Efforts for Environmental Conservation

Environmental Impact Caused by Business Operations and Past Environmental Conservation Activities

The Nitto Denko Group mainly manufactures adhesive tapes and optical films; and in the manufacturing process, the impact the Group has on the global environment stems from its use of energy and organic solvents and its generation of industrial waste. Recognizing this fact, we have been vigorously conducting environmental conservation activities to minimize our environmental impact. These activities include energy saving activities, the promotion of a more efficient manufacturing process, and the treatment and recycling of substances of concern according to their individual nature.

1 Reducing Industrial Waste: Resource and Cost Saving

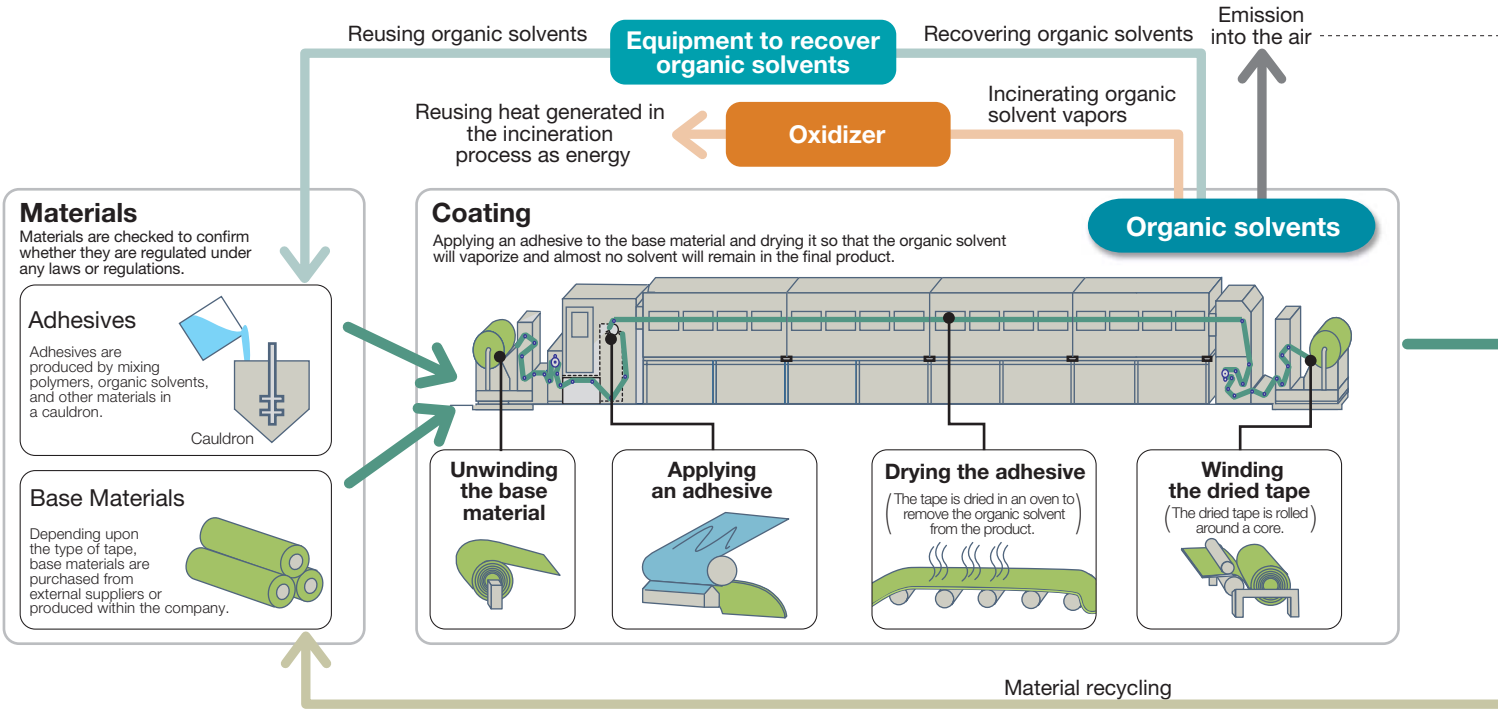
Waste generated in the manufacturing process includes waste from the tape cutting process, punching process, and defective products. We sort this waste into two categories: waste to be reused as materials (waste suitable for material recycling) and waste to be incinerated to generate usable heat (waste suitable for thermal recycling). In this way, we are able to make effective use of waste through recycling measures.

Additionally, we promote the development of manufacturing methods that will not generate waste (waste control at the source) to achieve total low-cost manufacturing.

2 Reducing CO_2 Emissions: Energy Saving and the Recovery of Waste Heat

To reduce CO_2 emissions, we are positively introducing energy-saving equipment, cogeneration systems, and solar power generation systems while replacing fuels with ones that emit less CO_2.

CO_2 is emitted when vapors from organic solvents used in manufacturing tapes are incinerated. In response, we have installed equipment that recovers heat generated in the incineration process in order to utilize the recovered heat energy to reduce fuel consumption.



History of the Nitto Denko Group's Environmental Conservation Activities

Nitto Denko Group's Activity	Environmental Legislation in Japan and Other Trends
1960s Installed solvent vapor recovery equipment ③ Began using low-sulfur heavy oil **1970s** Started producing adhesive tapes without the use of solvents ③ **1980s** Started the installation of a rectifier to reuse recovered solvent vapors ③ Installed an oxidizer to incinerate organic solvent vapors ③ Recycled industrial waste as fuel ① **1992** Established the Environment Committee Established Nitto U-tech (present Aichi Nitto Denko) to expand the recycling business ①	**1967** The Basic Law for Environmental Pollution Control was enacted. **1968** The Air Pollution Control Law was enacted. **1970** The Water Pollution Control Law and other environmental laws were enacted. **1991** The Keidanren Global Environment Charter was established. The Law for the Promotion of Effective Utilities of Resources was enacted.

Nitto Denko Group's Activity	Environmental Legislation in Japan and Other Trends
1993 Established a sector to manage environmental issues for the entire Group Formulated the Nitto Denko Environmental Conservation Activities Plan (Voluntary Environmental Plan) **1994** Discontinued the use of specified CFCs ④ **1995** Established the Regulations on the Management of Special Chemical Substances ④ Established the Regulations on the Preliminary Safety Assessment of Materials, Work in Process, and Products **1996** Established the Corporate Environmental Policy Built a database of materials regulated under laws and regulations ④ **1997** Nitto Denko Kyushu Plant (present Nitto Electronics Kyushu) became the first site to acquire ISO 14001 certification in the Nitto Denko Group.	**1993** The Basic Environment Law was enacted. **1996** The Keidanren Appeal on Environment was announced. ISO 14001, an international standard on environmental management, was issued.

Nitto Denko Group's Activity
1998 Added "acquisition of ISO 14001 certification" and "giving environmental consideration when expanding business overseas" to targets in the Voluntary Environmental Plan to incorporate the ideas described in the Keidanren Appeal on Environment Discontinued the use of trichloroethylene ④ All Nitto Denko Corporation plants acquired ISO 14001 certification. **1999** Installed a cogeneration system (supplying both heat and electricity) ② Began relevant reporting under the Pollutant Release and Transfer Register (PRTR) system ④ Published its first environmental report Established the Regulations on the Management of Chemicals ④

3 Preventing Emissions of Organic Solvent Vapors into the Air: Controlling Emissions at the Source and Implementing Measures to Prevent Air Pollution

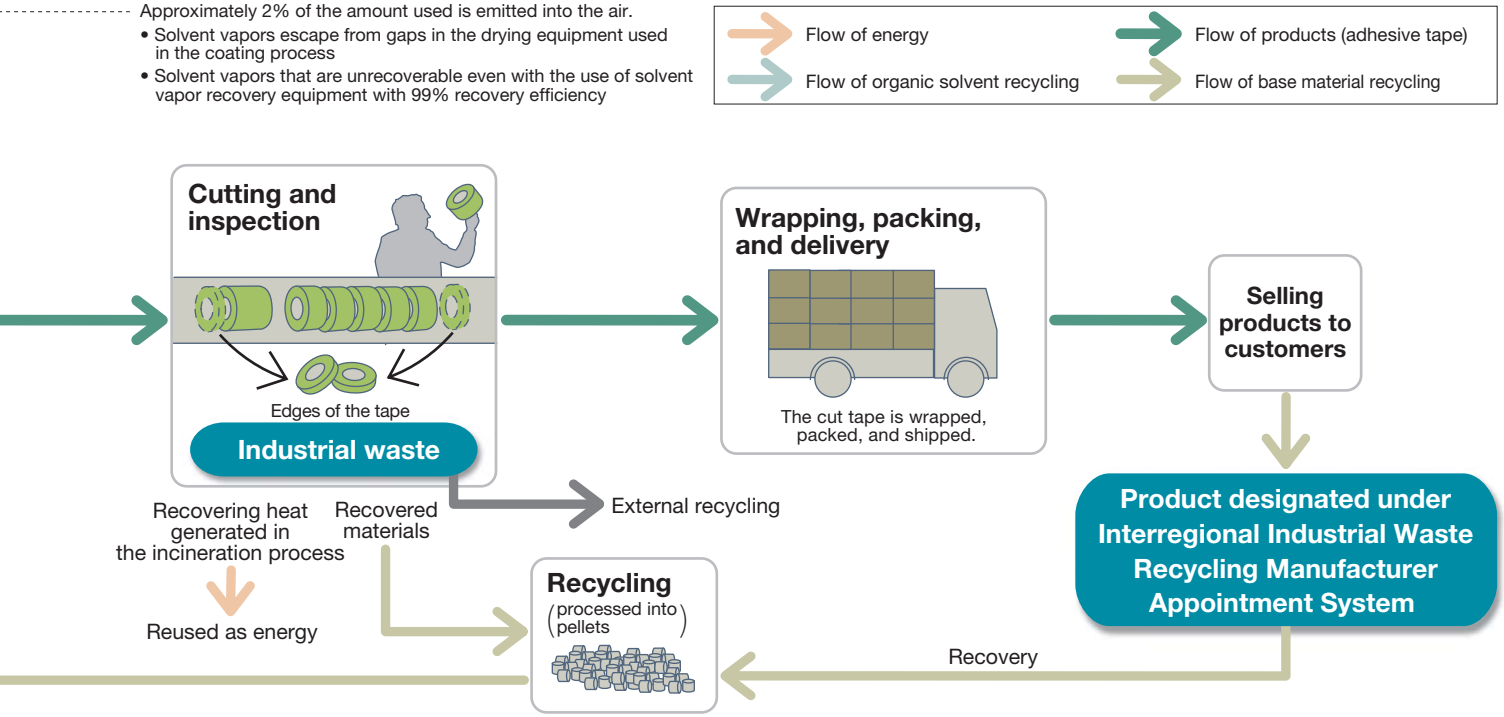
We use organic solvents as solvating media in manufacturing adhesives. These solvents, if vaporized and emitted into the air, will cause air pollution.

To prevent organic solvent vapors from being emitted into the air, we use equipment to recover and reuse it as organic solvents. In addition, we incinerate the vapors using an oxidizer and use the heat generated in the incineration process as thermal energy. Also, to reduce the total use of organic solvents, we are revising our manufacturing process and developing products that can be manufactured without the use of organic solvents.

4 Properly Managing Chemical Substances: In Compliance with Worldwide Laws and Regulations

We have set up a chemical substance management database to properly manage chemical substances used as product materials as well as those used in some of our manufacturing processes, thereby preventing these substances from causing damage to human health, ecosystems, and the environment.

In developing a new product, all related departments and sections work together to confirm that the product can be manufactured without the use of regulated substances, referring to relevant laws and regulations implemented around the world. Additionally, we change the materials used in existing products from time to time in response to revisions to related laws and regulations of each country. For substances that are not regulated under any laws or regulations but may adversely affect the environment or human health, we look into alternatives as much as possible.



	Environmental Legislation in Japan and Other Trends
	1998 The Law concerning the Promotion of Measures to Cope with Global Warming was enacted. **1999** The Law concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management was enacted.

Nitto Denko Group's Activity	Environmental Legislation in Japan and Other Trends
2000 Introduced environmental accounting to Nitto Denko Corporation on a non-consolidated basis All major domestic manufacturing companies of the Nitto Denko Group acquired ISO 14001 certification. **2001** Established the Guidelines for Green Procurement Five of the Nitto Denko Group's domestic companies introduced environmental accounting. Abolished the Regulations on the Management of Special Chemical Substances and established the Nitto Guidelines on the Voluntary Management of Chemical Substances 4 Introduced material flow cost accounting (MFCA) on an experimental basis **2002** Seven overseas Nitto Denko Group companies started environmental accounting. **2003** Nitto Denko Corporation achieved a 99% or more recycling rate. 1 Held the 1st Environment and Safety Global Meeting	**2000** The Fundamental Law for Establishing a Sound Material-Cycle Society was enacted. The Law for the Promotion of Effective Utilization of Resources was enacted. The Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (Law on Promoting Green Purchasing) was enacted. **2001** The Law concerning Special Measures for Promotion of Proper Treatment of PCB Wastes (PCB Special Measures Law) was enacted. The Law concerning the Recovery and Destruction of Fluorocarbons (Fluorocarbons Recovery and Destruction Law) was enacted.

Nitto Denko Group's Activity	Environmental Legislation in Japan and Other Trends
2004 Published an environmental and social report 2 Discontinued the use of SF_6 (a greenhouse gas) Established an environmental management indicator Made environmental investment in the Toyohashi Plant based on MFCA The Onomichi Plant concluded an agreement with ESCO (an energy service company) as a means to save energy. 2 **2005** Published a CSR report Started the operation of a chemical substance management database for the entire Group 4 Started the full operation of a recycling center at the Toyohashi Plant 1 Discontinued the use of all chlorine-based organic solvents as a result of the Toyohashi Plant discontinuing the use of dichloromethane	**2002** The Soil Contamination Countermeasures Law was enacted. **2005** The Kyoto Protocol was enforced.