Every year we challenge ourselves to further reduce the environmental impact of our business and make IBM in Australia & New Zealand a safer place to work.

In order to do this, we invest in systems, such as our global Environmental Management System (EMS), which helps us track, manage and ameliorate the environmental impact of doing business, and our global Well-being Management System (WBMS), which helps provide a safe and healthy workplace at IBM for our employees, contractors, suppliers and visitors.

While these systems are essential, they would not be as effective without a strong focus on creating a supportive culture. As CEO, I chair our Environmental Affairs Council, which takes a lead on increasing awareness with our employees and contractors of environment and wellbeing issues. We have also established effective consultation mechanisms that cover our major operations, and deliver safety and environmental training, education and awareness programs to our employees, and designated contractors and suppliers.

Here are some of the highlights of this year’s Environment & Wellbeing Progress Report:

**Major progress in computer equipment recycling**

In 2004 we extended the usefulness of more than 91,000 items of computer equipment through our remarketing operations in Australia and New Zealand. Of the computer equipment assigned for scrapping, almost 84% by weight was recycled. We also continued to work with the IT industry and commercial recyclers to find suitable secondary uses for the remaining computer plastics, and find practical solutions for the recovery of old PCs from the community, thereby diverting these materials from landfill. Introducing the IBM Printer Supplies Return Program in Australia also allowed us to recover more than eight tonnes of toner cartridges and other print consumables, none of which went to landfill.

> Continues next page.
Reduced water and paper consumption
In 2004, we used water more efficiently, saving 22 Megalitres (a 12% reduction in water consumption from 2003) at our key Australian sites, and 1 Megalitre in our key sites in New Zealand (a 17% reduction in water use). On average, each full-time equivalent employee and contractor used one ream of paper less in Australia and 1.8 reams less in New Zealand than in 2003. This is equivalent to an overall saving of more than 600 trees.

Safer workplace
During the year, we maintained AS4801 accreditation for the business services that touch our clients, which is independently audited. In 2004, IBM’s workplace injury rate improved, with lost time injuries per 100 employees falling from 0.43 to 0.34.

Continued support for the natural habitat and our biodiversity
Our New Zealand employees continued to volunteer their time towards a tree-planting project at Motutapu Island off Auckland. In Australia, we also continued to invest resources to regenerate and protect endangered “Blue Gum High Forest” and Turpentine Iron Bark Forest on our West Pennant Hills site in Sydney.

We will continue to invest to meet our corporate responsibility to reduce our impacts on the environment and ensure a safe and healthy workplace. We voluntarily publish this annual progress report and submit it for independent verification so you can make your own assessment of our progress on this commitment.

Please feel free to contact us with your feedback on 13 24 26, or by filling out the attached form and sending it to us.

Philip Bullock
CEO, IBM Australia and New Zealand
November 2005
IBM Australia / New Zealand: Profile

IBM is a leading supplier of information technology, software and services in Australia and New Zealand. We have been operating in Australia since 1932 and in New Zealand since the 1960s, where we installed New Zealand’s first computer.

In both countries, our focus is on helping customers of all sizes to adapt and prosper in the online world. Our extensive range of products and services help organisations to take advantage of new opportunities presented by Internet-based technologies, building on their existing technology investments.

IBM e-business solutions range from electronic office procedures which save businesses time and resources by linking them electronically with customers and suppliers, through to tools which can help businesses to tap new revenue streams.

IBM solutions are designed to solve short-term business challenges, while still being flexible enough to support companies as they adapt to new opportunities in the rapidly changing online world. One notable trend already impacting businesses is the increasing reach of technology as computing power becomes small and smart enough to be incorporated into everyday devices such as mobile telephones and hand-held computers.

With our extensive local and international skills, along with business partners who specialise in a range of industries, IBM solutions bring together the components which best suit the unique requirements of each of our customers.

Scope of this report

In 2004, the company had over 10,000 employees and over 2,000 contractors in Australia and over 700 employees and 250 contractors in New Zealand. During the year, these employees worked in 44 leased sites in Australia and 1 owned and 6 leased sites in New Zealand. They were also located in around 100 client sites across the region and, at times, many of them worked from home.

This report presents safety information tracked at all the IBM operated and client sites. Where environmental information is collected from a different number of sites the scope or business coverage is noted at the beginning of the relevant section of the Progress Report.
The IBM Environment Affairs Executive Council, key areas of interest have included: Industry IT Product Take Back program development, water conservation in IBM and Self Assessment Compliance programs for managers and employees.

**Safety Management Systems**
In 2004, we continued to implement the IBM Well-being Management System (WBMS) across our Business Units:

**The Safety Compliance Certification Program**
During the year, we held Safety Review Group meetings in NSW, Victoria, ACT and South Australia. Key results from these meetings included:

- making Safety Risk Assessment Modelling and Risk Communication protocols readily available via the Intranet;
- continuing to deliver intensive training programs for high-risk groups in Manual Handling and Ergonomics; and
- continuing the classroom-based Safety in Driving program.

**Training**
In addition to our general safety training programs, training focused on key target groups, including:

- new employees;
- contractors during induction to IBM sites;
- location site executives and site coordinators;
- site and security personnel;
- procurement;
- real estate; and
- field engineers and managers.

We also kept training registers for all safety courses undertaken.
Site Safety

In 2004 17 sites, covering approximately 75% of employees working on IBM premises, underwent building safety audits. These were: West Pennant Hills, Berry Street, Baulkham Hills and St. Leonards sites in New South Wales, Tuggeranong in ACT, Brisbane and Gold Coast, Adelaide and Ballarat in Victoria.

The reviews ensured that site safety programs complied with regulatory and IBM requirements for building site safety management. They revealed that there were no sites with major compliance issues or seriously unsafe conditions, although there were several areas for improvement, mostly related to Real Estate facility maintenance.

In addition, all follow-up items from the previous year’s 20 sites review were actioned and closed in 2004.

Specific Site Hazards

IBM has ensured that the cooling tower Legionella testing program is maintained according to Australian standards. No health issues related to Legionella were raised since the previous report was issued.

IBM’s asbestos management plan is current and is being implemented widely across IBM sites including a review of each piece of newly acquired Real Estate.

Health and Medical Programs

Wellness Assessments

In 2004, IBM New Zealand continued to offer its long-term Periodic Medical Review program, which provides a full health assessment and medical examination for employees on request.

IBM Australia continues to provide Full Health Assessments to all employees, and 823 employees from 11 sites utilised the opportunity offered. In general terms their health profile was better than found in the Australian population.

Employee Assistance Program (EAP)

For the 12th year, IBM’s EAP service continued to provide private, individual counselling to employees and their families when requested. In both Australia and New Zealand, employee feedback on satisfaction with the services rendered through the EAP was high (90% very good / excellent).

In Australia, 3% of employees sought assistance from the EAP service, via Corporate Health Services. This group also supplied:

• 2 on-site IBM team grief counselling seminars following 4 traumatic events;
• 14 stress management seminars, “Relaxation in a Busy Working Life” were conducted; and
• 19 hours of critical incident debriefing sessions were also undertaken.

In New Zealand, 5% of employees used the EAP. In addition, a stress education program called “Resilience” was offered across the business.
Certification and Audit

During the year, IBM systems were assessed and certified against several external best practice and certification programs.

- IBM Australia (IBMA) and IBM Global Services Australia (GSA) each succeeded in the re-audit requirements for the NSW Premium Discount (PDS) Scheme in June 2004. The audits were carried out by Workcover (NSW) accredited auditors. Successful achievers of PDS are advertised on the Workcover website. The benchmarks for the PDS can be found on the following address: www.workcovernsw.gov.au/html/pdscheme.nsp.
- The IBM Well-being Management System was also evaluated under IBM’s Professional Self Assessment (PSA) programs and no non-compliances were noted.

Work-related injury Experience

In 2004 IBM’s workplace injury rate reduced slightly, while the rate of Lost Time Injuries reduced from 0.43 to 0.34. However, the injury severity index for Lost Time Injuries, remained at 15 days / Lost Time Injury in 2004.

The major causes of injuries remained constant, though stress claims are rising:
- slips and falls (26%);
- manual handling (23%);
- workstation ergonomics (15%) and
- stress claims (4%).

| Total number of injuries (all IBMANZ): | 123 |
| Incidence of all injuries per 100 employees: | 1.11 |
| Total number of Lost Time Injuries: | 34 (0 for NZ) |
| Lost Time Injury Rate per 100 employees: | 0.34 |
| Average Days Lost per Injury: | 14.7 |
Corporate strategies, instructions, and procedures must support our commitment to employee well-being and product safety. Each of us, manager and employee alike, shares a personal responsibility for the following objectives:

- Provide a safe and healthful workplace for our employees
- Provide products that are safe for use by our customers and employees
- Meet applicable legal requirements and voluntary practices to which we subscribe where we operate and sell products
- Incorporate employee well-being and product safety requirements in business strategies, plans, reviews, and product offerings
- Implement, measure, and continually strive to improve well-being processes for preventing work-related accidents, injuries and illnesses
- Foster employee involvement and provide appropriate well-being education to employees to enhance their ability to work safely and productively

- Perform audits and self-assessments of our conformance with employee well-being and product safety requirements with results reported to senior executive management
- Investigate and address work-related and product safety incidents
- Provide appropriate resources to fulfill these objectives.

Our support for well-being through prevention is vital to our innovation, productivity, and morale. We have realized enormous dividends through customer and employee confidence in the safety of our products and our workplaces. The IBM Company expects nothing less in our efforts than the excellence we have attained in these areas.

Original Signed by:     Endorsed by:
J. Randall MacDonald    P. Bullock
Senior VP Human Resources   Country General Manager
IBM Corporation     Australia & New Zealand
IBM's corporate policy on environmental affairs, first issued in 1971, is supported by the company’s global environmental management system, which ensures the company is vigilant in protecting the environment across all of its operations worldwide.

To identify and effectively manage the potential environmental impact of IBM's operations, 30 years ago IBM established and has maintained a strong worldwide Environmental Management System (EMS), of which our environmental policy and programs form vital elements.

IBM's environmental policy provides the strategic framework for the EMS and outlines environmental objectives addressing areas such as: workplace safety; the conservation of energy and other natural resources; environmental protection; and the development and manufacture of products that are protective of the environment.

This policy is supported by corporate instructions and environmental practices that govern IBM's worldwide operations and are basic to its environmental management programs. The corporate instructions cover areas such as: chemical and waste management; energy management; environmental evaluation of suppliers; product stewardship; incident prevention and reporting; and environmental due diligence for acquisitions and divestitures.

ISO 14001 Environmental Management System

In 1997, IBM became the world’s first major multinational to earn a single worldwide registration to the ISO 14001 Environmental Management System standard. This registration covers all the manufacturing, research laboratories, product design and hardware development operations globally and some sales and services operations, including Australia. IBM Australia first achieved accreditation to this international standard in 2002.

In 2003, IBM successfully retained its ISO 14001 Environmental Management System certification (Certificate number 43820.36) for the West Pennant Hills premises. A further Surveillance Audit is scheduled for 2005 as part of the IBM Global EMS ISO 14001 accreditation program.

2004 significant environmental aspects

- Energy consumption
- Chemicals use & storage
- Hazardous waste disposal and trans-boundary movement
- Nonhazardous waste disposal
- Product and packaging disposal & reuse
- Unplanned releases
- Water use and discharges.

IBM is committed to environmental leadership in all of its business activities, from its operations to the design of its products and use of its technology.
Environmental Management System

2004 Environmental and Chemical Management programs
- Energy Efficiency
- Chemicals Management
- Water Conservation
- Waste Minimisation and Management
- Product Scrap Management
- Bush Regeneration
- Procuring for the Environment
- Environmental Incident Prevention, Preparedness, Response and Reporting
- Environmental Communication and Training
- Supplier Environmental Evaluation
- Environmental Site Assessment
- Environmental Due Diligence and Ground Water and Soil Protection.

Environmental performance assessment and reporting
IBM drives continual improvement in the EMS through environmental reviews and internal audits as part of our annual Professional Self Assessment (PSA) program. We also get the completeness and accuracy of our environmental and safety data and system independently verified.

In Australia and New Zealand internal reporting on environmental performance is focused though the quarterly meetings of the Environmental Affairs Council chaired by the CEO.

Externally, we report our performance annually against our environmental policy objectives via a global IBM environmental reporting system, which provides data included in the global IBM Corporate Responsibility Report as well as this Progress Report for our Australian and New Zealand operations.
Product Stewardship

Established in 1991, IBM's Product Stewardship Program has brought about industry-leading practices in design for the environment, product environmental metrics and product recycling.

The objectives are to:

- Develop products with consideration for their upgradeability to extend product life.
- Develop products with consideration for their reuse and recyclability at the end of product life.
- Develop products that can safely be disposed of at the end of product life.
- Develop and manufacture products that use recycled materials where they are technically and economically justifiable.
- Develop products that will provide improvements in energy efficiency and/or reduced consumption of energy.
- Develop products that minimize resource use and environmental impacts through selection of environmentally preferred materials and finishes.

IBM's product stewardship requirements are included in its Integrated Product Development process, a strategic tool used by process and product development engineers. They are also part of IBM's environmental management system.

For further information please visit the IBM Corporate Responsibility web site at: ibm.com/ibm/environment/products/index.shtml.

Reuse and Extending Life of Computers

IBM Australia and New Zealand has a well established parts re-utilisation and computer equipment repair and refurbishment business. Fully refurbished computer equipment is sold as IBM Certified Used Equipment. Other used assets are cleaned up and/or repaired for sale, sold as working parts or donated to charities and community organisations.

In 2004, in Australia IBM refurbished and extended the useful life of over 83,000 pieces of computer equipment, including: desktops, notebooks, servers, monitors, printers and other peripherals. In New Zealand over 8,500 units of computer equipment were repaired or cleaned up for remarketing.

In the same year, IBM in Australia and New Zealand also exported over 700 used computer parts and assemblies for warranty replacement or repair and direct reuse within the Asia Pacific region for maintenance support of clients.

Machine undergoing repair in Australia
Community Product Take Back

In 2004, IBM Australia continued to investigate solutions to minimise the environmental impact from disposing of used computer equipment, in the process participating in the Australian Information Industry Association (AIIA) Special Environmental Interest Group for product stewardship and waste minimisation. The AIIA and its member companies are investigating options for providing the community with a national and practical longer term alternative to landfill disposal of old PCs. Further information is provided on the AIIA web site at: www.aiia.com.au/i-cms.isp?page=139.

Recycling Old Computers

Returned computer equipment from end-of-lease, internal use, old stock and defective parts that cannot be sold and/or re-used is assigned for scrapping in Australia and New Zealand. All computer scrap in Australia and New Zealand is processed through IBM Approved Hazardous Waste and Product Disposal Service Suppliers. This process includes a desk top evaluation, review of supplier responses to an environmental and OHS questionnaire and site visits as required. An investigation into the final end use of materials continued to be part of the evaluation process.

In Australia the scrapping process includes disassembling, impairing sensitive parts, and separating materials for recycling, and disposal to landfill where no other practical commercial solution is available to IBM. In Australia, computer scrap represented an estimated 10% by weight of the total quantity of computer equipment returned for remarketing in 2004. In 2003 the percentage was considered similar at 14%.

In New Zealand, computer parts, equipment and peripherals assigned for scrapping are primarily untouched, with the exception of sensitive parts that are removed and impaired. The scrap is sent to a commercial recycler. In New Zealand, computer scrap represented an estimated 15% by weight of the total quantity of computer equipment returned for remarketing in 2004. This was the first year this was reported in New Zealand.

Information on IBM recycling trends for product scrap are outlined in this report under the section on Pollution Prevention and Waste Minimisation and Management.
Energy Star Program

In 2004, IBM Australia remained a signatory to the national Energy Star Program administered by the Australia Greenhouse Office. This is part of our commitment to producing personal computers, monitors and printers with defined energy efficiency in design and operational features. More detail on the Energy Star Program is available at: www.energystar.gov.au

Supplier Requirements for Packaging

In 1990, IBM developed global packaging guidelines prohibiting the use of ozone-depleting chemicals, heavy metals, polybrominated biphenyls and polybrominated biphenyl oxides from all IBM packaging. The Guidelines also provide direction on minimising toxic elements in packaging materials, identifying methods, processes and designs to reduce packaging volume, and promoting the use of packaging materials that are re-usable, recyclable and/or contain recycled content. Recent accomplishments resulting from these guidelines include eliminating:

- polyvinyl chloride (PVC) in IBM packaging;
- free-flowing cushioning materials;
- permanently commingled but dissimilar materials except in cases where they are part of re-usable packaging designs or where technically required to ensure product quality; and
- chemical impregnation of wooden packaging (even though it is legally allowed), as chemicals render wood unfit for recycling or energy recovery.

Global Packaging Specifications

IBM product brands imported to Australia and New Zealand are generally packaged to IBM Packaging and Handling Supplier and Interplant Requirements (IBM 2001). The requirements are used world wide through key supply chains for IBM product and are designed to help address the negative impacts of packaging on the environment. The specification defines the minimum general requirements for preparing and packaging all parts, subassemblies, products and materials shipped to any world wide IBM manufacturing, distribution centre or client from either suppliers or other IBM locations.

They aim to:

- eliminate the use of toxic and hazardous substances (i.e. in printing inks & wood pallets);
- address light weighting and the use of more homogenous materials; and
- find ways to replace non-recyclable and less environmentally preferable materials with recyclable materials that contain a recycled content and can potentially be reused.

The potential benefits from these initiatives should flow through to the end user and support kerbside recycling programs. IBM has also developed a global Master Packaged Product Data Base that includes information about the types and weight of packaging materials used. While the requirements seek to minimise packaging, they recognise that packaging protection is particularly crucial for sensitive IT equipment containing hard drives, monitors and other sensitive electronics. Packaging is generally used to protect an item during transport and handling to ensure the product gets to the customer in the same condition as when it left the manufacturing process. Further, bulk packaging is generally used to consolidate items for shipment in the most cost effective manner and is designed to protect the items from movement and damage during shipment. In addition, packaging is used for marketing purposes, to provide manufacturer and supplier information and communicating handling information.
The IBM Packaging Stewardship Action Plan for Australia

IBM in Australia voluntarily joined the National Packaging Covenant in 2000. Our Packaging Stewardship Action Plan 2001 – 2004 was accepted by the National Packaging Covenant Council in June 2002. IBM was invited by the National Packaging Covenant Council and chose to extend its plan for the interim period of the Covenant to 30 June 2005.


In 2004, several commitments in the original Action Plan required qualifying. For example, we needed to quantify the nature of the potential environmental impacts of packaging from product sold by IBM and its business partners in Australia.

In response to this, IBM has determined that the highest potential risk to the environment from disposal of unwanted packaging comes from its sale of personal computing equipment. On average it is estimated that the majority (90% plus) of new sales of personal computing equipment by IBM and its business partners in Australia are to business and government. The remainder is (<10%) being purchased by the general consumer and our employees via telesales and the Internet.

To estimate the quantity and types of packaging materials likely to be generated from new sales of personal computing equipment, IBM in Australia is using the Master Packaged Product Data Base and local sales information. This information will assist the company in developing suitable solutions to better manage negative impacts resulting from the disposal of unwanted packaging from its products.

Based on IBM 2003 sales data for personal computing equipment an estimated 727.8 tonnes of packaging was imported into Australia, an estimated 26% of the total gross weight of these sales. The packaged product was imported and some was assembled and re-packaged (primarily desktop PCs) in Australia. The hardware sales consisted of desktops, mobiles, servers, printer systems, storage devices, and retail / point of sale systems that included LCD flat panel screens. Mainframes and options, including monitors, are not included.

We have been analysing data to determine the potential environmental impact of the packaging materials from the sales of mainframes and other business IT equipment to business and government. The packaging consists of three common materials: corrugated carton (41% by weight), wood (48% by weight) and plastic (<10% by weight).

Table 1 presents further information on the quantity, type and percentage by weight of materials associated with new packaged product sales by IBM in Australia during 2003. The picture below provide an idea of some of the key packaging materials employed to protect the product from shock, vibration and dust during transport to the final end user.
Table 1: Analysis of packaging materials from IBM personal computer equipment sales in Australia in 2003

<table>
<thead>
<tr>
<th>Quantity of Total Packaging (tonnes)</th>
<th>Type of Materials</th>
<th>Composition of Materials (% by weight)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expanded Polyethylene (EPE)</td>
<td>4</td>
<td>Internal product shock &amp; vibration protection cushioning foam.</td>
</tr>
<tr>
<td></td>
<td>Expanded Polypropylene (EPP)</td>
<td>&lt;1</td>
<td>Internal product shock &amp; vibration protection cushioning foam.</td>
</tr>
<tr>
<td></td>
<td>Expanded Polystyrene (EPS)</td>
<td>3</td>
<td>Internal product shock &amp; vibration protection cushioning foam.</td>
</tr>
<tr>
<td></td>
<td>High Density Polyethylene (HDPE)</td>
<td>&lt;1</td>
<td>Protective/shrink foils, mainly used with manuals.</td>
</tr>
<tr>
<td></td>
<td>Low Density Polyethylene (LDPE)</td>
<td>1</td>
<td>Bags (for protection against dirt and dust) and the share of stretch wrap per unit used to secure the product to the pallet for bulk shipment.</td>
</tr>
<tr>
<td></td>
<td>Polypropylene (PP)</td>
<td>&lt;1</td>
<td>Carton closure tape and pallet bands.</td>
</tr>
<tr>
<td></td>
<td>Polyurethane (PU)</td>
<td>&lt;1</td>
<td>Bags (for protection against dirt and dust).</td>
</tr>
<tr>
<td></td>
<td>Corrugated carton</td>
<td>41</td>
<td>Outer cardboard box and inner shock protection and filler.</td>
</tr>
<tr>
<td></td>
<td>Composite</td>
<td>&lt;1</td>
<td>Internal product shock &amp; vibration protection cushioning.</td>
</tr>
<tr>
<td></td>
<td>Metal</td>
<td>1</td>
<td>Product support and protection.</td>
</tr>
<tr>
<td></td>
<td>Wood</td>
<td>48</td>
<td>Share of wood pallet per unit associated with bulk shipment.</td>
</tr>
<tr>
<td></td>
<td>Paper</td>
<td>&lt;1</td>
<td>Instructions and labelling.</td>
</tr>
</tbody>
</table>

Packaging take-back trial

In 2004, IBM in Australia committed to finding suitable solutions to unwanted packaging and began a packaging take-back trial for our business and government clients, with a view to introducing a formal service to take-back and dispose responsibly of the unwanted packaging materials that are generated from installing IT equipment on client sites.
Efficient Use of Office Paper

In 2004, the Australian business became a more efficient user of office paper. Each full-time equivalent employee and contractor (FTE person) used 9.8 reams of paper, falling from 10.8 reams in 2003. As a result, the business reduced its total consumption of office paper by 4,716,050 sheets on 2003. This is the equivalent of 605 trees. The majority of this paper was A4 80gsm white paper sourced from virgin stock.

Equally, in New Zealand, on average each FTE person consumed 8.3 reams of paper in contrast to 10.1 reams being consumed in 2003. However, the total paper consumption for the New Zealand business rose by 715,500 sheets or 20% on 2003, due to several acquisitions occurring 2003 and 2004.

To further improve these results, IBM will continue to target relevant areas of the business, review office equipment and processes and roll out employee awareness programs on key sites to help reduce the amount of paper consumed annually.

Trend for paper consumption from Australian operations 2001 to 2004

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>Number of Sheets of Cut Paper Used</th>
<th>Tonnes Equivalent</th>
<th>Trees Equivalent</th>
<th>Reams Used per Full-time Equivalent (FTE) Employee &amp; Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Australia</td>
<td>2001</td>
<td>68,602,000</td>
<td>343.8</td>
<td>9,094</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>64,404,390</td>
<td>321.9</td>
<td>8,515</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>62,970,200</td>
<td>315.8</td>
<td>8,356</td>
<td>10.8</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>58,254,150</td>
<td>293.0</td>
<td>7,751</td>
<td>9.8</td>
</tr>
<tr>
<td>IBM New Zealand</td>
<td>2001</td>
<td>3,555,000</td>
<td>17.7</td>
<td>469</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>4,030,000</td>
<td>20.3</td>
<td>537</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>3,563,500</td>
<td>17.9</td>
<td>473</td>
<td>10.1</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>4,279,000</td>
<td>21.5</td>
<td>569</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Key: * These figures differ from those published in the 2001 Environment Report since our verification process identified an incorrect conversion factor being used to convert US to metric tons for 2001 data.
IBM’s corporate policy on environmental affairs calls for the company to use energy responsibly, including conserving energy, improving energy efficiency and giving preference to renewable over non-renewable energy sources when feasible.

Thus, IBM’s energy program seeks to achieve and sustain progress in:

- improving the environment by maintaining a position of leadership in energy conservation; and
- reducing costs and increasing competitiveness and shareholder value through gains in energy efficiency.

IBM’s corporate energy goal is to save the equivalent of 4% of IBM’s actual annual electricity and fuel use by improving energy efficiency and giving credit to renewable energy use. When measuring progress towards this goal, we only count savings from identified energy conservation projects: reductions in energy consumption from downsizings, the sale of operations and cost avoidance actions are not included in the energy conservation goal.

In 2004, IBM in Australia and New Zealand had an energy conservation target of 2% saving. Although the target was not achieved, work was being undertaken internally to provide strategic focus and drive measurable savings and energy efficiency.

### Trends in Energy Consumption & Conservation for Australian Operations 2000 to 2004

<table>
<thead>
<tr>
<th>Year</th>
<th>(No. of sites &amp;) Square Meters of Building Area (m² ba)</th>
<th>Electricity Use (kWh)</th>
<th>Natural Gas (MJ)</th>
<th>Diesel Fuel (L)</th>
<th>Actual Electricity Savings (kWh)</th>
<th>Energy Savings (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>(35) 134,729</td>
<td>113,378,820</td>
<td>5,426,090</td>
<td>324,550</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>(29) 133,475</td>
<td>100,243,920</td>
<td>2,759,820</td>
<td>176,750</td>
<td>13,134,900</td>
<td>11.6</td>
</tr>
<tr>
<td>2002</td>
<td>(35) 148,187</td>
<td>111,080,046</td>
<td>3,843,120</td>
<td>175,550</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>(36) 141,935</td>
<td>107,607,131</td>
<td>4,130,349</td>
<td>172,745</td>
<td>3,472,915</td>
<td>3.1</td>
</tr>
<tr>
<td>2004</td>
<td>(36) 141,795</td>
<td>106,903,945</td>
<td>7,336,478</td>
<td>117,880</td>
<td>703,186</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>
Electricity Consumption

Australia

In 2004, electricity consumption was measured from 36 sites, representing 82% of the IBM lease portfolio and covering 69% of the total population of employees and contractors in Australia.

In 2004, IBM Australia consumed 106,903,945 kilowatt hours of electricity (kWh) from 36 sites, demonstrating energy savings of only 703,186 kWh (< 1%) on 2003 – an insignificant amount.

The six leased and operated data centres in the Australian property portfolio consumed 83% of the electricity from the 36 IBM sites, 98% of which was supplied through the national grid network. The data centres operate 24 hours, 7 days a week. The other 30 sites in the portfolio operated 10 hours a day for 5 days a week. A discussion on their energy efficiency is provided below.

New Zealand

In 2004, overall electricity consumption at the seven IBM sites in New Zealand rose by 354,956 kWh or 4% on 2003. This measurement is for 90% of the IBM property portfolio in New Zealand and over 85% of the employee and contractor population. This increase was partly due to the mix of sites changing, with an increase in net leased area occurring as a result of an acquisition.

Natural Gas, Diesel Fuel, Petrol & LPG

Australia

In 2004, diesel fuel was used at ten leased sites to ensure business continuity and natural gas was used at four sites for cafeterias and heating.

In 2004, natural gas consumption was recorded at 7,336,478 Megajoules (MJ), up by 3,206,129 MJ or 78% on 2003 for Australian operations. Ninety-two per cent of this increase came from including the Ballarat Regional Software Centre, which uses natural gas for powering the boiler, for the first time in 2004. The rest of the natural gas was consumed at the two cafeteria operations in Sydney and Melbourne and to power the two boilers for heating at the Clayton data centre in Melbourne.

In 2004, IBM Australia used 117,880 litres of diesel fuel to power standby generator sets needed to ensure business continuity at key IBM sites during emergency power outages and consumed as a result of scheduled maintenance runs. Consumption of diesel fuel declined by 54,865 litres or 32%, on 2003 due to fewer significant power outages during the year.


<table>
<thead>
<tr>
<th>Year</th>
<th>(No. of sites)</th>
<th>Square Meter of Net Leased Area (m² nla)</th>
<th>Electricity Use (kWh)</th>
<th>Natural Gas (MJ)</th>
<th>Diesel Fuel (L)</th>
<th>Propane (kg)</th>
<th>Electricity Savings (kWh)</th>
<th>Energy Saving (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>(7) 14,634</td>
<td></td>
<td>7,978,736</td>
<td>5,106,410</td>
<td>26,740</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>(9) 20,168</td>
<td></td>
<td>8,503,266</td>
<td>2,681,250</td>
<td>16,720</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>(7) 20,159</td>
<td></td>
<td>8,095,578</td>
<td>3,460,400</td>
<td>30,900</td>
<td>360</td>
<td>407,690</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>(7) 15,167</td>
<td></td>
<td>8,507,878</td>
<td>3,094,330</td>
<td>2,960</td>
<td>540</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>(7) 24,224</td>
<td></td>
<td>8,862,834</td>
<td>3,179,740</td>
<td>3,805</td>
<td>585</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
New Zealand

In 2004, IBM New Zealand’s natural gas consumption was 3,179,740 Megajoules (MJ), a rise of 85,410 MJ or 3% on 2003. Diesel fuel consumption was 3,805 litres, a rise of 28% on 2003. Again in 2003, power outages and the operation of the standby generator set at the Newton data centre helped consume some of the estimated 2,400 litres of diesel fuel used at this site.

In 2004, the company’s cafeteria at the Petone site consumed an estimated 585 kilograms of propane gas or LPG, a level similar to the previous year.

Energy Efficiency

The company has been measuring its energy efficiency as kilowatt hours of electricity used per square meter of net leased area (kWh/m² nla) and by kilowatt hours of electricity used by each full-time equivalent employee and contractor (kWh/FTE). In 2004, IBM began measuring energy efficiency in kilojoules per square metre of net leased area per hour for Australian and New Zealand operations. This measure is considered a better comparative indicator of the efficient use of energy across the entire IBM property portfolio from 24 hour by 7 days to 10 hour by 5 day operations. This measure is being considered for reporting at a site specific level in next years’ Progress Report to allow comparison by interested stakeholders.

Trends in Energy Efficiency for Australian and New Zealand Sites from 2000 to 2004

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>(No. of sites) and Square Meters of Net Leased Area (m² nla)</th>
<th>Electricity Used per Square Meter of Net Leased Area (kWh/m²)</th>
<th>Electricity Used per Full-time Equivalent Employees &amp; Contractors (kWh/ FTE)</th>
<th>Energy Intensity per Square Meter of Net Floor Area per Hour of Operation (kJ/ m² nla/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Australia</td>
<td>2000</td>
<td>(35), 134,729</td>
<td>842</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>(29), 133,475</td>
<td>751</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>(35), 148,187</td>
<td>750</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>(36), 149,935</td>
<td>758</td>
<td>14,046</td>
<td>461</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>(36) 141,795</td>
<td>754</td>
<td>13,158</td>
<td>461</td>
</tr>
<tr>
<td>IBM New Zealand</td>
<td>2000</td>
<td>(7), 14,634</td>
<td>545</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>(9), 20,168</td>
<td>426</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>(7), 20,159</td>
<td>402</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>(7), 15,187</td>
<td>560</td>
<td>11,151</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>(7) 24,224</td>
<td>366</td>
<td>10,000</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes: 2003 was the first time electricity use per FTE was measured in Australia and New Zealand.
Energy

Australia

In 2004, energy efficiency improved by 4 kWh per square meter of net leased area to 754 kWh/m² of net leased area over 2003. In addition, each full-time equivalent employee and contractor used on average 13,158 kWh of electricity, an annual average improvement of 888 kWh per employee.

During the year, for the first time energy use from electricity was measured at an average of 461 kilojoules per square meter of net leased area per hour of operation (kJ/m²nla/h). Those sites significantly above this (>10%) will be investigated to identify potential energy saving initiatives that also make good business sense.

One area under investigation is the dedicated computer raised floor areas and data centres, which during the year consumed extremely large amounts of energy per square metre of net leased area per hour at the data centres (up to 2.5 MJ/m²/h). This result was expected and considered a measure of computing power harnessed by clients to do business. We have started to develop a measure for reporting the level of energy efficiency across these areas.

In 2004, employee awareness programs focusing on efficient use at key energy consuming sites, such as West Pennant Hills and the national and state headquarters, also may have helped to reduce overall consumption slightly. During the year ‘hardware refreshes’ for clients at our data centres are also considered to have contributed minimal energy savings; however, technology refresh will have almost no further impact on energy savings in the future. Results may come from consolidating smaller more powerful computing equipment onto existing raised floor areas where full capacity has been realised and energy efficient equipment is standard. Benefits may also be gained from efficient energy use in the office environment being a strategic focus for 2005.

New Zealand

In 2004, IBM New Zealand uses 8,862,834 kWh of electricity in its offices and data centres, rising by 354,956 kWh on 2003. However, since 2003 the amount of electricity used per IBM NZ full-time equivalent employee and contractor (a measure of efficient use) has fallen by 10% nationwide, to 10,000 kWh.

In addition to watching our energy usage, IBM NZ has looked closely at savings that could be made during refurbishments. In July 2002 we moved our head office to refurbished floors in Wellington's Majestic Centre, in the process reducing energy use by 30% from 2001. In 2004, the efficient use of energy cut consumption by a further 13% over 2003 at this site. This improvement came from the better use of natural light, automatic ‘lights off’ at the end of the day, energy efficient lighting and employee awareness initiatives.

Trend in Energy Efficiency at IBM Australian Sites from 2000 to 2004

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IBM believes the most constructive approach it can take to address the complex issue of climate change is to apply its resources to reduce emissions associated with its own operations, and to create products that are increasingly energy efficient.

IBM A/NZ operations do not release significant quantities of the gases believed to have an effect on ozone depletion and on the greenhouse effect that contributes to global climate change.

The company’s greatest potential impact is an indirect one, through releasing carbon dioxide from the combustion of fossil fuels for generating electricity. This helps drive the company’s focus on energy conservation.

IBM is also tracking greenhouse gas emissions generated from its operations in Australia and New Zealand associated with disposing organic waste in landfills, and impacts associated with ground and air transport, which will require their own environmental initiatives. For example, in 2004 employees with vehicles determined essential in the service maintenance business are required to conduct a safe driving course which includes a green component.

In a change from previous reports, IBM in Australia and New Zealand will be reporting the total greenhouse gas emissions and quantities of emissions avoided from doing business. Reference to key performance indicators has therefore been discontinued.

Greenhouse Challenge
IBM Australia has been a partner in the National Greenhouse Challenge Program since 2000, which sets standards and methods for monitoring greenhouse gas (GHG) emissions. We used the Program’s Australian Greenhouse Office Factors and Methods Workbook, August 2004 to estimate our GHG emissions inventory reported in this document. More information about IBM’s activities under the Greenhouse Challenge Program can be found at: http://www.greenhouse.gov.au/challenge/.

Greenhouse Gas Emissions
Australia
In 2004, IBM measured GHG emissions associated with operating facilities and employee road and air transportation in the course of doing business.

During the year, an estimated 91% of the total greenhouse gas (GHG) emissions came from IBM sites in Australia as a result of energy consumed in office buildings, for operating fixed plant and supporting computer raised floor areas at 36 sites. A further 1% resulted from the disposal of biodegradable waste from 20 sites in landfills across Australia. The key contributing source remained the result of electricity consumption (90%).
In 2004, IBM also began to track, in more comprehensive manner, energy consumption from and kilometers traveled for air and road by employees, for the first time tracking hire car, private vehicle user kilometers and air transport. This source of emissions made up 8% of the total tracked GHG inventory in Australia.

### Summary of GHG Emissions and Savings for IBM Australian & New Zealand sites from 1998 to 2004

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>GHG Emissions from IBM Sites (t CO2-e)</th>
<th>Change in Annual GHG Emissions (t CO2-e)</th>
<th>Cumulative Avoided GHG Emissions (t CO2-e)</th>
<th>(No. of sites) and Square Meters of Net Leased Area (m² nla)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Australia</td>
<td>1998</td>
<td>162,015</td>
<td>-</td>
<td>-</td>
<td>(35) 134,729</td>
</tr>
<tr>
<td></td>
<td>1999</td>
<td>140,141</td>
<td>21,874</td>
<td>21,874</td>
<td>(35) 134,729</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>116,385</td>
<td>13,393</td>
<td>45,630</td>
<td>(29) 133,475</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>129,237</td>
<td>(12,852)</td>
<td>32,777</td>
<td>(35) 148,187</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>125,862</td>
<td>3,375</td>
<td>36,152</td>
<td>(36) 141,935</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>125,889</td>
<td>(27)</td>
<td>36,125</td>
<td>(36) 141,795</td>
</tr>
<tr>
<td>IBM New Zealand</td>
<td>2000</td>
<td>4,539</td>
<td>-</td>
<td>-</td>
<td>(7) 14,634</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>4,783</td>
<td>(245)</td>
<td>(245)</td>
<td>(9) 20,168</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>4,050</td>
<td>733</td>
<td>488</td>
<td>(7) 20,159</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>4,153</td>
<td>(103)</td>
<td>386</td>
<td>(7) 15,187</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>4,377</td>
<td>(224)</td>
<td>162</td>
<td>(7) 24,224</td>
</tr>
</tbody>
</table>

In 2004, IBM sites in Australia emitted 125,889 tonnes of CO2 equivalent emissions (CO2-e), remaining relatively static over the previous year (a small increase in emissions of 27 tonnes on 2003). Emissions rose as IBM continued to expand its waste metrics program to include tracking general waste disposed from commercial building in conjunction with the property manager. These newly reported sites represented the key state headquarters for Australian operations. Waste disposal in landfills and GHG emissions were also tracked from 20 IBM leases. These sites represented 75% of the employee and contractor population in 2004.

In Australia, from 1998 to 2004, an estimated 36,125 tonnes of CO2-e emissions (22% over the 7 year period) have been avoided from IBM leased sites.

### Summary of GHG emissions from employee travel in Australia for 2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Type &amp; source</th>
<th>Tonnes of CO2-e emissions generated from employee travel</th>
<th>Percentage of total emissions from employee travel (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Vehicle Use</td>
<td>2,560</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Passenger Flights</td>
<td>8,160</td>
<td>76</td>
</tr>
</tbody>
</table>

In 2004, GHG emissions estimated from employee travel by road and air came to 10,721 tonnes CO2-e GHG emissions of the total emissions inventory in Australia. The majority of these emissions (76% by weight) came from domestic and international passenger flights taken by employees during 2004. IBM will investigate the type and suitability of environmental initiatives that can be implemented to reduce the GHG emissions from employee travel.
Climate Change

Summary of Actual and Forecast Greenhouse Gas Emissions for IBM Australian sites from 1998 to 2005

New Zealand
In 2004, IBM generated 4,377 tonnes of greenhouse gas emissions from operating its seven key sites, a 5.4% rise on 2003. The amount of carbon dioxide equivalent emissions avoided between 2000 and 2004 was estimated at 162 tonnes. The major source of emissions remained the use of electricity (91% by weight) at the IBM sites. The next most important sources of emissions came from the disposal of biodegradable waste (5% by weight) to landfill and the use of natural gas (4% by weight). Total greenhouse gas emissions are forecast to rise 2% in 2005. This forecasted rise is the result of additional sites being reported for electricity use for the first time and due to continuing improvements to reporting waste disposal and reporting practices in New Zealand.
Ozone Depleting Substances

In 2004, IBM A/NZ used ozone depleting Chlorofluorocarbons (CFCs), Hydrochlorofluorocarbons (HCFCs) and Hydrofluorocarbons (HFCs) in air conditioning systems to support computer raised floor areas and office environments. The latter two refrigerants are also potent greenhouse gases. The inventory of these refrigerants remained relatively stable year on year. No environmental incidents involving refrigerants were reported during the year. Ongoing maintenance of the systems by certified air conditioning contractors resulted in minor top ups of refrigerants.

Australia

In 2004, IBM Australia was responsible for maintaining a total of 13,533 kilograms of refrigerants for the main building air conditioning systems and computer raised floor area units. The primary refrigerant gases used by IBM were HCFC-22 at 7,477 kilograms (55%), CFC-11 at 3,255 kg (24%) and HFC-134a at 2,184 kg (16%).

New Zealand

In 2004, IBM in New Zealand held 414 kilograms of CFC-11 refrigerant gas and 270kg of HCFC-22. The total refrigerants held in inventory were 684 kilograms.
Pollution Prevention and Waste Minimisation and Management

Since 1971, IBM's goal has been to identify and eliminate potential pollution. In Australia and New Zealand, we have local environmental incident prevention, preparedness, response and reporting, chemicals management and waste minimisation and management programs designed to deliver these goals.

To this end, we continue to manage the waste we generate (both hazardous and non-hazardous) according to a waste hierarchy that includes:

- **Reduce**
- **Reuse**
- **Recycle**
- **Chemical or physical treatment**
- **Dispose to landfill as a last resort.**

**Chemicals Management**

In 2004, IBM in Australia and New Zealand continued to manage chemical substances to minimise the need for, and reduce, the amount of hazardous substances and dangerous goods used and stored on client and IBM sites. As part of this process, chemical substance registers were maintained at the relevant sites.

In the last quarter of the year, IBM Australia started to implement the secondary containment program for its fuel storage and delivery systems. These systems are primarily required to ensure business continuity. The program included environmental due diligence work on the integrity of existing systems and soil and groundwater sampling and monitoring. It ensured best practice and the Victorian Guidelines on the Design, Installation and Management Requirements for Underground Petroleum Storage Systems were applied to existing fuel storage and delivery systems operated by IBM.

IBM A/NZ maintains material safety data sheets (MSDS) for its service chemicals and product supplies. The MSDS describes the chemical and physical properties of a substance and provides advice on its safe handling and use in accordance with statutory requirements for industrial chemicals set out by National Occupational Health and Safety Commission in Australia. We have a system in place to ensure that MSDS's are maintained and accessible to IBM employees and customers.

IBM does not manufacture chemical substances in Australia or New Zealand; however, we do maintain a Company Registration (No. 2354) with National Industrial Chemicals Notification and Assessment Scheme (NICNAS) to import industrial chemicals into Australia. In 2004, these consisted of service support chemicals to repair and maintain client hardware and printer consumables such as toner, developer and fuser oil.
Waste Materials Disposed from Facility Operations

**Australia**
In 2004, IBM generated a total of 1,233 tonnes of waste from its eight key leased and operated sites in Australia, an increase of almost 125 tonnes (11%) on 2003.

The waste stream comprised 7% (91 t) hazardous and the rest non-hazardous materials. Both these waste streams have increased since 2003, with a rise in generated materials – as discussed in more detail later in this section.

Non-hazardous waste generation increased by 746.3 tonnes (almost 10%) on 2003, due to the addition of 59 IBM leased and client sites across Australia. The majority (52%) consisted of general waste sent to landfill and waste office paper and cardboard (47%) sent for recycling. The other materials were electronic media and print consumables.

During 2004, IBM Australia continued to introduce green office recycling initiatives and roll-out environmental awareness initiatives for employees, informing employees of ways to reduce office paper consumption and make better use of green office recycling services.

**New Zealand**
In 2004, IBM New Zealand generated 100.9 tonnes of waste from five key IBM sites. This consisted almost entirely of non-hazardous waste. Less than half a tonne of hazardous waste was disposed of by IBM New Zealand operations.

---

**Trend for Total Waste Disposed from IBM A/NZ Sites from 2000 to 2004**

<table>
<thead>
<tr>
<th>Year</th>
<th>(Number of Sites) and Total Waste Disposed from IBM Key Sites (t)</th>
<th>Overall Total (t)</th>
<th>Hazardous Waste (t)</th>
<th>Non-hazardous Waste (t)</th>
<th>(No. of Sites) and Total Waste Disposed from IBM Leased &amp; Client Sites*</th>
<th>Non-hazardous waste (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>(8) 1,457.5</td>
<td>197.7</td>
<td>1,259.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>(8) 1,333.8</td>
<td>28.8</td>
<td>1,305.0</td>
<td>(49) 522.8</td>
<td>(51) 508.5</td>
<td>(64) 642.9</td>
</tr>
<tr>
<td>2002</td>
<td>(8) 1,654.9</td>
<td>32.1</td>
<td>1,622.8</td>
<td>(51) 508.5</td>
<td>(59) 746.3</td>
<td>(64) 642.9</td>
</tr>
<tr>
<td>2003</td>
<td>(8) 1,108.9</td>
<td>66.5</td>
<td>1,042.3</td>
<td>(64) 642.9</td>
<td>(64) 642.9</td>
<td>(64) 642.9</td>
</tr>
<tr>
<td>2004</td>
<td>(9) 1,233.5</td>
<td>91.4</td>
<td>1,142.1</td>
<td>(59) 746.3</td>
<td>(59) 746.3</td>
<td>(59) 746.3</td>
</tr>
</tbody>
</table>

IBM New Zealand

<table>
<thead>
<tr>
<th>Year</th>
<th>(Number of Sites) and Total Waste Disposed from IBM Key Sites (t)</th>
<th>Overall Total (t)</th>
<th>Hazardous Waste (t)</th>
<th>Non-hazardous Waste (t)</th>
<th>(No. of Sites) and Total Waste Disposed from IBM Leased &amp; Client Sites*</th>
<th>Non-hazardous waste (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>(3) 138.0</td>
<td>4.7</td>
<td>133.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>(7) 236.8</td>
<td>0.0</td>
<td>236.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>(6) 184.4</td>
<td>0.0</td>
<td>184.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>(5) 100.9</td>
<td>0.4</td>
<td>100.6</td>
<td>(5) 2.1</td>
<td>(5) 2.1</td>
<td>(5) 2.1</td>
</tr>
</tbody>
</table>

* = The data from leased sites is separate because we only have partial waste generation data from these facilities. The figures do not therefore indicate the true environmental impact of the operations at these sites.
Hazardous Waste

Australia
In 2004, IBM Australia generated and disposed of 91 tonnes of hazardous waste, with the majority being recycled. The hazardous waste is primarily associated (96%) with the battery replacement and maintenance strategy to support business critical data centre operations. The remainder consisted of oil, contaminated water, with a small amount of solvents, paints and waste rechargeable batteries.

The supplier that handles the old lead acid batteries has estimated 90% of the materials were recovered, with only the electrolyte being neutralised and sent to landfill. The used oil recovered from facility supporting plant systems and the old rechargeable batteries from electronic equipment were fully recycled. The solvents, paints and contaminated water were treated and used for energy recovery or neutralised and landfilled.

In 2004, the 37% increase in hazardous waste on the previous year was primarily the result of a higher quantity of lead batteries reached the end of their working life. These batteries supported un-interrupted power supplies at the data centres.

All hazardous waste was disposed of through IBM Approved Hazardous Waste Disposal Service Suppliers, whose use required authorisation at a corporate level.

New Zealand
In 2004, IBM New Zealand operations disposed of 360 kilograms of waste rechargeable batteries classified by the government as hazardous waste. The batteries primarily consisted of lead, nickel cadmium, Nickel Metal Hydride and Lithium Ion. The waste rechargeable batteries are stored before begin sent to France for recycling. No old lead acid batteries were disposed from the data centres during the year.

Non-hazardous Waste

Australia
In 2004, the company was able to recycle just over 46% by weight of the non-hazardous waste generated from its eight key leased and operated sites, a drop of 7% on 2003. The IBM global recycling target for non-hazardous waste remained at 67%. The fall was the result of an increase in general waste and a fall in waste office paper generated. In 2004 workplace initiatives to avoid office paper consumption contributed to a measurable reduction in waste office paper recycled.

Summary of Non-hazardous Waste Disposed from IBM Australian Sites from 2000 to 2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,500</td>
</tr>
<tr>
<td>2001</td>
<td>1,000</td>
</tr>
<tr>
<td>2002</td>
<td>2,000</td>
</tr>
<tr>
<td>2003</td>
<td>1,000</td>
</tr>
<tr>
<td>2004</td>
<td>1,500</td>
</tr>
</tbody>
</table>

In 2004, our Australian operations disposed of 1,142 tonnes of non-hazardous waste from our eight key leased and operated sites – a 10% increase on 2003.
Of the materials disposed, office paper (21% by weight) and cardboard (17% by weight) were the most significant, both being recycled. Also recycled were grease sludge (7% by weight), and timber pallets and building materials (each 2% by weight). Other recycled waste streams included: mixed glass, plastics and aluminium; print consumables and cooking oil.

Of the non-hazardous materials sent to landfill, general trash was the most significant at 39% by weight, followed by cafeteria waste at 8% and electronic media at almost 4% by weight.

All end-of-life products from IBM operations must be scrapped by an IBM Approved Product Disposal Service Supplier. Close the Loop based in Melbourne supplied this service to IBM in 2004.

In July 2004, IBM in Australia introduced the IBM Printer Supplies Return Program. Of note, in 2004, over 4 tonnes of print consumables (0.4% by weight) were collected and recycled in the six months to the end of the year at the eight key IBM sites. A similar quantity was collected at the other 59 leased and client sites. In 2003, only 380 kilograms of toner cartridges were recycled from these same sites. None of the materials processed through this product end-of-life management program were sent to landfill. All end-of-life products managed by IBM, including print consumables such as used toner cartridges, must be scrapped by an IBM Approved Product Disposal Service Supplier. The supplier, Close the Loop, based in Melbourne provided this service for IBM in 2004.

In 2004, non-hazardous waste sent to landfill rose by over 16% to 567 tonnes compared with 2003.
Trend for Disposal of Non-hazardous Waste from Australian sites from 2000 to 2004

<table>
<thead>
<tr>
<th>Year</th>
<th>(Number of sites) and square meters of building area (m² ba)</th>
<th>Average Quantity of Material Disposed per Square Metre of Net Leased Area (kg/m² nla)</th>
<th>Company Range (kg/m²)</th>
<th>Average Quantity of Material Disposed per Full-time Equivalent Employee &amp; Contractor (kg/FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>(8) 85,081</td>
<td>15</td>
<td>2 - 24</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>(8) 85,081</td>
<td>15</td>
<td>4 - 25</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>(8) 85,081</td>
<td>19</td>
<td>9 - 70</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>(8) 80,056 *</td>
<td>13</td>
<td>4 - 20</td>
<td>355</td>
</tr>
<tr>
<td>2004</td>
<td>(9) 79,723</td>
<td>13</td>
<td>10 - 37</td>
<td>381</td>
</tr>
</tbody>
</table>

Key: * = The Rosebery warehouse was sold and replaced by the Homebush warehouse

In 2004, the average amount of non-hazardous waste disposed of from the nine key facilities rose by one kilogram per square metre on 2003, to 14 kilograms for each square metre of net leased area. On average each employee (measured by the average annual full-time equivalent number of employees and contractors) generated 381 kilograms of non-hazardous waste, up by 7% (26 kilograms) on 2003.

IBM will continue to pilot green office waste recycling initiatives on relevant sites to continue to divert waste from landfill. Criteria that will be considered in identifying relevant sites include where recycling rates are below the national average of 46% by weight and where general waste remains a significant component of the waste stream at a site.

This is likely to include the data centres, warehouse and national, state and territory head quarters of the company. Recently conducted government funded office waste audits and waste reduction guidelines indicate that paper and cardboard can represent up to 65% of the office waste disposed in the general waste.

New Zealand

In 2004, the quantity of non-hazardous waste recycled from the five key IBM New Zealand sites rose a further 4% to almost 46% on 2003. In 2001 the actual recycling rate was 10%. The global non-hazardous recycling target was 67%.

In 2004, IBM New Zealand sites generated just over 100 tonnes of non-hazardous waste. Fifty seven percent was general rubbish disposed of in landfills. Waste office paper (25% by weight) and cardboard (12% by weight) collected from IBM offices and the national parts warehouse were recycled.

The variability in the quality of the data being collected at this stage precludes any deeper analysis of the data from year to year. It is expected that this situation will improve as the waste tracking and monitoring system in New Zealand continues to mature.
Summary of Key Materials Found in the Non-hazardous Waste Stream Disposed of at IBM New Zealand Sites from 2001 to 2003

Summary of Key Materials Found in the Non-hazardous Waste Stream Disposed of at IBM New Zealand Sites in 2004

Composition of materials disposed at IBM NZ sites

- **General trash**: 13,370 (570%)
- **Batteries**: 90 (0.4%)
- **Grease**: 1,350 (5.8%)
- **Cardboard**: 2,840 (12.1%)
- **Paper**: 2,227 (9.5%)
- **DUS**: 3,595 (15.3%)

Legend:
- General waste
- Office paper
- Electronic media
- Cardboard
- Cafeteria waste
- Recyclables
- Timber Pallets

Year 2001:
- General waste: 10.9%
- Office paper: 31.1%
- Electronic media: 84.5%
- Cardboard: 0.2%
- Cafeteria waste: 1.3%

Year 2002:
- General waste: 20.8%
- Office paper: 21.4%
- Electronic media: 35.3%
- Cardboard: 2.2%
- Cafeteria waste: 2.7%

Year 2003:
- General waste: 20.8%
- Office paper: 18.8%
- Electronic media: 56.0%
- Cardboard: 21.4%
- Cafeteria waste: 1.3%
Pollution Prevention and Waste Minimisation and Management

Product End-of-life Management Operations

All end-of-life products from IBM operations must be scrapped by an IBM Approved Product Disposal Service Supplier. MRI Technologies based in Melbourne and Sydney and SimPacific Metals recycling business based in Auckland continued to supply this service to IBM in 2004.

Australia

In 2004, IBM in Australia processed 155 tonnes of product scrap consisting of old and defective hardware from end-of-lease, internal sources and defective part returns. Of this, we recycled almost 84% by weight of the used computer equipment assigned for scrapping. The majority of material disposed to landfill was plastics from keyboards, mice, and computer and peripheral protective housings.

Summary of Product Scrap Processed for IBM A/NZ Operations from 2000 - 2004

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>Percent Recycled (% by weight)</th>
<th>Percent Stored (% by weight)</th>
<th>Percent Landfilled (% by weight)</th>
<th>Tonnes Processed (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Australia</td>
<td>2000</td>
<td>73.0</td>
<td>96</td>
<td>178</td>
<td>327.7</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>43.1</td>
<td>39.8</td>
<td>171</td>
<td>230.8</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>80.3</td>
<td>0.8</td>
<td>19.0</td>
<td>393.9</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>80.2</td>
<td>3.6</td>
<td>16.2</td>
<td>215.6</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>83.8</td>
<td>0</td>
<td>16.2</td>
<td>155.3</td>
</tr>
<tr>
<td>IBM New Zealand</td>
<td>2000</td>
<td>10.0</td>
<td>0</td>
<td>90.0</td>
<td>51.0</td>
</tr>
<tr>
<td></td>
<td>2001</td>
<td>10.0</td>
<td>0</td>
<td>90.0</td>
<td>37.1</td>
</tr>
<tr>
<td></td>
<td>2002</td>
<td>30.0</td>
<td>0</td>
<td>70.0</td>
<td>57.0</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>30.0</td>
<td>0</td>
<td>70.0</td>
<td>30.4</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>30.0</td>
<td>0</td>
<td>70.0</td>
<td>23.2</td>
</tr>
</tbody>
</table>

Key: In 2001 some scrapping data could not be authenticated, hence the 43.1% by weight result for recycling.

New Zealand

In 2004, 23.2 tonnes of product scrap was processed and disposed of in New Zealand. The supplier estimated that 30% by weight was recovered for recycling.

The used computer equipment was shredded with base metals recovered for recycling and the remaining residual waste (flock) was sent to the Redvalle licensed landfill in Auckland. Commercial recycling opportunities for end-of-life product remained limited in New Zealand.
In our current climate of extended drought, the efficient use of water resources is at the forefront of today's environmental concerns in Australia.

IBM has established programs to help protect this valuable resource and reduce and become more efficient in the use of water throughout its operations in Australia and New Zealand.

During 2003 and 2004, IBM began integrating the management of water into its environmental management system. The company began preparing a water efficiency and conservation plan that will help to continue the initial drive for continual improvement in the efficient use of water at IBM sites in Australia and New Zealand.

In this plan, IBM has set an annual water savings target of 5% for 2004 in Australia.

In 2004, IBM was able to reduce its water consumption at 12 key sites in Australia by 12%, saving over 22 Meeralitres of water on 2003 and exceeding our 2004 5% water savings target.

In 2004, the 12 key Australian sites used 156.4 Meeralitres of water, with the largest consumption and greatest savings of water recorded at West Pennants Hills. This site improved water consumption by almost 37% on 2003, an average saving of 64KL of water per day. This was achieved by continuing to adjust the sensor activated flushing mechanisms in the urinals, adjustments to the air condition and chiller systems on site and employee and contractor awareness raising.

IBM Sydney Water “Every Drop Counts” Business Program

In 2003, IBM Australia signed up to the Sydney Water “Every Drop Counts” (EDC) Business Program at St. Leonards, West Pennant Hills and Baulkham Hills data centres. At the time, these sites, which were leased and operated by IBM, were the largest users of water and therefore considered good candidates for cost effective water saving initiatives.

Under the EDC, IBM has committed to meet a 15% water saving target over the three year period 2003 to 2005. Since entering the EDC program we have improved water consumption by 30%, or just over 21 Megalitres, on 2003, an average a 58 KL per day water saving at these three sites. In 2004, the water saving for Australia and through the EDC program was achieved primarily as a result of initiatives implemented at the West Pennant Hills site.
### Summary of Water Use and Efficiency at IBM Australian Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Year 2003 (Kilolitres)</th>
<th>(KL/Day)</th>
<th>Year 2004 (Kilolitres)</th>
<th>(KL/Day)</th>
<th>Annual Saving (%)</th>
<th>(KL/Yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Pennant Hills, NSW *</td>
<td>63,507</td>
<td>174</td>
<td>40,171</td>
<td>110</td>
<td>36.7%</td>
<td>23,336</td>
</tr>
<tr>
<td>St. Leonards data centre, NSW *</td>
<td>30,998</td>
<td>85</td>
<td>34,470</td>
<td>94</td>
<td>-11.2%</td>
<td>-3,472</td>
</tr>
<tr>
<td>Baulkham Hills data centre, NSW *</td>
<td>26,170</td>
<td>72</td>
<td>24,942</td>
<td>68</td>
<td>4.7%</td>
<td>1,228</td>
</tr>
<tr>
<td>Clayton data centre, VIC</td>
<td>2,444</td>
<td>7</td>
<td>2,362</td>
<td>6</td>
<td>3.3%</td>
<td>82</td>
</tr>
<tr>
<td>Knoxfield data centre, VIC</td>
<td>4,378</td>
<td>12</td>
<td>5,227</td>
<td>14</td>
<td>-19.4%</td>
<td>-849</td>
</tr>
<tr>
<td>Ballarat data centre, NSW</td>
<td>4,150</td>
<td>11</td>
<td>3,598</td>
<td>10</td>
<td>13.3%</td>
<td>552</td>
</tr>
<tr>
<td>Pacific Hwy HQ, St Leonards, NSW</td>
<td>29,660</td>
<td>81</td>
<td>28,877</td>
<td>79</td>
<td>2.6%</td>
<td>783</td>
</tr>
<tr>
<td>Hay St. HQ, West Perth, WA</td>
<td>4,865</td>
<td>13</td>
<td>4,890</td>
<td>13</td>
<td>-0.5%</td>
<td>-25</td>
</tr>
<tr>
<td>Brisbane Ave HQ, Barton, ACT</td>
<td>5,412</td>
<td>15</td>
<td>3,324</td>
<td>9</td>
<td>38.6%</td>
<td>2,088</td>
</tr>
<tr>
<td>City Rd HQ, Southbank, VIC</td>
<td>6,376</td>
<td>17</td>
<td>6,058</td>
<td>17</td>
<td>5.0%</td>
<td>319</td>
</tr>
<tr>
<td>Greenhill Rd HQ, Parkside, SA</td>
<td>506</td>
<td>1</td>
<td>406</td>
<td>1</td>
<td>19.6%</td>
<td>99</td>
</tr>
<tr>
<td>Edward St HQ, Brisbane, QLD</td>
<td>0</td>
<td>0</td>
<td>2124</td>
<td>6</td>
<td>3.3%</td>
<td>21,092</td>
</tr>
</tbody>
</table>

**Key:** * = Every Drop Counts sites

### New Zealand

In 2004, IBM New Zealand consumed 5,704 kiloliters of water at two sites: 85% at the Petone data centre in Wellington; and 15% the Penrose warehouse in Auckland. This represented a 17% (1,148 kilolitres) annual saving in water consumption, against 6,852 kilolitres for the same two sites in the previous year. During the year, we established a process to audit water use at the other key IBM sites. This data should be reported in future years.
In 2004, IBM in Australia and New Zealand continued to maintain environmental and chemical management programs to prevent pollution and protect the environment, including initiatives to protect bushland, groundwater and surface waters, soil and human health.

One issue during the year has been that pollution prevention systems once considered state-of-the-art are reaching the end of their useful working lives and/or do not now provide the business an acceptable level of assurance and risk mitigation nor meet current best practice standards. Our response has been to recognise the need for corrective action wherever necessary, and to act promptly and responsibly.

Protecting Groundwater, Soil & Human Health
In 2004, the company continued with a comprehensive environmental due diligence program across its leased and operated sites in Australia and New Zealand. This was part of a broader strategy to update and provide secondary containment for fuel storage and delivery systems at data centres and other business critical sites where the risk to the environment was considered significant.

IBM continues to undertake environmental site assessments to identify the state of the environment and, where identified as necessary, undertake further investigations and actions to ensure environmental due diligence and risk mitigation.

Australia
In 2004, we started environmental due diligence and secondary containment work at ten key sites in Victoria and New South Wales. This included planning and designs for providing secondary containment for all but one of the smaller fuel storage and delivery systems. Soil and groundwater investigations and planning for the secondary containment program were also started at the six key data centres in late 2004.

New Zealand
During the year, environmental due diligence and secondary containment work at three key sites in Auckland and Wellington on the North Island were completed satisfactorily. Where practical to do so, underground petroleum storage tanks were replaced with double skinned aboveground tanks and piping ensuring fuel systems have acceptable secondary containment and early warning leak detection systems. In late 2004, an old underground storage tank and piping was decommissioned in accordance with local statutory and industry best practice requirements.
Habitat Restoration and Regeneration

Protecting “Blue Gum High Forest” at West Pennant Hills, Sydney, Australia
Since 2000, IBM has been controlling noxious weeds and assisting natural bush regeneration at its West Pennant Hills site in Sydney. The Forest regeneration activities are a voluntary initiative and help protect this once magnificent and ecologically rich community of plants and animals: less than 5% of this forest type remains in the Sydney region.

These regeneration activities have helped ensure the survival of the remnant “Blue Gum High Forest” located on the site and has enriched the biodiversity of the local area.

The Blue Gum High Forest is listed as an “Endangered Ecological Community” under the NSW Threatened Species Conservation Act, 1995. IBM continued to hold a Section 95(2) Certificate to undertake the regeneration works in 2004.

Reforestation of Motutapu Island, Auckland, New Zealand
In both 2003 and 2004, IBMers and their families helped with a tree-planting project at Motutapu Island off Auckland. The 2004 Motutapu Island Tree Planting Expedition took place on Sunday 25 July and was organised by the IBM Auckland Great Place to Work Committee. IBM volunteers again helped to plant native trees to restore the natural forest on Motutapu Island in the Hauraki Gulf (the island next to Rangitoto), planting 2,500 trees on a hillside paddock. The event provided a unique chance to take part in a Department of Conservation approved reforestation project.

A view of past hard work of a reforested hill slope on Motutapo Island
IBMers and their families planting trees the on hill slopes of Motutapu Island in 2004
Remediation

Audits & compliance

In 2004, IBM continued to prevent and minimise the impact of environmental incidents in Australia and New Zealand. The company received no environmental fines, penalties or improvement notices resulting from its operations in both countries.

Summary of Compliance and Environmental Incidents from 2000 to 2004

<table>
<thead>
<tr>
<th>Type of Incident</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Australia (44 sites)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major/Reportable</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minor</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Fines and Penalties</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Improvement Notices</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IBM New Zealand (7 sites)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major/Reportable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minor</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fines and Penalties</td>
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<tr>
<td>Improvement Notices</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Environmental Incidents

Australia

In 2004, IBM's Australian sites reported five minor environmental incidents that were fully contained with limited negative impact on the environment and human health.

The five minor incidents were related to:
- electrolyte leaks from failed lead acid batteries;
- a hydraulic oil spill from a failed forklift hydraulic line; and
- a diesel fuel leak from a day tank into a bunded generator room at a data centre.

All these incidents were contained within the building, effectively cleaned up and the resulting contaminated absorbent spill pads properly disposed of by IBM Approved Hazardous Waste Disposal Service Suppliers.

Environmental incident response and reporting training continued at relevant sites, including the 24x7 data centres.

New Zealand

In 2004, there were no environmental incidents reported at the IBM sites in New Zealand.

Environmental incident response and reporting training was conducted at relevant sites, including the data centres and warehouse.

Spill response stations like this one are located as close to the identified environmental hazard as practical.
IBM is committed to environmental affairs leadership in all of its business activities. IBM has had longstanding corporate policies of providing a safe and healthful work place, protecting the environment, and conserving energy and natural resources, which were formalised in 1967, 1971 and 1974 respectively.

They have served the environment and our business well over the years and provide the foundation for the following corporate policy objectives:

- Provide a safe and healthful workplace and ensure that personnel are properly trained and have appropriate safety and emergency equipment.
- Be an environmentally responsible neighbour in the communities where we operate, and act promptly and responsibly to correct incidents or conditions that endanger health, safety, or the environment. Report them to authorities promptly and inform affected parties as appropriate.
- Conserve natural resources by reusing and recycling materials, purchasing recycled materials, and using recyclable packaging and other materials.
- Develop, manufacture, and market products that are safe for their intended use, efficient in their use of energy, protective of the environment, and that can be reused, recycled or disposed of safely.
- Use development and manufacturing processes that do not adversely affect the environment, including developing and improving operations and technologies to minimise waste, prevent air, water, and other pollution, minimize health and safety risks, and dispose of waste safely and responsibly.
- Ensure the responsible use of energy throughout our business, including conserving energy, improving energy efficiency, and giving preference to renewable over non-renewable energy sources when feasible.
- Participate in efforts to improve environmental protection and understanding around the world and share appropriate pollution prevention technology, knowledge and methods.
- Utilise IBM products, services and expertise around the world to assist in the development of solutions to environmental problems.
- Meet or exceed all applicable government requirements and voluntary requirements to which IBM subscribes. Set and adhere to stringent requirements of our own no matter where in the world the company does business.
- Strive to continually improve IBM’s environmental management system and performance, and periodically issue progress reports to the general public.
- Conduct rigorous audits and self-assessments of IBM’s compliance with this policy, measure progress of IBM’s environmental affairs performance, and report periodically to the Board of Directors.

Every employee and every contractor on IBM premises is expected to follow this policy and to report any environmental, health, or safety concern to IBM management. Managers are expected to take prompt action.

Original signed by: Louis V. Gerstner, Jr.
Policy last revised: July 29, 1997
The following two report cards summarise the environmental and well-being performance and trends that help us move towards a better managed business in Australia and New Zealand.

### Trends Summary for Australia Operations

#### Well-being Indicators (Starts Page 6)

<table>
<thead>
<tr>
<th></th>
<th>Year 2000</th>
<th>Year 2001</th>
<th>Year 2002</th>
<th>Year 2003</th>
<th>Year 2004</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of injuries per 100 employees</td>
<td>1.05</td>
<td>1.08</td>
<td>1.07</td>
<td>1.03</td>
<td>1.11</td>
<td>✗</td>
</tr>
<tr>
<td>Number of lost time injuries per 100 employees</td>
<td>0.46</td>
<td>0.39</td>
<td>0.36</td>
<td>0.43</td>
<td>0.34</td>
<td>✓</td>
</tr>
<tr>
<td>Average days lost per lost time injury</td>
<td>16</td>
<td>21</td>
<td>15</td>
<td>10</td>
<td>14.7</td>
<td>✗</td>
</tr>
</tbody>
</table>

#### Environmental Indicators (Starts Page 9)

**Use & Conservation of Natural Resources**

<table>
<thead>
<tr>
<th></th>
<th>Office Paper Consumption (See Page 16)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Performance Indicators (KPI)</strong></td>
<td>Reams used per full-time equivalent employees &amp; contractors (Reams/FTE)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10.8</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>Cut sheets consumed</td>
<td>-</td>
<td>68,602,000</td>
<td>64,404,390</td>
<td>62,970,200</td>
<td>58,254,150</td>
</tr>
<tr>
<td></td>
<td>Tonnes equivalent</td>
<td>-</td>
<td>343.8</td>
<td>321.9</td>
<td>315.8</td>
<td>293.0</td>
</tr>
<tr>
<td></td>
<td>Trees equivalent</td>
<td>-</td>
<td>9,094</td>
<td>8,515</td>
<td>8,356</td>
<td>7,751</td>
</tr>
<tr>
<td></td>
<td>Number of full-time equivalent employees &amp; contractors (FTE)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11,637.4</td>
<td>11,830.9</td>
</tr>
</tbody>
</table>

**Energy Consumption (See Page 17)**

<table>
<thead>
<tr>
<th></th>
<th>Energy Saving Year to Year (Target 2%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electricity</td>
<td>-</td>
<td>11.6</td>
<td>-</td>
<td>3.1</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

**Key Performance Indicators (KPI)**

|                          | Kilowatt hours per square meter of building area (kWh/m² m² ba) | 842       | 751       | 750       | 758       | 754         | ✓           |
|                          | Kilowatt hours per full-time equivalent employees & contractors (kWh/FTE) | -         | -         | -         | 14,046    | 13,158      | ✓           |
### Trends Summary

#### Kilowatt Hours (kWh)

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas (Megajoules)</td>
<td>113,378,820</td>
<td>100,243,920</td>
<td>111,080,046</td>
<td>107,607,131</td>
<td>106,903,945</td>
</tr>
<tr>
<td>Diesel Fuel (Litres)</td>
<td>5,426,090</td>
<td>2,759,820</td>
<td>3,843,120</td>
<td>4,130,349</td>
<td>7,336,478</td>
</tr>
<tr>
<td>(Number of sites &amp; square meters of building area (m² ba))</td>
<td>324,550</td>
<td>176,750</td>
<td>175,550</td>
<td>172,745</td>
<td>117,880</td>
</tr>
<tr>
<td>Number of full-time equivalent employees &amp; contractors (FTE)</td>
<td>(35); 134,729</td>
<td>(35); 133,475</td>
<td>(36); 141,935</td>
<td>(36); 141,795</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Water Consumption (See Page 32)

**Key Performance Indicators (KPI)**
- Kilolitres use per m² building area (kL/m² ba)
- Kilolitres used per FTE (kL/FTE)
- Percent savings year on year (% by volume)

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual kilolitres of water used (kL)</td>
<td>2.7</td>
<td>2.1</td>
<td>2.2</td>
<td>1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Average Kilolitres used daily (kL/day)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>46</td>
<td>25.1</td>
</tr>
<tr>
<td>(Number of sites &amp; square meters of building area (m² ba))</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>26</td>
<td>12.3</td>
</tr>
<tr>
<td>Number of full-time equivalent employees &amp; contractors (FTE)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>26</td>
<td>12.3</td>
</tr>
</tbody>
</table>

#### Pollution Prevention & Management

**Greenhouse Gas Emissions (See Page 20)**

**Key Performance Indicators (KPI)**
- Kilograms CO₂-e/m² building area (kg CO₂/m² ba)
- Tonnes CO₂-e/FTE employee & contractors (t CO₂/FTE)

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GHG Emissions (Tonnes)</td>
<td>129,778</td>
<td>116,385</td>
<td>129,237</td>
<td>125,862</td>
<td>125,889</td>
</tr>
<tr>
<td>Cumulative Abattement (Tonnes)</td>
<td>32,237</td>
<td>45,630</td>
<td>32,777</td>
<td>36,152</td>
<td>36,125</td>
</tr>
</tbody>
</table>
### Trends Summary for Australia Operations

#### Waste Minimisation & Management (See Page 25)

<table>
<thead>
<tr>
<th></th>
<th>Year 2000</th>
<th>Year 2001</th>
<th>Year 2002</th>
<th>Year 2003</th>
<th>Year 2004</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-hazardous Waste Recycled (Target 67%)</strong></td>
<td>45%</td>
<td>51%</td>
<td>46%</td>
<td>53%</td>
<td>46%</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Non-hazardous Solid Waste</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Key Performance Indicators (KPI)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kilograms per full-time equivalent employees &amp; contractors (kg/FTE)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>355</td>
<td>381</td>
<td>✓</td>
</tr>
<tr>
<td>Kilograms per square meter of building area (kg/m² ba)</td>
<td>15</td>
<td>15</td>
<td>19</td>
<td>13</td>
<td>14</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Non-hazardous Solid Waste (tonnes)</strong></td>
<td>1,259.8</td>
<td>1,305.0</td>
<td>1,622.8</td>
<td>1,042.3</td>
<td>1,142.1</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Hazardous Waste (tonnes)</strong></td>
<td>197.7</td>
<td>28.8</td>
<td>32.1</td>
<td>66.54</td>
<td>91.4</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Computer Scrap</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Recycled (% weight)</strong></td>
<td>327.7</td>
<td>43 *</td>
<td>80</td>
<td>80</td>
<td>84</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Processed (tonnes)</strong></td>
<td>(8): 85,081</td>
<td>(8): 85,081</td>
<td>(8): 85,081</td>
<td>(8): 80,056</td>
<td>(9): 79,723</td>
<td>✓</td>
</tr>
<tr>
<td>(Number of sites) &amp; square meters of building area (m² ba)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,931.42</td>
<td>2,993.53</td>
<td></td>
</tr>
<tr>
<td>Number of full-time equivalent employees &amp; contractors (FTE)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Incidents Prevention (See Page 35)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of major releases</td>
<td>Zero</td>
<td>Zero</td>
<td>1</td>
<td>Zero</td>
<td>Zero</td>
<td>✗</td>
</tr>
<tr>
<td>Number of minor releases</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Fines &amp; Penalties (See Page 36)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fines &amp; Penalties</td>
<td>Zero</td>
<td>Zero</td>
<td>Zero</td>
<td>Zero</td>
<td>Zero</td>
<td>✗</td>
</tr>
</tbody>
</table>

Key: * = 20001 computer scrap data not available and 40% consisting of CRT monitors was stored for recycling; ✓ = Identifies an improvement in performance on last year that may led to a decrease in adverse environmental impacts; ✗ = No identified change on last year or is a baseline reporting year; ✗ = Identifies a decline in performance on last year that may led to an increase in adverse environmental impacts.
## Trends Summary

### Environmental Indicators (Starts Page 9)

#### Use & Conservation of Natural Resources

**Office Paper Consumption (See Page 16)**

**Key Performance Indicator (KPI)**

- **Reams used per full-time equivalent employee & contractor (Reams/FTE)**
  - Year 2000: 
    - **Cut Sheets Consumed**: 4,030,000
    - **Tonnes Equivalent**: 20.3
    - **Trees Equivalent**: 537
  - Year 2002: 
    - **Cut Sheets Consumed**: 3,563,500
    - **Tonnes Equivalent**: 17.9
    - **Trees Equivalent**: 473
  - Year 2004: 
    - **Cut Sheets Consumed**: 4,279,000
    - **Tonnes Equivalent**: 21.5
    - **Trees Equivalent**: 569

#### Energy Consumption (See Page 17)

**Energy Saving Year to Year (Target 2%)**

**Electricity**

- **Key Performance Indicator (KPI)**
  - **Kilowatt hours used per square meters building area (kWh/m² ba)**
    - Year 2000: 545
    - Year 2002: 402
    - Year 2004: 366
  - **Kilowatt hours used per full-time equivalent employee & contractor (kWh/FTE)**
    - Year 2000: 11,151
    - Year 2002: 8,507,878
    - Year 2004: 8,862,834

**Natural Gas (Megajoules)**

- Year 2002: 2,960
- Year 2004: 3,805

**Diesel Fuel (Litres)**

- Year 2002: 24,224
- Year 2004: 800

**Propane (Kilograms)**

- Year 2002: 15,187
- Year 2004: 763

**Water Consumption (See Page 32)**

**Key Performance Indicator (KPI)**

- **Kilolitres per square meter of building area (kL/m² ba)**
  - Year 2000: 1.2
  - Year 2002: 1.3
  - Year 2004: 1.0
- **Kilolitres of Water (Kilolitres)**
  - Year 2002: 8,862,834
  - Year 2004: 6,852

**(Number of sites & square meters of building area (m² ba))**

- Year 2000: 2
- Year 2002: 3
- Year 2004: 2

---

*Note: ✓ indicates performance meets target, ✗ indicates performance does not meet target.*

### Performance

#### Pollution Prevention & Management

**Greenhouse Gas Emissions**

<table>
<thead>
<tr>
<th>Year</th>
<th>Key Performance Indicators (KPI)</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kilograms of CO2-e/m² building area (kg/m² ba)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Tonnes of CO2-e/FTE employee (tCO2/FTE)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Total GHG Emissions (tonnes)</td>
<td>×</td>
</tr>
<tr>
<td></td>
<td>Cumulated Abatement (tonnes)</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Waste Minimisation & Management

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-hazardous Waste Recycled (Target 67%)</th>
<th>Hazardous Waste (tonnes)</th>
<th>Computer Scrap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-hazardous Solid Waste (tonnes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>processed (tonnes)</td>
<td>recycled (% by weight)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Environmental Incidents Prevention

- Number of major releases: Zero Zero Zero Zero Zero
- Number of minor releases: Zero Zero Zero Zero Zero
- Fines & Penalties: Zero Zero Zero Zero Zero

**Key:** * = Data not available on some sites to compare with previous year; # = see text for an explanation of why data reported as 13% in last year report; ✓ = Identifies an improvement in performance on last year that may led to a decrease in adverse environmental impacts; ▲ = No identified change on last year or is a baseline reporting year; × = Identifies a decline in performance on last year that may led to an increase in adverse environmental impacts.
GHD was commissioned by IBM Australia Ltd to conduct an independent verification of the “IBM Environment & Well-Being Progress Report for 2004” (the Report). The data and statements in the Report covered the period 1 January 2004 to 31 December 2004.

Scope of Work
The scope of the assessment was to verify the environmental and well-being data and claims in the Report, ensure that the Report provides a balanced view of IBM’s Health, Safety and Environment performance and identify areas for improvement. The verification was expanded for the current review period to cover 57 data sets, compared to 37 in 2003 and 12 in 2002. The assessment was limited to data and claims made for IBM’s Australian and New Zealand operations.

The findings of the verification audit are presented below.

Verification of environmental claims
The environmental statements and claims made in the text of the Report, relating to the data reviewed, present a fair and reasonable view of IBM’s health, safety and environmental performance over the review period.

Data collection procedures
GHD reviewed IBM’s procedures for collecting the data and deriving performance indicators. For Australian operations, the procedures were acceptable and the assumptions made in deriving indicators were reasonable for most data streams reviewed. Procedures have been improved by developing a record keeping process map and document register for information used in the Report, simplification of and improvements to data spreadsheets, and internal cross-checking of data. Procedures are still not fully documented for all reported indicators.

Data verification
For Australia, the data, data presentation, methodology, calculations and assumptions were correct, based on information available for the reporting period. Any data errors detected have been corrected in the final report. Most data errors were non-material.

Nine data sets were checked for New Zealand, covering computer scrap, water usage, electricity, general trash, paper and grease wastes. Four data sets were incorrect (with errors of up to 6.6%) and two data sets were not supported by available information. Generally data collection, record keeping, data consolidation, transcription to spreadsheets and internal checking were poor. This results in low confidence in the accuracy and completeness of the information provided. Therefore, the data for New Zealand was unable to be verified.

A substantial portion of the numerical environmental information is provided to IBM by its suppliers and contractors. We have independently audited a selection of contractors’ data collection procedures.

Materiality
The Report presents a fair representation of the material aspects of IBM’s environmental performance for 2004. IBM has changed some of the performance indicators reported and intends to cease reporting some KPIs. An assessment of materiality of the indicators is recommended. No misrepresentations were noted.

Completeness
IBM has identified and understood its direct material aspects, and reported on those aspects appropriately and clearly. IBM is making ongoing improvements in more complete and accurate data capture, for waste recycling and greenhouse gas emissions, for Australian sites.

Responsiveness
Stakeholder safety and environmental concerns and issues were not assessed during this verification. IBM could consider conducting formal stakeholder consultation for future Reports.

Summary
Based on our findings, the statements made and data shown in the Report present a fair and reasonable view of IBM’s environmental performance over the past year in Australia.

Independence
GHD confirms that the audit team is independent from IBM Australia Ltd.

Full statement
A more detailed version of this statement, including scope of work, methodology, findings, recommendations, assessment against AA 1000, statement of independence and details of auditors can be found at ibm.com.au

Sue Trahair
Lead Environmental Auditor, GHD Pty Ltd, Sydney, November 2005
Feedback Form

Your opinion is important to us.

I found the report to be:

☐ Very informative  ☐ Informative  ☐ Not informative

I found the level of detail to:

☐ Suited all of my needs  ☐ Suited some of my needs  ☐ Did not suit my needs

☐ No option

I am interested in IBM because I am:

☐ An employee or contractor  ☐ A client  ☐ A shareholder

☐ A neighbour  ☐ A regulator  ☐ A supplier

☐ Others

What sections did you find most useful and why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

What sections did you find least useful and why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

This completed form can be sent to IBM using any of the following:

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Environmental Manager for Australia and New Zealand
IBM Australia Limited
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Pennant Hills, NSW, Australia, 2120

E-mail to: mchanell@au1.ibm.com

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