

This section focuses on Minebea's various environmental protection objectives, activities and targets. For detailed information and specific examples, please refer to the page(s) indicated in the right column.

| Area     | Objectives   | Specific Activities/Achievements in Fiscal 2002  | Targets   | Page(s) |
|----------|--|--|---|---------|
| Products | Reduction or elimination of hazardous chemical substances in products        | 1. Switch to cadmium-free plastic materials (achieved)<br>2. Switch to lead-free cable insulation and plastic materials (ongoing)<br>Exposed<br>Other<br>3. Switch to lead-free solder (ongoing)<br>4. Eliminate hexavalent chromium (ongoing)<br>Electronic components<br>Automotive fasteners<br>5. Eliminate asbestos from electronic clutches and brakes (ongoing)<br>6. Switch to non-PVC coating materials for speaker boxes (commenced) | Achieve by March 2004<br>Achieve by December 2004<br>Achieve by June 2004<br>Achieve by December 2004<br>Achieve by June 2005<br>Achieve by March 2004<br>Achieve by January 2005 | 13-14   |
|          | Reduction of energy consumption/contribution to prevention of global warming | 1. Contribute to environmental improvement by increasing precision grade of ball bearings<br>2. Develop and commercialize lighting devices for LCDs<br>3. Develop and commercialize backlight inverters  |   | 14      |
|          | Compatibility with "3R" criteria   | 1. Develop and commercialize high tension bolts  |   | 15      |
|          | Environmentally sound distribution   | 1. Simplify recycling of cardboard boxes<br>2. Use environment-friendly packing materials<br>3. Recycle polyethylene containers as fuel pellets for electric power generation  |   | 15      |
| Plants   | Rehabilitation of contaminated soil and groundwater                          | 1. Resolve contamination caused by chlorinated organic solvents<br>a. Purify groundwater (ongoing) (Karuizawa and Fujisawa Manufacturing Units and site of former Ichinoseki Factory)<br>b. Replace contaminated soil (completed) (Omori Manufacturing Unit)   | Observe the environmental laws and regulations of each country and voluntary limits   | 16-17   |
|          | Prevention of damage to the ozone layer                                      | 1. Eliminate specified CFCs and ethane as cleaning agents (completed in April 1993)  | Switch to air conditioners that do not use ozone-depleting substances (ODSs) when installing new or replacing existing units  | 17      |
|          | Promotion of "3R" concept  | 1. Lower waste output from plants<br>a. Install oil recovery equipment<br>2. Increase recycling of waste<br>a. Improve storage areas for grinding swarf and promote briquetting<br>b. Reduce perishable waste and promote composting<br>3. Reduce disposal as landfill<br>a. Recycle sludge from wastewater treatment facilities   | Reduce total waste output 15% from the fiscal 2002 level by March 2006  | 18      |

| Area                 | Objectives   | Specific Activities/Achievements in Fiscal 2002  | Targets   | Page(s) |
|----------------------|--|--|---|---------|
|                      | Prevention of water contamination  | 1. Comply with environmental laws and regulations in each country<br>Japan: All plants have achieved limits stipulated by local laws and regulations and voluntary limits<br>Thailand: All plants have achieved limits stipulated by local laws and regulations and voluntary limits<br>China: All plants have achieved limits stipulated by local laws and regulations and voluntary limits | Observe the environmental laws and regulations in each country and voluntary limits | 19      |
|                      | Prevention of air pollution  | 1. Comply with environmental laws and regulations in each country<br>Japan: All plants have exceeded levels stipulated by local laws and regulations   | Observe the environmental laws and regulations in each country and voluntary limits | 20      |
|                      | Reduction of energy consumption/contribution to prevention of global warming | 1. Support use of natural forms of power generation<br>a. Join Tohoku Green Power Fund<br>2. Eliminate redundant equipment<br>a. Reduce number of oil mist collectors<br>3. Publicize the achievements of plants outside Japan/Asia<br>a. U.S. Group company's receipt of U.S. EPA award and efforts to reduce consumption of energy and raw materials                                       | Lower energy consumption (per unit of production)<br>1% annually                    | 20, 21  |
|                      | Establishment of environmental patrol programs                               | 1. Expand environmental management program, implement environmental patrols covering plants as well as surrounding areas   | Implement/continue/improve regular patrols  | 21      |
| Education            | Education for new recruits   | 1. Implement environmental education programs for new recruits   | Ongoing   | 22      |
|                      | In-house training  | 1. Implement training program for in-house environmental auditors  | Ongoing   | 22      |
|                      | Basic employee education   | 1. Regular environmental education for all employees   | Ongoing   | 22      |
|                      | Emergency response training  | 1. Implement environmental emergency drills  | Ongoing   | 22      |
| Communications       | Disclosure of information  | 1. Present information on environmental efforts at Minebea Web site  | Publish annual environmental report   | 23      |
|                      | Communication with local communities   | 1. Organize environment-themed art contest for children and teens (Thailand)   | Maintain communications with local communities                                      | 23      |
| Community Activities | Clean-up programs  | 1. Organize clean-up programs around plant sites   | Ongoing   | 24      |
|                      | Greening   | 1. Implement/participate in tree-planting programs<br>a. Tree-planting program (Thailand)<br>b. Sapling donation and tree-planting programs (China)  | Ongoing   | 24      |
|                      | Support for community environmental programs                                 | 1. Extend support to Fujisawa Shinbayashi Park Conservation Association  | Support local environmental protection efforts                                      | 24      |
|                      | Environmental protection funds   | 1. Shanghai-Minebea Lake Daishan-hu Environmental Protection Fund<br>a. Amount: Rmb 11.0 million (approx. US\$1.3 million)<br>b. Use of fund to support tree-planting programs   | Use fund to support local environmental efforts                                     | 25      |