TOSHIBA TEC GROUP
Environmental Report 2002

TOSHIBA TEC CORPORATION

Contents

Editorial Policy

- Our previous reports focused on environmental protection activities in manufacturing and using the products. TOSHIBA TEC Environmental Report 2002 is comprised of the maximization of recyclability, the ease of disposal when it has come to the end of its life, communication, and site information, which are intended to provide environmental management and environmentally conscious products.
- Many graphs and charts are used to easily understand the targets, plans and achievements.
- This report complies with the Environmental Reporting Guideline (Fiscal Year 2000 Version) published by the Ministry of the Environment.
- This report explains how we have been moving forward with our environmental voluntary plan, environmental accounting and environmental audit (EASTER), based on Toshiba Corporation's criteria, as a member of the Toshiba Group.
- Data from each business site and subsidiary companies are collectively described.
- The contents of this report can be viewed on our homepage.

Scope of this Report

- TOSHIBA TEC Group
  - TOSHIBA TEC CORPORATION
    Retail Information Systems Company
    Document Processing & Telecommunication Systems Company
    Home Electric Appliances Group
    Component Business Group
  - Domestic subsidiary companies (production)
    FUJIKEN CO., LTD., TOSEI DENKI CO., LTD., TEC KASHIYA DENKI CO., LTD., TEC IZU DENSHI CO., LTD., TEC PRECISION, INC., and TEC MRC CO., LTD.
  - Domestic subsidiary companies (software)
    TOSHIBA TEC Document Processing Systems Co., Ltd.
  - Domestic subsidiary companies (other)
    T.T. BUSINESS SERVICE CO., LTD.
  - Domestic subsidiary companies (sales or service)
    TEC SHOJI CO., LTD. and TEC ENGINEERING CO., LTD.
  - Overseas subsidiary companies (production)
    Data regarding environmental accounting and environmental impacts were collected from:
    TEC SINGAPORE ELECTRONICS PTE. LTD., TIM ELECTRONICS SDN. BHD., TOSHIBA TEC EUROPE IMAGING SYSTEMS S.A., and TOSHIBA COPYING MACHINE (Shenzhen) CO., LTD.
  - Overseas subsidiary companies (sales or service)
    Data regarding products were collected from:
    TOSHIBA TEC GERMANY IMAGING SYSTEMS GmbH and TOSHIBA AMERICA BUSINESS SOLUTIONS, INC.

Subject Period

- The results of the activities made between April 1, 2001 to March 31, 2002 are covered.
  The values described in the TOSHIBA TEC Environmental Report 2001 are used when no change has been made as of April 1, 2001.
  *Items worthy of mention, which were identified by August 20, 2002, are described.

Features in the Environmental Report 2002

- The LCA concept is adopted to understand environmental impacts on production sites and in product logistics and customer usage. The environmental impacts on production sites are considered in terms of input of materials and energy, air, water, recycling, and waste disposal.
- As a new attempt, detailed data in each production site is collectively described at the end of this report.

Message

The TOSHIBA TEC Group aims to be a global entity. It recognizes handing over of this irreplaceable Earth to the next generation, in a complete state, is the basic responsibility of the existing mankind. Therefore, our staff regards environmental protection as the most important tasks for the management of our company.
In accordance with the Toshiba Group's slogan -"Committed to People. Committed to the Future," - at the product development phase, we assess the impact of usage of the contemplated product and how to maximize recyclability and/or ease of disposal when it has come to the end of its life. Our business activities are contributing to the establishment of a recycling-based society.

Through this "Environmental Report 2002," we hope you understand the entire TOSHIBA TEC group environmental protection activities. This report also describes how we have been committed to reducing environmental impacts in the materials procurement, logistics, and use aspects, regarding them as products' environmental impacts in their life cycle.

This report also outlines our activities on effective use of resources, prevention of global warming, enhancement of controlling chemical substances, development of environmentally conscious products, and recycling of end-of-use products. For the development of environmentally conscious products, we established our voluntary criteria for the product environment, which prescribed environmental consideration requirements for each product. We expanded the recycling activities for end-of-use copiers on a nationwide basis last year. This year we started full-scale recycling activities for retail information systems products, including POS terminals.

On a continuous basis, TOSHIBA TEC updates information of these activities in our environmental reports and on our web site. We trust you will understand how committed we are to improving the environment and making it a healthier place for all of us to live. We welcome your comments and suggestions.

Ken-ichi Mori
President and Chief Executive Officer
September 2002

TOSHIBA TEC Group Policy

TOSHIBA TEC Corporation and the TOSHIBA TEC Group companies have been moving forward with environmental protection activities based on the Toshiba Group's slogan -"Committed to People. Committed to the Future."
We are fulfilling our duty by establishing a recycling-based society as a company, by reducing environmental impacts, while expanding activities on effective use of resources, prevention of global warming, enhancement of controlling chemical substances, development of environmentally conscious products, and recycling end-of-use products.

BASIC COMMITMENT OF THE TOSHIBA GROUP

Committed to People, Committed to the Future. TOSHIBA

Philosophy OF THE TOSHIBA GROUP

We, the Toshiba Group companies, based on our total commitment to people and the future, are determined to help create a higher quality of life for all people, and to do our part to help ensure that progress continues within the world community.

COMMITMENT TO PEOPLE
We endeavor to serve the needs of all people, especially our customers, shareholders, and employees, by implementing forward-looking corporate strategies while carrying our responsible and responsive business activities. As good corporate citizens, we actively contribute to further the goals of society.

COMMITMENT TO THE FUTURE
By continually developing innovative technologies centering on the fields of Electronics and Energy, we strive to create products and services that enhance human life, and which lead to a thriving, healthy society. We constantly seek new approaches that help realize the goals of the world community, including ways to improve the global environment.

Philosophy

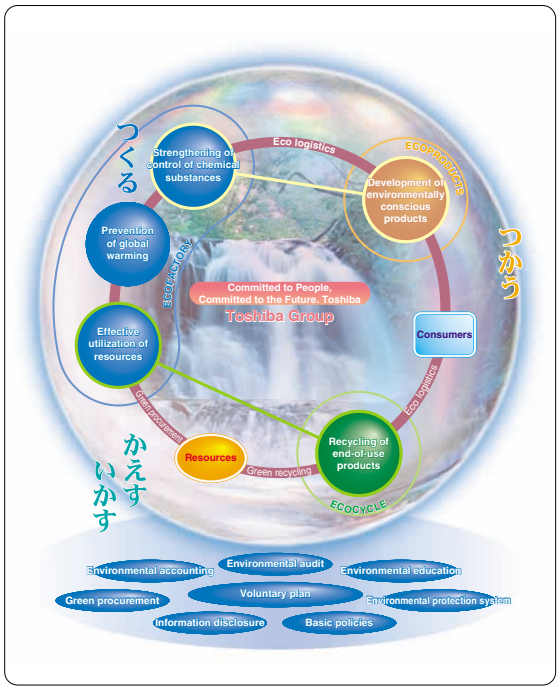
We, at TOSHIBA TEC CORPORATION and its group companies, will pursue excellence in all matters through dynamic and wise application of the latest knowledge, undertaking efforts for a better environment and assuring our contribution to society, to development of each group company and to promotion of the happiness of each group member.

Principles

1. We will provide products that customers need and appreciate, giving first priority to customer satisfaction.
2. We will provide the quality that engenders customers' confidence.
3. We will always pursue new technologies to establish higher corporate and social values.
4. We will respect each individual's capability to work to the fullest.
5. We will view our business from a worldwide standpoint as a global corporation.
6. We will contribute, as a good corporate citizen, to development of society, undertaking efforts for a better environment.
7. We will share our prosperity with all the people concerned, including customers, shareholders and group members.

TOSHIBA TEC Group

As a member of the Toshiba Group, we assesses the impact of usage of the contemplated product and how to maximize recyclability and/or ease of disposal when it has come to the end of its life.



Basic Philosophy for Environmental Protection

We, the TOSHIBA TEC Group companies, based on the recognition that the basic obligation of existing human beings is to hand down to our next generation, our irreplaceable Earth in a sound state. Therefore, we are determined to act according to the TOSHIBA TEC Group's management philosophy and policy.
For the business activities, products and services that have a great impact on the environment, we set objectives and targets, in every phase of the group, to the extent that is technically and economically possible, in order to continually improve the environmental management system.

Basic Policy for Environmental Protection

(1) TOSHIBA TEC Group considers environmental protection to be one of management's primary responsibilities.
(2) TOSHIBA TEC Group specifies objectives and targets for its business activities, products and services to reduce environmental impacts and prevent pollution.
(3) TOSHIBA TEC Group continually strives to improve the environment through vigorous implementation of environmental measures.
(4) TOSHIBA TEC Group complies not only with laws and regulations, and industry guidelines, which it has endorsed, but also its own standards for environmental protection.
(5) TOSHIBA TEC Group contributes to society through its environmental protection activities, which include the development and supply of excellent, environmentally conscious technologies and products in cooperation with the local community.
(6) TOSHIBA TEC Group recognizes that natural resources are finite, and committed to reducing, reusing and recycling in each phase of production covering use of materials, manufacturing, distribution, consumption, collection, and recycling and reusing.
(7) TOSHIBA TEC Group educates all its employees to enhance their consciousness of the environment.
(8) TOSHIBA TEC Group instructs and supports subsidiary companies to advance environmental activities throughout the Toshiba TEC Group.
(9) TOSHIBA TEC Group notifies those inside and outside of the group, of implementations of the environmental protection activities as needed.

TOSHIBA TEC Group

Established in April 1995
Revised in September 2001

The environmental policy of TOSHIBA TEC's business sites and subsidiary production companies is distributed in each site. To obtain it, please contact the person in charge of environmental protection for each site.

Company Profile

TOSHIBA TEC is committed to contributing toward the establishment of a recycling-based society through enhancing its environmental protection activities with its latest technologies.

Company name:	TOSHIBA TEC CORPORATION
Paid-in capital:	39.9 billion yen
Establishment:	February 21, 1950
Number of employees:	Not consolidated: 4,836 (as of April 2002)

Head office:	1-1, Kanda Nishiki-cho, Chiyoda-ku, Tokyo, 101-8442 Japan Phone: +81-3-3292-6223
Retail Information Systems Company:	3-21-1 Nihonbashi Hama-cho, Chuo-ku, Tokyo
Document Processing & Telecommunication Systems Company:	2-4-1, Shibakoen, Minato-ku, Tokyo
Home Electric Appliances Group:	1-1, Kanda Nishiki-cho, Chiyoda-ku, Tokyo
Component Business Group:	Mifuku, Ohito-cho, Tagata-gun, Shizuoka
Core Technology Development Center:	6-78, Minami-cho, Mishima-shi, Shizuoka (in Mishima Works)

Business sites and plant:

(Business sites/plant)	(Location)	(Products)
Ohito Business Center	Ohito, Ohito-cho, Tagata-gun, Shizuoka	POS systems, electronic registers, electronic scales, etc.
Mishima Works	Minami-cho, Mishima-shi, Shizuoka	Digital multi-function peripherals (MFP), facsimile machines, printers, etc.
Hadano Plant	Horiyama-shita, Hadano-shi, Kanagawa	Vacuum cleaners, health equipment, etc.
Component Business Group	Mifuku, Ohito-cho, Tagata-gun, Shizuoka	

Retail Information Systems

POS systems, electronic registers, OA equipment...

The POS system is the core of a retail information network and helps retailers quickly respond to customers' needs. Multi-media POS systems offers one-to-one services to the customers. Using the state-of-the-art technologies, management strategy support functions are configured. By providing solutions for IT, EC, support services and consulting, TOSHIBA TEC supports the retail industry as a total solution provider.

Document Processing & Telecommunication Systems

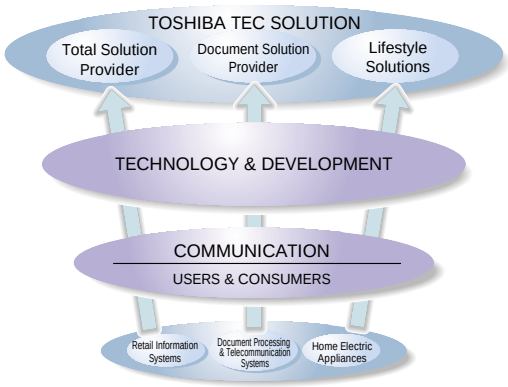
MFPs, copiers and facsimile machines...

To keep pace with the improvements in business speeds and efficiency, the MFP incorporates the print, copy and facsimile functions. A huge amount of paper information is digitized and managed in a space-saving manner. The office network system makes the most of electronic data by using the excellent search feature. TOSHIBA TEC offers well-prepared document processing & telecommunication environments for office documentation.

Home Electric Appliances

Vacuum Cleaners, cookware, motors...

Air-cycle vacuum cleaners which do not exhaust, reduce environmental impacts and save energy. Rechargeable vacuum cleaners eliminate encumbering cords. Cookware, such as mixers, cooking cutters and rice polishing machines, give convenience and joy to life. TOSHIBA TEC supports more comfortable living through original home electric appliances.



Domestic subsidiary companies (sales/development/software)

- TEC SHOJI CO., LTD.
- TEC INFORMATION SYSTEM CORPORATION
- TOSHIBA TEC DOCUMENT PROCESSING SYSTEMS CO., LTD.

Domestic subsidiary companies (production)

- TOSEI DENKI CO., LTD.
- TEC IZU DENSHI CO., LTD
- TEC PRECISION, INC.
- TEC MRC CO., LTD.
- ADVANCED SUPPLY MANUFACTURING CORPORATION
- TEC KASHIYA DENKI CO., LTD.
- FUJIKEN CO., LTD.

Subsidiary companies (service and others)

- TEC ENGINEERING CO., LTD.
- TOSHIBA LOGISTICS SOLUTIONS CO., LTD.
- T.T. BUSINESS SERVICE CO., LTD.

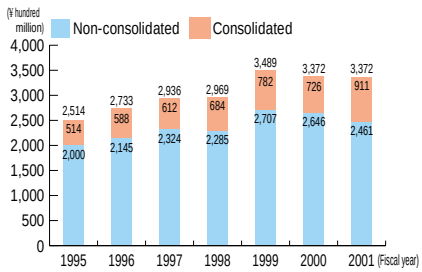
Overseas subsidiary companies (Sales)

- TEC AMERICA, INC.
- TEC CANADA, INC.
- TEC ELECTRONICA, S.A. de C.V.
- TOSHIBA TEC EUROPE RETAIL INFORMATION SYSTEM S.A.
- TEC ITALIA, S.r.l.
- TEC POLSKA Sp.z o.o.
- TEC AUSTRALIA PTY. LTD.
- BEIJING SHANGRONG ELECTRONIC MACHINERY CO.,LTD.
- TOSHIBA AMERICA BUSINESS SOLUTIONS, INC.
- TOSHIBA TEC U.K. IMAGING SYSTEM LTD.
- TOSHIBA TEC GERMANY IMAGING SYSTEMS GmbH
- TOSHIBA TEC FRANCE IMAGING SYSTEMS S.A.
- TOSHIBA TEC ITALIA IMAGING SYSTEMS S.P.A.
- UNITED O.A. LIMITID
- TAISHIBA INTERNATIONAL CO.,LTD.

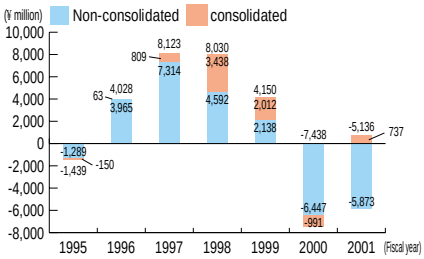
(Production and others)

- TOSHIBA TEC EUROPE IMAGING SYSTEMS S.A.
- TEC SINGAPORE ELECTRONICS PTE.LTD.
- TIM ELECTRONICS SDN.BHD.
- P.T. TEC INDONESIA
- TOSHIBA COPYING MACHINE (Shenzhen) CO.,LTD.
- TOSHIBA TEC (H.K.) LOGISTICS & PROCUREMENT LIMITID

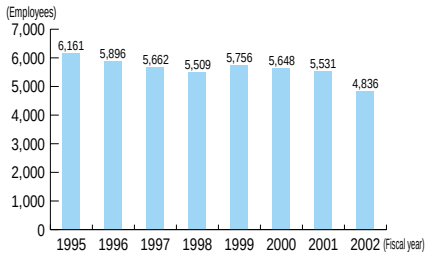
Net Sales



Profit

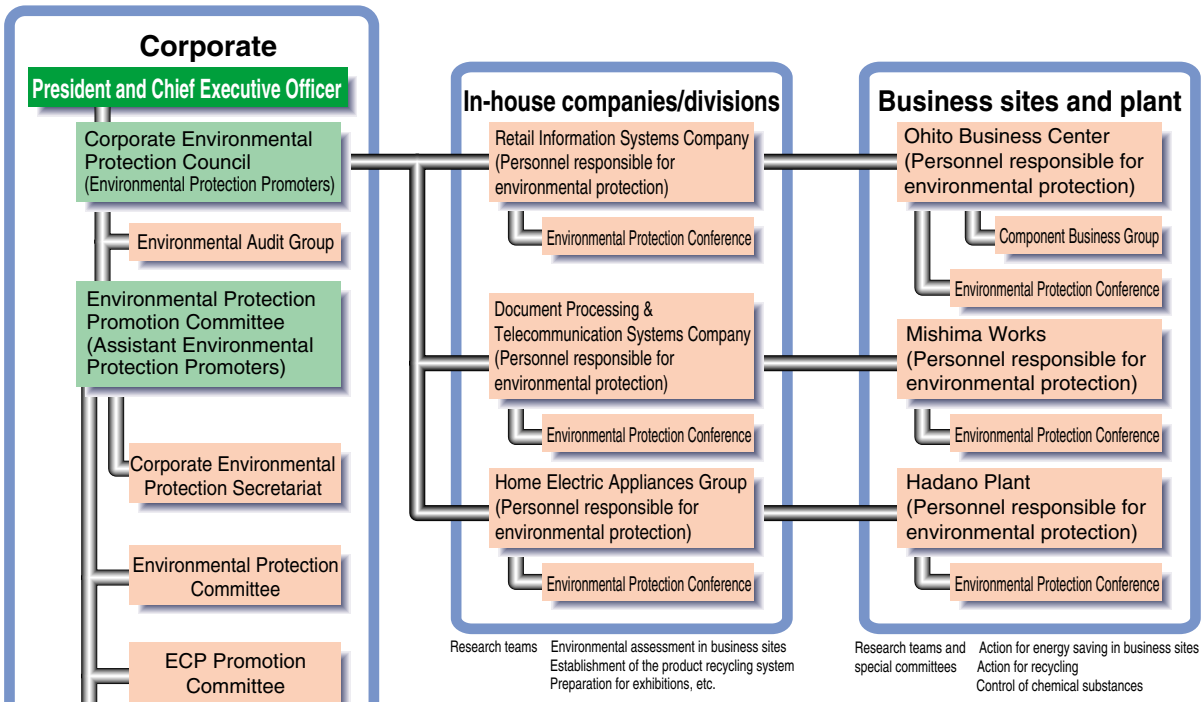


Number of Employees



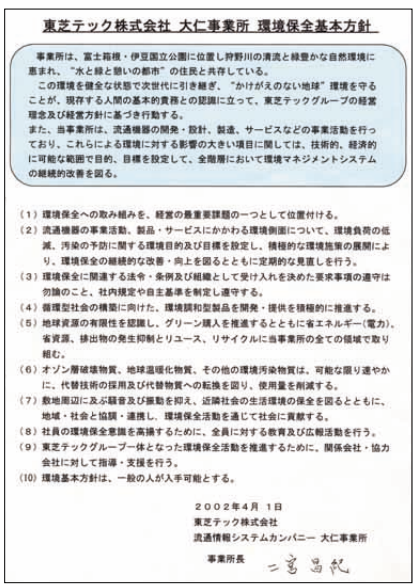
Environmental Protection System

With aims of enhancing our commitment to the environmental protection throughout the TOSHIBA TEC Group and making it integral to the operation of every TOSHIBA TEC Group company, TOSHIBA TEC set up the Corporate Environmental Protection Committee in 1989 (renamed as Corporate Environmental Protection Council in 1994). Chaired by the Environmental Protection Promoter (director responsible for environmental protection), the council discusses and determines various environmental issues. As its subordinate organizations, the environmental protection conference was set up in each in-house company, division and business site, to advance the corporate activities for environmental protection.



Corporate Environmental Protection Council

Environmental policy at each business site



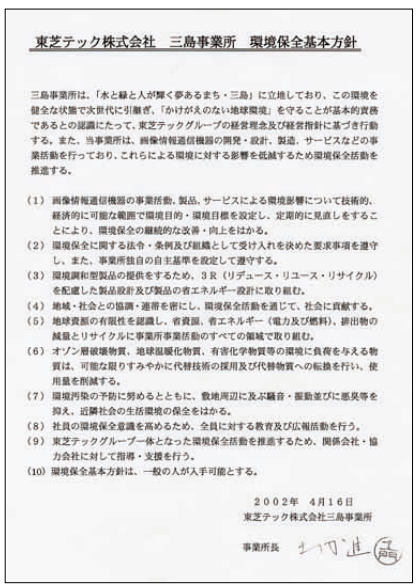
東芝テック株式会社 大仁事業所 環境保全基本方針

事業所は、富士箱根・伊豆国立公園に位置し狩野川の清流と緑豊かな自然環境に恵まれ、"水と緑と憩いの都市"の住民と共存している。
この環境を健全な状態で次世代に引き継ぎ、"かけがえのない地球"環境を守ることが、現存する人間の基本的責務との認識に立って、東芝テックグループの経営理念及び経営方針に基づき行動する。
また、当事業所は、流通機器の開発・設計、製造、サービスなどの事業活動を行っており、これらによる環境に対する影響の大きい項目に関しては、技術的、経済的に可能な範囲で目的、目標を設定して、全階層において環境マネジメントシステムの継続的改善を図る。

（1）環境保全への取り組みを、経営の最重要課題の一つとして位置付ける。
（2）流通機器の事業活動、製品・サービスにかかわる環境側面について、環境負荷の低減、汚染の予防に関する環境目的及び目標を設定し、積極的な環境施策の展開により、環境保全の継続的な改善・向上を図るとともに定期的な見直しを行う。
（3）環境保全に関連する法令・条例及び組織として受け入れを決めた要求事項の遵守は勿論のこと、社内規定や自主基準を制定し遵守する。
（4）循環型社会の構築に向けた、環境調和型製品を開発・提供を積極的に推進する。
（5）地球資源の有限性を認識し、グリーン購入を推進するとともに省エネルギー（電力）、省資源、排出物の発生抑制とリユース、リサイクルに当事業所の全ての領域で取り組む。
（6）オゾン層破壊物質、地球温暖化物質、その他の環境汚染物質は、可能な限り速やかに、代替技術の採用及び代替物質への転換を図り、使用量を削減する。
（7）敷地周辺に及ぶ騒音及び振動を抑え、近隣社会の生活環境の保全を図るとともに、地域・社会と協調・連携し、環境保全活動を通じて社会に貢献する。
（8）社員の環境保全意識を高揚するために、全員に対する教育及び広報活動を行う。
（9）東芝テックグループ一体となった環境保全活動を推進するために、関係会社・協力会社に対して指導・支援を行う。
（10）環境基本方針は、一般の人が入手可能とする。

2002年4月 1日
東芝テック株式会社
流通情報システムカンパニー 大仁事業所
事業所長 二宮昌紀

Ohito Business Center



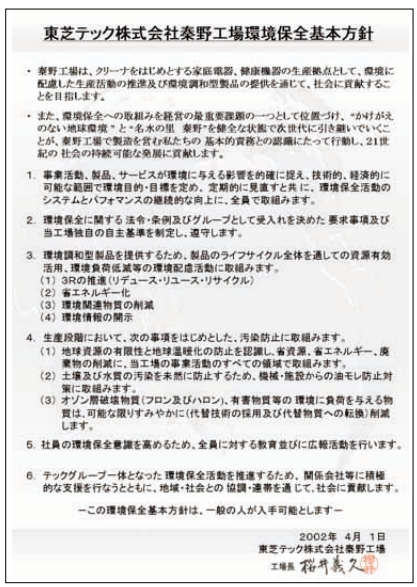
東芝テック株式会社 三島事業所 環境保全基本方針

三島事業所は、「水と緑と人が輝く夢あるまち・三島」に立地しており、この環境を健全な状態で次世代に引継ぎ、「かけがえのない地球環境」を守ることが基本的責務であるとの認識にたって、東芝テックグループの経営理念及び経営指針に基づき行動する。また、当事業所は、画像情報通信機器の開発・設計、製造、サービスなどの事業活動を行っており、これらによる環境に対する影響を低減するため環境保全活動を推進する。

（1）画像情報通信機器の事業活動、製品、サービスによる環境影響について技術的、経済的に可能な範囲で環境目的・環境目標を設定し、定期的に見直しをすることにより、環境保全の継続的な改善・向上をはかる。
（2）環境保全に関する法令・条例及び組織として受け入れを決めた要求事項を遵守し、また、事業所独自の自主基準を設定して遵守する。
（3）環境調和型製品の提供をするため、3R（リデュース・リユース・リサイクル）を配慮した製品設計及び製品の省エネルギー設計に取り組む。
（4）地域・社会との協調・連帯を密にし、環境保全活動を通じて、社会に貢献する。
（5）地球資源の有限性を認識し、省資源、省エネルギー（電力及び燃料）、排出物の減量とリサイクルに事業所事業活動のすべての領域で取り組む。
（6）オゾン層破壊物質、地球温暖化物質、有害化学物質等の環境に負荷を与える物質は、可能な限りすみやかに代替技術の採用及び代替物質への転換を行い、使用量を削減する。
（7）環境汚染の予防に努めるとともに、敷地周辺に及ぶ騒音・振動並びに悪臭等を抑え、近隣社会の生活環境の保全をはかる。
（8）社員の環境保全意識を高めるため、全員に対する教育及び広報活動を行う。
（9）東芝テックグループ一体となった環境保全活動を推進するため、関係会社・協力会社に対して指導・支援を行う。
（10）環境保全基本方針は、一般の人が入手可能とする。

2002年 4月16日
東芝テック株式会社三島事業所
事業所長 土門 進

Mishima Works



東芝テック株式会社秦野工場環境保全基本方針

- 秦野工場は、クリーナをはじめとする家庭電器、健康機器の生産拠点として、環境に配慮した生産活動の推進及び環境調和型製品の提供を通じて、社会に貢献することを目指します。
- また、環境保全への取組みを経営の最重要課題の一つとして位置づけ、"かけがえのない地球環境"と"名水の里 秦野"を健全な状態で次世代に引き継いでいくことが、秦野工場で製造を営む私たちの基本的責務との認識にたって行動し、21世紀の社会の持続可能な発展に貢献します。

1. 事業活動、製品、サービスが環境に与える影響を的確に捉え、技術的、経済的に可能な範囲で環境目的・目標を定め、定期的に見直すと共に、環境保全活動のシステムとパフォマンスの継続的な向上に、全員で取組みます。
2. 環境保全に関する法令・条例及びグループとして受入れを決めた要求事項及び当工場独自の自主基準を制定し、遵守します。
3. 環境調和型製品を提供するため、製品のライフサイクル全体を通しての資源有効活用、環境負荷低減等の環境配慮活動に取組みます。
   （1）3Rの推進（リデュース・リユース・リサイクル）
   （2）省エネルギー化
   （3）環境関連物質の削減
   （4）環境情報の開示
4. 生産段階において、次の事項をはじめとした、汚染防止に取組みます。
   （1）地球資源の有限性と地球温暖化の防止を認識し、省資源、省エネルギー、廃棄物の削減に、当工場の事業活動のすべての領域で取組みます。
   （2）土壌及び水質の汚染を未然に防止するため、機械・施設からの油モレ防止対策に取組みます。
   （3）オゾン層破壊物質（フロン及びハロン）、有害物質等の環境に負荷を与える物質は、可能な限りすみやかに（代替技術の採用及び代替物質への転換）削減します。
5. 社員の環境保全意識を高めるため、全員に対する教育並びに広報活動を行います。
6. テックグループ一体となった環境保全活動を推進するため、関係会社等に積極的な支援を行なうとともに、地域・社会との協調・連帯を通じて、社会に貢献します。

ーこの環境保全基本方針は、一般の人が入手可能としますー

2002年 4月 1日
東芝テック株式会社秦野工場
工場長 稲井義久

Hadano Plant

History of TOSHIBA TEC's Environmental Protection Activities

2002
- Issued TOSHIBA TEC Environmental Report 2002.
- Started using chromium-free steel plates and halogen-free printed circuit boards.
- Employed the lead-free soldering equipment.
- Integrated the production sites.

2001
- Issued TOSHIBA TEC Environmental Report 2001.
- Planned and announced the Third Environmental Voluntary Plan.
- Reviewed the Second Environmental Voluntary Plan.
- Started using lead-free soldering.
- Implemented Environmental Accounting including the domestic and overseas consolidated subsidiary companies.

2000
- Issued TOSHIBA TEC Environmental Report 2000.
- Introduced Environmental Accounting in the domestic manufacturing sites and consolidated subsidiary companies.
- Appointed the in-house company presidents and general managers to Environmental Protection Administrators.
- Renamed the Corporate Environmental Protection Administrator as Corporate Environmental Protection Promoter.

1999
- Renamed as TOSHIBA TEC CORPORATION.
- Acquired the copier business from Toshiba Corporation.
- Transferred the lighting business to Toshiba Lighting & Technology Corporation.
- Completed the sewer connecting constructions at the domestic manufacturing sites. Accredited with ISO 14001 (Yanagicho in January)
- Completed construction of visible industrial wastewater plumbing at all the domestic manufacturing sites.

1998
- Dismantled waste incinerators from all the domestic manufacturing sites.
- Established the ECP Promotion Committee.
- Accredited with ISO 14001 (Ohito in June)
- Accredited with ISO 14001 (Hadano and Mishima in March)

1997
- Set up Recycle Centers in all the domestic manufacturing sites.

1996
- Planned and announced the Second environmental Voluntary Plan.

1995
- Established the Environmental Policy.
- Started the activities to be accredited with ISO 14001.
- Established the TEC social contribution fund system
- Changed the name from Corporate Environmental Protection Committee to the Corporate Environmental Protection Council.
- Renamed as TEC Corporation.

1994
- Implemented the Environmental Audit System (EASTER) at the domestic manufacturing sites and all subsidiary companies.
- Acquired the facsimile business and laser printer business from Toshiba Corporation.

1993
- Abolished use of chlorofluorocarbons and 1.1.1-trichloroethane in all the domestic manufacturing sites and subsidiary companies.

1992
- Planned the First Environmental Voluntary Plan.
- Established the Corporate Environmental Protection Committee.

1989
- Established the Corporate Environmental Protection Basic Regulations.
- Appointed the director responsible for environmental protection as Environmental Protection Administrator.

1986
- Abolished use of trichloroethylene at all business sites.

1977
- Established the Analysis Department in Mishima.

1975
- Established the Environmental Protection Department in Ohito and Hadano.

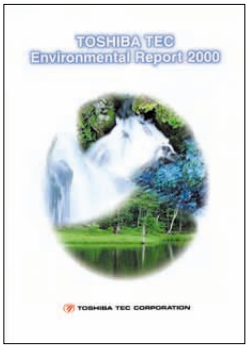
1974
- Established the Environmental Protection Department in Mishima.

1952
- Renamed as Tokyo Electric Co., Ltd.

1950
- Founded as Tokyo Electric Appliances Co., Ltd.

Issue of Environmental Reports
First issue: TOSHIBA TEC Environmental Report 2000

Japanese version
Issued on October 20, 2000



English version
Issued on November 20, 2000

Issue of Environmental Reports
TOSHIBA TEC Environmental Report 2001

Japanese version
Issued on September 20, 2001

English version
Issued on November 20, 2001

Voluntary Action Plan (Third Voluntary Environmental Plan)

(April 1, 2001 to March 31, 2006)

Items	Target and Commitments
1 Zero emissions of waste	Step-by-step implementation and the quantity of final disposal to be 1% or less of total discharge in fiscal 2003 By fostering the conversion to reduce waste, reuse and recycle, TOSHIBA TEC aims to reduce the quantity of final disposal (landfill) to 1% or less of the total discharge by fiscal 2003.
2 Reduce release of chemical substances	30% reduction in fiscal 2005 compared with fiscal 2000 In order to achieve a 30% reduction in fiscal 2005 compared with fiscal 2000 in the quantity of chemical substances released, TOSHIBA TEC is employing technologies enabling reduction of usage and alternatives to chemical substances contained in adhesives and purchased products, and has installed recovery equipment.
3 Reduce CO_2 release	25% reduction in fiscal 2010 compared with fiscal 1990 Through optimizing the combination of enhancement of facility management and capital expenditure upon energy-saving facilities, TOSHIBA TEC aims to reduce the use of energy. By adopting new energy and arranging the inverter control units appropriately, using night-time electricity effectively and promotion of peak-cut, TOSHIBA TEC is trying to reduce the CO_2 release.
4 Green procurement	Set target for fiscal 2005 with fiscal 2001 as a benchmark TOSHIBA TEC is making analyses and evaluations for the reference fiscal year to set the targets and scale the achievements in green procurement for each year until fiscal 2005.
5 Provide product information	50% of products to be in compliance with the voluntary environmental standards by fiscal 2005 By establishing the voluntary environmental standards for products, the creation of environmentally conscious products complying with Toshiba Group Earth Protection Mark Program is being promoted.
6 Reduce electricity consumed per product function	30% reduction in fiscal 2005 compared with fiscal 2000 TOSHIBA TEC aims to achieve a 30% reduction in electricity consumed per product function in fiscal 2005 compared with fiscal 2000, by moving forward with the reduction of electricity consumed by new products based on the product assessment standard.
7 Apply lead-free soldering	Application of lead-free soldering to all products distributed in April 2003 or after Application of lead-free soldering for vacuum cleaners and bar code printers started in fiscal 2000 and is being expanded step by step. TOSHIBA TEC intends to apply lead-free soldering to all new products distributed in April 2003 or after.
8 Abolish HCFCs*	Abolition by December 2004 TOSHIBA TEC aims to cease use of HCFCs by the end of December 2004. It will be achieved by restricting the purchase and use of products, such as a cooling spray, which use HCFCs, and using the substitutes for HCFCs.

* HCFCs is the abbreviation of hydrochlorofluorocarbons, substances widely used as refrigerant in air conditioners etc.

TOSHIBA TEC's Environmental Impacts in Fiscal 2001

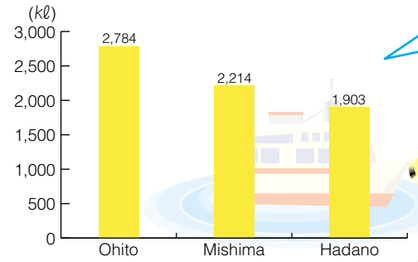
Environmental impacts involved in business activities contain the INPUT and OUTPUT aspects related to product manufacturing. The INPUT includes the procurement of materials and components and the use of energy such as electricity, water resources, and chemical substances. The OUTPUT includes the emission of gas, water, and waste. In addition, fuel for transporting products and electricity consumed by customers who use the products, are also environmental impacts.
In the Third Environmental Voluntary Plan TOSHIBA TEC decided upon concrete targets for reducing environmental impacts in manufacturing and use of the products, and have been committed to reaching these goals (see page 6). The advancement of the commitments is described on page 11.

*The data are collected from the Ohito Business Center, the Mishima Works and the Hadano Plant.

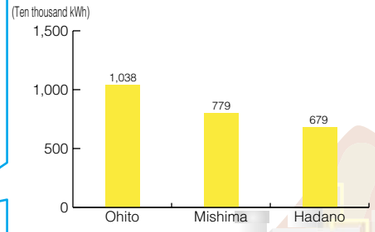
INPUT(Environmental impacts in materials procurement)

Energy: electricity (for facilities, air conditioning and lighting) and fuel (for air conditioning)

Energy input in fiscal 2001 (calculated in crude oil)

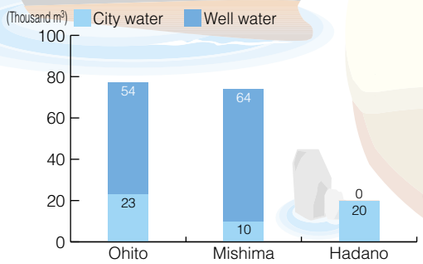


Electricity consumption

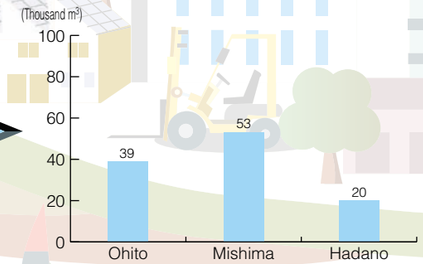


Water (for air conditioning, drinking and sanitary use)

Water used in fiscal 2001

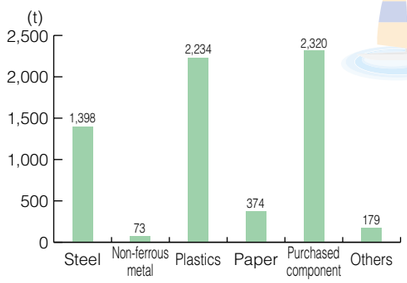


Water discharge in fiscal 2001



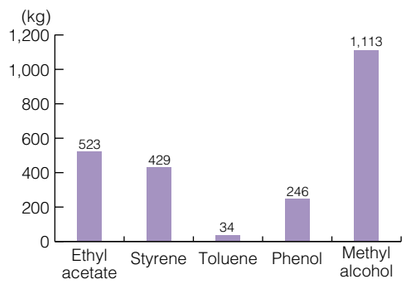
Chemical substances (adhesives, insulating varnish, plastic compounds and cleaning detergents)

Materials input in fiscal 2001



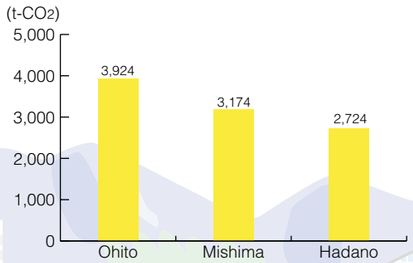
Raw materials and components

Chemical substances used

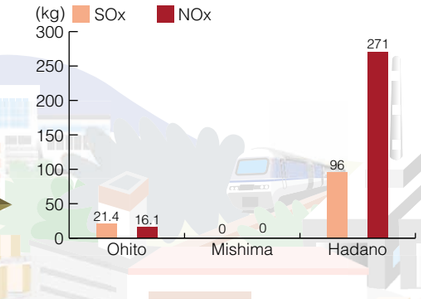


OUTPUT(Environmental impacts in product manufacturing)

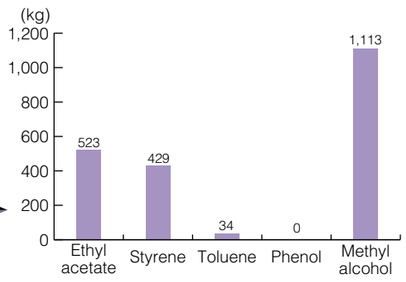
CO_2 emissions in fiscal 2001



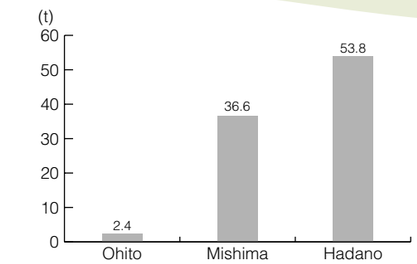
SOx/NOx emissions in fiscal 2001



Chemical substance emission



Final disposal of waste



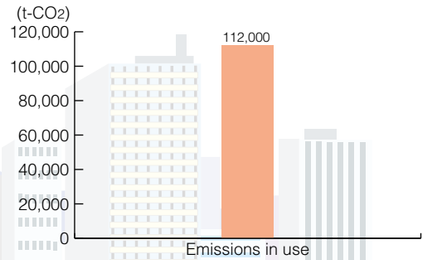
The environmental impacts in logistics and use by customers are expressed in numbers.

OUTPUT(Environmental impacts in logistics)

OUTPUT(Environmental impacts in use by customers)

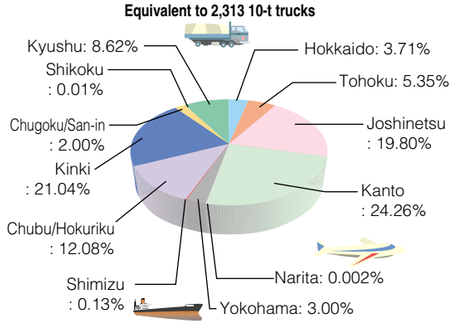
Estimated CO_2 emissions related to electricity consumed by customers who use the products

CO_2 emissions by customers

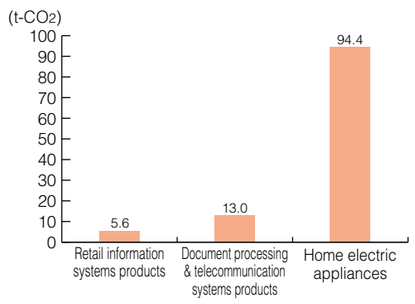


TOSHIBA TEC product delivery destinations

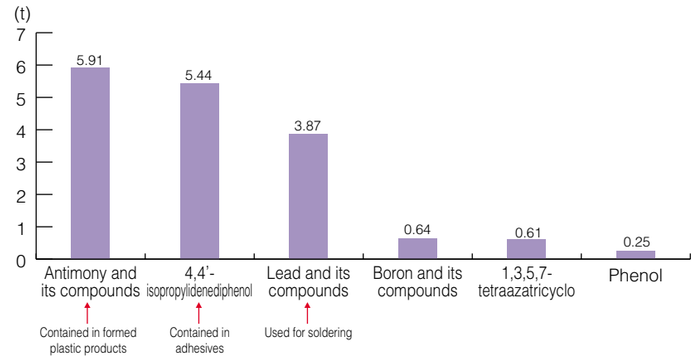
Equivalent to 2,313 10-t trucks



CO_2 emissions by trucks

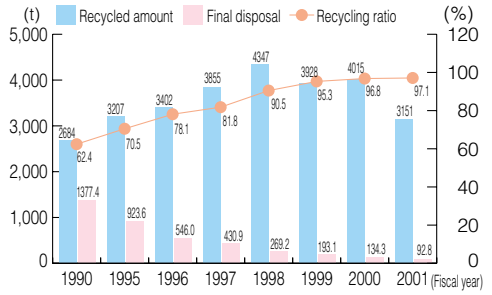


Transferred chemical substances which are incorporated in products



Voluntary Action Plan Implementations

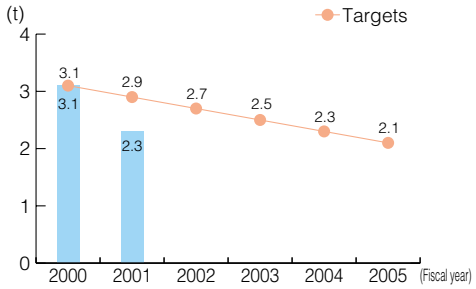
Implementations for zero emission of waste



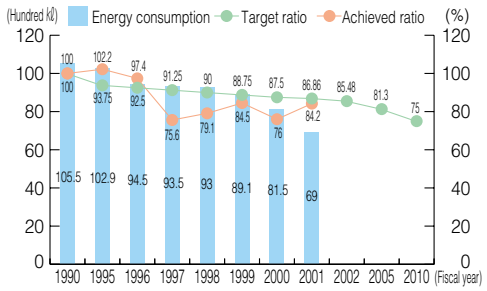
1 Emission of waste has been smoothly reduced and the target for the end of fiscal 2003 will be reached.
For details, see page 29.

2 The modification of manufacturing equipment enables the use of materials, which do not contain styrene.
Adhesion with adhesives has been changed to mechanical fixing.
The reduction target is reached.
For details, see page 30.

Reduction of chemical substances



Reduction of energy consumption



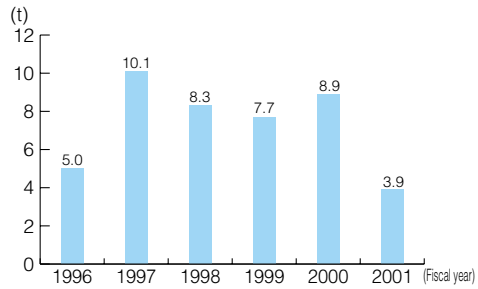
3 Energy consumption is reduced. However, the ratio becomes worse due to the reduction of sales.
For details, see page 28.

4 The investigations of suppliers and the evaluation of environmental protection activities are being made.
For details, see page 26.

5 The voluntary environmental standards for products are being established.
For details, see pages 36 and 37.

6 The energy-saving design is adopted for each product group.
For details, see pages 32 to 35.

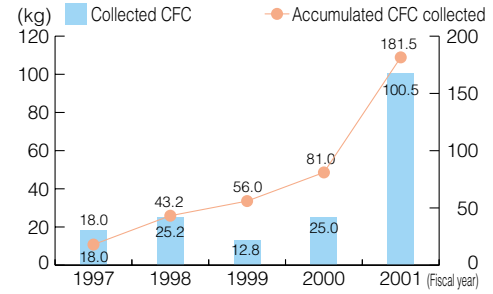
Reduction of lead soldering



7 The lead-free soldering facilities were added to start a full-scale operation.
Newly distributed products, including MFPs*, POS terminals, bar code printers, vacuum cleaners and health equipment employ lead-free soldering.
For details, see pages 27 and 30.

*MFP···Equipment incorporating functions of a printer, copier, and facsimile machine.

CFC collection



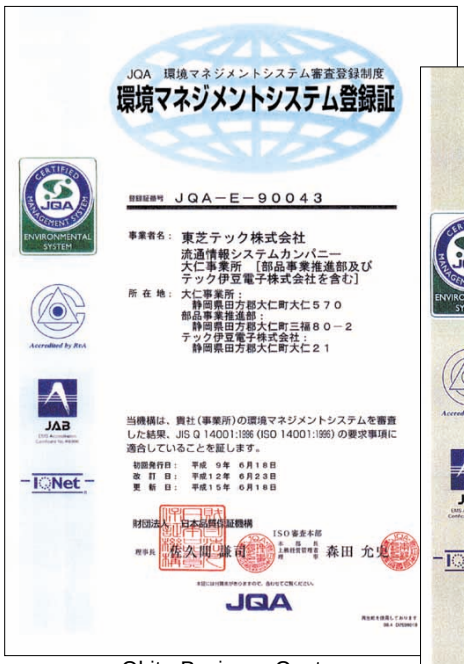
8 TOSHIBA TEC substituted propane gas for chlorofluorocarbon (CFC).
CFC is collected when replacing air conditioners.
Periodical checking for CFC leakage is made on facilities that use CFC.

Environmental Management System (ISO14001)

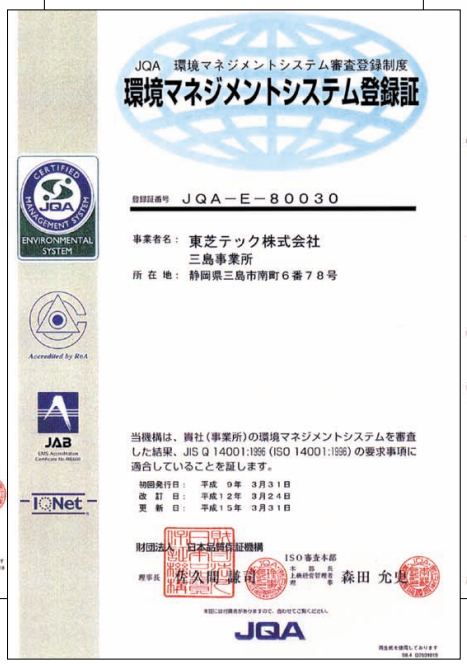
TOSHIBA TEC Group established a system to reduce environmental impacts and to continuously implement environmental protection activities. Considering ISO 14001, the international standard for environmental management systems to be an effective tool, TOSHIBA TEC has been recommending its domestic and overseas subsidiary companies be accredited with it.

ISO 14001 certifications at domestic business sites

The Hadano Plant and the Mishima Works were accredited in March 1997 and the Ohito Business Center in June 1997. This indicates that all the three domestic manufacturing sites are certified. TOSHIBA TEC received an extended examination which included examinations at TEC IZU DENSHI at renewal time to promote accreditation jointly with its subsidiary company.



Ohito Business Center



Mishima Works

Hadano Plant

Results of ISO 14001 examination

[Ohito Bushiness Center]

The examination for the first year after renewal (fourth year from the first examination) was made by the Japan Quality Assurance Organization (JQA) in June 2001.

Result: Accreditation continued
Comment: Non-conformance: None
Opportunity for improvement: 7
Strong point: 1

[Mishima Works]

The examination for the second year after renewal (fifth year from the first examination) was made by JQA in March 2003.
Result: Accreditation continued
Comment: Non-conformance: None
Opportunity for improvement: 3
Strong point: 2
The examination was made as an extended examination since the sites were integrated into Mishima Works where TOSHIBA LIGHTING & TECHNOLOGY CORPORATION transferred from and the Yanagicho Works transferred to. (The Yanagicho Works was already accredited with ISO 14001.)

[Hadano Plant]

The examination for the second year after renewal (fifth year from the first examination) was made by the Japan Audit and Certification Organization for Environment and Quality (JACO) in February 2003.

Result: Accreditation continued
Comment: Non-conformance: None
Observation: 1
Recommendation: 4

ISO14001 certification at overseas subsidiary companies

To provide the overseas subsidiary companies with the management system similar to the domestic business sites, TOSHIBA TEC intended for the three bases in Southeast Asia to be accredited with ISO. As a result, TEC SINGAPORE ELECTRONICS PTE. LTD. and TIM ELECTRONICS SDN. BHD. (Malaysia) were certified in April 1998. Then, PT TEC INDONESIA was certified in August in the same year.
According to the transfer of the copier business from Toshiba to TOSHIBA TEC in January 1999, the overseas subsidiary companies in Europe, the United State, and China were accredited, in succession.

TEC SINGAPORE ELECTRONICS PTE. LTD.
(Singapore)

TIM ELECTRONICS SDN. BHD.
(Malaysia)

PT TEC INDONESIA
(Indonesia)

TOSHIBA AMERICA BUSINESS SOLUTIONS, INC.
(USA)

TOSHIBA COPYING MACHINE (Shenzhen) CO., LTD.
(China)

TOSHIBA TEC EUROPE IMAGING SYSTEMS S.A.
(France)

ISO examination at TOSHIBA TEC EUROPE IMAGING SYSTEMS S.A.

Internal audit at TIM ELECTRONICS SDN. BHD.

Environmental Accounting

Costs and benefits

Aggregated: TOSHIBA TEC Corporation and 3 domestic subsidiaries and 4 overseas subsidiaries
Period: April 1, 2001-March 31, 2002

Environmental costs

Unit: millions of yen

Classification		Content	Expenditure		Current expenses		Differences	
			Consolidated	Not consolidated	Consolidated	Not consolidated	Consolidated	Not consolidated
Business area costs		Reduction of environmental impacts(1)~(3)	141.3	131.9	236.1	206.7	-74.0	-52.8
Content	(1)Pollution prevention costs	Atmosphere, water, soil, etc.	41.6	32.2	43.0	36.4	-21.8	-10.8
Content	(2)Global environmental protection costs	Prevention of the greenhouse effect, etc.	90.1	90.1	94.9	89.5	-46.4	-45.3
Content	(3)Resource circulation costs	Effective utilization of resources, etc.	9.6	9.6	98.2	80.8	-5.8	3.3
Upstream/downstream costs		Green procurement, recycling, etc.	0	0	127.7	126.8	200.3	-65.9
Management activity costs		Environmental education, etc.	0	0	439.7	407.6	-192.8	-189.6
R&D costs		Development of ECP	0	0	148.8	109.6	49.4	80.9
Social activity costs		Disclosure of information, etc.	0	0	62.1	56.9	-17.8	-18.9
Environmental damage costs		Recovery from soil pollution, etc.	0	0	0	0	0	0
Total			141.3	131.9	1,014.4	907.6	-34.9	-246.3
		Total expenditure during the period	6,707.7	4,653.2				
		Total R&D expenditure during the period	24,063.3	23,287.4				

Environmental benefits

Unit: millions of yen

Classification	Content	TOSHIBA TEC	Group	Total
Actual benefits	Benefits that can be directly converted into monetary value	53.5	14.5	68.0
Assumed benefits	Benefits concerning reduction in environmental impacts	70.4	1.7	72.1
Customer benefits	Reduction of environmental impacts at the usage phase	212.2	493.0	705.2
Customer benefits	Reduction of environmental impacts at the usage phase	7.5	0	7.5
Total		343.6	509.2	852.8

Breakdown of actual benefits

Item		Environmental impact reduction*	Monetary value of benefits (Million yen)
Energy(kℓ)	TOSHIBA TEC	778	32.8
	Group	-29	-31.0
	Total	749	1.8
Waste(kg)	TOSHIBA TEC	-7,355	15.9
	Group	35,800	1.8
	Total	28,445	17.7
Water(㎥)	TOSHIBA TEC	16,102	4.8
	Group	1,269	43.7
	Total	17,371	48.5
Total			68.0

*The figures show differences in volumes of environmental impacts with regard to the input data described on page 7, between fiscal 2000 and fiscal 2001.
Minus figures indicate that increase in environmental impacts exceeded reduction in benefits.

Breakdown of assumed benefits

Item		Environmental impact reduction*	Monetary value of benefits (Million yen)
Environmental impact reduction benefits at the manufacturing phase (kg)	TOSHIBA TEC	1,688	70.4
	Group	737	1.7
	Total	2,425	72.1

*The figures show differences in volumes of environmental impacts on water and air described on page 8, between fiscal 2000 and fiscal 2001.

Breakdown of customer benefits

Item		Environmental impact reduction	Monetary value of benefits (Million yen)
Environmental impact reduction benefits at the usage phase	Electricity	10,847kWh	212.2
	Paper rolls	836t	493.0
	Total	–	705.2

Basic framework

Classification of environmental costs and the calculation criteria are in accordance with the Environmental Accounting Guidelines Year 2002 edition issued by the Ministry of the Environment, Japan, in March 2002.

As in TOSHIBA TEC's previous environmental accounting, the amounts of "investment" and "expenses" are clarified. The principal difference from the previous year's environmental accounting is that "depreciation costs" concerning environmental facilities, which were previously not reported as "expenses," are reported as "expenses." Only expenditure for the facilities acquired in fiscal 1999 or later is within the scope of calculation of depreciation costs.

Regarding benefits, since no unified standards have been established, environmental impact reduction benefits are indicated quantitatively and also calculated in monetary value in TOSHIBA TEC's environmental accounting. The following table shows TOSHIBA TEC Group's classification of

benefits. "Actual benefits" are benefits that can be directly converted into monetary value. "Assumed benefits" are the reduction in environmental impacts on the atmosphere, water and soil. In "customer benefits" reduction in power consumption or paper rolls in terms of POS terminals, MFPs, and vacuum cleaners, and other economic benefits are evaluated. "Risk prevention benefits," a newly introduced item, are benefits of investment in environmental structures to prevent risks, which may otherwise occur in the future.

Economic benefit items		Environmental impact reduction items
Actual benefits	Environmental impacts clarified quantitatively and easily converted into monetary value	Reduction of electricity, reduction of fuel, reduction of water, reduction of waste (including proceeds from sale of items with value)
Assumed benefits	Environmental impacts clarified quantitatively and converted into monetary value based on certain assumptions	Reduction of environmental impacts on atmosphere, reduction of environmental impacts on water
Customer benefits	Reduction of environmental impacts during use by customers, such as reduction of power consumption, and other economic benefits are calculated.	Reduction of environmental impacts during use of products
Risk prevention benefits	The extent to which risks are reduced after the investment compared with before the investment is calculated	Prevention of environmental risks that might otherwise occur in the future

●Basis for calculation of assumed benefits
Monetary values were calculated by giving each substance, calculated in terms of cadmium, weighting based on environmental standards and ACGIH-TLV (allowable concentration of each substance as determined by the American Conference of Governmental Industrial Hygienists) and multiplying the result by the amount of compensation in the case of cadmium pollution. Reduction in environmental impacts on atmosphere, water and soil is indicated quantitatively and the environmental impact reduction volumes are compared with the previous year's results, and also reduction of environmental impacts is calculated in terms of monetary value to enable comparison of various environmental impacts on the same basis. *Explanation of the concept of weighting by referring to cadmium and hexavalent chromium
Environmental standard values for cadmium and hexavalent chromium are 0.01mg/l and 0.05mg/l, respectively, and the reciprocals, 100 and 20, respectively, are used as weighting coefficients for the substances. According to comparison using weighting coefficients, environmental impact cost of hexavalent chromium is calculated to be \2,502,144/kg, which is one fifth of that of cadmium. Regarding atmosphere-related environmental impacts, data of ACGIH are used for weighting.

●Basis for calculation of customer benefits
Benefits of reduction of environmental impacts of products throughout their life cycles are calculated in terms of physical quantity units and monetary units. A life cycle comprises several phases: 1) procurement of raw materials, 2) manufacturing, 3) transport, 4) use, 5) collection, 6) recycling and 7) appropriate processing. TOSHIBA TEC's environmental accounting focuses on the benefits of reduction of environmental impacts at the use phase. Energy-saving benefits are calculated using the following formula:

Benefits (yen) =S [(power consumption per year of the former model -power consumption per year of the new model) xnumber of units sold per year xbenchmark unit price of electricity charge]

●Basis for calculation of risk prevention benefits
Benefits of investment in environmental structures, such as dikes, for the purpose of preventing pollution of soil and groundwater are evaluated as benefits to prevent risks that might otherwise occur in the future. Risk prevention benefits for each capital investment item are calculated according to the following formula:

Risk prevention benefits =
Quantity of chemical substances stored xBasic amount (monetary value) xImpact coefficient x Occurrence coefficient

where the basic amount and the impact coefficient are those used for assumed benefits and the occurrence coefficient is a value unique to TOSHIBA TEC.

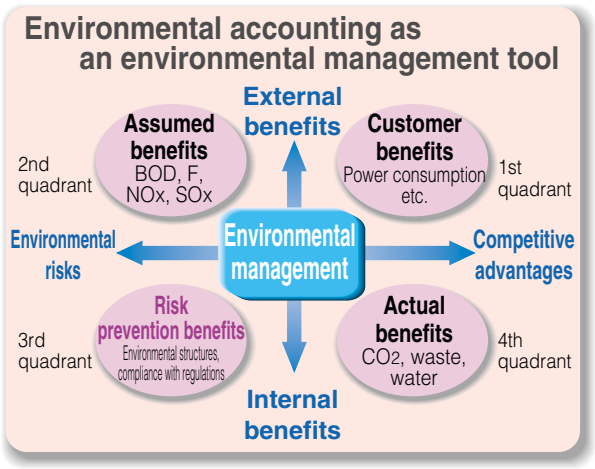
Tool for environmental management

A good working definition of environmental accounting is that it is a tool used to reflect environmental considerations in decision-making. Thus, environmental accounting underpins environmental management.

There are various types of environmental impacts, such as waste and air pollution. Because different standards are used for different types of environmental impacts, it is difficult to quantify the total environmental impact. To facilitate the use of environmental accounting in decision-making, it is desirable to have a common standard for environmental impacts of all types.

Environmental issues involve negative externalities. TOSHIBA TEC is attempting to take negative externalities into account or, at least, clarify them, so as to ensure that decision-making on environmental countermeasures is informed by environmental accounting, and contributes to the reduction of environmental impacts on society

The figure below indicates the outline of TOSHIBA TEC's environmental accounting. TOSHIBA TEC's environmental accounting for fiscal 1999 principally concerned the second and the fourth quadrants. For fiscal 2000, TOSHIBA TEC calculated the first quadrant, benefits to society. In the environmental accounting for fiscal 2001, risk prevention benefits, which correspond to the third quadrant, were calculated. Benefits of investment in environmental structures for the purpose of preventing pollution of soil and groundwater are evaluated as benefits of preventing risks that might otherwise occur in the future. TOSHIBA TEC intends to use this indicator in decision-making concerning prioritization of environmental investment projects and investment decisions.



Investments in Environment-related Facilities

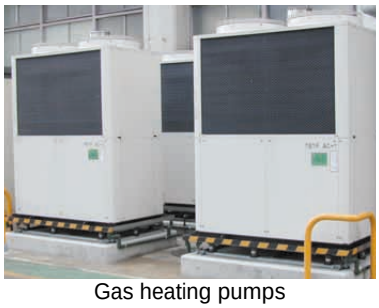
To reduce environmental impacts generated due to business activities and prevent environmental risks, TOSHIBA TEC is making various investments towards environmental protection. TOSHIBA TEC employs the production process, which causes less environmental impacts, makes investments in environment-related facilities in accordance with laws and regulations, implements monitoring and measurements for maintaining voluntary standards. These activities are expanded to the whole TOSHIBA TEC Group, which strives to improve the level of these activities to protect a global environment.

Environment-related investment overview

Between 1990 and 1993, TOSHIBA TEC introduced equipment such as water cleaning machines, in accordance with the abolition of use of 1.1.1-trichroloethane and chrolofluorocarbons (CFC), which were used in the cleaning process. Considering the fact that each business site is located in an environment rich in water resources (Ohito: clear stream from the Kanogawa River, Mishima: spring water from Mt. Fuji, and Hadano: clean water from the Tanzawa mountain range), TOSHIBA TEC focused their investments to maintain high water quality and prevent pollution of soil until 1998. The prevention of global warming has been appealed for recently, and TOSHIBA TEC has been striving to employ energy-saving equipment and substitute clean energy in order to reduce CO_2 emissions, since 1998.

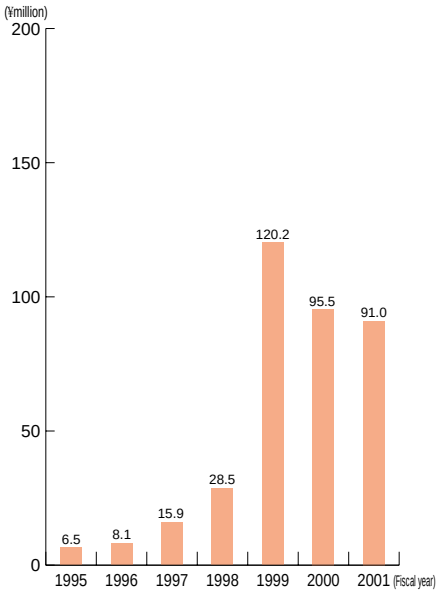
Change of investments in environment-related facilities

Energy-saving equipment

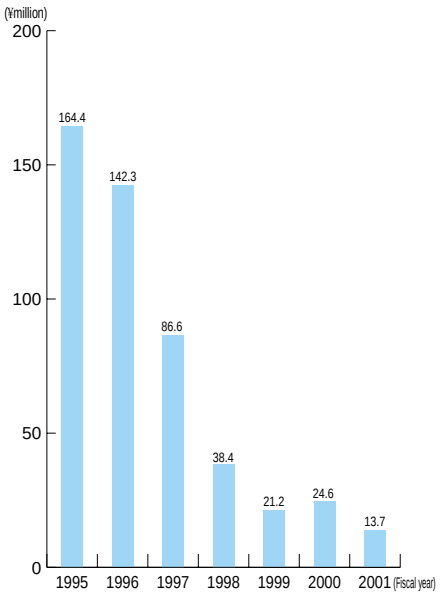


Gas heating pumps

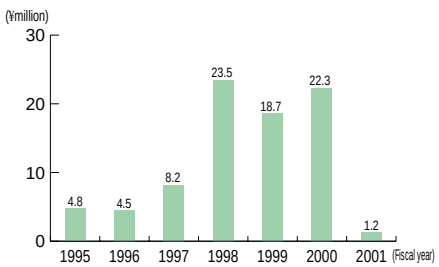
Electricity monitor



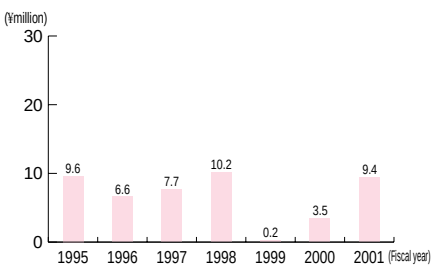
Prevention of water pollution



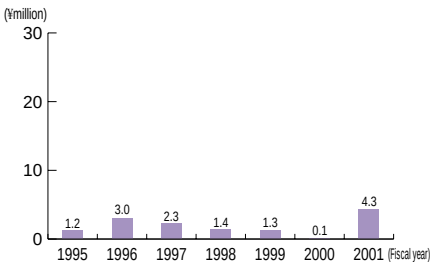
Prevention of air pollution



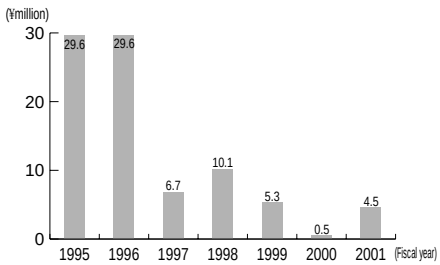
Prevention of soil pollution



Prevention of noise and vibration



Reduction of waste



Integration of business bases

As part of business restructuring, TOSHIBA TEC transferred the departments from Yanagicho Works (Kawasaki, Kanagawa) to other business sites for integration of business operations in January 2002. From the viewpoint of environmental protection, environmental effects of the transferred facilities were assessed prior to the transfer.

Mishima Works

Component Business Group

Mishima Works

Mainly assessed items are the actions for reducing power consumption, saving energy and controlling noise after the transfer.

A trial calculation of power consumption reduction was made before the transfer. According to the results, wattmeters were installed to the facilities which consumed much power, to enhance the control. To save energy, the inverters were employed to the lighting and air-conditioning systems. Air-conditioning for individual spaces was enabled and CFC refrigerants with less environmental impact were selected. Shading glass plates were used to restrict room temperature rise. Furthermore, water-heating appliances for use with night-time electricity were applied in the kitchens for in-house cafeterias, in order to reduce the cost.

The temperature chambers used for development were replaced with the energy-saving ones which used CFC refrigerants with less environmental impacts. Considering the residential area around the Mishima Works, TOSHIBA TEC rearranged the facilities and devised methods to satisfy the noise requirements.

Component Business Group

The Component Business Group integrated the production sites into the Mifuku Plant, to improve business efficiency, restructure the organization, and synthesize facilities and technologies for machining high value-added components.

58 facilities from the Ohito Business Center and 7 facilities from the Yanagicho Works were transferred. Before the transfer, an environmental assessment was made to take actions for reinforcing the foundation and the building.

As a future action for saving energy, the Component Business Group will apply inverters with the compressors and employ an energy control system.

Pressing equipment

Temperature chamber

Injection molding machine

Facilities transferred (Units)

Item	Total number of transferred facilities	Mishima Works	Component Business Group	China	Discarded/Sold
Temperature chamber	10	8			2
Injection molding machine	38		13	14	11
Pressing equipment and die manufacturing machine	41		27	6	8
Consumables manufacturing facility	2	2			
Automatic lathe	33		8		25
Machining center	8		6		2
Electric discharge machine	8		6	2	
Other exclusive machine	17		5	3	9
Total	157	10	65	25	57

Environmental Risk

Abolishment of use of heavy oil

Conversion of air-conditioning fuel from heavy oil to electricity or natural gas

At the Ohito Business Center, actions related to heavy oil were important. It decided to abolish all facilities using heavy oil in fiscal 2001. Thus, the two tanks were removed, eliminating the summer-time offensive odor and risk of releasing the oil to the rivers.

By changing heavy oil heating to electricity-operated air conditioning (with inverter), yearly CO_2 reduction of 59 tons was achieved.

Lower heavy oil tank

After removal of the lower heavy oil tank

Progress for abolishing the use of heavy oil (Units)

Item	1998	1999	2000	2001
Heavy oil tank	2	2	2	0
Heavy oil heater	11	7	4	0

The Mishima Works reduced heavy oil heaters to replace them with natural gas-operated air conditioners. When the Yanagicho Works was merged, all the heavy oil heaters were abolished. Employing electricity or natural gas for air conditioners enabled the yearly CO_2 reduction of approx. 99 tons.

Heavy oil heater before being removed

Abolishment of boilers

At the integration, Mishima Works removed the two boilers, which allowed the yearly CO_2 reduction of approx. 270 tons.

Boiler before abolishment

Progress for abolishing the use of heavy oil (Units)

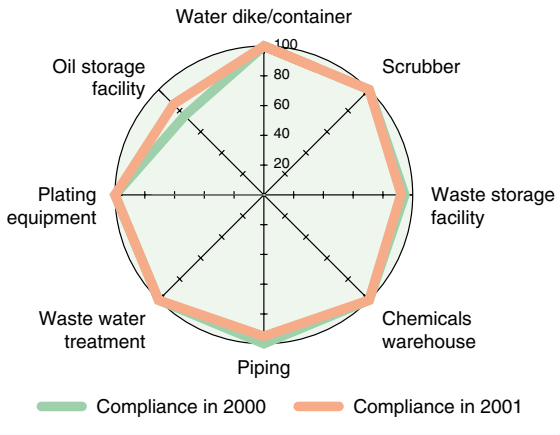
Item	1995	1996	1997	1998	1999	2000	2001
Heavy oil heater	19	19	14	11	9	6	0
→Natural gas-operated air conditioner			4	6	8	10	37
→Electricity-operated air conditioner							9
Boiler	2	→	→	→	→	→	Abolished
Steam water heater for cafeteria	2	→	→	→	→	→	Abolished
Steam tableware sterilizer for cafeteria	1	→	→	→	→	→	Abolished
→Water heater using night-time electricity							10

Environmental structure management

Environmental structures are improved according to the Toshiba Group's guidelines, in order to reduce environmental impact.

A Guidelines for installation and structure of water dikes and containers
B Guidelines for installation and structure of scrubbers for waste gas
C Guidelines for installation and structure of waste storage facilities
D Guidelines for installation and structure of chemical warehouses
E Guidelines for piping liquid chemical substances and waste water
F Guidelines for installation and structure of waste water treatment facilities and on-site water waste systems
G Guidelines for installation and structure of plating equipment
H Guidelines for installation and structure of oil storage facilities

Compliance with the environmental structure guidelines (%)



Soil control

The business integration at the Ohito Business Center transferred the lathe work department to the Component Business Group. This department had used a large amount of cutting oil for a long time. The environmental assessment was made on the vacant lot where the department used to check whether there were environmental effects on soil.

As the result of the assessment, oil seepage was found only on the surface. Therefore, the surface was removed and mortar was reinstalled.

Surface removal

Vacant lot soil investigation

The Mishima Works investigated the vacant lot where TOSHIBA LIGHTING & TECHNOLOGY CORPORATION used oil. As a result, no problem was found in the soil.

Vacant lot investigation

Prevention of soil pollution

The Hadano Plant removed the surface of the vacant lot where the departments used much oil and applied 3-mm thick watertight coating, in order to prevent soil and groundwater pollution due to oil. For preventing oil from dripping from the facilities and equipment, a container was installed. Thus, double protection against soil pollution was provided. The container was installed on the ground, enabling checking all six surfaces for oil leakage.

Surface removal

Watertight coating

Container installed on the ground

Polychlorinated biphenyl (PCB) control

The Mishima Works and the Ohito Business Center have been strictly controlling the transformers and fluorescent lamp ballast which contain PCB, and carry out monthly inspections, in accordance with the Waste Disposal and Public Cleansing Law since 1972.

Based on the Law Concerning Special Measure against PCB Waste, enacted in July 2001, the storage status was reported to the district public health center.

PCB storage

Periodical Underwater Measurement and Reporting

To monitor underwater, the monitoring wells were voluntarily installed in the Ohito Business Center and the Mishima Works. These business sites report the water quality analysis results on a regular basis to the local governments in Mishima and Ohito.

Taking underground water sample

三島市役所環境企画課様

'01-11-29

三島事業所
G環境保全・管理担当

観測井戸測定結果一覧表

測定月日	場所	1,1,1-トリクロロエタン	トリクロロエチレン	テトラクロロエチレン
'98-12-11	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'98-12-22	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'99-3-18	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'99-3-18	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'99-5-20	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'99-5-20	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'99-7-16	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'99-7-16	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'99-9-25	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'99-9-25	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'99-11-26	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'99-11-26	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'00-1-26	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'00-1-26	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'00-3-30	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'00-3-30	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'00-5-31	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'00-5-31	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'00-7-26	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'00-7-26	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'00-9-29	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'00-9-29	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'00-11-28	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'00-11-28	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'01-1-31	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'01-1-31	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'01-3-27	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'01-3-27	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'01-5-24	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'01-5-24	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'01-7-25	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'01-7-25	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'01-9-28	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'01-9-28	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満
'01-11-29	新規観測井戸	定量下限未満	定量下限未満	定量下限未満
'01-11-29	廃水処理場横井戸	定量下限未満	定量下限未満	定量下限未満

(単位:mg/l)

※定量下限未満は0.0001mg/l
分析法:溶媒抽出法
使用機器:GC(ECG-N) Yanaco G3810
採取者:菅野好司(社内)
分析者:菅野好司(社内)

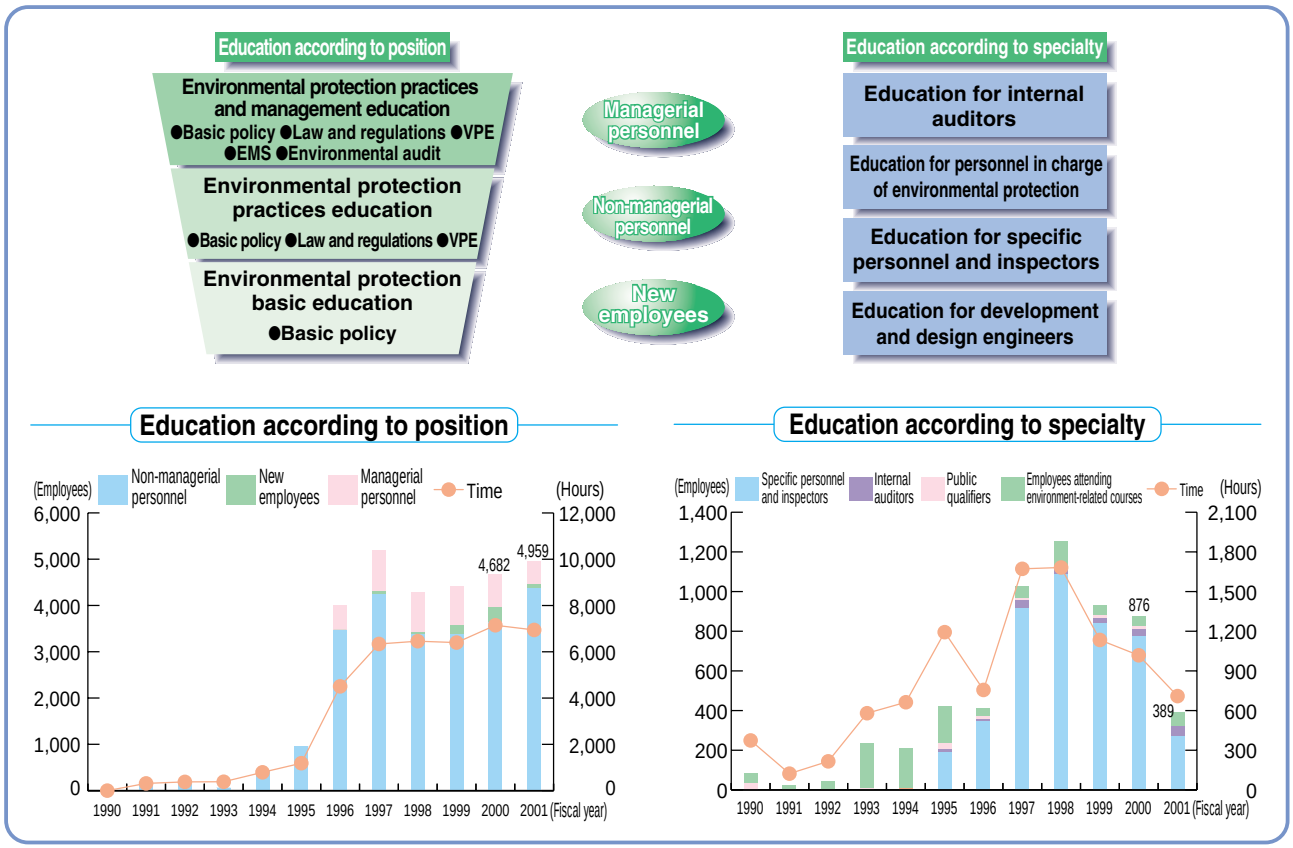
以上

Periodical report to the city of Mishima

Environmental Education

Environmental education

The education according to position is offered to the personnel at every level from new employees to senior management, to enhance the environmental consciousness and expertise. The curriculum includes the basic policy for environmental protection, the laws and regulations concerning the environment, the voluntary plan for environmental protection (VPE), the environmental management system (EMS) and the environmental audit. Not only TOSHIBA TEC personnel but also personnel of the subsidiary and cooperating companies receive the environmental education.



Education for internal auditors, specific personnel and engineers

TOSHIBA TEC provides education for internal auditors and specific personnel to audit in compliance with the ISO 14001 requirements.

The development and design engineers receive environmental engineering education allowing them to advance the creation of environmentally conscious products.

Education for managerial personnel

Lecture regarding environmental technologies

As part of encouraging development or design engineers and technicians to create environmentally conscious products, lectures and seminars regarding environmental technologies are provided to improve their technological levels, knowledge and awareness about environmentally conscious products.

Lecture on closed recycling for plastics

Environmental education for engineers (e-learning)

The Mishima Works provides development or design engineers with environmental education through personal computers (e-learning).
In addition to the general contents regarding environmental management systems, domestic and international laws and regulations, the trend of various environmental labeling standards or other latest information is incorporated.
The purpose of the e-learning through the website is to propagate knowledge on environmentally conscious product design. With regard to fields requiring expertise, the web site contains pages intended for designers in each field.
Compared with conventional group lessons, e-learning enabling learners to study individually through their PC, has the following advantages:

- Learners can make effective use of their free time.
- A large amount of paper distribution is not required.
- Answers can be obtained from Questions and Answer via e-mail.
- Education database can be repeatedly accessed to confirm the contents after the education completion is reported.
- The name of learners who have completed the education can be viewed on a real-time basis.

Improvements will be made to the contents and methods every year to provide more effective education.

Fostering environmental auditors

TOSHIBA TEC provides education for internal auditors to validate the ISO 14001 environmental management. There are two ways to foster them; one is public qualification through sending the employees to exclusive external training organizations, and the other is certification through in-house training and practice.

ISO 14001-related environmental auditor qualification in 3 business sites and domestic production subsidiaries

Qualification	Fostered by	1995	1996	1997	1998	1999	2000	2001	2002
ISO 14001 assistant examiner	External organization		2	2	3			1	5
Chief internal auditor	External organization	6	3					1	9
	In-house training					15		24	14
Internal auditor	External organization	11	4	5		3			34
	In-house training		18	48					61
No. of qualifications		17	27	55	3	18	0	26	123
No. of auditors		11	32	81	81	82	73	97	97

Environmental Audits

EASTER*

TOSHIBA TEC carries out environmental audit every year, starting in fiscal 1994, according to the Toshiba's environmental audit system. This audit contains Toshiba Environmental Audit by the Toshiba corporate audit team and In-house Environmental Audit by the in-house audit team appointed by the Assistant Environmental Protection Promoters. The audit is positioned as part of the management audit.
The in-house audit team assists the production subsidiary companies to do environmental audits.

*Environmental Audit System in Toshiba on the bases for ECO Responsibility

Environmental management system audit

The environmental management systems of all business sites are covered by ISO 14001 certification and a third-party organization examines those systems in connection with the extension of the certification. Auditing of environmental management systems covers all requirements of ISO 14001, including compliance with laws and regulations and emergency preparedness and response, while evaluating the levels compared with the previous year's results in terms of quality improvement and advancement.

Auditing of control of workplace

The personnel in charge or supervisors should check the inspection and control status of the workplace and understand the actual status on-site on a daily basis. The audit is carried out to confirm whether such a system is established and works well, as well as whether the workplace is kept neat, organized and clean.
As for critical facilities, training for emergencies is evaluated to see if the staff acts as in the manuals.
Items to be improved and recommendations concerning facilities and their operations are identified and transferred to every employee.

Auditing of the degree of achievement of the voluntary plan

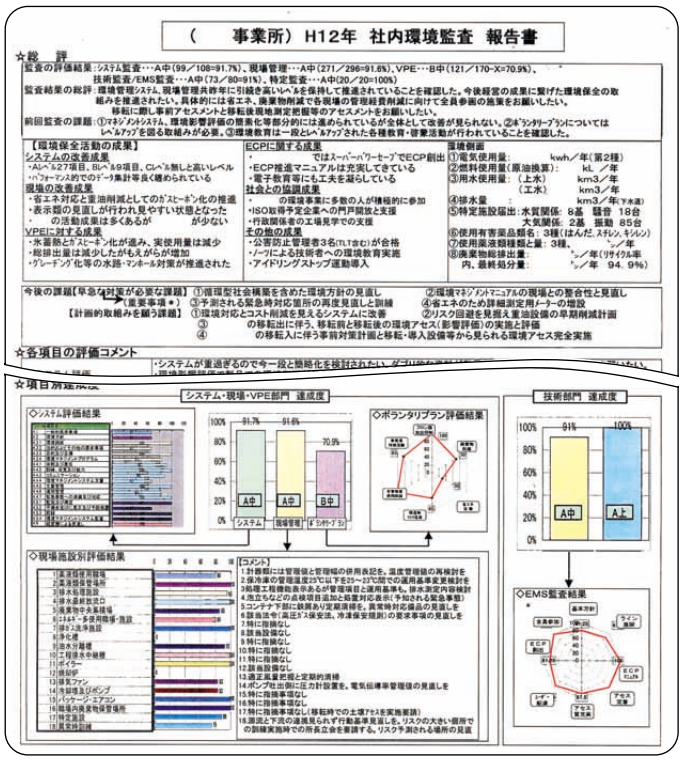
Besides checking the extent to which items of TOSHIBA TEC Voluntary Environmental Plan, such as energy saving, zero emission, and reduction of waste, have been achieved, the following items are evaluated from the viewpoint of innovativeness and impacts of operation's activities, the degree of participation of personnel and applicability: improvement of the environmental management system, improvement of control of the workplace, communication with local communities, and activities to achieve targets of the voluntary plan.

Auditing of reation of environmentally conscious products

Concerning creation of environmentally conscious products, planning, management and the environmental consciousness of engineering sections in terms of both products and technology are evaluated.
Disclosure of products' environmental performance for the user is socially demanded. Therefore, auditing is conducted in a wider range to confirm whether the products comply with eco-labeling programs and green procurement regulations.

Transferring audit results

When the EASTER is implemented in one business site, personnel in charge of environmental protection and workplace supervisors of other sites and production subsidiary companies are requested to participate in the audit. Their participation will allow recommendations and items which require improvement to be transferred within the TOSHIBA TEC Group in order to continue improvements.

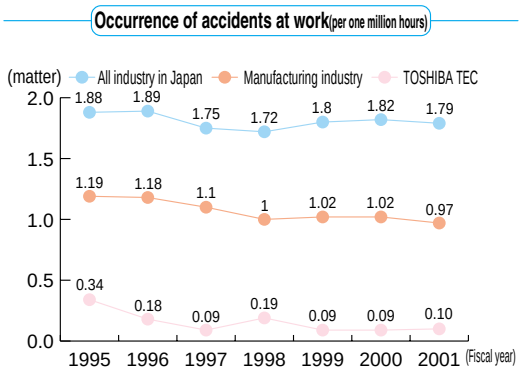

（　事業所）H12年　社内環境監査　報告書

Health and Safety Activities

To a considerable degree, business activities derive their vitality from the physical and mental well-being of employees.
It is important for management and supervisors to recognize ensuring the safety and well-being of employees as part of the company's social responsibility, as well as to facilitate appropriate management of health and safety.
It is important for employees to have the opportunities to derive personal satisfaction from their work.
TOSHIBA TEC is striving to tackle the health and safety activities alongside the employees, support their health both in mind and body, provide working environments that encourage employees to realize their potential, in accordance with laws and regulations.

Safety control

TOSHIBA TEC has long been seeking to eliminate accidents in the workplace. With regard to the overall rate, TOSHIBA TEC is considerably lower than average for the entire industry and for the manufacturing industry in Japan. It is stepping up its efforts to eliminate accidents and the employees are encouraged to be more conscious of danger in their daily action as to eliminate danger itself, by conducting risk prediction training.
TOSHIBA TEC intends to vigorously promote activities that incorporate the guidelines of the Ministry of Health, Labor and Welfare for safety and hygiene management systems.



Occupational health care

Control of working environments, work control, and health care are promoted to prevent any medical problems associated with occupations.
Keeping fit is largely up to the individual. In the event of periodic medical check-ups indicating problems, such employees have an opportunity for personal consultations with medical professionals to advise them on what they need to do in order to cultivate healthy lifestyles.
TOSHIBA TEC is vigorously working to enhance the awareness of employees maintaining a good mental health, by encouraging the employees to do outdoor recreation activities and communicate with other department employees.
A hot line has been opened for employees and their families as members of the Toshiba Group where they can receive advice from health-care professionals.


Periodic medical check-up


Healthy walking

Work environment measurement

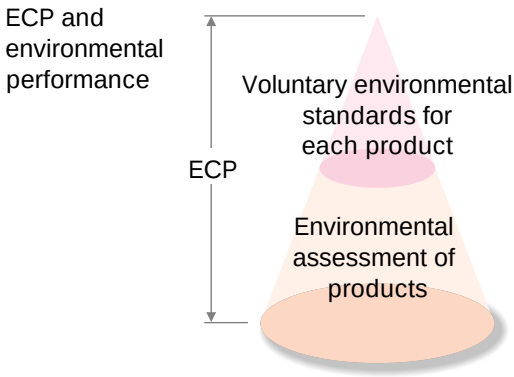
To maintain a clean working environment, the amounts of fine particles, organic solvents, and specified chemical are measured to evaluate the conditions in the working environment. Measurements and analysis are carried out by the Work Environment Measurement Team stationed in the Materials Analysis Room of the Mishima Works. Periodically they visit work places. If the team finds any problem, it provides support and advises improving the environment of work places. The team conducts measurements at neighboring companies, as well as the subsidiary companies.
The Analysis Room facilitates information exchange regarding chemical substance analyses of purchased components in association with various analysis organizations in the Toshiba Group, as part of green procurement.
(Registered as a work environment measurement organization. Registration number: Shizuoka 22-23)


Analysis Room

Environmentally Conscious Products (ECP) Vision

Efforts to develop ECPs

TOSHIBA TEC strives to create Environmentally Conscious Products (ECPs) of which environmental impacts are minimized at every stage of their life cycle - from materials procurement, manufacturing, transportation, through to usage, recycling and disposal.
To create ECPs, TOSHIBA TEC set up the voluntary environmental standards, which prescribed the industry's top-level requirements for environmental considerations for each product, in addition to conventional product assessment. Thus TOSHIBA TEC focuses on the 3R design (reduce, reuse and recycle), energy-saving design and design for reducing chemical substances having environmental impacts.



Products in compliance with the voluntary environmental standards

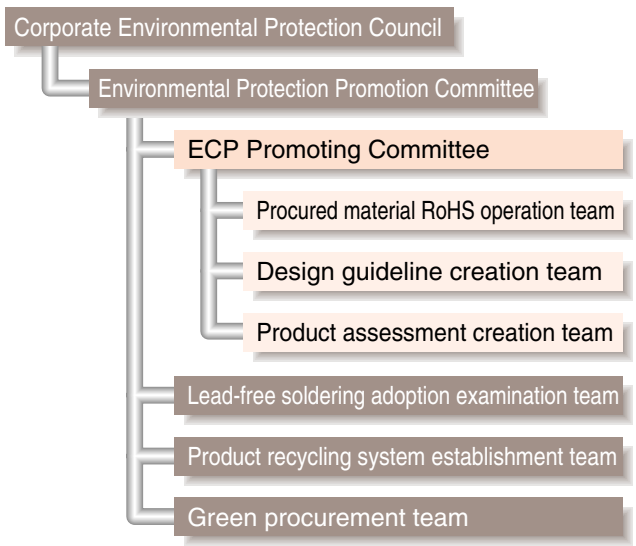
Office automation equipment	Copier and MFP	6 models
	POS terminal	3 models
	Bar code printer	Under development
Home electric appliances	Vacuum cleaner	Under development
	Health equipment	Under development

Promoting system for developing ECPs

The ECP Promoting Committee, established under the Corporate Environmental Protection Council in 1997, has been solving corporate issues regarding development of ECPs. This committee acts according to the following basic policies:

- Set up action plans for compliance with domestic and international laws and regulations
- Facilitate disclosure of environmental information
- Carry out the voluntary environmental plan
- Provide education

The ECP Promoting Committee previously created the Design Guidelines and documents regarding ECP improvements. In the fiscal year 2002, this committee inaugurated the Purchased Product RoHS Operation Team (see page 27) to abolish the use of specified hazardous substances premeditatedly on all products.



Planning and Design

Environmental assessment of products

TOSHIBA TEC started product assessment in the home electric appliances division, according to the execution of the Law for Promotion of Utilization of Recycled Resources in 1991 (currently called the Law regarding Promotion of the Effective Use of Resources). It has been implemented for all products manufactured in all divisions since 1995 to evaluate environmental effects in each stage of product planning, design, trial production, and pre-production. In fiscal 2001, the assessment procedures were remarkably revised to focus on the 3R design.

Life cycle assessment (LCA)

LCA makes a quantitative evaluation regarding the environmental impact that a product has at every stage, covering materials procurement, manufacturing, transportation, usage, recycling, and disposal in order to reduce its environmental impact based on the evaluation result.

TOSHIBA TEC introduced LCA in 1997. The applications were gradually expanded within the corporation and the assessment on main product groups were completed in fiscal 2001.

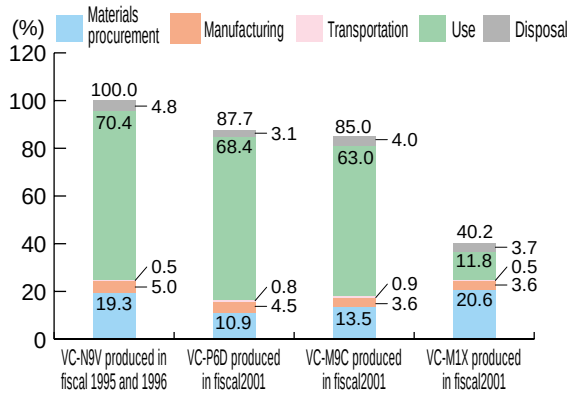
With regard to environmental impacts, assessment is made in terms of energy consumption and emissions of CO_2, SOx, and NOx.

Example:

- Indication in CO_2 emission
- Reduction of environmental impact due to recycling is calculated as a subtraction from raw materials

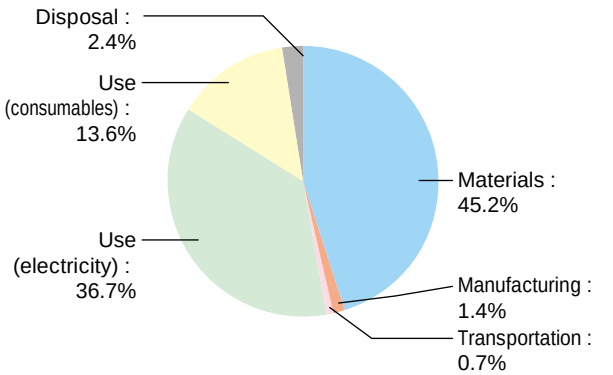
The home electric appliances division started to incorporate LCA into product assessment in September 1998. The following chart describes the difference in environmental impact between the conventional VC-N9V vacuum cleaner and the new products in fiscal 2001 in terms of CO_2 emission. The new products are the VC-P6D popularly priced vacuum cleaner, the VC-M9C MAGIC CYCLONE vacuum cleaner and the VC-M1X cordless vacuum cleaner. The environmental impacts of these new products were reduced.

CO_2 emissions from vacuum cleaners



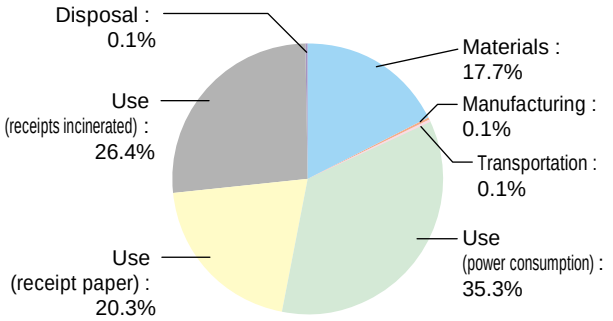
The MFPs have a lot of environmental impacts at the raw materials procurement and use stages. Therefore, TOSHIBA TEC targets the promotion of the 3R design and the reduction of power consumption. (Environmental impacts of copy paper are not subject to the assessment.)

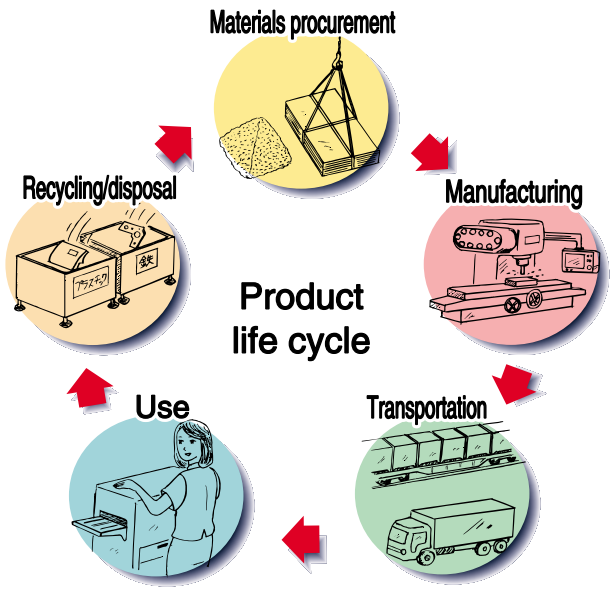
CO_2 emissions from MFPs



The environmental impacts of the POS terminals for mass merchandisers contain paper used and its incineration, and power consumption. Therefore TOSHIBA TEC intends to reduce the amount of paper used and power consumption. (It is assumed that the receipts are incinerated.)

CO_2 emissions from POS terminals for mass merchandisers





Green Procurement

Commitments to green procurement

At the raw materials procurement stage, TOSHIBA TEC moves forward with green procurement as part of producing environmentally conscious products. To procure environmentally conscious raw materials from suppliers, who are actively undertaking environmental protection measures, TOSHIBA TEC published the Green Procurement Guidelines for Materials in November 2000.
According to the guidelines, TOSHIBA TEC is conducting the evaluation of the suppliers' environmental protection measures and investigation of environmental performance of delivered products.

Evaluation of suppliers' environmental protection measures

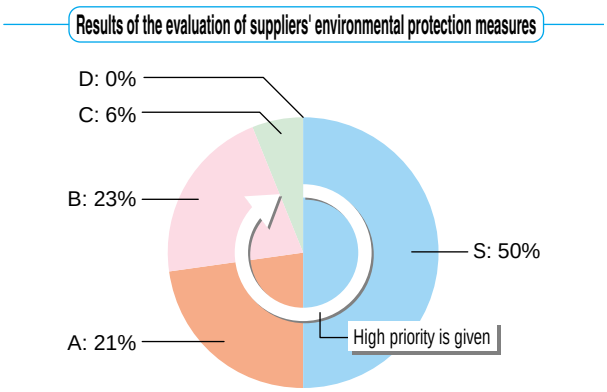
TOSHIBA TEC held explanatory meetings for the green procurement guidelines and conducts evaluations of the suppliers' environmental protection measures from December 2000, and 453 suppliers have been evaluated thus far.

Evaluation criteria for suppliers

(1) Has gained a ISO 14001 certification
(2) Promotes green procurement
(3) Is taking 10 environmental protection measures

Ranking suppliers by scores*

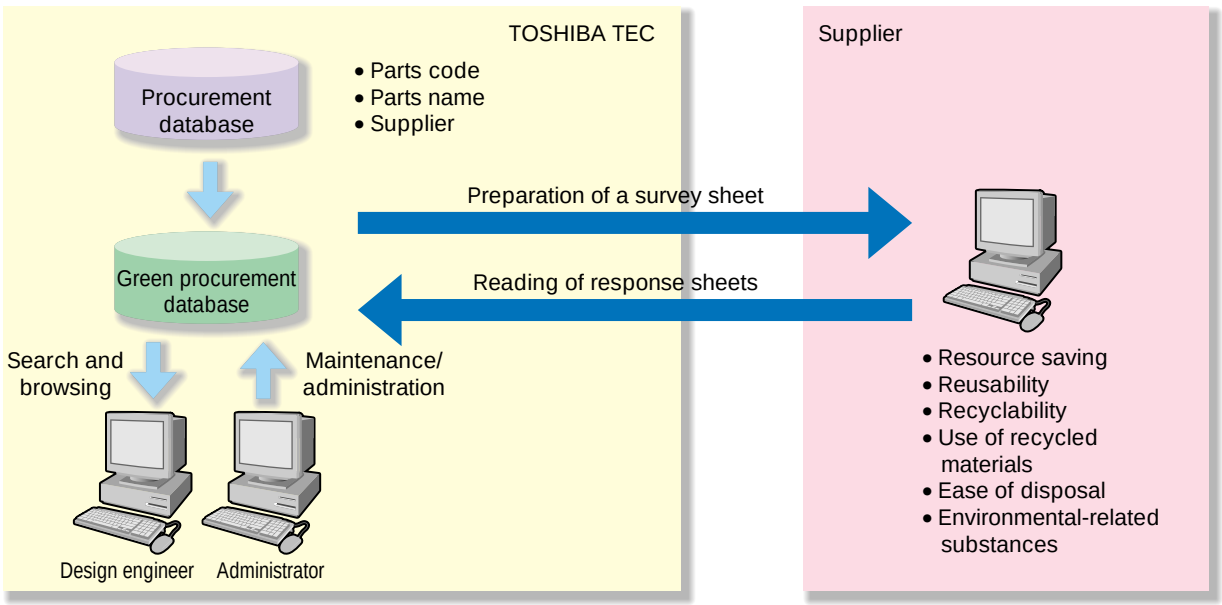
S: More than 100 or accredited with ISO 14001
A: 80 - 90- 100
B: 50 - 60 - 70
C: 30 or 40
D: 10 or 20
* Expression in multiples of 10.



TOSHIBA TEC gives priority to procurement from S, A or B-ranked suppliers, and request C or D-ranked suppliers to improve their operations or provide them with instructions and assistance.
As the results of the investigation of the Retail Information Systems Company conducted in fiscal 2001, 94% of the suppliers are ranked as S, A or B.

Investigation of environmental performance of delivered products

TOSHIBA TEC started the investigation of environmental performance of delivered products in September 2001. The investigating criteria are (1) resource saving, (2) reusability, (3) recyclability, (4) use of recycled materials, (5) ease of disposal, and (6) environmental-related substances. The results are converted into a database, which is used for developing ECPs in the design divisions.



How the green procurement database works

Reduction of chemical substances in products

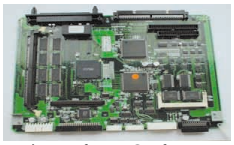
Heavy metals, including lead and cadmium, may pollute underground water when they are disposed of by landfill. Polyvinyl chloride and plastics containing halogen flame retardant may generate toxic gas when incinerated.

TOSHIBA TEC's commitments to reducing such chemical substances are as follows:

Lead	Soldering for joining	Lead-free soldering for both flow soldering and reflow soldering, has been applied to in-house manufactured printed circuit boards (PCBs) for MFPs, POS terminals, bar code printers, JIMCOM (office computers), business card/postcard printers, card terminals, vacuum cleaners, and health equipment, since 2001.
	Wire shielding material	Lead-free wires have been used for MFPs, POS terminals, JIMCOM, business card/postcard printers, and card terminals, since 2001
	Lens	Lead-free lenses have been used in the optical system for MFPs, since 1999.
Halogen	Printed circuit boards (PCB)	Halogen-free PCB and solder-free soldering have been employed for MFPs, since 2002.
	External plastic case	Halogen-free external plastic cases have been used for MFPs, since 1999.
Chromium	Steel plate	Chromium-free steel plates have been used for MFPs and card terminals, since 2002.
	Screws	Hexavalent chromium-free screws have been used for MFPs since 2002.
Polyvinyl chloride	Parts	The material of the frame and the back board of the electronic meeting boards has been changed from polyvinyl chloride to extrusion formed aluminum, since 2001.
		Elastomer has been substituted for polyvinyl chloride for hoses and bumpers of the vacuum cleaners, since 1989.
	Wire shielding material	Substitution for polyvinyl chloride used as sheath for internal wiring and power cords is under consideration.


Engine PCB for M-6800 POS terminal


PCB for VC-M9C vacuum cleaner


Halogen-free PCB for MFP


Chromium-free steel plate for MFP


TB-9101 electronic meeting board


VC-M9C vacuum cleaner

Procured Material RoHS Operation Team

The Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directives will be adopted. Consequently, electrical and electronic equipment which contains the specified hazardous substances (lead, mercury, cadmium, hexavalent chromium, PBB and PBDE) will not sell in the EU countries in and after 2006.

TOSHIBA TEC organized a team to abolish the use of the specified hazardous substances premeditatedly on all products.

Energy Saving

Improvement of the air conditioner operation system

The air conditioners were previously operated under the control of the thermo controller in the Hadano Plant. By monitoring the operation hours of the refrigerant compressor and controlling the load for air-conditioning, power consumption was reduced. The Hadano Plant also reduced the contracted electric capacity thus reducing the cost.

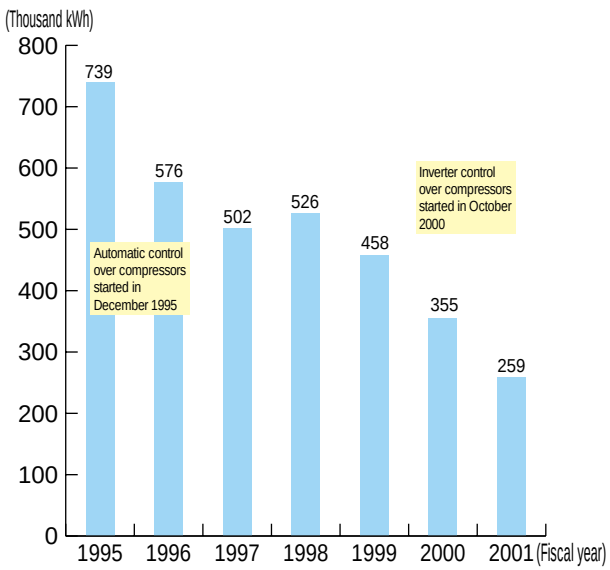
Number of air conditioner operating systems: 23 (40 channels)
Effect 1: Power consumption:
60,000 kWh/year reduction
Effect 2: Monthly contracted electric capacity:
70 kW reduction

Air conditioner operating system

Applying inverters to compressors

The Ohito Business Center improved the cooling units and piping of the three compressors, and applied the inverters, to reduce power consumption.

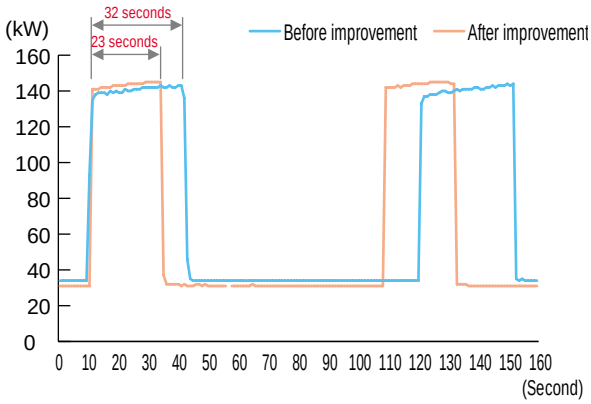
Power consumption transition



Electricity monitoring system

The electricity monitors enable data to be processed with personal computers via the LAN. To understand how energy is used and verify the effect, the monitors have been installed since 1999. As many as 115 monitors are currently attached to the facilities which consume a large amount of electricity, in the three business sites of Ohito, Mishima and Hadano. The following chart shows the example of using this system.

Electricity monitoring system



To understand power consumed for air leakage from the facilities and pipes, the compressors were operated when the manufacturing facilities did not work and power consumption was monitored at intervals of one second. As a result, 32-second power consumption due to air leakage or other loads to the compressors was found. Eliminating air leakage reduced the load operation to 23 seconds, allowing 35,000 kWh reduction per year.

Energy-saving campaign fan

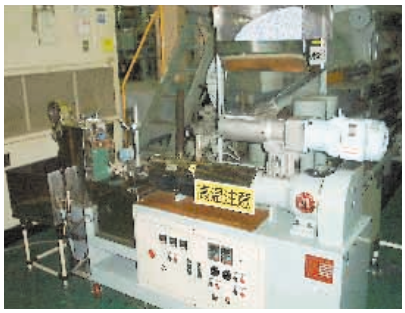
Waste

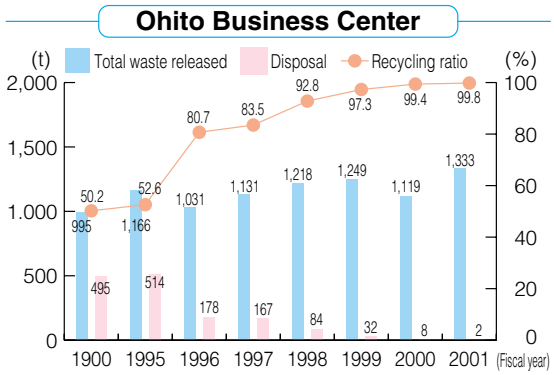
Reduction of waste

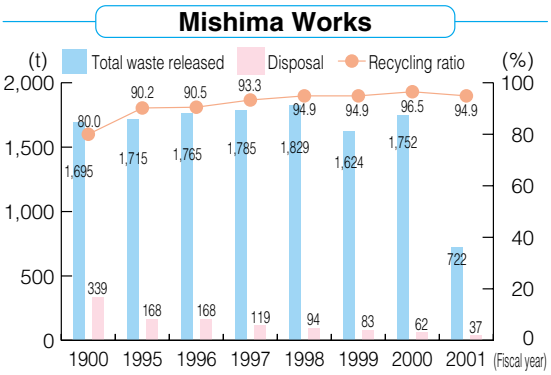
Each business site of TOSHIBA TEC is implementing thorough separation of waste from every workplace. Consequently, the Ohito Business Center has already achieved zero emissions of waste in fiscal 2001. Other business sites are striving to achieve zero emissions by the end of fiscal 2003.

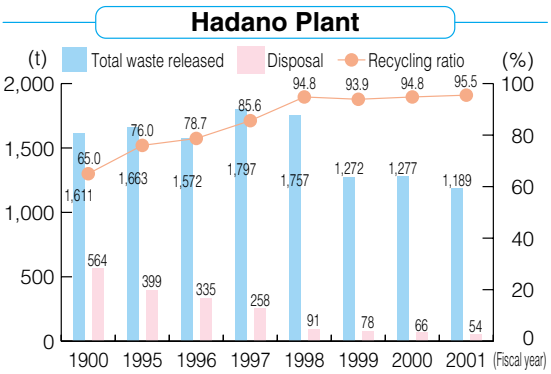
Zero emission activity at each business site

1. Each business site transforms paper which cannot be recycled to solid fuel. This conversion reduces waste of 5 tons at the Ohito Business Center, 15 tons at the Mishima Works, and 10 tons at the Hanadno Plant on a yearly basis.
2. The Hadano Plant recycles oil by processing waste liquid with the oil separating system. As a result, 20-ton waste reduction per year is achieved.
3. The Mishima Works composts fallen leaves, which were previously incinerated, and reduced waste of 1 ton per year.
4. In order to make effective use of resources, the Hadano Plant employs the repellet machine to make closed recycling of scrap resin produced in resin forming. Thus yearly 4-ton reduction of the use of new materials is achieved.


Repellet equipment

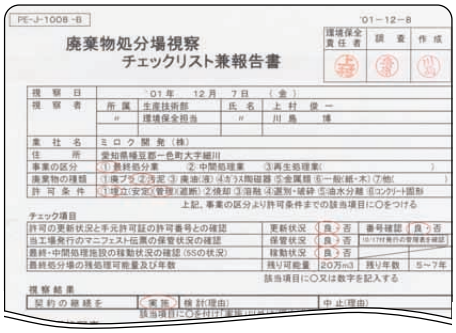






Inspecting the landfill

TOSHIBA TEC is responsible for confirming whether the consigned waste disposal vendors dispose of waste appropriately. Thus, personnel in charge of site environmental protection are sent to the landfill to check the disposal status according to the inspection sheet. The checking is performed to confirm the permitted disposal, manifesto storage, and facility control statuses, according to the principle of focusing on the "actual place, actual thing and actual situations," and determine whether or not the consignment is continued.

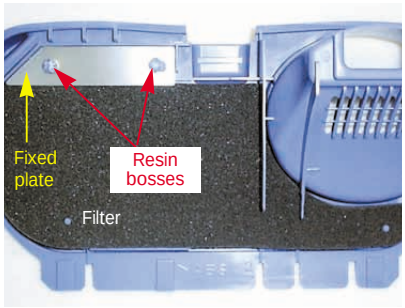

廃棄物処分場視察
チェックリスト兼報告書
Inspection sheet


Landfill

Chemical Substances and Noise

Reduction of chemical substances used

The Hadano Plant modified the manufacturing equipment to use materials, which do not contain styrene for the purpose of reducing environmental impacts from chemical substances. By applying mechanical fixing, the use of adhesives was reduced by approx. 600 kg in fiscal 2001.



Mechanical fixing on the vacuum cleaner

Applying lead-free soldering equipment

TOSHIBA TEC has been focusing on the development of lead-free soldering technology for the printed circuit boards incorporated into the products.

Presently 2 lines each of the reflow soldering equipment and flow soldering equipment are in full operation and lead-free soldering is applied at an increasingly rapid pace. The equipment will be expanded in fiscal 2002.


Lead-free soldering equipment

(Number of units applied)

Item	1st half of fiscal 2001	2nd half of fiscal 2001	1st half of fiscal 2002	2nd half of fiscal 2002	1st half of fiscal 2003
Reflow soldering equipment	1	–	1	1	–
Flow soldering equipment	1	–	1	–	1

Action against noise from toner manufacturing equipment

Manufacturing of toner and developer for copiers requires a large-scale facility, which mixes materials and crushes kneaded material into fine particles. The facility was transferred from the Yanagicho Works to the Mishima Works in January 2002, when the production sites were integrated.

Since the Mishima Works is located in a residential area, the following actions were taken to comply with the standards for the residential areas.

(1)The dust collector was isolated in a noise insulating room.

(2)The soundproof material was applied to the inside of the exhaust duct.

(3)The exhaust duct was lengthened to attenuate noise.

(4)The silencer was attached to the exhaust duct and located in the place farthest from the residential area.

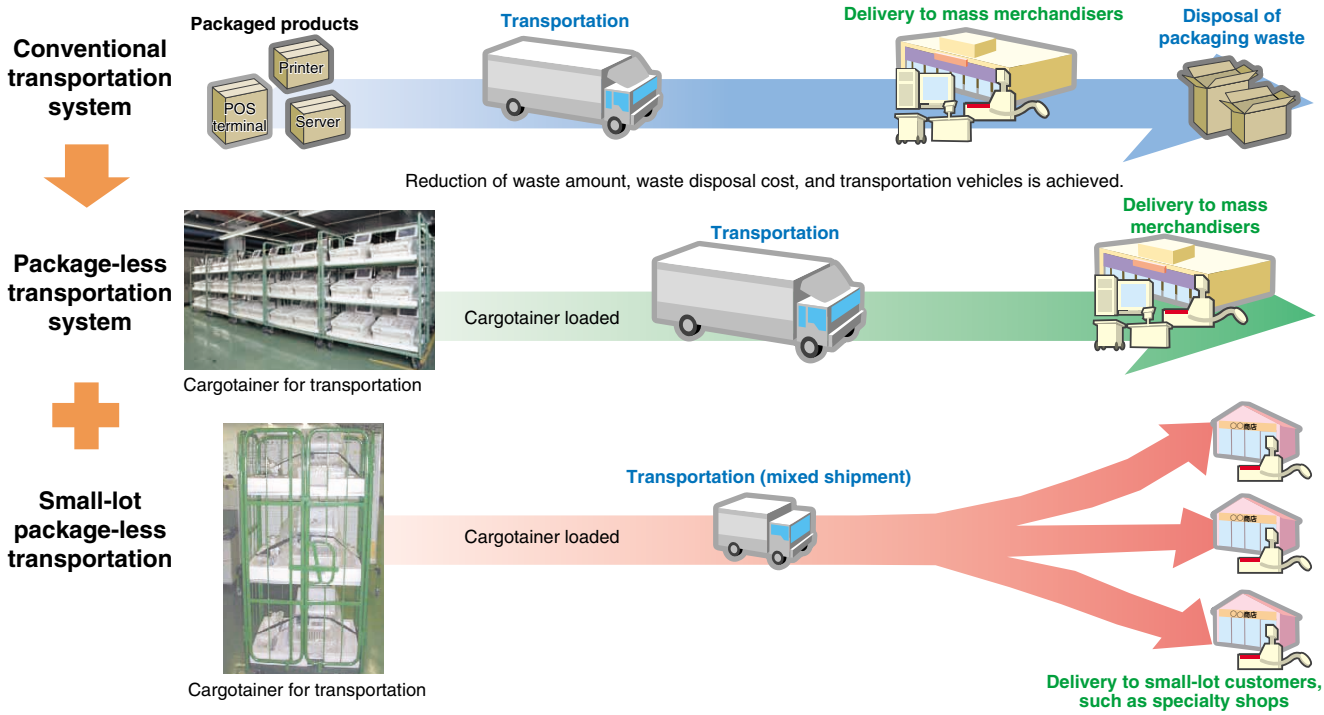

Noise-insulating toner duct


Noise insulating room

Logistics

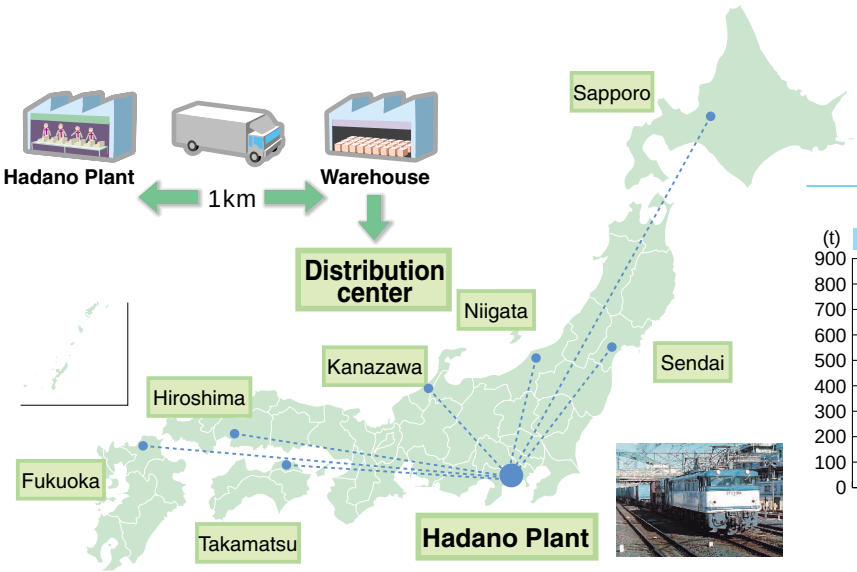
Implementation of small-lot package-less consolidated transportation

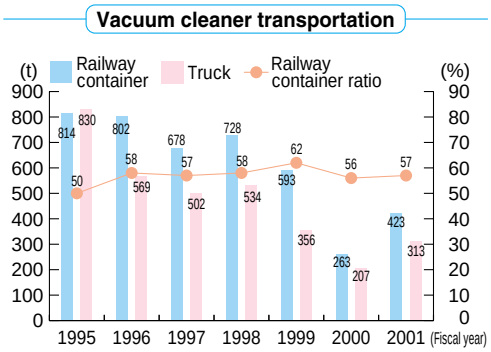
In addition to package-less transportation for mass merchandisers, package-less transportation for small-lot customers is implemented using cargotainers.
By transporting the products set up in the plant on the cargotainer, mixed shipment is available.



Use of railway transportation

TOSHIBA TEC delivers an enormous number of products in Japan, mainly by trucks, which require reducing the weight of products, packaging materials and the volume of the packages. TOSHIBA TEC uses railway containers to their advantage as well.





Retail Information Systems Company

The Retail Information Systems Company is committed to the 3R design, saving energy and chemical substance reduction, by setting up the voluntary environmental standards, to create environmentally conscious products (ECPs) which generate less environmental impacts throughout the product life cycle. The commitments are described below.

●3R design

In addition to the conventional Recycle design, the Company is striving for Reduce design and Reuse design.

Electronic journal system* for compact and lightweight design and paper reduction

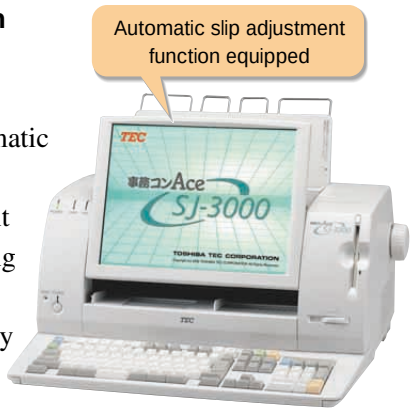
The POS terminals use the electronic journal system to reduce the size and weight and abolish the use of paper. TOSHIBA TEC is the first company in the industry to employ the electronic journal system and approx. 50% of the POS terminals are equipped with this system in fiscal 2001. The effect is equivalent to 836-ton reduction of paper rolls (similar to approx. 500 million yen) by customers.

*The electronic journal system keeps, search and browse journal information (sales information) using electronic media.

ST-97 POS terminal

Automatic slip adjustment in loading for paper reduction

The JIMCOM (office computer) contains the automatic slip adjustment function to prevent printing from being dislocated. This function eventually reduces the paper used.



SJ-3000 JIMCOM (office computer)

Compact and lightweight body achieved by multi-function

The IT-3410 multi card reader/writer integrates the magnetic card reading mechanism and the IC card reading/writing mechanism into one unit. The unitizing achieves weight reduction by 55% compared with the conventional models.

Considerations to reuse

The Company proceeds with the diversion of parts used in conventional products to new products. This part standardization contributes to reusing parts.

Use of recycled materials

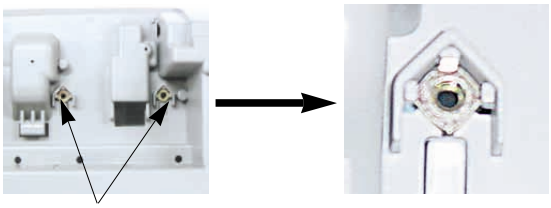
Formed parts of recycled plastic materials are used for drawers and automatic change dispensers. The cushioning materials have also been changing from Styrofoam to pulp mold made of recycled materials or corrugated cardboard. The Company will expand the use of recycled materials.

VT-100 automatic change dispenser

SL-5300 integrated label printer

Considerations to recycle

To improve recyclability, plastic parts having a weight of 25 g or more are provided with the indication of material names. Grade indication is also provided with as many parts as possible.
To facilitate disassembly for reuse and recycling, the Company changes the dismantling method, standardizes the parts and employs snap-fit connections.



Flat nut attached

Enlarged photo

●Energy-saving

For the purpose of saving energy, the POS terminals are equipped with the remote power control (RPC) function, which enables the store controller to provide ON/OFF control over the terminal and prevent unnecessary operations. The JIMCOM (office computers) and the copierboards contain the power saving function and the automatic power-off function, respectively, to reduce standby power consumption. In fiscal 2001, TOSHIBA TEC put the first-in-the-world bar code printer complying with ENERGY STAR® on the market in the industry.

ENERGY STAR is a U.S. registered mark.

B-872 bar code printer

●Chemical substance reduction

To reduce chemical substances with significant environmental impacts, the Company investigates the chemical substances used in the following products and tries to reduce them.

- POS terminal
- Handy terminal
- Automatic change dispenser
- Scale
- Server
- Electronic cash register
- Bar code printer
- JIMCOM (office computer)

The range of products subject to investigation will be expanded and the results will be integrated into a database to be used for the development of new products.

Lead reduction

Applying lead-free soldering was started in the bar code printers and expanded to the POS terminals, JIMCOM (SJ-3000 office computer), card terminals, and business card/postcard printers. The Company's comprehensive commitments to lead reduction contain the use of lead-free internal wiring harnesses and power cords.

CI-200 business card/postcard printer

Eliminating PVC

The material of the front board frame and the backboard frame of the copierboard was changed from polyvinyl chloride (PVC) to extrusion formed aluminum. The Retail Information Systems Company achieved abolition of PVC in other products, except for electric wires.

TB-9101 electronic meeting board

Reducing hexavalent chromium

To reduce hexavalent chromium, which is one of restricted substances by the RoHS Directives, chromium-free steel plates are used.

IT-3410 card terminal

TOSHIBA TEC's Environmental Products

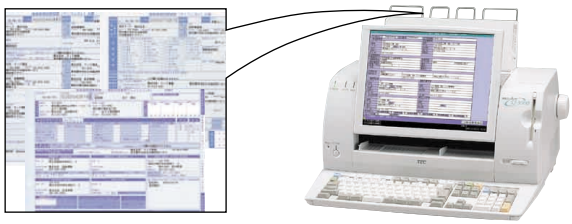
Deposit-system empty can collecting machine

Deposit-system PET bottle collecting machine

Biodegrading garbage processor

Manifest management system

For the SJ-3000 JIMCOM (office computer) for issuing slips and invoices, TOSHIBA TEC provides the Manifest Management System complying with the Waste Disposal and Public Cleansing Law enforced on April 1, 2001. (This system is recommended by the National Federation of Industrial Waste Management Association and other waste management cooperative associations.)



SJ-3000 JIMCOM (office computer)

Environmentally Conscious Products

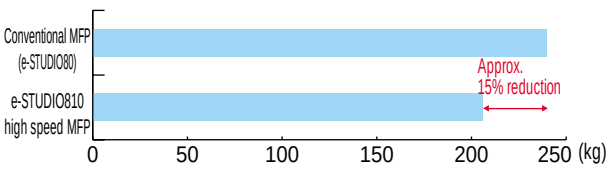
Document Processing & Telecommunication Systems Company

The Document Processing & Telecommunication Systems Company has been moving forward with the 3R design in the development of the e-STUDIO810 high speed MFP and the e-STUDIO210c/310c high speed full-color MFP.
The Company also saves energy and reduces chemical substances to create environmentally conscious products.

●3R design

The 3R design considerations for the e-STUDIO810 MFP contains unit design, ease of disassembly, and ease of removing parts to be reused.
[Reduce]
Since the machine body is made compact and lightweight, the weight and the installation space are reduced by approx. 15% and by approx. 21%, respectively, compared with the conventional e-STUDIO80.
[Reuse]
By using the new developing engine which employs the TOSHIBA TEC's Toner Recycling System, approx. 90% of residual toner are collected in the developing engine and mixed with new toner for the purpose of reuse. Thus, MFP running with high recyclability is achieved. Standardization and reuse of parts are also considered at the design stage.
[Recycle]
The Company reduces parts which are difficult to be recycled.

Compact and lightweight design(body weight)

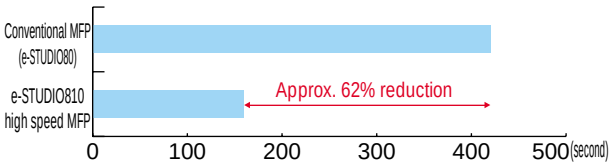


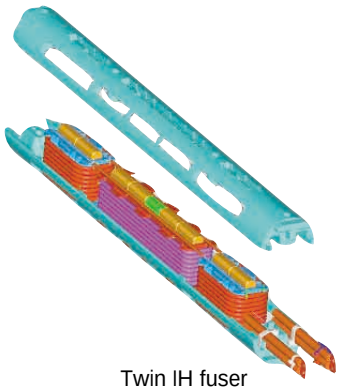
e-STUDIO810 high speed MFP

●Saving energy

The e-STUDIO810 operates smoothly and efficiently, consuming a bare minimum of electricity. Its Twin IH (induction heating) fuser technology uses twin coils to minimize heat loss and reduce warm-up energy. As a result the e-STUDIO810 achieves energy consumption of 344 Wh/h and achieves the standard value of 369 Wh/h for the fiscal year 2006 determined by the Law Concerning the Rational Use of Energy.
The warm-up time is also reduced by approx. 62%, compared with the conventional e-STUDIO80.

Warm-up time





Twin IH fuser

●Reducing chemical substances

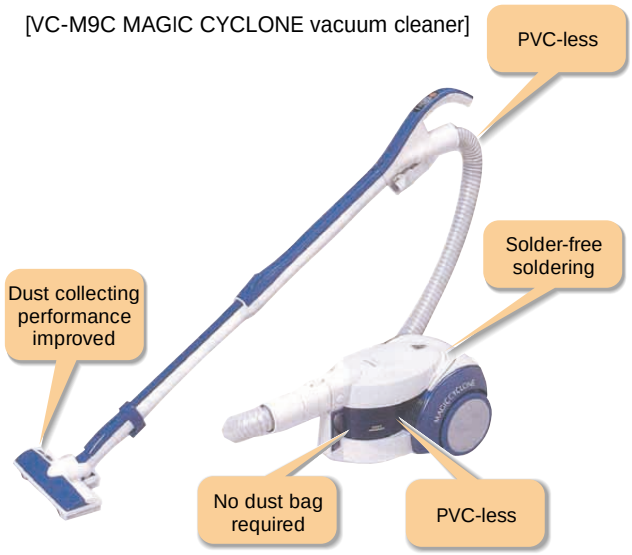
The Company is striving for lead-free, chromium-free, and halogen-free development. Remarkable reduction of such chemical substances is achieved on the e-STUDIO210c/310c high-speed full-color MFP.
Lead-free soldering and halogen-free substrate are applied to 88% (in weight) and 90% (in area) respectively, of the printed circuit boards in-house manufactured. The use of halogen is abolished on the covers. As for plated steel plates and screws, chromium plating is reduced.

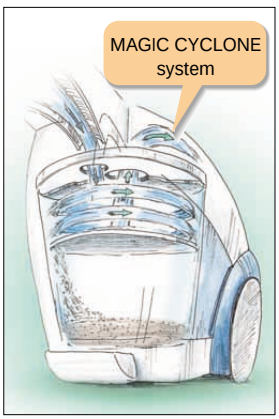
e-STUDIO210c/310c high-speed full-color MFP

Home Electric Appliances Group

The Home Electric Appliances Group incorporate the concept of LCA to product assessment and develop the cordless vacuum cleaner and the MAGIC CYCLONE vacuum cleaner.

[VC-M9C MAGIC CYCLONE vacuum cleaner]

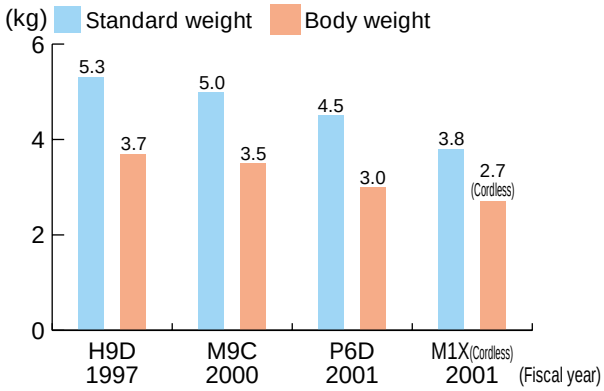




●3R design

[Reduce]
The Group is striving for reduction in size and weight of the vacuum cleaner body and accessories. The VC-M1X cordless vacuum cleaner released in September 2001, and the VC-M9C MAGIC CYCLONE vacuum cleaner released in November 2001, achieve a compact and lightweight design. The latter separates dust and air with centrifugal force and thus does not use consumable dust bags.
[Recycle]
To improve recyclability, the Group vigorously uses materials with less environmental impact, and provides plastic and paper packages with materials identification indication. The manuals describe an explanation about battery collection.

Vacuum cleaner weight comparison (resource saving effect)



Standard weight: Total weight of the body, hose, extension pipe and floor brush
Body weight: Weight of the vacuum cleaner body

●Saving energy

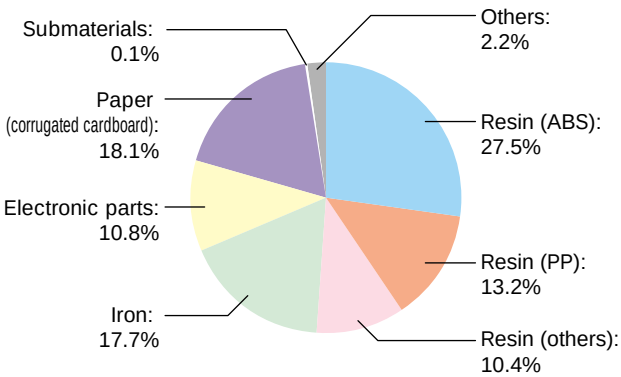
The Group believes that efficient collection of dust achieves energy saving on the vacuum cleaners. The VC-P6D popularly priced vacuum cleaner, released in February 2002, achieves approx. 10% improvement in dust collection performance, compared with the conventional vacuum cleaners.

●Reducing chemical substances

As for the vacuum cleaners, the Group is striving to expand the application of lead-free soldering to the printed circuit boards (PCBs) and substitution for PVC hoses and bumpers.

- Lead-free soldering is applied to all PCBs for the VC-M1X, VC-M9C, and VC-P6D.
- The Group changed the hose and bumper material from PVC to elastomer.

Vacuum cleaner materials



PVC-less:
Hose for the VC-P6D

Environmental Labeling

By affixing a typical environmental label in every country to the products, TOSHIBA TEC notifies people all over the world that environmental considerations are provided to its products.

Environmental labeling (Type Ⅰ)

Labeling requiring certification by a third party organization.

International ENERGY STAR® Program

Standby power makes up most power consumed by OA equipment (personal computers, display, printers, copiers and facsimile machines). The ENERGY STAR® label can be attached to OA equipment whose standby power consumption is less than the prescribed criteria. This program has been implemented as an optional registration system certified with both the Japanese and US governments, since 1995. TOSHIBA TEC participate in the International Energy Star Program and presently 47 models of the copiers and facsimile machines comply with the criteria.

Eco Mark

The Eco Mark is a Japanese representative environmental label established by the Japan Environment Association. It is attached to products, which are judged to generate less environmental impacts and to be useful for environmental protection. Eleven models of the TOSHIBA TEC copiers are certified at present.

Overseas Environmental Labeling

The TOSHIBA TEC's products comply with the Blue Angel Mark (Germany's environmental labeling) and the Chinese environmental labeling program (HJDZ40-2000).

Blue Angel Mark

Chinese environmental label

Environmental labeling (Type Ⅱ)

Labeling based on criteria that a company voluntarily establishes.

Toshiba Group Earth Protection Mark

TOSHIBA TEC set up the voluntary environmental standards, which prescribed the industry's top-level requirements for environmental considerations for each product, and this mark appears in catalogs and on web site for the products in compliance with the standards.

Three models each from the POS terminals and MFPs are permitted to use this mark.

＊(See page 37.)

東芝グループ
地球環境マーク

東芝テックPOSターミナル
環境自主基準適合製品

Environmental labeling (Type Ⅲ)

Labeling based on consumers' judgment after disclosing environmental impact information

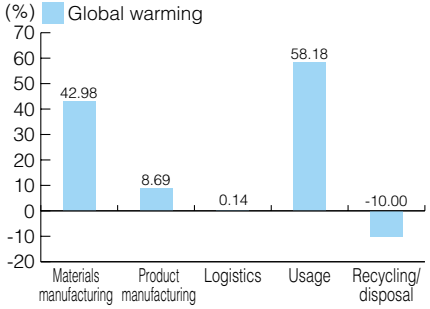
ECO LEAF labeling

The ECO LEAF labeling program started in June 2002. According to this program, the environmental impacts output from every stage covering raw materials procurement, manufacturing, transportation, usage, recycling, and disposal, are calculated with LCA method.

This label indicates the calculated environmental impacts as quantitative data. Three TOSHIBA TEC's models were already certified.

No.AA-02-002 (e-STUDIO550)
No.AA-02-003 (e-STUDIO650)
No.AA-02-004 (e-STUDIO810)

e-STUDIO810's environmental impacts



The graph shows percentages converted into global warming impacts (CO_2) during the product's life cycle.

Voluntary environmental criteria for ECPs

To promote Type Ⅱ environmental labeling, TOSHIBA TEC set up the voluntary environmental standards, which prescribed the requirements for environmental considerations for each product. TOSHIBA TEC has already established the Voluntary Environmental Standard for POS Terminals, the Voluntary Environmental Standard for PPC/MFP, and the Voluntary Environmental Standard for Vacuum Cleaners, and is preparing the standards for other products.
TOSHIBA TEC is aiming to increase the number of products complying with the voluntary environmental standards, in order to achieve the goals of the Third Voluntary Environmental Plan.

東芝グループ
地球環境マーク
東芝テックPOSターミナル
環境自主基準適合製品

Voluntary environmental criteria for POS terminals

NO.	Life cycle	Environmental considerations
1	Parts/materials procurement	Recyclable plastics (PP, PS, PE, PC, SAN and ABS) make up 80% or more. Voluntarily restricted substances (PCB, asbestos, dioxins, CFCs) and the specified flame retardant bromides (PBDEs and PBBs) are not contained. Green procurement is implemented.
2	Manufacturing	ODSs (ozone-depleting substances: CFCs, halon, carbon tetrachloride, 1.1.1-trichloroethane, HCFCs, HBFC, methyl bromides) which the Montreal Protocol prescribed to reduce or restrict are not used. The amount of joint soldering used is understood.
3	Logistics	Recovered (recycled) paper is used for packing materials. Styrofoam is not used for packing materials. Polyvinyl chloride (PVC) is not used for packing materials.
4	Usage by customers (Product specifications)	Power consumption per function is reduced compared with the conventional products. An energy-saving feature is equipped.
5	Recycling end-of-use products	Recyclable materials defined by TOSHIBA TEC make up 75% or more. Environmental considerations are disclosed on the Internet, homepages and manuals. It is easy to dismantle the product. The product can be disassembled into units with general tools. The name of plastics having a weight of 25 g or more is indicated.
6	Other environmental considerations	The amount of CO_2 emissions is understood, with the LCA method. The product is designed on the assumption of longevity: Spare parts are identified. Items to be inspected are identified. Paper manuals do not exist or recycled paper is used for manuals. Product assessment is conducted.

Compliant products

M-6800 POS terminal for mass merchandisers

e-STUDIO810 high-speed MFP

Collection and Recycling System for End-of-Use Products

Collection and recycling system for copiers

TOSHIBA TEC is promoting collection and recycling of copiers in cooperation with its customers, TOSHIBA INFORMATION EQUIPMENTS CO., LTD., the sales company, and TERM CORP., the recycling firm.
In December 1998, TOSHIBA TEC started the collection and recycling of the used copiers in the Tokyo area and expanded the geographic coverage to other areas such as Nagoya, Osaka, Hiroshima, and so on. By establishing the ninth collection and recycling site in Sendai in the summer of 2001, TOSHIBA TEC completed the nationwide collection and recycling system in Japan for copiers.
To increase the efficiency of collection and recycling of copiers, TOSHIBA TEC is participating in the Recycled Equipment Exchange System of the Japan Business Machine and Information System Industries Association, where the used copiers of other manufacturers traded in by each manufacturer are brought together for mutual exchange.
At the recycling site, the used copier is manually dismantled into each material in order to facilitate the recycling.
TOSHIBA TEC is reinforcing the operation of diverse logistics for collection of used products and strengthening the activities to increase the reuse of the parts.

Dismantling

Note)*1: Replacement centers for the Japan Business Machine and Information System Industries Association
*2: Local collection bases for the replacement centers

Nationwide expansion of collection and recycling

Copier re-manufacturing

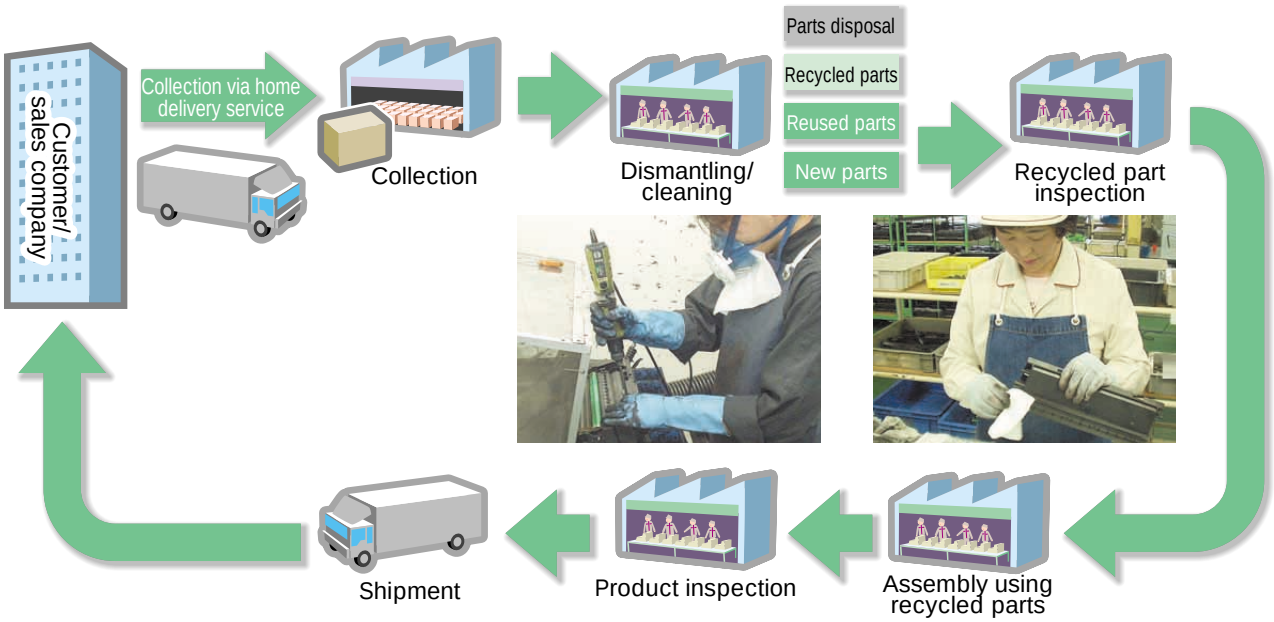
The consumer society, where unnecessary products are disposed of, is to change. TOSHIBA TEC has been challenging to remove usable parts from products to be scrapped and reuse them.
In April 2001, TOSHIBA TEC introduced the PREMAGE651RM in the Japanese market. This product is the first re-manufacturing (RM) digital copier in the industry, which has achieved the reused parts ratio of 60% (in weight). Reuse of the parts is extremely effective for reducing environmental impacts. The PREMAGE651RM is an environmentally conscious product contributing to the establishment of a recycling-based society. Reused parts comply with the quality inspection criteria the same as for new parts.

Reused parts data	
Body weight	250 kg
Total weight of reused parts	Approx. 150 kg
Ratio of reused parts (in weight)	60% or more
Number of reused parts	Approx. 800
Main reused parts	Frame, wire harness, large-capacity paper cassette, printed circuit board, laser unit, etc.

PREMAGE651RM
Permitted to bear the ENERGY STAR® label and the Eco Mark.

Process unit of facsimile machines

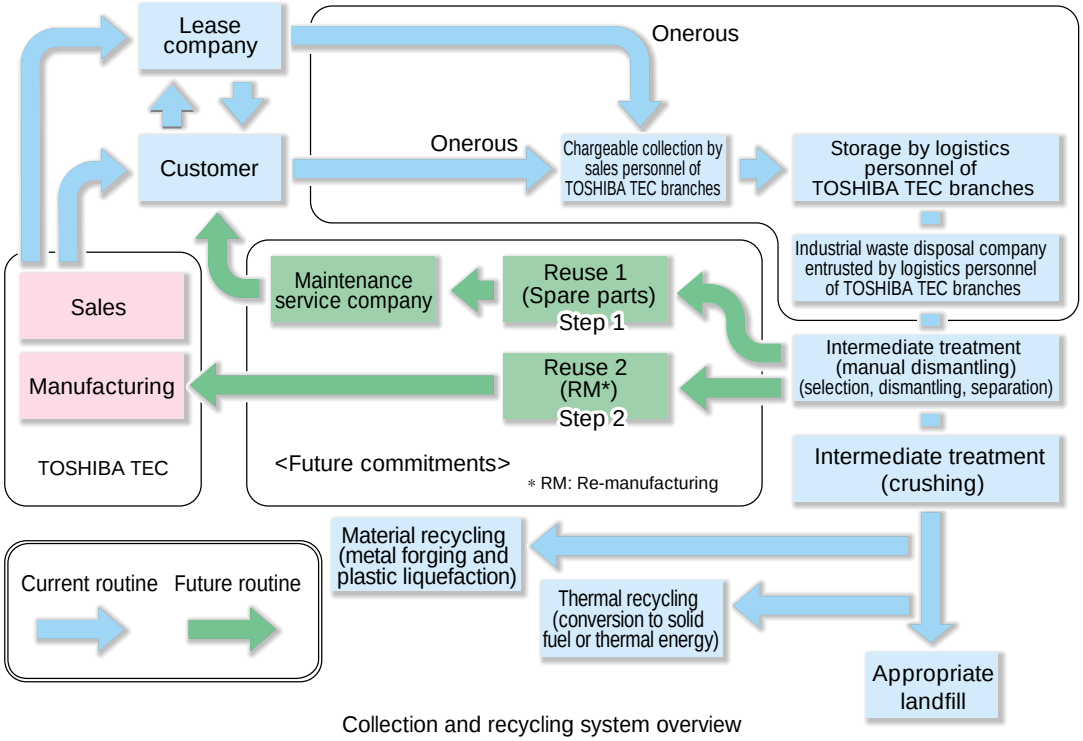
TOSHIBA TEC is developing a reuse and recycling business for the process units of facsimile machines in the Japanese market. Consequently, the recycling system that collects used process units from the field, selects and recycles reusable parts and supplies them again to the market has been established. Recycled process units under strict quality control ensure quality similar to a new process unit and satisfy quality requirements from customers. TOSHIBA TEC will continue to reduce parts disposal and increase the number of reused parts.



Collection and Recycling System for End-of-Use Products

Collection and recycling system for retail information system products

The Retail Information Systems Company of TOSHIBA TEC started the trial collection and recycling of end-of-use products in the Kanto, Chubu, Kansai and Hokkaido areas in January 2001. The collection and recycling system started full-scale operations in April 2002. This system will be expanded on a nationwide basis in October 2002. The collected products are manually dismantled to optimize separation according to materials, toward the expansion of material recycling.



Collection and recycling system overview

Intermediate treatment (manual dismantling)

Collected product

Collection and recycling expanded on a nationwide basis

Environmental Considerations on a Global Basis

TOSHIBA TEC has subsidiary companies in many parts of the world and conducts various environmental protection activities, in the production and sales phases on a global basis.

Malaysia

TIM ELECTRONICS SDN. BHD. is the base for manufacturing MFPs and facsimile machines. The Company is moving forward with adopting a pulp mold as package cushioning material for small products, to reduce environmental impacts and cost. Pulp mold is used for 75% of the packaging of the products currently manufactured. Corrugated cardboard is used for packages for the larger sized products, instead of Styrofoam. . By facilitating recycling through using recycled materials and changing the cushioning material from corrugated cardboard to pulp mold, a complicated cushioning structure can be formed and reduction in the number of parts and amount of materials can be achieved. Pulp mold can be further recycled and does not emit dioxins or other toxic substances when incinerated.
The use of Styrofoam for packaging the TOSHIBA TEC's products was completely abolished. However, it is still used for the packages of purchased parts. Such Styrofoam is pelletized and recycled as plastic products or packaging materials for home electric appliances.

Used Styrofoam packages

Pelletized Styrofoam

China

TOSHIBA COPYING MACHINE (Shenzhen) CO., LTD. was accredited with ISO 14001 in April 1999 and has been focusing on the enhancement of environmental management. As part of it, the Company started to facilitate green procurement.

Billboard indicating the environmental policy

Main purposes of green procurement

(1) Parts delivered to the Company shall comply with the Chinese or international laws and regulations and shall not contain chemical substances directly or indirectly affecting the human body or environment.
(2) Any environmental pollution or harm to employees' health shall not be brought about in the manufacturing process.

Supplier selection procedure

(1) Selected 60 out of approx. 80 suppliers, based on internal judgment in terms of management, environmental protection system, and credit.
(2) Distributed the inspection sheet to the 60 suppliers, in accordance with the green procurement guidelines.
(3) Evaluated and analyzed the returned inspection sheet. Provided the suppliers who are less conscious of ISO 14001 with on-sight or written instructions and made requests to improve with a time limit.
(4) Implemented environmental audit. Requested to take actions if any problems were found.

Activities

May 2002	Distributed the inspection sheet to the suppliers in accordance with the green procurement guidelines.
July 2002	Requested improvements completed in the 60 suppliers
September 2002	Will complete environmental audits.
October 2002	Will issue a final report.

Environmental Considerations on a Global Basis

Germany

A comprehensive part of the TOSHIBA TEC GERMANY IMAGING SYSTEMS GmbH's environmental protection program is the collection and recycling of spare parts and consumables. This program is implemented to effectively use the resources and reduce significant waste disposal. It has been expanded throughout the whole of Europe for all spare parts and consumables, including photo conductors, toner containers, fuser rollers and blades. In Germany, the end-of-use parts are collected by the dealers using special recycle boxes. The parts are brought together to the main sorting center in Germany and sorted according to how they are to be reused.

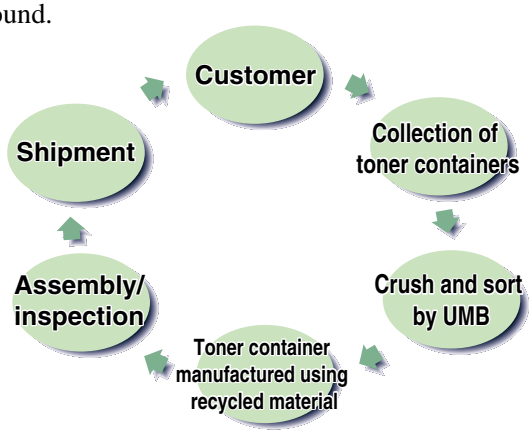
Recycle box
The red recycle box collects the toner containers and the yellow one collects photo conductors, fuser rollers and blades.

As an example, the fuser rollers are sent back to the roller manufacturer and are re-coated in a special process. Following a comprehensive quality control phase, the fuser rollers are delivered to the customers.

Facility to re-coat fuser rollers and shipment inspection

France

TOSHIBA TEC FRANCE IMAGING SYSTEMS S.A. in France, which is the base for manufacturing the copiers and consumables, is implementing the collection and recycling system that is called Unité Mobile de Broyage (UMB). This system uses trucks equipped with a device where end-of-life toner containers are collected from customers can be ground.



UMB recycle system

The device is installed to a 40-feet container truck and can be transported anywhere in France. The plastics are recycled as plastic material for manufacturing toner containers, which achieves a closed recycling system.

Container truck equipped with a plastic crushing device

Equipment in the container truck

Collected toner containers are separated from the labels and foreign materials, and then transferred to the grinder with the conveyor. Ground plastics are separated from the waste toner by the classifier.
The equipment is capable of processing 500 kg per day.

United States

In 1999 the toner manufacturing facility of TOSHIBA AMERICA BUSINESS SOLUTIONS, INC. (TABS) was certified to ISO 14001. Taking environmental actions for the entire business, covering production and service, TABS is moving forward with zero landfill. To this end, collection and recycling have been applied to white copy paper and corrugated cardboard from 1994, and copier's toner containers from 1996. As a result, TABS kept 3000 tons of copy paper, 500 tons of corrugated cardboard, and 42 tons of waste toner containers from the local landfill.

COLUMBUS recycling program

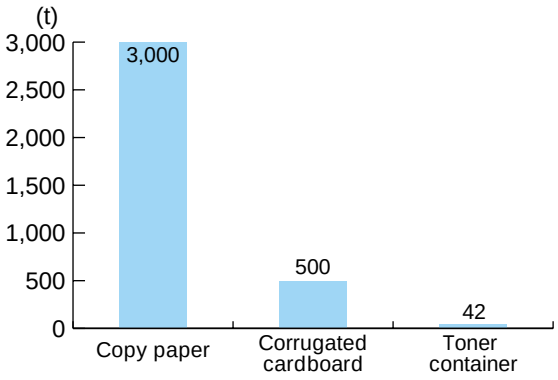
TABS has been implementing a recycle program for toner containers used in the copier since February 1996. This program is called COLUMBUS, which comes from COLlection of Used containers in the Market which Belongs to the US. End-of-use toner containers are delivered to the special recycling center via the United Parcel Service (UPS). The delivered toner containers are separated and crushed into pellets. Pelletized plastics are reused as the toner container via the resin manufacturer and the toner container molder. Thus, a closed loop is achieved. This program has recycled approx. 225,000 units of toner containers thus far. Part of them are sent to a local power plant for energy recovery.

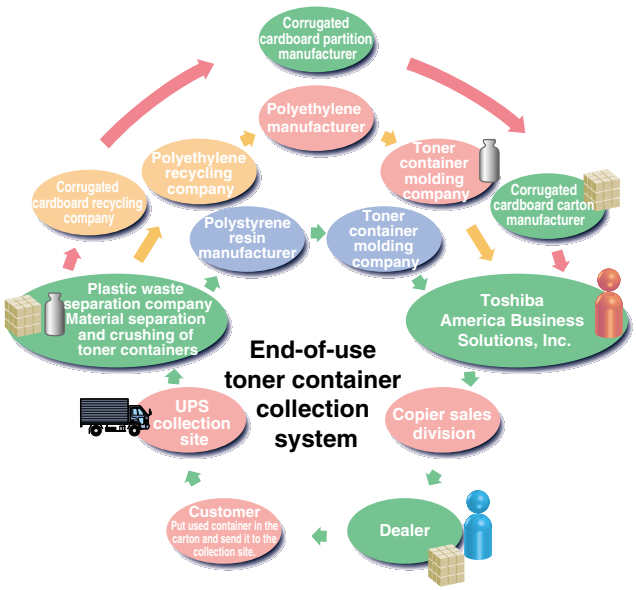
Waste minimization

Waste minimization is very important for environmental release reduction. Production waste primarily consists of unused raw materials. Waste of raw materials is a significant expense for our business and creates a negative impact on the environment. TABS's continuous improvement activities have allowed for a reduction in raw material waste from 340 tons in 1992 to 140 tons in 2001.

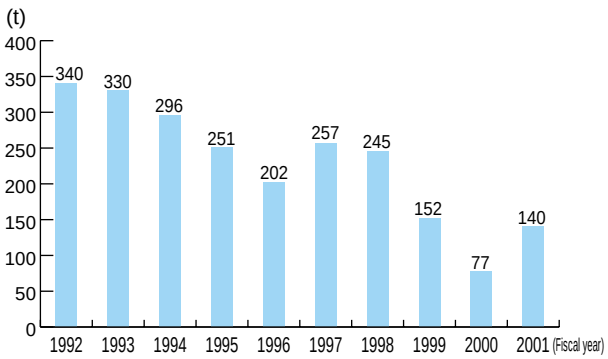
Mr. Bill Nygard
Director HR & Administration
Toner Production Division
TOSHIBA AMERICA BUSINESS SOLUTIONS, INC.

Tons kept from landfill





Total raw material waste



Philanthropy and Social Activities

Voluntary cleaning activities

TOSHIBA TEC joins local environmental protection organizations in cleaning activities.

Sakuragawa River

Place:Area around the Shirataki Park, Mishima
Activities:Weeding and collection of garbage and empty cans from the bank and the riverbed

Daibagawa River

Place:Area between the Tukimibashi Bridge and the Nishikidabashi Bridge, Mishima
Activities:Weeding and collection of garbage and empty cans on the dike

Fukazawagawa River

Place:Area around the Fukazawagawa dike and the Mifuku interchange, Ohito
Activities:Weeding and collection of garbage and empty cans

Voluntary collection of unlawfully damped garbage

Unlawfully garbage damping preventing campaign and garbage collection

Place:Yabitsu line of the prefectural road, Hadano
Activities:Collection of damped large-size refuse

Participation in overseas afforestation activity

On a voluntary basis TOSHIBA TEC staff participated in the 8th Children's Forest Program sponsored by the Japanese Electrical Electric & Information Union. This program is promoted in order to think of symbiosis with the environment by protecting the vegetation on the Earth and communicating with local children through joint afforestation, while the natural environment is rapidly disappearing.

The afforestation area was located around six elementary schools in Cheng Mai, the second largest city in Thailand. Struggling with steep and muddy slopes of 30 degrees, the participants planted 24,400 jambolan plum seedings. They spent three days weeding, in cooperation with local pupils.

The participants deeply recognized the importance of handing the sound environment to the next generation.

Communication with local community

Hadano commerce and industry festival

TOSHIBA TEC participated in the 27th Hadano Commerce and Industry Festival. The Hadano Plant deepens communication with the Hadano citizens, through demonstrating environmentally conscious products in the Industry Exhibition Booth, jointly with 6 other companies in the city.

Ohito Business Center summer festival

The Ohito Business Center was thronged with the employee's families and neighbors in the annual summer festival. The campaign for environmental issues, including zero emissions was conducted at the same time this year.

Mishima Works summer festival

The employees' families as well as neighbors participated in the festival and enjoyed traditional songs and dances. Those present were given energy-saving campaign fans (see page 28).

Exhibition at Eco-Products 2001

The Eco-Products 2001 was held at the Tokyo Big Sight from December 13 to 15, 2001. TOSHIBA TEC exhibited its environmentally conscious products to show its commitments to global and local environmental protection.

Exhibitions
Document Processing & Telecommunication Systems Company:
"Environmental considerations in copiers (use of the IH technology)"
Home Electric Appliances Group:
"VC-M1X MAGIC CYCLONE vacuum cleaner"

The actions for lead-free soldering were introduced in the presentation given by the Toshiba Group.

Exhibition at Shizuoka environment, welfare and technologies exhibition 2001

TOSHIBA TEC exhibited its equipment in the 2nd Shizuoka Environment, Welfare and Technologies Exhibition 2001, held on November 23 to 25, 2000, at Twin Messe Shizuoka.
Since the Ohito Business Center and the Mishima Works, the production bases for the TOSHIBA TEC products, main production subsidiary companies and many affiliated companies are located in Shizuoka prefecture, the TOSHIBA TEC booth welcomed a large number of visitors.

No-car day campaign to help with air pollution prevention

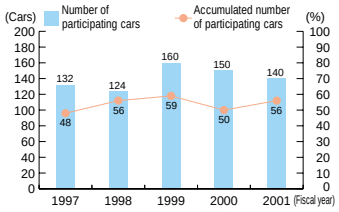
Activity at the Hadano Plant

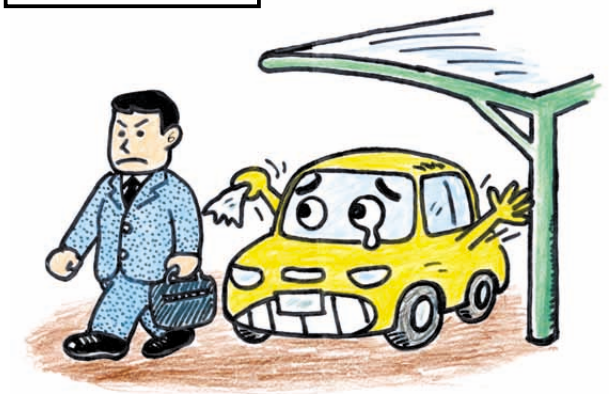
The no-car day campaign has been implemented since 1997 to recover a clear sky. This campaign is conducted on Wednesdays from November through January. On these days, the employees are restrained from commuting by car.

Please cooperate in promoting No-car Day Campaign

Period: Every Wednesday from November through January
Target cars:Cars having a registration number with last digit the same as the date
The target cars for tomorrow (January 27) have the registration number whose last digit is 7.

Campaign participating cars

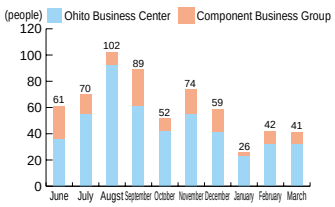




Activity at the Ohito Business Center

No-car day is set for the third Wednesday each month. The accumulated number of participants in fiscal 2001 was 621. On the day before the no-car day, the on-premises broadcasting appeals to the employees to cooperate on the campaign.

Campaign participating cars



Acceptance of site visit (Mishima)

Fujieda local government officials

Purpose: Observation of the TOSHIBA TEC's environmental protection activities for reference in order to be ISO 14001-certified.
Observations: 1. How TOSHIBA TEC is moving forward with global warming prevention
2. Environmental protection activities on the site
3. Environment-related facilities
No. of visitors: 40

Study group from newspaper publishing companies

Purpose: Observation of the TOSHIBA TEC's environmental protection by reporters from 8 newspaper publishing companies, including Nihon Keizai Shimbun, Inc.
Observations: 1. Commitments to environmental protection activities and achievements
2. Environment-related facilities
No. of visitors: 9

Kawasaki Heavy Industry's environmental study group

Purpose: Observation of the TOSHIBA TEC's environmental protection by Kawasaki Heavy Industries Ltd. and its 28 affiliated companies.
Observations: 1. Commitments to environmental protection activities and achievements
2. Environment-related facilities
No. of visitors: 39

Business Site Information in Fiscal 2001

Main environmental data from domestic business sites

The symbol "–" indicates that the relevant substance is not used in the business site, or that the substance was not measured since it is not subject to measurement.

Site	Location	Power consumed	Water and sewage	Water discharge	Water discharged to	Environmental accounting		Disposal		Emissions to air			Emissions to water								
						Environmental investment	Environmental expenditure	Recycling	Landfill	Flyash	NOx	SOx	BOD	COD	SS	Copper	Zinc	Dissolved iron	Dissolved manganese	Total chromium	Fluorine	Total nitrogen
		Thousand kW/h	m³	m³		¥thousand	¥thousand	t	t	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
Ohito Business Center	570 Ohito, Ohito-cho, Tagata-gun, Shizuoka-ken	10,380	77,446	38,575	Rivers and sewage	38,160	160,561	1,331	2.4	0.5	21.4	16.0	58.2	94.4	48.8	–	–	–	–	–	–	–
Mishima Works	6-78 Minami-cho, Mishima-shi, Shizuoka-ken	7,790	73,760	53,206	Sewage	74,000	310,958	685	36.6	–	–	–	36.4	–	110.8	3.2	7.9	30.1	6.3	3.2	3.2	–
Hadano Plant	Hadano-shi, Kanagawa-ken	6,790	19,694	19,694	Rivers and sewage	24,375	168,581	1,135	53.8	26.8	270.9	95.5	7.8	15.2	15.4	–	–	–	–	–	–	–

Main environmental data from domestic production companies

Site	Location	Power consumed	Water and sewage	Water discharge	Water discharged to	Environmental accounting		Disposal	
						Environmental investment	Environmental expenditure	Recycling	Landfill
		Thousand kW/h	m³	m³		¥thousand	¥thousand	t	t
Fujiken Co. Ltd.	Nitta, Kannami-cho, Tagata-gun, Shizuoka-ken	950	5,779	5,779	Rivers and sewage	60	47,867	33	18.0
Tosei Co., Ltd.	Kamishima, Ohito^cho, Tagata-gun, Shizuoka-ken	1,530	7,905	7,780	Sewage	0	17,425	282	10.0
TEC Izu Denshi Co., Ltd.	Ohito, Ohito-cho, Tagata-gun, Shizuoka-ken	520	1,454	1,454	Rivers and sewage	0	17,301	128	11.3

Main environmental data from overseas production companies

Site	Location	Power consumed	Water and sewage	Water discharge	Water discharged to	Environmental accounting		Disposal	
						Environmental investment	Environmental expenditure	Recycling	Landfill
		Thousand kW/h	m³	m³		¥thousand	¥thousand	t	t
TSE	Singapore	4,390	22,860	22,860	Sewage	756	7,041	24	24.0
TIM	Malaysia	3,470	39,082	39,082	Rivers and sewage	0	1,670	17	49.9
TEIS	France	10,770	5,592	5,592	Sewage	5,387	11,966	539	168.6
TCOS	China	4,720	254,292	254,292	Rivers and sewage	3,147	3,070	153	116.0

Other data from TOSHIBA TEC

Environmental investments (¥thousand)

Site	Ohito Business Center	Mishima Works	Hadano Plant	Total
Air	0	0	1,239	1,239
Water quality	2,520	11,000	151	13,671
Soil	3,502	1,000	4,888	9,390
Noise and vibration	0	4,000	344	4,344
Energy-saving measures	28,888	58,000	4,080	90,968
Waste disposal	0	0	4,528	4,528
Contribution to local community	0	0	0	0
Administration and others	3,250	0	9,145	12,395
Total	38,160	74,000	24,375	136,535

Environmental education (Number of employees)

	Ohito Business Center		Mishima Works		Hadano Plant		Total	
	No. of employees	Total number of hours	No. of employees	Total number of hours	No. of employees	Total number of hours	No. of employees	Total number of hours
ISO 14001-related	1,924	4,094	2,830	2,970	755	283	5,509	7,347
Environmental qualification-related	3	58	0	0	0	0	3	58
Lectures and others	18	52	28	256	20	56	66	364
Total	1,945	4,204	2,858	3,226	775	339	5,578	7,769

CFC collection (kg)

Site	Ohito Business Center	Mishima Works	Hadano Plant	Total
CFC collection	65.4	32.8	2.3	100.5

Chemical substances (Substances subject to PRTR) (t)

	Ohito Business Center			Mishima Works			Hadano Plant			Total		
	Amount handled	Amount released	Amount transferred/ consumed	Amount handled	Amount released	Amount transferred/ consumed	Amount handled	Amount released	Amount transferred/ consumed	Amount handled	Amount released	Amount transferred/ consumed
2-aminoethanol	0.01	0	0.01							0.01	0	0.01
Antimony and its compounds	5.91	0	5.91							5.91	0	5.91
Silver and its water-soluble compounds	0.01	0	0.01							0.01	0	0.01
Toluene	0.01	0.01	0	0.02	0.02	0				0.03	0.03	0
Lead and its compounds	3.76	0	3.76				0.11	0	0.11	3.87	0	3.87
4,4'-isopropylidenediphenol							5.73	0.29	5.44	5.73	0.29	5.44
Styrene							0.43	0.43	0	0.43	0.43	0
1,3,5,7-tetraazatricyclo							0.61	0	0.61	0.61	0	0.61
Phenol							0.25	0	0.25	0.25	0	0.25
Boron and its compounds							0.64	0	0.64	0.64	0	0.64

Other Information

Environmental laws and regulations and environmental communication

Violations: None
External environmentrelated accidents (emergency): None
Penalty/fine: None
Environmental lawsuits: None
Internal environmentrelated accidents (abnormality): 2 (see the following)
Environmental complaints: None
Soil pollution newly discovered: None

[Accidents]

Hydrochloric acid tank pipe broken

An operator mistakenly applied a shock to the hydrochloric acid tank pipe in the water purifying machine. Consequently the pipe cracked and hydrochloric acid released inside the dike. The released hydrochloric acid did not go beyond the dike. It was neutralized and then processed through the waste water treatment equipment.


Flexible structure adopted in piping


Roof and fence installed for preventing danger

Oil release from the truck

Oil leakage from the truck of the affiliating company was found and reported to the guard. The guard immediately absorbed the oil and cleaned the road using special equipment prepared for abnormalities.


Cleaning

Next version

The 2003 issue will be published in August 2003.

Items complying with the Environmental Reporting Guidelines (Fiscal Year 2000 Version) issued by the Ministry of the Environment

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8.	State of research and development of technologies for environmental conservation and environment-conscious product/services (Design for the Environment [DfE])	24, 25, 32 to 35
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11.	State of social contribution related to environment	44, 45
12.	A complete picture of environmental burdens	7, 8, 9, 10, 11
13.	State of environmental burdens from material/energy input, and mitigation measures	7, 11, 16, 28, 29, 30, 38-40, 46
14.	State of environmental burdens at the upstream (purchase of products/services), and mitigation measures	26, 27, 36, 37
15.	State of environmental burden from output of refuses, and mitigation measures	8 to 11, 16, 18, 29, 30, 38 to 40, 46
16.	State of environmental burdens at the downstream (providing products/services), and mitigation measures	32 to 40
17.	State of environmental burdens from transportation, and mitigation measures	9, 31
18.	State of environmental burdens from cumulative soil contamination, land utilization and other environmental risks, and mitigation measures	18, 19, 47

For details about TOSHIBA TEC's domestic production subsidiary companies, please refer to the Environmental Report 2001 (the previous issue) or TOSHIBA TEC's homepage.

Cover illustration

A cloud, forest and water drops are placed on the symbol of nature - the sky, the sea, and the Earth. This illustration alludes to TOSHIBA TEC 's commitments to environmental protection. The three leaves indicates this report is the third issue.

TOSHIBA TEC's homepage
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Toshiba Group Earth Protection Mark

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