

Maxell Group / Hitachi Maxell Energy Group
CSR Report 2011

Thanks to you, we have marked our
50th anniversary.

Things we will always hold dear:
Dreams, memories, people and the earth.



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Impact of the Great East Japan Earthquake and Responses to the Disaster

We wish to express our heartfelt sympathy for all who have suffered from the Great East Japan Earthquake, together with our best wishes for the fastest possible recovery by those areas affected by the disaster.

Establishment of the Major Earthquake Response Headquarters

Hitachi Maxell established a Tohoku-Pacific Ocean Earthquake Damage Response Headquarters on March 11, 2011. With this headquarters as the focal point, information on damage suffered by employees, families, and company sites was collected and countermeasures were formulated.

Damage was suffered by the Group company Maxell Finetech (head office in Watari-Gun, Miyagi Prefecture). Buildings were not damaged at either the head office plant or the Sodegasawa plant, and production facilities also did not suffer more than slight partial damage. The company therefore was fully recovered at the end of March and began shipping products as usual.

Regarding Dry Battery Production Increases

The increase in demand for dry batteries in the earthquake region led Hitachi Maxell to put the Osaka Works, which manufactures alkaline dry batteries, on a 24-hour production basis which has continued in effect since March 14. The Works has donated 165,000 dry batteries to the earthquake region.

Aid to the Earthquake Region

The Maxell Group and the Hitachi Maxell Energy Group made donations of five million yen to the earthquake region, and the Maxell Association (an employee social group) sent donations of two million yen through the Central Community Chest of Japan. Company labor and management also conducted joint humanitarian fund-raising to support rapid recovery in the earthquake region.

We also delivered relief supplies to the earthquake region from March 22 to 24. The supplies included water, instant noodles, vacuum-packed foods, prewashed rice, gas canisters, sets of bedding, dry batteries, toilet paper, and disposable diapers.



Corporate Profile

Hitachi Maxell, Ltd.

Head Office: 2-8-2 Iidabashi, Chiyoda-ku, Tokyo 102-8521, Japan

Established: September 1960 **Paid-in capital:** ¥12.2 billion (as of April 2011)

Consolidated net sales: ¥133.4 billion (for the year ended March 31, 2011)

Number of employees (consolidated): 2,618 (as of April 2011)

Our Businesses

Information Storage Media

Computer tapes, broadcasting videotapes, "iV" cassette hard disks, Blue-ray Discs, DVDs, CDs, audio tapes, video tapes

Batteries

Lithium-ion batteries, coin-type lithium rechargeable batteries, silver oxide batteries, lithium primary batteries, alkaline dry batteries

Materials, Devices and Electric Appliances

Optical components, functional materials, adhesive tape, RFID systems, IC cards, small electrical appliances, electroforming and precision parts, metal molds, synthetic resin molded products

Hitachi Maxell Energy, Ltd.

Head Office: 1, Koizumi, Oyamazaki-cho, Otokuni-gun, Kyoto 618-8525, Japan

Established: April 2011 **Paid-in capital:** ¥1 billion (as of April 2011)

Number of employees (consolidated): 1,289 (as of April 2011)

Our Businesses

Batteries

Lithium-ion batteries, coin-type lithium rechargeable batteries, silver oxide batteries, lithium primary batteries, alkaline dry batteries

Message from the Management

February 1, 2011 marked the 50th anniversary of Hitachi Maxell. On April 1, 2011, Hitachi Maxell Energy, Ltd. was established through corporate spin-off.

Aiming for Growth Centered on the Trusted Maxell Brand

With the recent corporate spin-off, Hitachi Maxell has taken a new departure as a company focused mainly on the functional parts and materials business, optical component business, information storage media, mechanical and modular parts, and brand business. This company has inherited the world-renowned “maxell” brand, and we intend to continue winning our customers' trust and expanding in the global market by means of the maxell brand.



The keywords for our coming expansion and growth are “unique,” “footwork,” “speed,” and “niche top.” The Group companies link together to strengthen the unique technologies that each possesses and respond with excellent footwork to the technical issues that arise because of the growing sophistication of customer needs. Accelerating our business development with a global perspective, we will rapidly deliver unique products to our customers and earn their satisfaction. In this way, we will respond to the diversity of change that is taking place. The mutual collaboration among Group companies will generate a synergistic effect, and we will aim to acquire the top shares in local and niche markets by developing unique parts, materials, and products that are competitively superior.

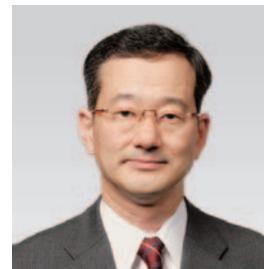
Working under this new structure and basing our actions on the Maxell Group management philosophy of “Harmony and Cooperation, Working with Heart and Soul, and Being of Service to Society,” we will continue our committed efforts to provide customers with the value they truly seek and to develop into a company that pleases our stakeholders.

June 2011

Yoshihiro Senzai
President and Representative Director
Hitachi Maxell, Ltd.

Contributing to Society by Creating Battery Products

Hitachi Maxell Energy was set up on April 1, 2011, as an independent spin-off that inherits the battery business of Hitachi Maxell. It is a fully owned subsidiary of Hitachi, Ltd.



We are a specialized manufacturer of battery products and our role as a Group company is to provide major support for the business of batteries, which are a key device in the Social Innovation Business that is a focus of Hitachi, Ltd. activity. In that role, we manufacture and market lithium-ion rechargeable batteries, micro batteries, and dry batteries, as well as related products. Looking ahead, we intend to step up our provision to customers of suggested solutions that combine our products and peripheral technologies, including our high-capacity, high-safety lithium-ion battery for use in mobile equipment, coin-type batteries with superior environmental durability backed up by a voluminous record of actual results, highly leak-resistant alkaline dry batteries, batteries suited to industrial applications, and batteries suited to information networks and other such applications. We plan to move more rapidly to deliver unique products, technologies, and service available only from Hitachi Maxell Energy, and in doing so to provide our customers with value.

Our fundamental principle is to contribute to society by developing advanced technologies and creating unique battery products that are characterized by safety and high performance. We will proceed with our own independent management in that spirit, taking measures to assure the safety of our products and protect the global environment, strengthening our corporate governance, improving internal control systems, and heightening our corporate ethics and compliance. We will put CSR management into actual practice in these various ways so that we can continue earning the trust of all our stakeholders as well as of society at large.

June 2011

Masao Okafuji
President and Representative Director
Hitachi Maxell Energy, Ltd.

Editorial Policy

This report is published to communicate the CSR*1 activities of the Maxell Group and the Hitachi Maxell Energy Group to stakeholders.

Our CSR Report Editorial Committee is made up of members from all divisions that engage in dialogue with stakeholders. These members determine report topics by taking into consideration what stakeholders and society attach importance to, as well as what the Maxell Group and Hitachi Maxell Energy Group attach importance to. Information that ranked higher in importance has been put into concise, organized form in our report to make it communicate more effectively. We have again expanded our feature articles as we did last fiscal year to include employee comments together with other elements that we hope will make this report more readable as well as more approachable.

Detailed information on environmental and other matters that could not be included in the present report will be made available on our website.

Companies Covered by this Report

Hitachi Maxell, Ltd., and 14 Group companies together with Hitachi Maxell Energy, Ltd.*2 and one Group company
Where the report coverage differs by Group or company, the differences are noted in each topic concerned.

Maxell Group

Hitachi Maxell, Ltd.; Maxell Finetech, Ltd.; Maxell Sliontec Ltd.; Kyushu Hitachi Maxell, Ltd.; Maxell Seiki, Ltd.; Maxell Shoji Co., Ltd.; Maxell Corporation of America; Maxell Europe Ltd.; Maxell Deutschland GmbH; Maxell Asia, Ltd.; Maxell (Shanghai) Trading Co., Ltd.; Maxell Taiwan, Ltd.; Maxell Asia (Singapore) Pte. Ltd.; Maxell Tohshin (Malaysia) Snd. Bhd.; PT.SLIONTEC EKADHARAMA INDONESIA

Hitachi Maxell Energy Group

Hitachi Maxell Energy, Ltd.; Wuxi Hitachi Maxell Co., Ltd.

Period Covered by this Report

The period covered is April 1, 2010 to March 31, 2011. In some instances, however, the subject matter relates to fiscal 2011.

Reference Guidelines

Ministry of the Environment, Environmental Reporting Guidelines (2007 edition)
Environmental promotion laws, Ministry of the Environment Guide to Entries in Environmental Reports (2nd Edition, November 2007), Global Reporting Initiative Sustainability Reporting Guidelines 2006*3

*1 Corporate Social Responsibility

*2 Hitachi Maxell, Ltd., set up Hitachi Maxell Energy, Ltd., as a new company through corporate spin-off on April 1, 2011.

*3 Guidelines for international sustainability reporting compiled by the Global Reporting Initiative

Published June 2011

Related website: <http://www.maxell.co.jp/>

Our technologies, products and services are geared to enhancing the comfort of people's lives and serving industry and society.

▼ Maxell Group

Wireless chargers
Photographic paper

"HDCAM" broadcasting videotapes

Computer tapes for data backup

Lens units for security cameras

RFID microtube

Rotary shavers

iV cassette hard disks support full-HDTV
Blue-ray Discs for video recording

Lens units for micro-cameras and mobile telephones

Canal-type headphones

Automatic urine-sampling systems

In-car lenses for safety assurance/tapes for electrical wire connections

Cylindrical CR batteries for fire alarms

"Voltage" alkaline dry batteries

Lithium-ion batteries for mobile phones

Button-type zinc air batteries for hearing aids

Lithium thionyl chloride batteries for intelligent gas meters

Coin-type lithium rechargeable batteries

Silver oxide batteries for wristwatches

Batteries for capsule endoscopes

Heat Resistant Coin-type CR batteries for Tire Pressure Monitoring System (TPMS)

▲ Hitachi Maxell Energy Group

Maxell Group

Wireless Charger Capable of Charging the iPhone4 Without Using a Charging Cable (Hitachi Maxell)

We developed a wireless charger to resolve the inconvenience that charging time imposes on mobile equipment even as the functionality of smart phones and other mobile devices grows increasingly sophisticated. The iPhone can be charged by inserting it into a special sleeve and just placing it on a charging pad.



* iPhone is a trademark of Apple Inc. that is registered in the United States and other countries.

If the wireless charging function comes into widespread use, it will contribute to a reduction of environmental impact by limiting the wastage of power consumed by AC adapters and reducing the amount of waste from connector cables and other such products. We hope to pursue future development of chargers that can be used with other mobile devices, as well.



Tatsuhiko Atsuta
Product Development &
Marketing Division
Hitachi Maxell, Ltd.

Lens Unit for Security Camera Adapted to Diverse Needs (Maxell Finetech)

We developed a security lens unit that has zoom and autofocus functionality using a stepping motor as well as switchable day/night functionality for capturing night-time or other such imagery. We plan to pursue future development with a view to further increased definition, wide-angle zoom to angles of 100 degrees or more, and so on.



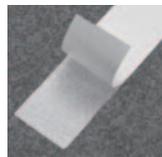
Zoom lenses for security cameras demand high reliability and durability. Since these products have such long lifetimes, they are also designed with consideration for the environment in mind. We want to continue developing products adapted to future market needs and to continue contributing to the safety and security of society.



Seiji Kasuga
Nagano Optical Division
Maxell Finetech, Ltd.

Expanded Line-Up for Heat-Conducting Double-Sided Adhesive Tape Series (Maxell Sliointec)

A ceramic powder with extremely high heat conductivity was employed as the heat-conducting filler to realize a balance of both heat conductivity and great adhesive power. The use of heat-conducting double-sided adhesive tape makes it possible to reduce the use of adhesive, screws, and other such fasteners to fix members in place. This can also enable significant cuts in the man-hours put into the production of electronic equipment and other products.



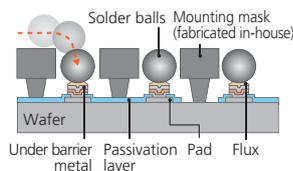
Our series of heat-conducting double-sided adhesive tapes has seen increasing use in recent years, particularly for LED applications. We hope to continue developing new products for the future and build them into a product group that plays a key role in heat countermeasures for electronic equipment.



Kumiko Morimoto
Technology Division
Maxell Sliointec Ltd.

Batch Process of Solder Ball Mounting on Semiconductor Wafer (Kyushu Hitachi Maxell)

Our solder ball mounting method using a mask fabricated in-house supports small lots, short delivery times, and low cost while also realizing the mounting of small-diameter balls 100 μm or less in size. As semiconductors become ever more sophisticated, we will achieve the chip and substrate connection needs.



We realized this by combining ball transfer masks fabricated using our electro fine forming (EF2) technology with technology for plating applied to wafers. We began undertaking the ball mounting process of telecommunications ICs for use in mobile terminals in May 2010. Based on our customers' requirements, we are willing to expand this business to mass production in the future.



Yuichi Sukegawa
EF2 Division,
Kyushu Hitachi Maxell, Ltd.

RFID*1 Microtube that Protects Data during -80 Degree C Storage (Maxell Seiki)

We mounted our company's coil-on-chip RFID, which has superior heat and impact resistance, at the bottom of a microtube, and commercialized an RFID microtube that protects data during -80 degree C storage, as well as a dedicated reader/writer unit.



*1 Radio Frequency Identification

The healthcare industry is presently directing a great deal of attention at RFID. We are making various suggestions regarding RFID applications based on RFID technology we have cultivated over many years in addition to our RFID microtube. Our intention is to continue contributing in future to the increased effectiveness of pharmaceutical development, to the enhanced safety of healthcare operations, and so on.



Hiroto Watanabe
Business Planning
Department
Maxell Seiki, Ltd.

Hitachi Maxell Energy Group

High-Capacity Lithium-ion Battery Employing Silicon-based Negative Electrode (Hitachi Maxell Energy)

We realized high capacity by developing a negative electrode containing nano silicon composite, a new material that has nano-sized silicon dispersed within an ion conductor. This product is also compatible with conventional lithium-ion batteries in terms of charging voltage and operating voltage, so it can be used without altering the battery control systems on the device side.



The technology for higher capacity using nano silicon composite is a first step toward the coming development of high-performance batteries. We intend to proceed in future with the creation of batteries that not only have further increased capacity, but that also have high power output, rapid charging, long life, high-level safety, and various other special characteristics.



Shuichi Nagaoka
Mobile Battery Division
Hitachi Maxell Energy, Ltd.

High-power Coin-Type Lithium Rechargeable Batteries for Compact Devices (Hitachi Maxell Energy)

In addition to successfully reducing form factor (diameter 20 mm, thickness 3.45 mm) by the effective use of internal volume, we also enabled high-rate discharge capability (maximum current value of 140 mA) with an approximately 40-times*2 increase by the use of our proprietary electrode structure. We also achieved a service life of approximately 500 charge-discharge cycles, thus enabling long-term use of the product.



We developed a compact rechargeable battery with superior long-term reliability at high power output. As a battery solutions supplier, we want to contribute to the development of the new communities to come.



Takahiro Shimada
Micro Battery Division,
Hitachi Maxell Energy, Ltd.

*2 Comparison with Maxell's CR2032 at 60% available capacity.

CSR Activity Report

CSR Management

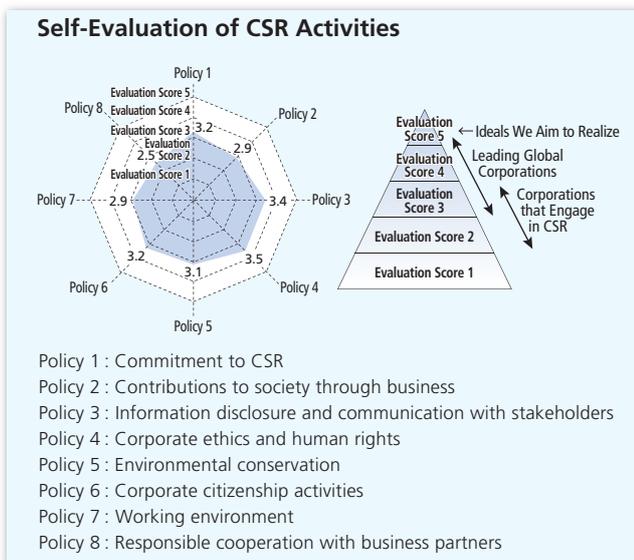
Basic CSR Policy

The Maxell Group and Hitachi Maxell Energy Group have established Corporate Behavior Standards that specify the mission and duties to be performed by the Group, and have defined a CSR Policy. The purpose is to conduct CSR activities in a systematic and continuous way, as well as to encourage employees to take pragmatic action to uphold these policies and standards. We are also working diligently to maintain close collaboration among all Hitachi Group companies and to achieve total Group synergy.

CSR Management (Self-evaluation of CSR Activities and its Results)

Hitachi Maxell and Hitachi Maxell Energy use the CSR self-assessment tool developed by the Hitachi Group to verify our position and orientation relative to the image of what our CSR should be.

Our self-assessment results for fiscal 2010 show that we achieved high levels in "corporate ethics and human rights" and "information disclosure and communication with stakeholders." However, we found there is still room for improvement in "Responsible cooperation with business partners."



Corporate Governance

The Maxell Group and Hitachi Maxell Energy Group are proceeding according to the basic policy of "action founded in high corporate ethics," as proclaimed in the CSR Activity Policy of the Hitachi Group, and endeavoring to establish corporate ethics that work by leadership example from the top. In April 2007, we formed a system to collect risk compliance information and make it widely known, and in April 2008, we consolidated the Risk Compliance Management Headquarters and the Environmental Promotion Headquarters to form the CSR Promotion Division. We are also implementing risk evaluation, which includes the compliance perspective, in every division.

Social Activity Report

Together with Customers

Enhancing Customer Satisfaction



The Maxell Group and Hitachi Maxell Energy Group are actively pursuing activities to reflect customer views in our products and services in order to enhance customer satisfaction (CS). This work is pursued by the Customer Service Center, which is the contact point for customer inquiries, together with the QA/CS Center and in collaboration with the operating divisions.

The activities are focused, for instance, on creating "CS products" that are improved by incorporating customer views and wishes. The Customer Service Center is dedicated to responding promptly and appropriately to customer questions and requests for consultation.

This work is conducted using response rate and rate of Gratitude Calls from Customers as indices.

During fiscal 2010, the response rate was 88% and the rate of Gratitude Calls from Customers was 5.2%. Both figures show increases over the previous year.

"Voltage" Alkaline Dry Batteries Guarantee Against Electrolyte Leaks (Hitachi Maxell Energy, Ltd.)

We are implementing a leak guarantee that offers to replace batteries and repair or replace devices if leaks occur in Voltage products incorporating our electrolyte leak prevention design that have been used properly and are within the recommended service life (five years).

Two years have now passed since the products went on sale, and there has not been even a single case of electrolyte-leak accidents due to over-discharge, demonstrating the high level of quality achieved.



Easily Transportable "iV" Cassette Hard Disks (Hitachi Maxell, Ltd.)

The "iV" cassette hard disk was our response to customers who asked for an easy-to-carry hard disk capable of easily recording digital HDTV imagery. Despite its compact palm-size form factor, it has a full 500 GB of capacity and is equipped with high-level content protection technology.



Enhancing Product Liability and Quality

Reducing accidents resulting from product faults to give customers a greater sense of security and trust was made a priority topic from fiscal 2009. The SQM10 movement*1 was started in that year with the aim of achieving its objective in fiscal 2010. In fiscal 2010, we initiated the simple leakage defect (SLD) malfunction elimination program. This came about because of the topics examined in evaluation meetings for the shared Hitachi Group-wide "Ochibo Hiroi" (gleaning) product malfunction prevention program. The entire Maxell Group and Hitachi Maxell Energy Group tackled the issue of malfunction reduction by conducting periodic liaison and report sessions to examine improvement methods, reciprocal application of improvement cases among works, and other such means. This reduced accidents resulting from defects in new products by approximately 27% over the previous year.

There was one newly announced product malfunction in fiscal 2010. This was a mistaken specification marking in one portion of a photo printing paper product.

*1 Super Quality Management 2010: This continuation of the Maxell Top Quality Campaign aims to provide customers with the highest quality in products and services and seeks to strengthen quality control.

Together with Business Partners

Fair Transactions with Suppliers



Hitachi Maxell and Hitachi Maxell Energy conduct procurement in accordance with the Hitachi Group's Guidelines for Procurement Activities, and endeavor to engage in fair transactions with suppliers. The action guidelines have also been applied to our company regulations in order to make them thoroughly familiar to employees.

Working for Shared Awareness with Suppliers Regarding CSR

Hitachi Maxell and Hitachi Maxell Energy engage in exchanges with suppliers through policy briefing sessions organized by each operating division, at customary New Year's celebration forums and other such occasions. We are endeavoring to build a common awareness of CSR.

At the New Year's celebration forums held in January 2011, the president requested that the business partners engage in thoroughgoing implementation of risk management, to include "observance of basics and rightness."

Together with Employees

Assuring Diversity



The Maxell Group and Hitachi Maxell Energy Group act in accordance with the Code of Ethics, which was also written to specify "respect for employee character and human rights" and states that "it is forbidden to discriminate by sex, age, nationality, race, ethnicity, creed, religion, social position, special needs, and so on." We are engaged accordingly in initiatives to build employment and personnel systems that operate in fairness and equality as well as in efforts to increase awareness of human rights.

Hitachi Maxell and Hitachi Maxell Energy had a ratio of employment of people with special needs of 1.95% in fiscal 2010. We had 46 rehired former employees who had reached the age of mandatory retirement, and we had 28 foreign employees.

Occupational Health and Safety Activities

The Maxell Group and the Hitachi Maxell Energy Group in Japan are deploying occupational health and safety programs in accordance with the Occupational Health and Safety Basic Policy. In fiscal 2010, the Health and Safety Committees took on the role of driving power, and have been endeavoring to promote and improve our health and safety activities. They have also been building OSHMS*1 compliant management systems, and engaging in thoroughgoing implementation of traffic safety measures and risk assessment as well as acting with a focus on employee health promotion and related matters.

Creating an Enriching Workplace

Hitachi Maxell and Hitachi Maxell Energy are committed to supporting diverse employee work styles and cultivation of the next generation of human resources.

In June 2009, we acquired "Kurumin" Next-Generation Human Resource Cultivation Support Accreditation, and we are engaging in efforts to make our workplaces even easier to work in.



*1 Occupational Safety and Health Management Systems (OSHMS): Occupational safety and health management systems certified by the Japan Industrial Safety and Health Association.

Together with Local Communities and Societies

Activities to Contribute to Society



The Maxell Group and the Hitachi Maxell Energy Group observe a Group CSR Activity Policy that states, "We promote social contribution activities as a good corporate citizen to realize a better society." In line with this policy, and following the themes of "support for education and culture" and "protection and beautification of the environment," we are engaging in communication with stakeholders as well as a variety of activities to contribute to society.

Outreach Instruction in School Classrooms with Handmade Battery Workshops

The Kyoto Works holds Handmade Battery Workshops as part of its program of communication with local communities. At the request of the Otokuni Bureau of Education in Kyoto Prefecture, we conducted our first outreach instruction for 60 fourth-grade elementary school students in two classes in September 2010. This was done under the Guest Teacher Program (a school classroom initiative) under the Kyoto Edison Program. This allowed us to contribute to a new facet of communication activity and, as an addition to the Parent and Child Classrooms conducted to date, expanded the breadth of our programs.



Softball Workshop Held

Our softball team held softball workshops at Oyamazaki Primary School in December 2010, at municipal lower secondary schools in Ibaraki in January 2011, and at municipal lower secondary schools in Takatsuki in February. Members of Maxell's softball team who belong to the first division in the Japan Women's Softball League coached from 100 to 200 students apiece in warming up, fungo practice, batting, and so on, conveying the fun of softball to the children.



Educational Support Activities (England)

Maxell Europe Ltd. (a dealership, hereafter MEL) established the Maxell Education Trust in 1990 to support local communities. It has to date provided a total of 399,800 pounds sterling to educational institutions and schools in the MEL region. In fiscal 2010, the Trust disbursed 6,500 pounds sterling for an educational project at Newdale Primary School in the city of Telford, where a Maxell plant is located. The project, which is on the theme of Past, Present, and Future, provided for students aged from 7 to 11 to create pictures on topics of Telford's cultural and industrial heritage.



Blood Donation Campaign (Malaysia)

Maxell Tohshin (Malaysia) Sdn. Bhd. (the Malaysian plant, hereafter MTM) has been collaborating with local hospitals and public health offices every year since 2002 to conduct blood donation campaigns for the general public. As a sponsor, MTM handles planning, sets up campaign venues, and operates reception desks. It also made donations of polo shirts and other goods. The campaign is conducted in borrowed corners of urban shopping centers, and not only has it been covered by local newspapers, making it an object of interest, but it has also been reviewed very favorably in various quarters as a contribution to society.



Other Activities to Contribute to Society

- A cumulative total of 770 or more Group members took part in cleanup activities in the vicinity of our works and in local communities (the Tokyo Building, the Osaka Works, the Kyoto Works, the Ono Works, Maxell Finetech, Maxell Sliontec, and Kyushu Hitachi Maxell).
- Exchange took place with 1,441 people on plant study tours and with 78 people in hands-on training (the Osaka Works, the Kyoto Works, the Ono Works, Maxell Finetech, Maxell Sliontec, and Kyushu Hitachi Maxell).
- Overseas Group members participated in afforestation programs, nature conservation, cleanup activities, and other such volunteer activities (Hong Kong and Taiwan).

Evaluations from Outside the Company

- Approved as the dry batteries recommended by the Japan Toy Hospital Society "Voltage" alkaline dry batteries
- Visual Grand Prix 2010 Summer "Media Product" Prize Cassette Hard Disk "iV"
- Visual Grand Prix 2011 "Media Product" Prize Blue-ray Disc, DVD
- Commendation as a Green Enterprise by the Wuxi City Environmental Protection Agency for the ninth consecutive year (Wuxi Hitachi Maxell Co., Ltd., the Wuxi Plant in China, hereafter WHM)

Group Company Websites

Hitachi Maxell, Ltd./Hitachi Maxell Energy, Ltd.
<http://www.maxell.com>
<http://biz.maxell.com/index.html>
 Maxell Finetech, Ltd.
<http://www.maxell-finetech.com/>
 Maxell Sliontec Ltd.
www.sliontec.co.jp/ (in Japanese only)
 Kyushu Hitachi Maxell, Ltd.
<http://www.e-kyuma.com/> (in Japanese only)
 Maxell Seiki, Ltd.
http://www.maxei.co.jp/index_eng.html

Environmental Report

Maxell Group and Hitachi Maxell Energy Group Environmental Action Objectives and Actual Results for Fiscal 2010

Evaluation criteria : Target achieved : Target partially achieved

Category	Activity	FY2010 Target		FY2010 Results	Self-evaluation	
Ecological Mind and Global Environmental Management	Cultivation of Environmental Literacy	Promote enrollment in ecological mind education (e-learning)		100% enrollment		
Provision of Next-Generation Products and Services	Promotion of Eco-Products	Expansion of Eco-Products	Ratio of sales*1: 65%	67%		
	Promotion of Environmental CSR Manufacturing	REACH regulations compliant		Implemented study of component contents		
Works and Offices with a High Level of Environmental Consideration	Global Warming Prevention	30% reduction in CO ₂ emissions (Japan, compared with FY1990)		52% reduction		
		52% reduction in CO ₂ emissions per unit production*2 (Japan, compared with FY1990)		62% reduction		
		Reduction in CO ₂ emissions per unit of production (Objectives by site) (Overseas, compared with FY2008)		(MTM) 28% reduction (objective 33%)*4		
	Efficient Use of Resources	Energy reduction in transportation (Japan)	14% reduction in unit energy consumption during transportation (compared with FY2006)		17% reduction	
		Reduction of waste generation	40% reduction (Japan, compared with FY2000)		53% reduction	
			20% reduction in water usage (Japan & overseas, compared with FY2005)		27% reduction	
		Chemical Substance Management	"VOC"*3 emissions volume"	25% reduction (Japan, compared with FY2000)		45% reduction
30% reduction (Overseas, compared with FY2005)				59% reduction		

*1 Ratio of Sales = (Eco-Products Sales)/(Maxell Group and Hitachi Maxell Energy Group Sales)

*2 Real Output = nominal output / Bank of Japan's Domestic Corporate Goods Price Index for electrical machinery and equipment

*3 Volatile Organic Compounds: General terms for organic compounds containing toluene, methyl ethyl ketone, and other substances that evaporate and form a vapor in the atmosphere.

*4 Objectives and Results by Site: 16% reduction relative to 13% reduction at the UK Plant (MEL), 28% reduction relative to 33% reduction at the Malaysia Plant (MTM), and 2% reduction relative to the status quo at the China Wuxi Plant (WHM).

Ecological Mind and Global Environmental Management

Environmental Protection Action Guidelines

The Maxell Group and the Hitachi Maxell Energy Group have established Environmental Protection Action Guidelines for all our environmental activities. These guidelines support the Global Environmental Charter of the Nippon Keidanren (Japan Business Federation) and were formulated in line with the Groups' Corporate Behavior Standards.

Since fiscal 2009, we have been adding our endorsement to the Nippon Keidanren Declaration on Biodiversity, in which we have been participating as "Declaration Promotion Partners."

Environmental Management System

The Maxell Group and the Hitachi Maxell Energy Group are working to integrate their domestic business establishments and group companies under the ISO 14001 standards. In December 2008, we acquired ISO 14001 certification that integrated seven domestic regions.

We are expanding our environmental activities with the further addition of Maxell Sliontec in fiscal 2009, and the Nagano Optical Division of Maxell Finetech in fiscal 2010.

Strict Compliance with Laws and Regulations

The Maxell Group and Hitachi Maxell Energy Group did not have any environment-related accidents, violations, fines or complaints, including the seven typical pollution issues (air, water, soil, odors, noises, vibrations and ground subsidence).

Providing Next-Generation Products and Services

Responses to REACH Regulations

A list of 46 candidate substances of very high concern (SVHC) was published by January 2011 under the European REACH regulations*5. The Maxell Group and the Hitachi Maxell Energy Group registered subject substances on a Control Standard for Handling Chemical Substances, placed them under control, and made the details available on our website. In fiscal 2010, we submitted CLP*6 notification regarding the ingredients of the ink being produced at the Kyoto Works.

*5 The REACH regulations, a system of controls for chemical substances in the EU, were enacted on June 1, 2007. REACH covers chemical substances manufactured in the EU or imported into the EU in amounts exceeding one ton per year per corporation.

*6 The Regulation on Classification, Labelling and Packaging of chemical substances and mixtures came into force in the EU on January 20, 2009. It requires companies to notify the European Chemicals Agency of substances subject to REACH registration, toxic substances, and toxic substances contained in mixtures.

Expansion of Eco-Products

The Maxell Group and the Hitachi Maxell Energy Group make quantitative evaluations of the environmental impact of products at every stage of their lifecycle in accordance with the items established in the Hitachi Group environmental suitability design assessment criteria. Products that meet or surpass certain standards are registered as Eco-Products. Products that further excel in their environmental performance are registered as Super Eco-Products.

In fiscal 2010, three product items were registered as Super



Super Eco-Products

LTO Ultrium5 Computer Tape (Hitachi Maxell)

This product employs magnetic material with greater microparticulation and higher retentivity to realize the great storage capacity of 3.0 TB, which is twice that of former products (using data compression; 1.5 TB uncompressed). The greater saving of resources and higher data transfer rates due to the greatly increased capacity yield an increase in system efficiency and other effects that support the demand for green IT.

* Linear Tape-Open, LTO, the LTO logo, Ultrium, and the Ultrium logo are trademarks of HP, IBM Corp., and Quantum registered in the United States and other countries.



Super Eco-Products

Butyl Tape (Maxell Siontec)

This adhesive tape with superior waterproof and vibration-absorbing properties has a variety of industrial applications, including in construction, construction materials, and motor vehicles. The adhesive that is the principal component of the tape is made from recycled butyl rubber, and the tape manufacturing process does not use organic solvents, making this an environmentally friendly adhesive tape.



Super Eco-Products

IC Card Reader-Writer MR-520 UJ (Maxell Seiki)

This IC card reader-writer is used for official individual identification services such as found in the National Tax Administration Agency's electronic filing system. It offers high transfer rates (maximum 344 kbps) and features smaller size and lighter weight (20% less in our comparison) than conventional products. The device also supports rapid updates to the operating system, and we are working to further enhance its convenience of use.



Eco-Products and 24 were registered as Eco-Products. We achieved the objective of expanding the presence of Eco-Products so that their ratio in total sales rises to 65% or higher by fiscal 2010.

Environmental Communication

Dialogue with Stakeholders

On December 22, 2010, 13 university students taking the Introduction to Global Environmental Studies course in the Division of Global Architecture in the Osaka University School of Engineering were invited to the Osaka Works, where an opportunity to engage in dialogue was set up. This was the third such event.

The visitors were told about the Hitachi Group environmental vision and Maxell Group and Hitachi Maxell Energy Group environmental activities, and an exchange of views took place.



Business Operations and Environmental Impact

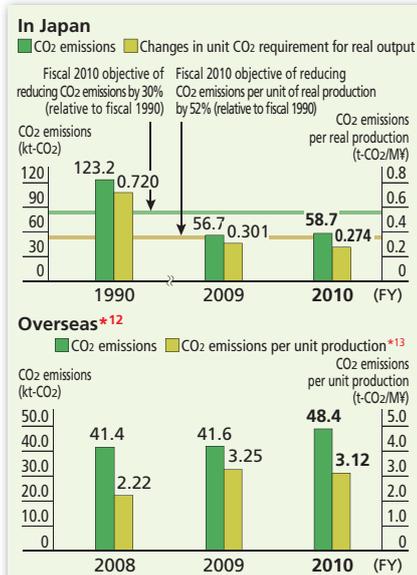
INPUT	City water, industrial water, ground water		Procured materials	
	Japan	Overseas	(Japan figures for the Maxell Group and Hitachi Maxell Energy)	
	773,000m ³	148,000m ³	Ferrous metal materials	2,200t
			Nonferrous metal materials	4,100t
			Synthetic resin materials	14,600t
			Other nonmetal materials	16,100t
			Other composite materials	19,000t
			Handled amount of PRTR*7 chemicals	
			Japan	3,392t
			Overseas	53t

R&D	Procurement and Production	Logistics	Sales / Use
		54,000t	(Japan figures for the Maxell Group and Hitachi Maxell Energy)

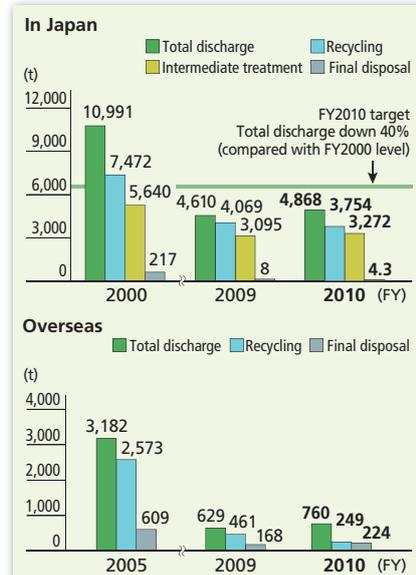
OUTPUT	Wastes and valuable resources		BOD*8	
	Japan	Overseas	Japan	Overseas
	4,868t	760t	14.6t	
	4.3t	224t	COD*9	1.4t
	3,754t	249t	Exhaust gas	
	254t	29t	CO ₂ emissions:	
			Japan	58,700t-CO ₂
			Overseas	48,400t-CO ₂
			SO _x :Japan	400Nm ³ *10
			NO _x :Japan	19,100Nm ³ *10

*7 Pollutant Release and Transfer Register *8 Biochemical Oxygen Demand
*9 Chemical Oxygen Demand *10 Volume of emissions by designated domestic facilities

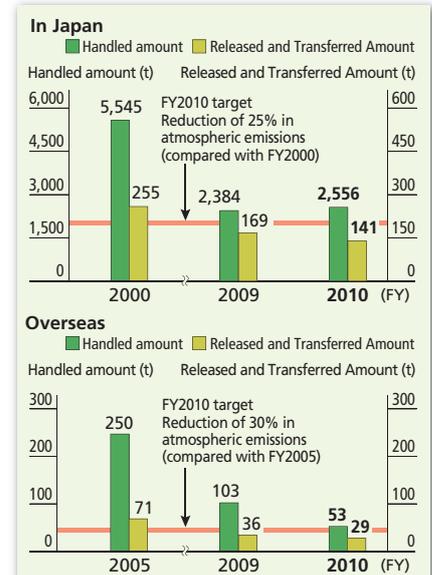
CO₂ Emissions*11 and CO₂ Emissions Per Unit Production



Waste Situation



VOC Volumes Handled and Emitted



*11 Figures published by the power utilities concerned are used for the electric power/CO₂ conversion coefficients (unit: t-CO₂/MWh). (For fiscal 1990, the average of 0.417t-CO₂/MWh for all power sources was used.)

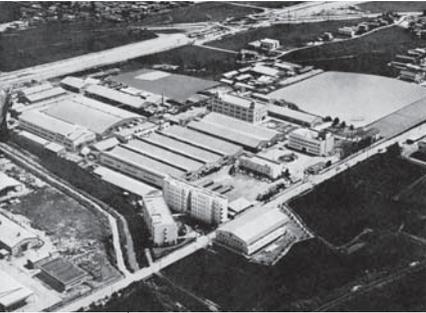
*12 These are the UK Plant (MEL), the Malaysia Plant (MTM), the Wuxi Plant in China (WHM), and the Indonesia Plant (PT. SIONTEC EKADHARAMA INDONESIA).

*13 The yen equivalent of the electric power/CO₂ conversion coefficient (unit: t-CO₂/MWh) of the individual countries and the internal production volume of the individual site are determined.

Electric Power/CO₂ Conversion Coefficients: United Kingdom 0.566, Malaysia 0.534, China 1.02, Indonesia 0.997

We use the Japan Electrical Manufacturers' Association Report on Survey to Estimate Unit CO₂ Emissions for Power Generation in Various Countries, Ver.3.

50 Years of Evolution and Manufacturing (Monodzukuri)



1961 The dry battery and magnetic tape divisions of Nitto Electric Industrial Co., Ltd. (the present Nitto Denko Corp.) were set up independently as Maxell Electric Industrial Co., Ltd.

1963 Commenced production of the first alkaline dry batteries in Japan.



UK-2 (C size) batteries were capable of high current output and had superior leak resistance and storage capacity.

1966 The first cassette tape produced in Japan, born from thin-tape manufacturing technology.



Development succeeded when our thin-film coating technology obtained technical accreditation from Philips in the Netherlands.

1967 Completed the Kyoto Works. The Kyoto Plant (now the Kyoto Works) completed at Oyamazaki-cho, Otokuni-gun, Kyoto Prefecture.



1969 Established Maxell Corporation of America. Our first overseas sales base was inaugurated in New York City.

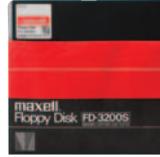


1970 "UD" went on sale as the world's first cassette tape especially for music.



The name of "UD" as a Maxell tape that enabled Hi-Fi recording became widely known in the European and American markets.

1976 The company commercialized the first domestically produced 8-inch floppy disks and Japan's first silver oxide batteries.



We grasped the technical trend at IBM in the United States early on and developed floppy disks. As leading producers of silver oxide batteries for use in electronic watches, we also gained the trust of timepiece manufacturers.

1978 Released VHS video cassette tapes.

We placed on the market VHS videotape that experiences few drop-outs and has superior durability.



1979 We established a production base in the United States. Our first overseas cassette tape production base was established in Atlanta, Georgia.

1984 Released 12-inch optical disks. The OC301 optical disk was realized with high density, high sensitivity, high capacity, and low error rates.



1984 Commenced production of IC cards and memory cards.

We developed IC cards as one of the first IC card manufacturers in Japan. The memory card came into being as a product to use super lithium batteries.



1989 Established Maxell Electronics (Malaysia) Sdn. Bhd. The first recording media production base in the Asia region, mainstay for manufacturing of these products, was established in Malaysia.



Management Product Environment

1960	1970	1980	1990
<p>1961</p> <ul style="list-style-type: none"> The dry battery and magnetic tape divisions of Nitto Electric Industrial Co., Ltd. (the present Nitto Denko Corp.) were set up independently as Maxell Electric Industrial Co., Ltd. 	<p>1963</p> <ul style="list-style-type: none"> Commenced production of the first alkaline dry batteries in Japan. <p>1964</p> <ul style="list-style-type: none"> Changed company name to Hitachi Maxell, Ltd. <p>1966</p> <ul style="list-style-type: none"> Introduced the first audio cassette tapes into the Japanese market. <p>1967</p> <ul style="list-style-type: none"> Completed the Kyoto Works. <p>1968</p> <ul style="list-style-type: none"> Established Maxell Seiki, Ltd. <p>1969</p> <ul style="list-style-type: none"> Established Maxell Corporation of America. <p>1970</p> <ul style="list-style-type: none"> Commercialized UD series of audio cassette tapes. Established Kyushu Hitachi Maxell, Ltd. 	<p>1976</p> <ul style="list-style-type: none"> Introduced the first 8-inch floppy disks (FD-3200S) into the Japanese market. Established Maxell Europe GmbH in Germany. Commercialized Japan's first silver oxide battery. <p>1977</p> <ul style="list-style-type: none"> Listed on the 2nd sections of the Tokyo Stock Exchange (TSE) and the Osaka Securities Exchange (OSE). <p>1978</p> <ul style="list-style-type: none"> Established Kyoto Research Laboratory. Released VHS video cassette tapes. <p>1979</p> <ul style="list-style-type: none"> Established Maxell America Incorporated in Atlanta, Georgia, in the U.S. <p>1980</p> <ul style="list-style-type: none"> Established Maxell (U.K.) Limited (the present Maxell Europe Ltd.) in the U.K. Listed on the 1st sections of the TSE and the OSE. <p>1981</p> <ul style="list-style-type: none"> Commercialized coin-type lithium manganese dioxide (CR) batteries. <p>1982</p> <ul style="list-style-type: none"> Completed the Tsukuba Works. <p>1984</p> <ul style="list-style-type: none"> Released 12-inch optical disks (OC301). 	<p>1986</p> <ul style="list-style-type: none"> Completed Maxell (U.K.) Limited Telford Plant in the U.K. <p>1989</p> <ul style="list-style-type: none"> Commenced production of IC cards and memory cards. Completed the Fukuchiyama Works. Established Maxell Electronics (Malaysia) Sdn. Bhd. Released data cartridge for computer use. <p>1991</p> <ul style="list-style-type: none"> Established the Recording Media Research Laboratory in Tsukuba. Commercialized 3.5 magneto-optical (MO) disks. <p>1992</p> <ul style="list-style-type: none"> Completed the Ono Works. Launched computer backup tape DLTtape® III. <p>1993</p> <ul style="list-style-type: none"> Released digital audio MiniDisc (MD-RM). <p>1995</p> <ul style="list-style-type: none"> Released writable compact discs (CD-R). <p>1996</p> <ul style="list-style-type: none"> Commenced production of lithium-ion rechargeable batteries. Commenced production of coin-type lithium manganese dioxide (ML) rechargeable batteries. Established Wuxi Hitachi Maxell Co., Ltd., in Wuxi, China. Released nickel-metal hydride rechargeable batteries. <p>1997</p> <ul style="list-style-type: none"> Commenced production of button-type titanium carbon lithium (TC) rechargeable batteries. <p>1998</p> <ul style="list-style-type: none"> All company manufacturing sites in Japan acquired ISO 14001 certification for environmental management systems. Released the world's first rewritable DVD-RAM discs. <p>1999</p> <ul style="list-style-type: none"> Established the Battery Research and Development Laboratory. Introduced the Dynamic series of high-performance alkaline dry batteries. Commercialized high-capacity polymer lithium-ion batteries.

1989

Released data cartridge for computer use.

"HS-8" 8-mm data storage media supporting the compact, high-capacity DDS format was put on the market.



1996

Commenced production of lithium-ion rechargeable batteries. Released nickel-metal hydride rechargeable batteries.



We commercialized high-voltage, high-capacity, lightweight, and rechargeable lithium-ion batteries as well as nickel-metal hydride batteries with superior high current discharge capability.



1996

Established Wuxi Hitachi Maxell Co., Ltd., in Wuxi, China.

A production base serving as a mainstay of lithium-ion battery manufacturing was established in Wuxi City, China.

1998

ISO 14001 certification in environmental management systems was acquired by all our manufacturing sites in Japan.

Environmental management systems are in operation at four Hitachi Maxell locations and five Group company locations.



1998

Released the world's first rewritable DVD-RAM discs.

We realized high-capacity optical disks capable of replacing CDs and using a phase-change recording layer for rewritability.



2000

Released LTO Ultrium 1 data cartridges (first in the world to acquire technical compatibility certification).

This product acquired certification for technical compatibility as a data cartridge for use in tape storage systems on high-capacity computers.



2003

Expanded applications of aspherical lenses.

Started production of camera lens units for mobile telephones, pickup lenses, and other such products.

2005

Commercialized a silver oxide battery that is completely mercury- and lead-free.



This battery assures the same long-term storability as conventional products while reducing the environmental burden.

2006

Developed a fuel cell that uses hydrogen derived from water and aluminum.



A system was established for producing hydrogen by the reaction of water and aluminum, and this system was applied to the development of fuel cells.

2007

Launched world's first iVDR-standard hard disc drive, iV, capable of recording copyright-protected high-definition content.



Even with its compact body, this product with its high capacity, rapid transfer rate, and copyright-protection technology makes it possible to record full HDTV imagery as-is.

2007

Made Sliontec Corporation a subsidiary.

This company joined the Group as a firm that manufactures and markets cloth, two-sided, and metal foil tapes, tapes for use with electronic components, and other kinds of adhesive tapes as well as adhesive-related products.

2008

Developed heat-resistant separator that improves the safety of lithium-ion rechargeable batteries.



This product with a diameter of 18 mm and total height of 65 mm is capable of high current discharge at 20 A. It is intended for power tools, power-assisted bicycles, and other such applications.

2009

Completed construction of electrode plant in Kyoto Works.

Introducing high-speed, high-precision coating systems, we upgraded our capacity for producing electrodes for lithium-ion batteries.

2009 Maxell Finetech, Ltd., founded

Founded as a new company through the merger of Hitachi Maxell's Optical Components Division with Tohshin Seiko Co., Ltd., and Nagano Optics Laboratory Corporation.

2010

19th Global Environment Awards Minister of Economy, Trade and Industry Award Received

The company was commended for having developed innovative technology in the small battery field and for continuing development of products that contribute to reduction of the environmental burden.



2011

Celebration of 50th anniversary held

A commemorative ceremony was held on February 1, 2011 to celebrate our 50 years of history in retrospect and the start of a new 50 years going forward.

2000

- 2000
 - Released 4.7GB DVD-R discs.
 - Released LTO Ultrium 1 data cartridges.
 - Released Super DLTtape® I data cartridges.
- 2001
 - Commercialized Coil-on-Chip RFID.
- 2002
 - Launched the New Dynamic series of alkaline dry batteries with power expander technology.
- 2003
 - Commenced shipments of LTO Ultrium 2 data cartridges.
 - Obtained the world's first qualification certificate of Super DLTtape® II data cartridge.
 - Commenced shipments of camera lens units for cellular phones.
 - Launched Blu-ray discs for recordings.
 - Commenced production of pickup lenses.
- 2004
 - Commercialized heat-resistant, coin-type lithium manganese dioxide batteries.
 - Released a brand-new alkaline battery, Epsialpha.
 - Commenced shipments of commercial-use pigment inks.
 - Commercialized the world's first 5X DVD-RAM disc.
 - Commenced shipments of LTO Ultrium 3 data cartridges.
- 2005
 - All Maxell Group manufacturing companies in Japan achieved zero emissions.
 - Commercialized a silver oxide battery that is completely mercury and lead free.
 - Commercialized lithium manganese dioxide (CR) cylindrical batteries.
- 2006
 - Merged Maxell Electronics (Malaysia) Sdn. Bhd. with Tohshin Precision (Malaysia) Sdn. Bhd. to establish a new company: Maxell Tohshin (Malaysia) Sdn. Bhd.
 - Developed a fuel cell that uses hydrogen derived from water and aluminum.

2010

- 2007
 - Became the world's first qualified DLTtape manufacturer and commenced shipments of Maxell DLTtape® S4 data cartridges.
 - Commercialized LTO Ultrium 4 after becoming the world's first qualified manufacturer.
- 2008
 - Launched world's first iVDR-standard hard disc drive, iV, capable of recording copyright-protected high-definition content.
 - Made Sliontec Corporation a subsidiary.
 - Launched Dynamic Voltage high-performance alkaline dry batteries that are long-lasting and have triple-power.
 - Developed heat-resistant separator that improves the safety of lithium-ion rechargeable batteries.
 - Maxell Group acquires ISO 14001 certification for Group-wide integrated environmental management systems in Japan.
- 2009
 - Launched New Voltage, an alkaline dry battery offering electrolyte leakage compensation.
 - Completed construction of electrode plant in Kyoto Works.
 - Merged Tohshin Seiko Co., Ltd., and Nagano Optics Laboratory Corporation to create Maxell Finetech Ltd.
- 2010
 - Received Minister of Economy, Trade and Industry Award at 19th Global Environment Awards.
 - After delisting from the first sections of the Tokyo Stock Exchange and the Osaka Securities Exchange, became a wholly owned subsidiary of Hitachi, Ltd.
 - Began shipping LTO Ultrium 5 data cartridges.
- 2011
 - 50th anniversary celebration held.
 - New company Hitachi Maxell Energy, Ltd., established through corporate spin-off.



February 2011 marked the 50th anniversary of Maxell.

We are committed to the fundamental philosophy of "Raising the company's founding spirit to yet higher levels, and make our corporate contribution to society by developing better proprietary technologies and products." On that foundation, we will turn our gaze to the next era, and in order to sustain the brilliance for a long, long time, and to continue being loved, we will engage in CSR management.



Hitachi Maxell, Ltd. Hitachi Maxell Energy, Ltd.

Maxell Japan: <http://www.maxell.co.jp/>

Maxell Worldwide: <http://www.maxell.com/>

<http://biz.maxell.com/index.html>

