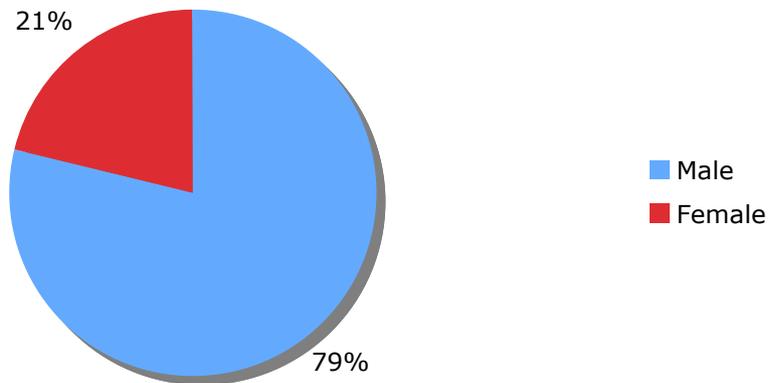
Our Employee Profile in 2008



Employees by contract type



Employees by gender



Our total employee turnover in 2008 was approximately 17%.

Diversity and Equal Opportunity

In 2008 we:

- Conducted Equal Opportunity training completed for Contact Officers. The network of contact officers is displayed around the company and on the company intranet;

- Updated policy and posters for Harassment, Discrimination and Bullying: Your rights and responsibilities;
- Conducted first round of screening of employment candidates by an independent recruitment centre, thus ensuring all candidates are considered regardless of gender. We are also asking recruitment agencies to actively seek female applicants, making sure that applicants know that we offer flexible work practices and equal access to the workplace;
- Introduced the Orica talent management process. This approach offers "talented" employees the opportunity to participate in a talent validation process that, in turn, offers them access to robust development opportunities. We are implementing proactive strategies to monitor and influence female development. More work needs to be done to monitor this trend at lower levels of the organisation;
- Surveyed Family Leavers about the Family Leave process provides Orica with positive feedback. Orica keeps in contact with family leavers by providing updates on company events;
- Supported programs around women's leadership both in corporate functions and engineering; and
- Continued to promote flexibility options around family commitments as part of employee value proposition.

Half of the Group's Young Professionals this year are female – a significantly higher ratio than the general employee population where there is only 16% women. A review of comparative salaries paid between males and females at middle and senior management found that there was no significant salary differential in 2008.

In Australia, 21% of our employees are female. This proportion is increasingly reflected in our senior management positions:

- 12% of middle managers;
- 8% of senior managers; and
- 22% of non-executive company Directors.

Diversity data for other regions where we operate is managed at the business level and is not aggregated centrally. For example, our Minova Siemianowice site in Poland employs approximately 90 disabled persons (out of approximately 220). This initiative, along with the high level of on-site support services available (doctors, dentists, etc), make the Siemianowice site a successful example of our commitment to employee diversity.

Read more about how our people work together:

- Young Professionals Program;
- Employee Engagement findings; and
- Brilliant Ideas Program in Venezuela.

Case Studies

Young Professionals Program

Orica, Global

Our graduates participate in a three-year, structured development program to enhance their understanding of our business and develop their leadership and interpersonal skills. All graduates attend a biannual two-day development workshop, learning skills such as High Performance Organisation Training in their first year, developing a strong mentoring relationship in their second year and conflict resolution in their third year. Diego Carbonetti, information technology Young Professional attended the 2008 workshop and said “Having these skills opens up more opportunities to progress down our chosen career paths. I enjoyed getting to know the other graduates and managers and having a laugh with them.” Orica senior management, including our Managing Director, and our graduates get together during the workshop period for the annual Young Professionals Dinner. The program will expand to include North America, Latin America and EMEA in 2009.

Employee engagement findings

Orica, Global

We are building a solid picture of what matters to our Orica employees.

Our Net Promoter Score survey asks Orica employees how likely we would be to recommend Orica as an employer to their friends on a scale of zero to 10. The responses are then sorted into three different categories: Promoters (rate Orica at nine or 10), Passives (rate Orica at seven or eight), Detractors (rate Orica anywhere from zero to six).

With over 2,000 responses to the survey since its launch in 2007, our net promoter score is currently 10.

Safety, Health and Wellbeing is an area identified by promoters and detractors alike as a reason for their net promoter score. For example, in 2008 Chemical Services implemented site-specific health programs in response to company-sponsored health checks of more than 100 employees. The checks covered cholesterol, blood pressure, resting heart rate, BMI, lung function, vision, back care and cardio-respiratory health.

In their response to the survey, an Orica Mining Services employee said, “I believe Orica is turning a corner in regards to training and opportunities for progression. I think long term we are a very viable company and I think I will be staying.”

Brilliant Ideas Program in Venezuela

Orica Mining Services, Venezuela

Our employees are full of brilliant ideas. Recognising this, Orica Venezuela established the “Brilliant Ideas” system to encourage their people to share great ideas for their workplace and business. With 48 ideas submitted and seven awards granted last year, “Brilliant Ideas” drives innovation and a mutual feeling of shared ideas and common goals among our people.

Our Economic Contributions

Overview

We are the global market leader in our largest business, Mining Services, and the Australian market leader in our Consumer Products and Chemicals businesses. Effective 1 January 2007, Orica completed the acquisition of Minova, a global market leader in mining strata control chemicals, further enhancing our position as a truly international company.

Orica's strategy for sustainable profit growth and strong returns on investment is driven by:

- Securing market leadership positions in selected "niche" markets, which build on the businesses strengths and enables the company to better service customers, develop and retain technological advantage and achieve benefits of scale;
- Growing only businesses that have "earned the right to grow"; and
- Growing "close to the core".

Strict adherence to financial criteria continues to provide the discipline required for assessing growth opportunities. Orica sees growth coming from four key areas: Industry and Organic Growth, Productivity Improvements, Expansion Capital expenditure and Mergers and Acquisitions.

Responsible Financial Management

Comprehensive practices have been adopted to monitor:

- That capital expenditure and revenue commitments above a certain size obtain prior Board approval;
- Financial exposures including the use of derivatives;
- Safety, health and environment standards and management systems to achieve high standards of performance and compliance; and
- That business transactions are properly authorised and executed.

Our internal audit process is managed by the Chief Risk Officer and is co-sourced with an independent firm of accountants. Through this process, our controls, processes and procedures are reviewed and improvements recommended across our corporate and business activities.

The company's financial statements are subject to an annual audit by an independent, professional auditor who also reviews the company's half-yearly financial statements. The Board Audit and Risk Committee oversees this process on behalf of the Board. Read more in our Corporate Governance Statement.

Our Financial Performance in 2008

Orica's net profit after tax and significant items was \$540 million for the full year ended 30 September 2008, an 11% increase on the previous full year.

Excluding the loss on individually significant items of \$33 million, net profit after tax was \$572 million, up 15% on 2007. Sales revenue increased 18% to \$6.5 billion. Cash flow from operating activities was up by 41% to \$737 million.

The Board has declared a final dividend of 55 cents per ordinary share, bringing the total ordinary dividend for 2008 to 94 cents per share, representing an increase of five cents or 6% on the 2007 final dividend. The 2008 dividend is franked at 20 cents per share.

Earnings per share (EPS) before significant items increased 14%, over the 2007 full year, to \$1.70.

The result demonstrates the strength across Orica's business platforms despite some challenging market conditions during 2008, including unfavourable foreign exchange movements and rising input costs.

The record results marks Orica's seventh consecutive year of profit growth. It also highlights the continued strength in Orica's underlying earnings with all business platforms achieving double-digit growth.

In July, the board announced it's in principle intention to de-merge the Consumer Products business so that both Orica and Consumer Products can each pursue their respective strategic growth paths. Due to extreme volatility in equity and financial markets the Board decided in November to defer the de-merger indefinitely. While the strategic rationale for the de-merger remains undeniable, external circumstances have impacted the intended timing.

However, once the de-merger of Consumer Products eventuates in a more stable financial market environment, Orica will be around 90% focused on the mining and infrastructure sectors. This is a very deliberate strategy designed to expose ourselves to those sectors of the economy which we believe will achieve above average growth in the foreseeable future and – importantly – limit the level of volatility in our earnings.

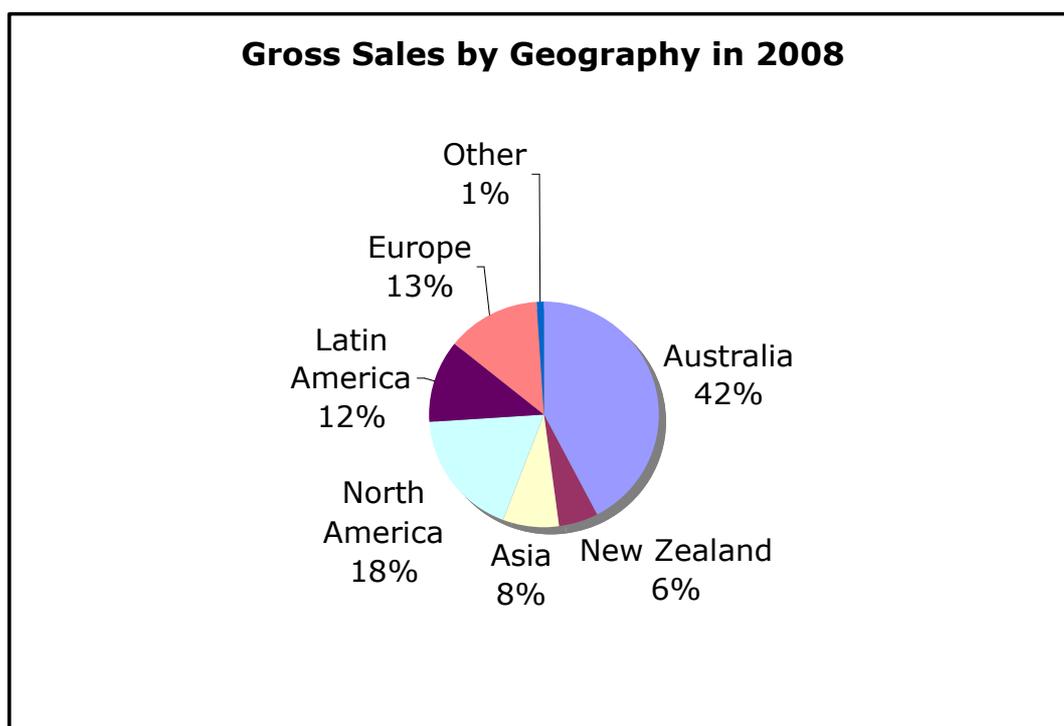
Summary financial information for Orica Limited \$ Million (Year ending 30 September 2008)

	2008	2007
Sales	6544.1	5527.2
Gross Margin	2874.6	2474.1
EBITA1	1188.8	995.9
EBIT 1	970.1	812.7
Net profit after tax pre significant items	572.3	497.8
Net profit after tax after significant items	539.6	487.7
Operating cash flow	736.9	524.3
Productivity (%) 2	69.0	69.8
Earnings per share (cents) 1	170.0	149.5
Dividends per share (cents)	94.0	89.0
Return on shareholders funds (%) 1	16.9	19.2
Gearing (%) 3	19.1	33.2

1 Pre significant items

2 Productivity measured as total fixed costs as a percentage of gross margin

3 Net debt/(net debt + book equity)



Economic Value Generated and Distributed

We see our social responsibilities as being complementary to our financial performance and a critical component of both our licence to operate in all regions of the world and our ability to attract and retain the best employees.

Economic value generated		Economic value distributed					Economic value retained
Revenues		Employee wages and benefits	Payments to providers of capital	Payments to government	Community investments		Net cash flow from operating activities
Receipts from customers	Royalty and other income received	Payments to suppliers and employees	Net interest paid	Net income taxes paid	Gross taxes and royalties	Voluntary contributions and investment of funds in the broader community, Includes donations	
6946.8	58.4	5929.8	148.5	190	0	0.12	736.9

Financial Impact of Climate Change

Risks

We consider our company to be exposed to regulatory and physical risks from climate change.

While the EU Emissions Trading Scheme does not currently cover our facilities, the pending introduction of an Australian scheme will lead to increased costs for our Australian businesses (i.e. including materials and energy inputs, compliance and reporting and direct emissions costs). We anticipate that our activities will attract similar risks in other countries where we operate as relevant emissions trading schemes are introduced.

Many of our Australian facilities have already experienced the impact of changes in water availability. We have already implemented, or are developing measures to mitigate, the impact of water restrictions. The risk of extreme weather events has been considered in our risk management, emergency response planning and business continuity planning processes. We anticipate that extreme weather events may also impact on supply and price of input materials.

Opportunities

While we are committed to reducing our impact on the climate, the regulatory and physical risks of climate change may also provide some opportunities for our company:

- We are investigating carbon abatement opportunities in the Clean Development Mechanism (CDM) countries where we operate. Our investigations in the Philippines are particularly advanced, with further research planned in Mexico;
- Significant energy savings have been identified through our participation in the Australian Energy Efficiency Opportunities legislation's pilot program;
- Water scarcity in Australia offers us the opportunity to sell recycled water from our Water Treatment Plant in Botany, Sydney, leading to a reduced reliance on potable water;
- We have identified technology that will provide significant abatement of our nitrous oxide emissions; and
- We are investing in products and services designed to minimize carbon emissions from the provision of blasting services to our global mining customers.

Financial assessment

We are currently undertaking an independent review of our approach to climate change to identify any further gaps and opportunities. We intend to incorporate any additional findings into our financial and operational plans over the next reporting period to ensure they are addressed appropriately.

We run financial models of cost/revenue outcomes of our:

- Nitrous oxide abatement programs; and
- Our marketing plans to customers that incorporate carbon-related business opportunities.

In 2007 we introduced carbon and water pricing sensitivity analysis for all major supply contracts and investments. We also include a carbon and water “price-escalation” clause for customer contracts in excess of three years.

Previous Reports

Please see our previous reports on our website (www.orica.com.au):

2007 Sustainability Report

2006 SH&E Annual Sustainability Report

2005 SH&E Annual Sustainability Report

2004 SH&E Annual Sustainability Report

2003 SH&E Annual Sustainability Report

Feedback

We welcome your feedback on our 2008 Sustainability Report. Contact us:

Email: sustainability.team@orica.com

Telephone: +61 3 9665 7111

Global Reporting Initiative Navigator

Our 2008 Sustainability Report has been written in accordance with the 2006 Global Reporting Initiative (GRI), 2006 Sustainability Reporting Guidelines. The Report has been assessed by GRI as meeting the requirements for the B+ GRI Application Level. We believe it represents a balanced and reasonable presentation of our organisation's economic, environmental and social performance.

Report Application Levels



		2002 In Accordance	C	C+	B	B+	A	A+
Mandatory	Self Declared			Report Externally Assured		Report Externally Assured		Report Externally Assured
	Third Party Checked			Report Externally Assured		Report Externally Assured		Report Externally Assured
Optional	GRI Checked			Report Externally Assured		Report Externally Assured		Report Externally Assured

This GRI Index demonstrates how our Report addresses the GRI Standard Disclosure requirements (Part 2 of the 2006 Guidelines). Read more about our approach to addressing Part 1 of the Guidelines (Defining Report Content, Quality and Boundary) in [Our Approach to Reporting](#).

The third column of this Index indicates the relevant sections of the Report that address the Standard Disclosure requirements. Not all references to an indicator are included in this Index, as it is impractical to list every applicable reference to an indicator.

G3 Content Index

STANDARD DISCLOSURES PART I: Profile Disclosures

1. Strategy and Analysis

Profile Disclosure	Description	Reference	Reason	Comments
1.1	Statement from the most senior decision-maker of the organization	MD Message		
1.2	Description of key impacts, risks, and opportunities.	Orica and SD, "Our Key Sustainability Challenges"		

2. Organizational Profile

Profile Disclosure	Description	Reference	Reason	Comments
2.1	Name of the organization.	Orica and SD, "Explanation of Company Terms"		
2.2	Primary brands, products, and/or services.	"About Orica" web link		
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	"About Orica" web link		
2.4	Location of organization's headquarters.	Orica and SD, "Explanation of Company Terms"		
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	"About Orica" web link		
2.6	Nature of ownership and legal form.	Orica and SD, "Explanation of Company Terms"		
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	"About Orica" web link		
2.8	Scale of the reporting organization.	"About Orica" web link		
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Orica and SD, "Acquisitions and Divestments"		
2.10	Awards received in the reporting period.	Orica and SD, "Awards and Recognition"		

3. Report Parameters

Profile Disclosure	Description	Reference	Reason	Comments
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Orica and SD, "Report Boundary"		
3.2	Date of most recent previous report (if any).	Orica and SD, "Our Approach to Reporting"		
3.3	Reporting cycle (annual, biennial, etc.)	Orica and SD, "Report Boundary"		
3.4	Contact point for questions regarding the report or its contents.	Orica and SD, "Our Approach to Reporting"		
3.5	Process for defining report content.	Orica and SD, "Materiality"		
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Orica and SD, "Report Boundary"		
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope). I	Orica and SD, "Report Boundary" and "Completeness"		
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Orica and SD, "Report Boundary"		
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Orica and SD, "Report Boundary"		
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g. mergers/acquisitions, change of base years/periods, nature of business,	Orica and SD, "Report Boundary"		

	measurement methods).			
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Orica and SD, "Report Boundary"		
3.12	Table identifying the location of the Standard Disclosures in the report.	GRI Content Index		
3.13	Policy and current practice with regard to seeking external assurance for the report.	Orica and SD, "Reliability"		
4. Governance, Commitments, and Engagement				
Profile Disclosure	Description	Reference	Reason	Comments
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Sustainability Governance, "Organisational Structure"		
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Sustainability Governance, "Organisational Structure"		
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	Sustainability Governance, "Organisational Structure"		
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Sustainability Governance, "Code of Ethics"		
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	Sustainability Governance, "Organisational Structure"		
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Sustainability Governance, "Organisational Structure"		
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	Sustainability Governance, "Organisational Structure"		
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Sustainability Governance, "Code of Ethics"		
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Sustainability Governance, "Organisational Structure" and "Risk Management"		
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Sustainability Governance, "Organisational Structure"		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Orica and SD, "SH&E Policy"		
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Orica and SD, "Our Public Commitments"		
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	Working with Others "Industry Partnerships"		
4.14	List of stakeholder groups engaged by the organization.	Orica and SD "Engagement"		
4.15	Basis for identification and selection of stakeholders with whom to engage.	Orica and SD "Engagement"		
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Orica and SD "Engagement"		

4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Orica and SD "Engagement"		
------	---	---------------------------	--	--

STANDARD DISCLOSURES PART II: Disclosures on Management Approach (DMAs)

G3 DMA	Description	Reference		Comments
DMA EC	Disclosure on Management Approach EC	Our Economic Contributions "Responsible Financial Management"		
DMA EN	Disclosure on Management Approach EN	Environment "Our Performance in 2008"		
DMA LA	Disclosure on Management Approach LA	Health and Safety "Our Performance in 2008" pages 2 and 3. Our People "Our Performance in 2008"		
DMA HR	Disclosure on Management Approach HR	Our People "Our Performance in 2008"		
DMA SO	Disclosure on Management Approach SO	Our People "Our Performance in 2008"		
DMA PR	Disclosure on Management Approach PR	Working with Others "Product Stewardship – Our Performance in 2008"		

STANDARD DISCLOSURES PART III: Performance Indicators

Economic

Performance Indicator	Description	Reference	Reason	Comments
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Our Economic Contributions "Economic Value Generated and Distributed"		
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Our Economic Contributions "Financial Impact of Climate Change"		

Environmental

Performance Indicator	Description	Reference	Reason	Comments
EN3	Direct energy consumption by primary energy source.	Environment "Energy Use"		
EN4	Indirect energy consumption by primary source.	Environment "Energy Use"		
EN16	Total direct and indirect greenhouse gas emissions by weight.	Environment "Emissions"		
EN17	Other relevant indirect greenhouse gas emissions by weight.	Environment "Emissions"		
EN20	NOx, SOx, and other significant air emissions by type and weight.	Environment "Emissions"		
EN21	Total water discharge by quality and destination.	Environment "Water"		
EN22	Total weight of waste by type and disposal method.	Environment "Waste"		
EN23	Total number and volume of significant spills.	Environment "Spills and Incidents"		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Working with Others "Product Stewardship – Our Performance in 2008"		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Environment "Compliance"		

Social: Labor Practices and Decent Work

Performance Indicator	Description	Reference	Reason	Comments
LA1	Total workforce by employment type, employment contract, and region.	Our People "Employee Profile"	Not available	Partial conformance – Orica reports total workforce by

				employment type and region only. Employment contract data is captured at the business level and not aggregated centrally.
LA2	Total number and rate of employee turnover by age group, gender, and region.	Our People "Employee Profile"	Not available	Partial conformance – Turnover data is captured at the business level and not aggregated centrally. Orica has provided OMS total turnover as a material indicator of total company turnover.
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	Our People "Commitment to Employment"		
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	Health and Safety "Fatalities", "Injuries and Illnesses" and "Hygiene Monitoring Programs"		
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	Our People "Diversity and Equal Opportunity"		Partial conformance – gender diversity reported only
Social: Human Rights				
Performance Indicator	Description	Reference	Reason	Comments
HR4	Total number of incidents of discrimination and actions taken.	Our People "Human Rights and Discrimination"		
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	Our People "Human Rights and Discrimination"		
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	Our People "Human Rights and Discrimination"		
Social: Society				
Performance Indicator	Description	Reference	Reason	Comments
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Sustainability Governance		
SO5	Public policy positions and participation in public policy development and lobbying.	Sustainability Governance, "Code of Ethics"		
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Environment "Compliance"		
Social: Product Responsibility				
Performance Indicator	Description	Reference	Reason	Comments
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Working with Others "Product Stewardship"		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Health and Safety "Product Safety"		