Making lives better, easier and more complete.
3M Vision

3M Technology Advancing Every Company
3M Products Enhancing Every Home
3M Innovation Improving Every Life

Science...is just science.
Until you make it improve the world.

Science...is just science. Until you apply it to something.
Make it do something. Change something. Improve something.

3M Overview

From one idea to the next.
First begun in 1902,

3M’s long tradition of science persists today. 3M’s history began over a century ago, in 1902, in Minnesota, U.S.A., where it was originally established to mine corundum ore for use in grinding wheels. However, the ore recovered turned out to be of a weaker quality, causing the company to turn to the manufacture and sale of sandpaper. The water-resistant sandpaper released by the company in 1921, a world-first, was an overnight hit. As a result, the company turned to abrasives and adhesives technology. Since then, we at 3M have moved from one idea to the next, linking innovation with utility to create a diverse array of products and services.

3M Products

$32.8 billion

Employees

About 90,000 people

3M Japan Overview

The 3M Japan Group turns its eyes outward, poised to create innovation on the global market.

3M Japan Limited was established in 1960 as 3M’s first local subsidiary in Asia, where it contributed to Japan’s rapid growth through the import and sale of products such as tapes, reflective materials, adhesives and abrasives. In 1961 3M Japan established the Sagamihara Site, which has become its base of current research and development activities. The 3M Japan Products Limited Yamagata Site (formerly Yamagata 3M Limited) was established in 1970 as the largest manufacturing base in Japan, making the 3M Japan Group an even greater global hub. Now the Group operates with about 2,800 employees, playing a core role in the global 3M group. It also serves as a regional leader supporting astounding growth in Asian markets.

3M Japan Products

About 317.7 billion yen

Employees

About 2,700 people

3M Innovation

3M Technology Advancing Every Company
3M Products Enhancing Every Home
3M Innovation Improving Every Life
Solutions only 3M can offer, as a science company that pursues technology.

Delivering innovations developed in Japan to the world: An important base in Asia

Since its inauguration as the first subsidiary in Asia in 1960, the 3M Japan Group has delivered products to meet trends in the Japanese market, making use of 3M’s global R&D platform and its sourcing and production network. Currently we serve as a major center in Asia to provide products made in Japan to Asia and around the world.

Focusing on 5 megatrends to grow in the mature Japanese market

The 3M Japan Group’s strength has been industrial business to support Japanese export industries such as the automotive and electronics industries. In recent years, we have also focused on domestic-demand-based businesses, including health care and consumer businesses, as well as industrial. With this balanced focus on both domestic and export businesses, we will be less affected by the impact of recession and achieve sustainable growth. The 3M Japan Group has drawn up growth strategies focusing on five megatrends in the Japanese market: (1) Healthcare & Aging Society–Innovate with local products to meet the needs of Japan, the most fast-paced aging society in the world. (2) Government & Infrastructure–Sophisticated Design and Renovation of Commercial Facilities for the 2020 Olympics. (3) Sustainable energy–Offer solutions to concerns about the environment and energy conservation. (4) New Buying Behavior–Strengthen our e-commerce capabilities. (5) High-tech Industry–Leverage the business in areas such as automotive, telecommunications and electronic devices, in which Japan originally has strong competitiveness.

Achieving sustainable growth through relationships built on trust with every stakeholder

In order for the 3M Japan Group to keep growing, it is essential to respond to social issues through dialogues with stakeholders based on our solid compliance and risk management. This process will create new value, and we will further strengthen relationships of trust with our customers, suppliers, employees, communities, and other stakeholders. I believe that the 3M Japan Group’s assets of ingenious technologies, high performing talent, and strong customer bases enable us to achieve remarkable results.

Steven Vander Louw
President
3M Japan Limited

(as of June 2018)
Offering 55,000 products that leverage our science for diverse industrial fields as well as for everyday life.

3M strengths: Ten fields

- Automotive products
- Commercial Solutions
- Consumer
- Design & Construction
- Electronics
- Energy
- Health Care
- Manufacturing
- Safety
- Transportation

Five business groups

- Industrial
- Electronics & Energy
- Safety & Graphics
- Consumer
- Health Care

Major fields

- Industrial
- Electronic & Energy
- Safety & Graphics
- Consumer
- Health Care

Cross-divisional Efforts

- National Resilience Project
- Promotion of e-commerce and digital marketing

Industrial

Anticipating the needs of changing times, 3M’s range of products can be found in a variety of industrial fields.

Tapes, Adhesives

Industrial Adhesives & Tapes Division

- 3M™ VHB™ Acrylic Foam Tape

Abrasives

Abrasives Systems Division

- 3M™ Cubitron™ II Products

Fluorine chemical products

Advanced Materials Division

- 3M™ Dyneon™ PTFE Compounds and TFM™ PTFE Compounds

Filter materials

Separation and Purification Sciences Division

- Betapure™ Polypropylene Non-woven Depth Filter Cartridge SKYLY/SKYB Series (0.5μm ~ 10μm)

Automotive interior and exterior products

Automotive and Aerospace Solutions Division

- 3M™ Light Strin

Automotive repair products

Automotive Aftermarket Division

- 3M™ Masking Tape
Electronics & Energy
Providing products to support a new generation.

- **Power and communications products**
  - **Electrical Interconnect Solution Division**
    - **3M™ Cold Shrink Tube**
      Tube used for insulation protection and waterproofing of electrical wire connections and cable connectors. Removal of the core after positioning the tube to shrink into position to form a tight seal, reducing installation time.

- **Electrical and electronic products**
  - **Electrical Interconnect Solution Division**
    - **3M™ Mini-Clamp Connector**
      Connector that enables the connection of sensor leads and control wires within various types of manufacturing equipment, including that for semiconductors and automated transferring systems. Requires no special tools, thus reducing man-hours.

- **Fluorine chemical products**
  - **Electronics Materials Solutions Division**
    - **3M™ Novec™ Engineered Fluids**
      Non-flammable fluorine-based liquid for a range of industrial uses. Its excellent electric insulation and thermal stability are useful for chemical synthesis reactions at ultra-low temperatures and temperature-regulating media for semiconductor manufacturing machines.

- **Machine tool related products**
  - **Electronics Materials Solutions Division**
    - **3M™ 3D printer platform sheet 3099AB**
      The world’s first 3D printer-specialized sheet. The specially processed surface firmly fixes the resin, and the formed object can be removed cleanly from the sheet. The product greatly improves the precision in forming a shape with ABS resin, which has been difficult to model.

Safety & Graphics
Supporting everyday life across a broad range of fields, from construction, signs and displays to public safety.

- **Design & Construction**
  - **Construction Markets Division**
    - **3M™ DI-NOC™ Film**
      A wide variety of interior films including wood-grain, monochrome and abstract designs to stimulate the imagination of any designer. Long lasting and easy to install. Approved as non-combustible. The film provides beautiful finishes for offices, stores, and hotels.

- **Graphics products**
  - **Commercial Graphics Division**
    - **3M™ Scotchcal™ Graphic Film**
      Graphic products for a wide range of applications such as signs, displays, buses, train cars and planes.

- **Safety and security products**
  - **Transportation Safety Division**
    - **3M™ Diamond Grade™ DG3**
      Reflective sheeting traffic signs that shine brightly from afar even at night. High weather-resistance ensures that signs remain clearly visible for longer.

- **Cleaning products**
  - **Cleaning and Workplace Safety Division**
    - **3M™ Wet Disposable Mop**
      Wet disposable mop, new mopping system, contributes considerably to increase the floor cleaning productivity and hygienic control at food service restaurants, convenience stores, and other chain operating customers.

- **Personal safety products**
  - **Personal Safety Division**
    - **3M™ VFlex™ Particulate Respirators**
      Disposable low-cost mask approved by the Ministry of Health, Labour and Welfare. Blocks over 98%* of dust and other harmful particles in the air.

* Average measured value

3M strengths: Ten fields and five business groups
Consumer

Helping to support convenient and enjoyable lifestyles with products for everyday life.

Stationery and office supplies

- Post-it® Full Adhesive Note
  - Sticky notes with strong all-over surface adhesion, ready to use whenever you need to take a note or leave a message. User-friendly, since the whole pad can be attached to your laptop, fridge and so on.

- Scotch® Mending Tape
  - A high quality tape that is barely noticeable when attached. The tape’s quality and color are long lasting. Provides a suitable surface for writing on. Winner of the 2014 Long Life Design Award.

Household products

- Scotch-Brite™ Antibacterial Urethane Sponge
  - Sponge that removes burnt marks from pots and grills. Simple design is a perennial favorite among kitchen sponges. Winner of the 2012 Long Life Design Award.

- Command™ Hook for bath & kitchen
  - This hook with a water-resistant adhesive tab holds strongly on a variety of surfaces exposed to moisture, such as in a kitchen or in a bathroom. It can be removed cleanly by stretching the tab if it is no longer in use.

- A-one™ Label Seal
  - Labels that can be used for a wide range of purposes, from mailing labels to displays. They can be made easily with just a personal computer and printer. Offering a large selection, the labels meet diverse needs from office to personal use.

- Scotch® Super Strong Double Coated Tape Premier Gold Super Multi-Purpose
  - Double-stick tape that utilizes 3M®’s advanced adhesive technology for industrial fields. For bonding all kinds of materials, from flexible PVC to plastic.

Health Care

Responding to the customers’ needs for health and safety across a wide range, from medicine and food to environmental fields.

Medical products

- Protective cap for needleless connector
  - This disinfecting cap prevents contamination at the tube connecting part for intravenous drips or fluid therapies in the medical field. The product received the 2016 Good Design Award in Japan.

- Scotchbond™ Dental Adhesive
  - A single dental adhesive that can be used to perform seven different procedures using dental enamel, dentine, metal and zirconia.

- 3M™ Littmann® Stethoscope
  - Standard stethoscope that lets you effectively hear patients’ heart sounds. Routinely used by many healthcare professionals including doctors and nurses. Featuring 20 attractive tube colors. On sale since 1996 and winner of the Long Life Design Award in 2012.

Dental products

- Scotch-Brite™ Dental Adhesive
  - A single dental adhesive that can be used to perform seven different procedures using dental enamel, dentine, metal and zirconia.

Orthodontic products

- Orthodontic ceramic brackets
  - Ceramic brackets that offer an orthodontist- and patient-focused design. The translucent brackets blend with the patient’s natural tooth color, while their small size and low profile help minimize discomfort.

- Scotchbond™ Dental Adhesive
  - A single dental adhesive that can be used to perform seven different procedures using dental enamel, dentine, metal and zirconia.

Food safety products

- 3M™ Petrifilm™ Plates
  - Dry film culture media for food bacteriological testing. Petrifilm plates save testing time compared with conventional methods and contribute to food safety management.

- 3M™ Pressurized Metered Dose Inhaler Systems
  - Aerosol formulation for the treatment of respiratory conditions such as asthma. Since our creation of the first metered-dose inhaler more than 50 years ago, 3M has been a world leader in inhaled drug delivery technologies.
3M Japan Group is committed to offering greater value to society and our customers.

We set up an organization that leads cross-divisional efforts under the theme of “National Resilience” to come up with various solutions that contribute to maintaining and managing social infrastructure. We are also focusing our efforts on e-commerce systems to support sales and marketing for each division.

Organization Specialized in Meeting Megatrends

We develop solutions cross-divisionally in order to have a broad approach that meets the need for longer service life of social infrastructure.

3M Japan Group has actively promoted activities in each business division to help the recovery of the areas affected by the Great East Japan Earthquake since its occurrence. In July 2011, we inaugurated the Tohoku Project Department in order to develop the activities on a cross-divisional scale beyond the boundaries of divisions. In 2013, the organization changed its name to the National Resilience Project Headquarters to evolve into an organization that could meet the need for social infrastructure with a longer service life. We will promote more extensive activities in liaison with municipalities, the Ministry of Land, Infrastructure, Transport and Tourism, road and railway companies, and other private businesses of various industries.

We have offered solutions to customers in the Tohoku area and other regions as well, including water retention sheets that maintain the required amount of water for proper curing to improve the durability of road and bridge concrete, emergency road surface repair materials to be used as a temporary measure before more permanent repair work on areas where roads have caved-in, and window film for shatter-resistance and the repairing of wall cracks.

Looking forward to the Tokyo 2020 Olympic and Paralympic Games, redevelopment activities will be accelerated and demand for hotel renovations will increase. Now, the focus of work on social infrastructure has definitely changed from the construction of new buildings to repairs or renovations that extend the life of existing buildings. To meet this megatrend, 3M Japan Group will promote cross-divisional activities with its accumulated knowledge and skills in various areas. We see this as the best use of our resources to contribute to society.

Target markets

Examples of solutions for longer service life of social infrastructure

| 3M™ Concrete Water Supply Curing Control Sheet 1117 | Water retention sheets to maintain the correct amount of water in the curing process to improve the durability of road and bridge concrete. The use of this sheet is currently under examination at more than thirty construction sites around Japan, in addition to the Tohoku area. |
| 3M™ Scotchgard™ Film | Shorten the construction period for guideboard replacement in the renovation of restrooms at Tokyo Metro. |
| 3M™ VHB™ Tape | Emergency temporary repairs before more permanent repair work on areas where roads have caved-in. |
| 3M™ Stamark™ Road Refurbishment L715 | Shatter-resistant window film used for the renovation of a school. |
| 3M™ Scotchtint™ Window Film | Shatter-resistant window film used for the renovation of a school. |

Channel Expansion

Utilizing every “e” possibility, we will diversify sales channels and accelerate innovative sales activities.

To meet increasingly diversified purchasing patterns, the 3M Japan Group inaugurated the e-commerce promotion department. We are promoting the diversification of sales models by adopting e-commerce as one method of increasing points of contact with customers. We focus on digital marketing by using external EC sites to sell our products and by considering various types of sales promotion approaches through exposure to social media such as Facebook and Twitter. By expanding these connections, we will actively use every type of e-commerce: we will improve our websites, encourage traffic from external websites, and promote linkage to external pages.

Strengthening Contacts with Customers and Distributors and Jointly Creating New Businesses

We hold exhibitions at customers’ meeting rooms and event spaces, with the goal that customers see 3M as an indispensable partner as we develop solutions from the customer’s point of view.

These exhibitions are held with a view to building stronger partnerships with customers and expanding business hand in hand through the introduction of 3M’s cutting-edge technologies, services, diverse products, and total solutions. We also offer technological seminars and technological exchange meetings.

We are further promoting efforts to explore new markets together with our channel partners by providing more opportunities for us to explain 3M products to our distributors.

“Adhesive and Bonding Solutions Seminar” Held for Distributors

The Tape and Adhesive Products Division held the “Adhesive and Bonding Solutions Seminar” at the Sagamihara Site to strengthen relationships with distributors and accelerate cooperation and business in key fields. At the seminar, they shared 3M’s business strategy, the main market trends in Japan and abroad, 3M’s adhesive and bonding technology, and successful application development examples. Participants got hands-on training that deepened their understanding of the performance and applications of the adhesive. We are continuing our efforts to strengthen relationships in order to expand the businesses of both our company and our distributors.
Science Company That Supports Society

Being a company group that continues to offer technologies, products, and solutions exceeding the expectations of customers based on the power of science.

To continue to be a supplier chosen by customers around the world, we make full use of all our resources, including global business bases and human resources networks, through all the processes of marketing, product development, production and supply.

The core business model for us is to identify the problems customers are facing in their actual sites, products, and situations, and create one-of-a-kind solutions combining 3M’s diverse technologies. Setting this model at the center of our business development, we are able to serve business, life and health areas.

3M will continue to support every aspect of our society based on the 3M vision.
We offer solutions that support business, life and health.

3M utilizes the power of science to improve work efficiency, productivity, and functionality for customers in a wide range of fields. We offer total solutions for people’s lives, including the creation of comfortable and safe life spaces and ideas for a joyous and convenient life. We also provide various products and solutions to solve social issues in the fields of medicine and food for people’s health, safety and security.

Business

3M Technology Advancing Every Company

Contributing to the durability and longer service life of social infrastructure such as bridges and tunnels by developing effective curing sheets to make concrete stronger.

3M™ Concrete Curing Tape 2227HP
3M™ Concrete Water Supply Curing Control Sheet 1117

3M Innovation Improving Every Life

Protecting sensitive skin and reducing pain for elderly people with an adhesive that is 'skin friendly,' as gentle to the skin as water.

3M™ Kind Removal Silicone Tape

Social issues

Customer issues

Solutions offered by 3M Japan Group

3M developed a tape containing a silicon adhesive that is skin friendly. The tape helps minimize pain and reduce the likeliness of strands of hair being pulled out when the tape is removed.

Social issues

Customer issues

Solutions offered by 3M Japan Group

3M developed a tape containing a silicon adhesive that is skin friendly. The tape helps minimize pain and reduce the likeliness of strands of hair being pulled out when the tape is removed.

Health

3M Products Enhancing Every Home

Helping reduce time spent on housework by making it easier to remove stubborn dirt around the kitchen and on kitchen utensils.

Scotch-Brite™ Antibacterial Urethane Sponge S
Scotch-Brite™ Scrub wet sheet

Social issues

Customer issues

Solutions offered by 3M Japan Group

3M developed kitchen sponges and cleaning sheets to remove burns and oil stains quickly and easily.

Social issues

Customer issues

Solutions offered by 3M Japan Group

3M developed kitchen sponges and cleaning sheets to remove burns and oil stains quickly and easily.

Life

Examples of 3M solutions

3M™ Concrete Water Supply Curing Control Sheet 1117

Social issues

Customer issues

Solutions offered by 3M Japan Group

3M developed curing tapes and sheets to maintain the moisture levels needed to achieve stronger concrete, with fewer cracks and a higher tolerance for salt.

Social issues

Customer issues

Solutions offered by 3M Japan Group

3M developed curing tapes and sheets to maintain the moisture levels needed to achieve stronger concrete, with fewer cracks and a higher tolerance for salt.
With 46 technology platforms at hand, 3M pursues R&D that supports the success of our customers’ businesses.

With 46 core technologies at hand, 3M combines innovative technologies in creative ways, displaying a strong capacity for product development. The range and depth of these technology platforms are unparalleled by other companies, with over 55,000 products that help to make the world a better place.

Research and Development

R&D to Spur New Innovation

R&D is the heart of 3M. It has produced unique solutions for customers and supported business growth at 3M. The 3M business model is to create products that previously didn’t exist. Through this business model, we have developed creative products such as abrasives, pressure-sensitive adhesive tape, non-woven masks, and fluorine materials, based on 46 technology platforms. These products are distributed to various markets through five business groups (see Page 7).

Recognizing the importance of R&D, 3M targets an investment of 6% of annual sales in R&D in order to further vitalize innovation. A business plan of their departments, the engineers’ ideas show promise but do not align with the company growth. When engineers’ ideas to promote technological innovation and spur business growth at 3M. The 3M business model is to create products that previously didn’t exist. Through this business model, we model is to create products that previously didn’t exist. Through this business model, we

Supporting employees’ initiative and creativity

3M’s Innovation Program

3M maintains a variety of programs to support the ideas and business plans of our engineers and other employees. These systems help to nurture individuality and creativity in our employees, which leads to original and ground-breaking innovations.

Funding Originality: the Genesis Program

The Genesis Program was established in 1984 to promote technological innovation and spur company growth. When engineers’ ideas show promise but do not align with the business plan of their departments, the Genesis Program can provide the necessary budget to begin development.

Accelerating Growth: the Pioneer Fund

The Pioneer Fund is directly controlled by the 3M Japan Limited president, and is used to accelerate growth and pursue new business opportunities. Funds are distributed to over 60 programs per year, including projects with short turnaround as well as those which span several years.

Engineers Exchanging Ideas: TIE Events

During the Tech Forums carried out in countries throughout the world, 3M holds events where engineers can gather for a cross-functional exchange of ideas, promoting synergy by allowing engineers to come into contact with technologies outside their specialization. In Japan, these include TIE (Technical Information Exchange) Events, which are poster sessions in which engineers can announce the results of their research.

Target ratio of R&D

6% of annual sales

Basic Research and Development Technologies

Technology Platforms Create New Technologies, Core Techniques, and Products

Over 55,000 products are included in the 3M family. Behind this unparalleled product development lies 46 "Technology Platforms."

For instance, our microreplication technology was developed from techniques used during the creation of Fresnel lenses for overhead projectors, by which minute structures are created in repition on a film’s surface. Microreplication technology has been expanded to products such as reflective sheets for road signs, and has also been combined with other technologies such as those for forming minute prisms on a film’s surface and those for controlling light. This has led to the production of brightness enhancing films that help to improve the efficiency and performance of smart devices and other high-end goods.

The platforms are regularly reviewed.

Total No. of Visitors to Customer Technical Center

Over 130,000

Developing Possibility: The Customer Technical Center (CTC)

Located at the Sagamihara Site

The Customer Technical Center (CTC) is an innovative solution center where 3M engineers work in collaboration with our customers to develop ideas which address their technological problems. 3M’s 46 technology platforms are on display at CTC. Customers can meet with engineers face-to-face to discuss problems and solutions and explore possible courses of action.

Technology Platforms

46

46
Leveraging the “made in Japan” manufacturing capability trusted worldwide, 3M continues to deliver best quality products to meet customers’ needs.

Japan has earned worldwide confidence in its excellent quality control, and is a vital production base in the global 3M group. To further this, 3M Japan Products Limited was inaugurated in 2015 to strengthen Japan’s production capability. The 3M Japan Group continues to deliver products with excellent QCD (quality, cost, and delivery) to meet customers’ needs around the world as well as in Japan.

**Production System**

**Strengthening manufacturing capability with synergies between production bases**

3M Japan Products Limited was formed by integrating three manufacturing sites in Japan in 2016. It is one of the most important bases for manufacturing and technology development in Japan and the global 3M group. Japanese companies are strengthening product development and production systems for those industries in which Japan has a competitive edge on the world market, such as the automotive, electronics, and health care industries. Our mission is to deliver high value-added products to meet customer needs and achieve mutual success. To support this mission as a manufacturer, we will leverage the economies of scale gained by the integration of our manufacturing sites to improve efficiency and reinforce quality control systems through active capital investment. We will also promote talent exchanges to share technological know-how with different sites to produce synergistic effects.

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yamagata Site (Formerly Yamagata 3M Limited)</td>
<td>The largest manufacturing base in Japan, with a 45-year history. Boasting top-class production equipment in the global 3M group, the site is one of a dozen superhubs in 3M. It produces a diverse range of products, such as reflective sheeting, internal/external decorative films, connectors, automobile sound absorbers/thermal insulation, nonwoven abrasives, nylon kitchen sponges, adhesive tapes, and optical films. The Yamagata site also serves as an R&amp;D center for some of the products manufactured there.</td>
</tr>
<tr>
<td>Iwate Site (Formerly Iwate 3M Limited)</td>
<td>A base of adhesive tape production. By combining different substrates and adhesives, it produces a wide range of adhesive tapes for hygiene and industrial use. It also manufactures fluororubber and other chemical products by using unique chemical process technologies such as mixing, filling and chemical reactions. The Iwate site will increase production through continuous investment to become a superhub like the Yamagata site.</td>
</tr>
<tr>
<td>Chiba Site (Formerly Act Co., Ltd.)</td>
<td>A production base specializing in printer labels. The company produces OA labels and cards and related products and is a leader in the market in Japan.</td>
</tr>
</tbody>
</table>

**Quality Control System**

**Pursuing reliable quality throughout the supply chain**

In order to constantly deliver quality products that meet customers’ expectations, the 3M Japan Group has built a quality management system to fulfill the requirements of the markets. Our sites have obtained the ISO9001 certificate and ISO13485 for health care products production lines. For the continued improvement of quality and service, we use the Quality Playbook, a worldwide 3M tool, to apply the PDCA cycle starting with self-assessment. In addition, our suppliers all receive the document “Expectations of Suppliers,” describing 3M’s expectations and regular assessments of our raw materials and parts suppliers.

**Manufacturing Technology**

**Promoting valuable product development from a manufacturing point of view**

If a product contains excellent ideas but cannot be mass-produced due to issues with quality, cost, or delivery (QCD), it will be of no use. The 3M Japan Group manufacturing technology department has built and implemented optimal production processes for each product. They collaborate with the R&D and sourcing departments and participate in production from the product planning and designing stages, making use of their diverse manufacturing technologies including precision coating, nonwoven, and microreplication. They support speedy commercialization of innovative products from a manufacturing viewpoint.

**Occupational Safety & Hygiene**

**Promoting a safe and clean production environment under global common safety and hygiene systems**

A safe and clean production environment is essential for stable supply. 3M has operated the Safety & Hygiene Management System globally for more than 20 years. This Management System requires each subsidiary to comply with regulations and standards of the USA and the host country. The 3M Japan Group incorporates Japanese laws and industry standards to make production sites safe and clean.

### Yamagata Site
- **Overview**: The largest manufacturing site in Japan with a 45-year history.
- **Products**: Produces various products such as reflective sheeting, decorative films, connectors, and optical films.
- **Role**: Serves as an R&D center for some products.

### Iwate Site
- **Overview**: A base for adhesive tape production.
- **Process**: Produces a wide range of adhesive tapes.
- **Technology**: Uses unique chemical process technologies for production.

### Chiba Site
- **Overview**: Specializes in printer labels.
- **Process**: Produces OA labels and cards.
- **Role**: A leader in the market for printer labels.
Creating value through collaborative dialogue with customers: 3M is a trusted and reliable partner.

In order to provide ideal technologies, products and solutions, and to remain our customers' supplier of choice, 3M works to jointly create value through communication with its customers, actively pursuing new opportunities for the creation of a variety of collaborations.

Opportunities for Dialogue and Collaboration

Confronting Customer Issues Directly, Increasing Satisfaction, and Ensuring Dynamic Product Development

In order to respond to the differing needs of individual customers, 3M strives to create opportunities for communication with its customers. In the bright, open space of the 3M Innovation Visitor Center near the entrance of the head office, we exhibit 3M products, technologies and history in an easy to understand fashion to convey a 'big picture' view of 3M to our diverse customers. We also set up at our head office the "Material Science & Design" showroom for visitors from the construction industry to experience a wide variety of 3M solutions, and the 3M Dental Education Center for dental professionals aiming to promote cooperation with our oral care business. We use these facilities to deepen communication with customers by offering an opportunity to experience our products. 3M will create new products and services to improve customer satisfaction through dialogue, taking into account social megatrends, needs and issues. We will identify needs commonly found among many customers, and use this as a base for our ongoing product development, and to direct the finding of new research themes.

Visualizing 3M: The 3M Innovation Visitor Center

In addition to exhibits of representative 3M technologies and their use in product applications, there are also special exhibitions arranged according to themes where visitors can interact directly with products. The story of 3M's origins and the popularity of products developed by 3M Japan are also introduced.

Experiential showroom to expand possibilities of construction "Material Science & Design"

We opened an experiential showroom named "Material Science & Design," the first such showroom by a film manufacturer, for customers in the construction industry. The showroom exhibits approximately 900 kinds of interior materials and actual construction images, suggesting new perspectives for interior construction. With this space, we will meet a broad range of construction needs with fresh approaches.

Oral Care Collaboration Center: 3M Dental Education Center

The Dental Education Center provides professionals in the dental industry with the latest information on oral care. In addition, the center is fully equipped with dental chairs, dental and orthodontic supplies, and other necessary equipment. Advanced display equipment is used during product seminars, training, lectures, and other events.

Forefront of Points of Contact with Customers

Turning Customer Needs into New Ideas

Our Application Development Engineers provide customers with product-related services as well as technology- and product-related solutions by utilizing the innovative and cutting-edge technologies and skills of 3M. For example, we are conducting projects to solve problems of major automobile manufacturers and electric manufacturers by visiting them in person. We have also formed abrasive advisor groups named 3M Ken-En Tai, special teams to give small-to medium-sized manufacturers advice about state-of-the-art abrasive techniques.

Staff Specializing in Solving Technological and Product Problems Offer Support Services.

Technical Service is composed of an expert staff who uses the most innovative technological skills to help support 3M customers. Technical Service's principal duties include development of new products, improvement of existing products, and the cultivation of new applications, but staff is also ready to provide customers with product support and to offer technological and product-related solutions. This allows us to further expand business opportunities with our customers.

Employee Feedback

We offer solutions that satisfy our customers.

I make proposals for the development of joining materials and methods for automobiles. I am working on a project to develop a next generation car at a major automobile manufacturer. I visit the customer in person to solve their problems. Recently I made a proposal for a new material developed by the 3M Japan Group to strengthen automobile outer panels that would result in weight saving and better fuel consumption. My proposal was accepted because the customer appreciated my approach. They realized that the suggestion I made took into account not only the performance of the entire car but also the workability that I identified through frequenting their manufacturing site.

3M Ken-En Tai, an Advisor Group to Support Abrasive Machining Processes at Manufacturing Sites

In 2014 the Abrasive Systems Division of 3M Japan Limited formed 3M Ken-En Tai, meaning abrasives support team in Japanese. This is a special abrasive advisor group to introduce state-of-the-art abrasive technologies including 3M™ Cubitron™ II Abrasive. The group visits small- to medium-sized manufacturing sites for transportation equipment, metal processing, etc., lets customers experience the products' performance through demonstrations, and advises on how to improve the abrasive machining process. 3M Ken-En Tai carries out its activities with a view to acquiring new customers in various parts of Japan, and also deepening communication with existing customers who are actually using 3M products. 3M Ken-En Tai has visited more than 10,000 companies so far.

Masayuki Tachi, Automobile Division, Sagamihara Site, 3M Japan Limited
Creative corporate culture and talent diversity: 3M training programs prepare the way for the innovations of tomorrow.

3M contributes to society through science. Accordingly, our most important management asset is our talented people, who share in 3M’s vision of creating new innovation. 3M pursues a corporate culture which promotes independence. Additionally, we strive to reinforce systems which are conducive to an open and free corporate environment that encourages a diversity of talent.

Talent Development Policy

A Systematic Approach to Globalization and Employee Growth

Our most-valued resource for achieving our corporate vision is our people. 3M has established basic management and hiring principles, including respect for the dignity and worth of all individuals, and encouragement of the initiative of each employee. We encourage all employees to display leadership and expect them to play to win, innovate, foster collaboration and teamwork, prioritize and execute tasks, develop others and themselves, and act with integrity and transparency.

Awards for intrepid employees who have taken risks and produced results

20 awards

Talent Development Program

The 3M Three Year New Employee Program ensures that employees acquire the skills necessary to become independent and self-motivated members of the 3M Japan Group within three years of entering the company. In order to cultivate the leaders of tomorrow 3M also runs the Japan Leadership Academy, which teaches the skills necessary to excel as a leader in the 3M group, as well as a Duty-based Training Program to impart the necessary specialist knowledge and skills for each division. The program’s instructors comprise professionals from within and outside the company. In 2014, the Learning Center was set up at Sagamihara Site with the aim to accelerate employee development within the 3M Japan Group.

Choosing a Career Path through the Dual Ladder System

3M was one of the first companies to create a dual career ladder for its engineers, offering the 3M technical community the same prestige, compensation and perks as offered to corporate management. The program is known as the Dual Ladder system. The system allows new engineers to choose whether to progress within research and development or within administration and management.

Establishment of Corporate Culture

The Tradition of 15% Culture at 3M

The unwritten rule handed down at 3M is that if an engineer believes that an area of research which differs from their official duties may be useful to future business, they may spend up to 15% of their work hours pursuing these ideas. 15% Culture has helped create new ideas for 3M. Since 2011 3M has presented the 15% Culture Award to the technologies and products born from the 15% Culture that are expected to contribute to future growth of the company’s businesses. This film is made of a nonwoven fabric and is substituted for the diffusion plates used in televisions to provide uniform brightness. The film weighs 1/20th as much as conventional products and can contribute to resource savings including weight reduction of televisions. The product is also contributing to the growth of the company.

Fostering Intrrepid and Independent Employees

In the process of creating new innovation, repeated trial and error is necessary. Accordingly, 3M understands that active challenge, without fear of failure, is vital for strengthening the independence of our employees. Emblematic of this belief are the words spoken by William McKnight, former chairman and father of the 3M revival; words which still guide the 3M of today: “Mistakes will be made. But if a person is essentially right, the mistakes he or she makes are not as serious in the long run as the mistakes management will make if it undertakes to tell those in authority exactly how they must do their jobs. Management that is destructively critical when mistakes are made kills initiative. And it’s essential that we have many people with initiative if we are to continue to grow.”

3M contributes to society through science. Accordingly, our most important management asset is our talented people, who share in 3M’s vision of creating new innovation. 3M pursues a corporate culture which promotes independence. Additionally, we strive to reinforce systems which are conducive to an open and free corporate environment that encourages a diversity of talent.
Supporting the continuous growth of our companies and helping to realize a sustainable society.

In order to meet expectations placed on us by society as a corporate citizen, and to contribute to the creation of a sustainable society, the 3M Japan Group works to build trust with stakeholders, contributing to local communities and society through the provision of environmentally-friendly products and services with inherent value.

Solving Environmental Issues

The 3P (Pollution Prevention Pays) Program began as a global 3M policy in 1975 to conserve valuable resources by preventing the sources of pollution. Its basic intent is to prevent pollution at its source through the improvement of manufacturing processes, use of alternative materials, and R&D, instead of eliminating pollution after it has been generated. The program aims to raise employee awareness of pollution prevention and environmental conservation. The 3P Program has proven that investment in environmental conservation benefits the company.

Conveying the Joy of Science to Children

The 3M Japan Group holds a close relationship with the Miyagi Prefecture of Japan, including our Sendai Branch, which serves as 3M’s principal marketing base in the Tohoku region, as well as our use of Sendai Harbor to import and export products. In order to contribute to post-earthquake recovery in Miyagi Prefecture, in June 2013 we acquired naming rights to three facilities: 3M Sendai Science Museum (Aoba-ku, Sendai City), 3M Sendai Port Park (Miyagino-ku, Sendai City), and 3M Minatohama Seaside Green Park (Shichigahama, Miyagi District).

In January 2016, the 3M Japan Group devised an “Environmental Medium Term Goal” for 2025 in an aim to continue and further improve activities to reduce our environmental footprint. Based on this Medium Term Goal, three specific goals and target figures for each fiscal year were set, and activities have been promoted to put into practice the idea of environmental management and to achieve “sustainable development”. In fiscal year 2016, we reduced waste generation** by 6% compared to 2015, but the result was less than the fiscal year target. However, the results for energy usage*** and water usage**** both significantly exceeded the fiscal year goals. Moving forward, we will continue the challenge to achieve our goals.

With Society

Four Vital Issues: Education, Environment, Health/Welfare, and Community

With Employees

“Diversity & Inclusion” to Achieve Stronger Competitiveness and Sustainable Growth

With Employees

“Diversity & Inclusion” to Achieve Stronger Competitiveness and Sustainable Growth

Employee Feedback

I want children to become enthusiastic about science.

A new program is incorporated each year at the Summertime Children’s Science Laboratory event held at the Sagamihara Site. This time, experiments based on the themes of “The Science of Glass” and “The Science of Light and Color” were conducted. At the “Wizard Graduate School,” in which participants devise their own experiments, various ideas were gathered from the children for a test to protect an egg from a bowling ball. When the results were presented, the children were unable to contain their excitement. During the experiments and explanations, the children diligently took notes and looked with wonder at the objects that they had made. Scenes such as these were very impressive. Moving forward, we hope to continue contributing to efforts to spark greater interest in science.

Kaoru Otsuka, Automobile Division, AD Design Lab, 3M Japan Limited

Human resources with diverse experiences and values are indispensable to effectively meet business needs arising from the rapidly changing business environment and diversification of market demands. If unfettered discussions in the workplace can generate new ideas, and if employees can work in an environment of trust and mutual respect, then we can increase our competitiveness and grow together with our customers. We are placing special emphasis on developing human resources and a workplace environment where more female employees take on managerial positions and are responsible for business operations, and where they are able to maximize their potential. 3M supports groups of employee volunteers that focus on diversity, believing that the power of a bottom-up approach is important for promoting diversity and inclusion. At 3M Japan Group we have established “Diversity & Inclusion for Innovative Values (DIVA),” which engages in activities to support our diverse workforce and foster 3M’s culture of inclusion.

Received Catalyst Award

3M received the Catalyst Award in 2017 from the US nonprofit organization “Catalyst,” which supports women’s career advancement through inclusion in the workplace. This award is given to companies for their proven approach to expand opportunities for women in business.

Results of Environmental Load Reduction Efforts by 3M Japan Group

<table>
<thead>
<tr>
<th>Goal</th>
<th>Results for 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce waste generation per unit** to 10% below 2015 level</td>
<td>Plus 20%</td>
</tr>
<tr>
<td>Reduce energy use per unit*** to 30% below 2015 level</td>
<td>Minus 6%</td>
</tr>
<tr>
<td>Reduce water usage per unit**** to 10% below 2015 level</td>
<td>Minus 16%</td>
</tr>
</tbody>
</table>

* Waste generation per unit of production (kg/p-product)
** Energy use per unit of production (GJ/p-product)
*** Water usage per unit of production (m³/p-product)

Please visit our website “Environmental Performance Data” for details about 3M Japan Group CSR activities.
http://www.mmm.co.jp/sustainability/index.html
1921
Iwate 3M is in the process of expanding production to fasteners and other goods.

1986
Iwate 3M Limited (Currently 3M Japan Products Limited Iwate Site) is Established

1976
3M Health Care Limited (Currently 3M Japan Limited, Health Care Company) is Established

1980
A world-first innovative product developed by Sumitomo 3M (now 3M Japan). This water-based adhesive meets Japanese organic solvent regulations on air components and occupational safety.

1990
3M™ Water-based Bond 7

1992
3M™ Scotchgard™ Ceramic Resin Fastener

1995
3M™ Teflon™ Optical Clear Adhesive

1998
"3M Science. Applied to Life.™" was globally introduced as the new corporate brand platform of 3M.

2000
Cuno Inc. (Currently 3M Japan Products Limited Ibaraki Site) Joins the 3M Japan Group

2010
For over 100 years, 3M has been connecting customers with the science of tomorrow.