

Third Environmental Action Plan Results

| Category | Item | Objective | Specific actions and targets | Results | Evaluation |
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| 1) Developing environmentally friendly products and technologies | 1. Preliminary environmental evaluations | Augmenting preliminary evaluations from development and design stages | <p>Creation of database for materials that contain environment-impacting substances targeted for management</p> <p>Investigation of evaluation methods LCA*1 study group, creation and raising awareness of database</p> | <ul style="list-style-type: none"> Created database for materials that contain environment-impacting substances and started inputting into IMDS*2 Established AISIN LCA database and devised LCA Calculation Manual Continued implementing LCA evaluations (5 components) (Intake manifolds, oil pumps, water pumps, door locks and window regulators) | |
| | 2. Development of clean energy devices | Promoting development of devices for clean energy vehicles and life related products | <p>Development of SR motors, automotive fuel cell components and others</p> <p>Development of fixed installation fuel cells</p> | <ul style="list-style-type: none"> Promoted development of devices for clean energy vehicles such as vehicle drive motors Developed residential fuel cells (in progress) | |
| | 3. Measures to counter global warming | Developing products and technologies that lead to CO ₂ reductions | <p>Lighter weight for automotive parts, improving engine efficiency and transmission efficiency</p> <p>Raising energy efficiency of life related products</p> | <ul style="list-style-type: none"> Cooperated with customers to develop lighter automotive parts <ul style="list-style-type: none"> Revolving seat adjusters Aluminum pans Variable plastic intake manifolds Development of highly efficient GHPs and cogeneration systems Marketing of energy-saving shower-toilets | |
| | 4. Improvement of recyclability | Promoting recyclable designs and developing recycling technologies; expanding use of recyclable materials | <p>Augmentation and implementation of Recyclable Design Guidelines</p> <p>Aiming for 95% recycling of an automobile by 2015, developing recycling technology for automotive parts that achieves recycling rate of 95% or more for automotive parts</p> <p>Expanding product lineup that utilizes recycled plastics</p> | <ul style="list-style-type: none"> Enhanced Recycle Design Guidelines and devised/utilized Recycling Feasibility Calculation Manual Improved recyclability of principal components (Large plastic parts, electronic components and auto body components) Practical usage of recycled plastic materials (Center pillar garnish, spoiler, etc.) | |
| | 5. Management and reduction of environment-impacting substances | Increasing management of and steadily reducing environment-impacting substances | <p>Reduced usage: lead (less than 1/3 of fiscal 1997 level by the end of fiscal 2006), hexavalent chromium (less than half of fiscal 1999 level by the end of fiscal 2006)</p> | <ul style="list-style-type: none"> Promoted reduction for 4 SOC*3 substances <ul style="list-style-type: none"> Lead Gradually switched over to target material Cadmium Totally eliminated Mercury None of our products contain mercury. Hexavalent chromium Switchover activities carried out by Special Committee on Hexavalent Chromium and Emergency Committee on RoHS*4 | |
| 2) Saving resources and enhancing recycling activities based on the spirit of "effective utilization of limited resources" | 6. Measures to counter global warming | Proactively promoting reduction of CO ₂ emissions | <p>CO₂: Reduce total emissions by 5% vs fiscal 1991 level by the end of fiscal 2006 (by 10% by the end of fiscal 2011)</p> <ul style="list-style-type: none"> Make an inventory of existing technologies and their horizontal deployment Energy conservation through development of new methods and equipment Development of energy-saving products | <ul style="list-style-type: none"> Total CO₂ emissions increased 9.7% as a result of rapid increase of production volume and establishment of new factories CO₂ emissions decreased 20% on a per-unit-of-sales basis vs fiscal 2001 level thanks to aggressive energy-conservation efforts Energy conservation measures during fiscal 2001-2006 <ul style="list-style-type: none"> Introduction of cogeneration systems (Kariya, Nishio, Handa) Total elimination of regeneration energy loss for aluminum holding furnace and combined thermal exchange burner Electricity conservation for coolants of machining equipment and hydraulic pumps | |
| | 7. Management and reduction of environment-impacting substances | Further augmenting chemical substances control and reducing PRTR (*5) substances | <p>Introduction and operation of total chemical substances management system</p> <p>VOC*6: Reduce emissions of toluene and xylene by 40% vs fiscal 1999 levels by the end of fiscal 2006</p> <p>PRTR substances: Reduce usage by 30% vs fiscal 1999 levels by the end of fiscal 2006</p> | <ul style="list-style-type: none"> Establishment and commencement of operation of PRTR substance tabulation system Completed creation of database for 3,426 resources and materials targeted for environmental management Switched solvents to water-soluble alternatives Established framework for preliminary evaluation of introducing chemical substances | |

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| 3) Minimizing environment-impacting waste in production and implementing stringent environmental management | 8. Reduction of waste materials and conservation of resources | | Zero landfill waste: Achieve at all factories by the end of fiscal 2004 Incinerator waste: Achieve 30% reduction vs fiscal 2001 by the end of fiscal 2006 Establishment of Eco Center for recycling in-house waste and used products | <ul style="list-style-type: none"> Achieved zero landfill waste at all factories ahead of schedule (fiscal 2002) Started operation of Eco Center (fiscal 2003) Achieved zero incinerator waste (fiscal 2006) | |
| | 9. Streamlining of logistics | Reducing CO ₂ emissions and aggressively promoting reduced use of packing and packaging materials | CO ₂ : Reduce total emissions to the amount below fiscal 2000 level through improved transportation efficiency by the end of fiscal 2006 | <ul style="list-style-type: none"> Achieved goals through modal shift to counter rapid increase in transportation volume as a result of increased production | |
| | | | Packing and packaging materials: Reduce usage volume by 10% vs fiscal 2000 levels by the end of fiscal 2006 | <ul style="list-style-type: none"> Not achieved for total usage volume due to rapid increase in overseas production Reduced from 6.1 to 3.0 on a per-unit-of-sales basis by improving packing efficiency | |
| 4) Promoting environmental conservation through close information-sharing with the government and customers and through cooperation and support with suppliers and overseas production companies 5) Intensifying public relations, education and corporate citizenship activities | 10. Augmentation of collaborative organizational activities | Increasing activities with partners | Closely collaborate with all Toyota companies, all AISIN companies and AISIN partners Request establishment of environmental management system at suppliers based on acquisition of ISO 14001 certification by 2003 | <ul style="list-style-type: none"> Coordinated activities as a member of Toyota consolidated environment management Strongly promoted AISIN consolidated environmental management Inspected environmental management system at suppliers | |
| | 11. Environmental considerations at overseas subsidiaries | Supporting ISO 14001 certification | Acquire external certification at all overseas production bases by the end of fiscal 2004 | <ul style="list-style-type: none"> Promoted obtaining certification at 16 overseas production bases by fiscal 2004, of which 13 were certified. The remaining 3 bases obtained certification by fiscal 2006 | |
| | 12. Corporate citizenship activities | Proactively participating in local communications activities | Hold meetings with local communities about the environment Promote greenification, cleanup around surrounding factories and participation/cooperation in welfare activities | <ul style="list-style-type: none"> Each factory independently held regular community meetings Cleanup activities conducted by each factory Held environmental meetings Promoted corporate citizenship activities such as nature study tours | |
| | 13. Public relations activities and information disclosure | Disclosing environmental information | Publish sustainability report with expanded content and disclose information via Internet Hold and sponsor/participate in environment-themed events | <ul style="list-style-type: none"> Ongoing publication of environmental report since fiscal 2000 Created environment corner in the AISIN com-center (Communications Hall) Continued to hold environmental lecture (Jul) and energy conservation presentation (Feb) Included employees' families in family eco-activities | |
| | 14. Training and awareness activities for employees | Raising knowledge and awareness among employees | Systematic implementation of environmental conservation education by job rank Continuous implementation of educational activities of employees through environmental month and others | <ul style="list-style-type: none"> Held educational sessions for environmental managers, environmental enforcement staff and newly appointed supervisors. Also held classes on internal auditing and PRTR substances Continued to hold environmental lecture (Jul) and energy conservation presentation (Feb) Included employees' families in family eco-activities | |
| 15. Promotion of comprehensive environmental management | Promoting the development of a consolidated environmental management system | Devise environmental action plan and obtain ISO 14001 certification by the end of fiscal 2004 at AISIN environmental consolidation companies (production bases) | <ul style="list-style-type: none"> Established unified company-wide system Reviewed company-wide environmental management organization | | |

*1 LCA (Life Cycle Assessment): A method for comprehensively, scientifically, quantitatively and objectively assessing the total environmental impact and load during the production, use and disposal of products. Environmental impact and load is influenced by such factors as resource and energy consumption and emission of environmentally harmful substances and waste.

*2 IMDS (International Material Data System): A material data system used by the automobile manufacturing industry to manage all materials used in the production of automobiles

*3 SOC (Substances of Concern): Substances that impact the environment

*4 RoHS (Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment): Regulations enacted by the European Union on July 1, 2006 for limiting the use of specific toxic substances used in electrical and electronic equipment. The regulations were enacted to decrease environmental load during burial and incineration of products after use and prevent the use of toxic substances in recycled materials, targeting lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE).

*5 PRTR (Pollutant Release and Transfer Register): A system for reporting the discharge and flow volume of chemical substances legally recognized as having an environmental impact

*6 VOC (Volatile Organic Compounds): Chiefly refers to manmade synthetic substances that can easily be released into the atmosphere at room temperature and under normal pressure. Toluene and xylene are representative VOC substances, although there are over 100 other substances within this category.