

Unceasing pursuit of “unprecedented innovation, unprecedented value”

Company

1962

Sony Chemicals Corporation was established for manufacturing and sales of copper foil products for circuits and industrial adhesive products.



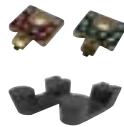
1970

Kanuma Plant No. 1 completed. Transferred from Haneda Plant.



1972

Started mass production of magnetic heads and ferrite cores.



1963

Advanced into the liquid adhesive domain to build up a new core business.



1965

Expanded the application of bonding technologies to double-coated tapes.



1977

Commercialized anisotropic conductive films (ACF) ahead of industry peers.

As LCD panels for digital cameras and cellular phones and also flat panel displays became widespread, demand for LCD display devices grew ever faster. Anisotropic conductive films (ACF) are indispensable for the evolution of LCD display devices. Sony Chemicals Corporation succeeded in commercializing ACF ahead of the rest of the industry.



1987

Listed on the Second Section of the Tokyo Stock Exchange (TSE).



1989

Sony Chemical Corporation of America established.



1992

Sony Chemicals Europe B.V. established in the Netherlands.



1994

Sony Chemicals (Suzhou) Co., Ltd. established in China.



1985

Launched production of ink ribbons for thermal transfer printers.



1989

Started production of high-density thin multilayer printed circuit boards for the passport-sized camcorder Handycam® TR55.



1996

Started volume production of multilayer printed circuit boards for PlayStation®.



1998

Started production of optical devices.



1994

Started production of protection elements for Li-ion batteries.

As laptop PCs, cellular phones, video cameras and other portable electronic equipment were introduced with reduced sizes and advanced features, the Li-ion battery market expanded. Sony Chemicals Corporation was first in the world to mass-produce the protection elements essential for safe operation of Li-ion batteries.



1987

Started production of Lamicoil for compact motors.



For over 50 years since the days of our predecessor Sony Chemicals Corporation, we have been delivering new value to the world.

The value we have created is embodied in technologies indispensable for the advancement and safety of products and that enhance convenience, including through miniaturization, thinning, and greater visibility.

Capitalizing on the unique technologies we have cultivated over many years and new technologies yet to be developed, we will continue our pursuit of value.

2000

Sony Chemicals Corporation was delisted from TSE. Became a wholly owned subsidiary of Sony Corporation.

2006

Company name changed to Sony Chemical & Information Device Corporation.

2012

Company name changed to Dexerials Corporation, and business launched.

Dexerials

2013

Dexerials (Shanghai) Corporation established in China.



2015

Listed on the First Section of the Tokyo Stock Exchange (TSE).



Dexerials Kibou Corporation started business.

2016

Tochigi Technology Center started operations.



2021

Headquarters changed to Shimotsuke-shi, Tochigi. Tokyo Office moved to Kyobashi, Chuo-ku, Tokyo.

2020

Dexerials Precision Components Corporation established.

2001

Started production of touch panels.



2002
Started selling of anti-reflection films.

Sony Chemicals Corporation established the roll-to-roll sputtering system suited for volume production by applying the proprietary technology for anti-reflection film for cylindrical CRTs, which had been developed by Sony Corporation.



2004

Started production of thermal conductive sheets.



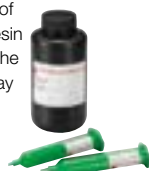
2008

Started production of inorganic polarizer for projectors.



2007

Started production of the optical elastic resin (SVR®) to increase the visibility of the display panel.



2014

Started production of eye shield material for medical use.



2018

Developed anti-fogging and anti-fouling solutions to prevent clouding and improve the ease of cleaning mirrors.

2016

Commercialized ArrayFIX particle-arrayed anisotropic conductive film (ACF).



2015

Started production of Albedo solar control window film.

2013

Started production of PSA-transformable optical elastic resin (hybrid SVR) whose adhesive properties are transformed during UV curing.

While maintaining excellent optical properties of conventional SVR, which is known for its high visibility as well as abilities to improve contrast and shock resistance, hybrid SVR realizes workability equivalent to that of optical clear adhesive. It also reduces color unevenness of display panels caused by shrinkage during curing.



2021

Commercialized the Phosphor Film "PS Series".



Commercialized SFJ15Amperes T Series, small thin lead-free self control protector.

Products

Highlights



No.1



Anisotropic conductive films (ACF) ^{*1}



Optical elastic resins (SVR) ^{*2}



Anti-reflection films produced utilizing sputtering technology ^{*3}

Net sales



65,830 million yen

year on year +14.1%

Operating profit



11,339 million yen

year on year +145.6%

Profit attributable to owners of parent



5,329 million yen

year on year +94.9%

ROE



10.4%

year on year +4.9%pt

Total payout ratio (before amortization of goodwill)



42.2%

Ratio of outside directors



57.1%

Ratio of mid-career hires



39.5%

Three-year retention rate for new graduates employed



82.5%

Number of engineers



564

Ratio to No. of employees on a consolidated basis

31.8%

^{*1} The 2020 share for amount of ACF for large-sized and small- to medium-sized displays according to the "2021 Current Status and Future Prospects of the Display-related Market" issued by Fuji Chimera Research Institute, Inc.

^{*2} The 2020 share for total amount of optically clear adhesives (OCR/LOCA) used in bonding displays according to the "2021 Current Status and Future Prospects of the Display-related Market" issued by Fuji Chimera Research Institute, Inc. Optical elastic resin (SVR) is the product name for Dexerials' optically clear adhesives.

^{*3} The 2020 share for amount of surface treatment film (dry coating) according to the "2021 Current Status and Future Prospects of the Display-related Market" issued by Fuji Chimera Research Institute, Inc.

Business Portfolio

(Note) Each business corresponds to a segment among the disclosed results and net sales include inter-segment sales.

Optical Materials and Components Business

Contribution
to net sales
42.7%

Net sales **28,165** million yen Operating profit **6,278** million yen

This business is classified into three categories: optical films, optical resin materials, and optical solutions. These three categories include anti-reflection films, optical elastic resins, and smart precision adhesives. We have a large share of the global market because of the advanced technology and high quality of our anti-reflection films which are our mainstay products.



Anti-reflection films

The dry-type anti-reflection films realizing outstanding low reflection property and abrasion resistance contribute to improved visibility of mobile devices and automotive displays such as center information displays. Lineup including DxShield®, eye shielding materials for medical use featuring low reflectance and high visual transmittance utilizing our microfabrication technology.



Optical elastic resins (SVR)

Highly permeable and elastic resin is embedded in air gaps in devices such as smartphones and tablet PCs to realize slim profiling and improved visibility. Our lineup also includes a PSA-transformable optical elastic resins (hybrid SVR) for small-to-medium-sized flat panel displays (FPD) whose adhesive properties are transformed by UV curing to realize workability equivalent to that of optical clear adhesive.



UV-curable / thermo-curable adhesives

Our "SA Series" of smart precision adhesives comprises adhesives for UV curing, thermosetting, and UV + thermosetting. This series accomplishes low temperature fast curing, along with low shrinkage, and is ideal for precision affixing during assembly such as camera modules and optical pickups.



UV-curable resin for optical discs

UV-curable resins for optical disc media, such as DVD and Blu-ray Disc. Suitable for forming a corrosion-protection coating for the recording layer and for forming the base and cover layers of Blu-ray Disc media.

Electronic Materials and Components Business

Contribution
to net sales
57.3%

Net sales **37,801** million yen Operating profit **6,858** million yen

This business is classified into the four categories: adhesive materials, anisotropic conductive films, surface mounted type fuses, and micro devices. Due to our advanced technology and high quality, we have a large share of the global market for anisotropic conductive films (ACF), our mainstay products, which we were the first in the industry to develop and put into mass production in 1977.



Anisotropic conductive films (ACF)

Anisotropic conductive films are conductive adhesive materials that exploit electrical properties to conduct two components vertically while keeping mechanical performance by adhesion. Widely adopted for display panels and camera modules.



Surface mounted type fuses

Self control protectors (SCP) that immediately interrupt overcharge or overcurrent in Li-ion rechargeable batteries are standard fuses for secondary protection devices. We also offer a lineup of power current protector (PCP) fuses for high-current applications, which despite being thinner and smaller, protect electronic devices from overcurrent.



Thermal conductive sheets

Thermal conductive sheets conduct the heat generated from IC chips such as CPUs to the heat sink to protect device performance. We offer silicone sheets featuring high thermal conductivity and flexibility, acrylic sheets, and carbon fiber sheets for applications that generate large amounts of heat such as network servers of wireless base station.



Inorganic polarizers / Inorganic waveplates

These optical devices have high durability to withstand long hours of use in high temperature and high light intensity environments, and achieve high transmittance and low reflectance with its nano-level processing technology and a unique thin-film microstructure. They boost the brightness and contrast of projectors and optical units that use laser light sources.



Solar cell conductive films for photovoltaic modules

This film-type bonding material is used to bond solar cells with the metal ribbon that collects electricity generated by the cells. The material is capable of bonding at a lower temperature than conventional soldering. Thus, cells undergo less thermal strain from heating, which helps improve yield during module production.



Sputtering targets

Our sputtering targets are widely used by manufacturers of electronic and electric devices for semiconductor chips, recording media of various optical disk formats, and more. High purity and uniform structure contribute to higher productivity while our various irregular-shape-processing technologies extend lifetimes.

The application field of Dexerials products is extensive and diverse

Around Town

Smartphones

Please refer to P7.

Tablets PCs

- ▶ Anisotropic conductive films (ACF)
- ▶ General-purpose double-coated tapes
- ▶ Dustproof nets with adhesive for speakers
- ▶ Thermosetting tapes for FPC

- ▶ UV-curable / Thermosetting adhesives
- ▶ Thermal conductive sheets
- ▶ Optical elastic resins (SVR)
- ▶ Surface mounted type fuses

Automobile

Please refer to P7.

Electric motorcycles

- ▶ Surface mounted type fuses

Offices & Schools

Laptop PCs

- ▶ Anisotropic conductive films (ACF)
- ▶ General-purpose double-coated tapes
- ▶ Thermosetting tapes for FPC
- ▶ UV-curable / Thermosetting adhesives

- ▶ Anti-reflection films
- ▶ Surface mounted type fuses

Projectors

- ▶ Inorganic polarizers / Inorganic waveplates

Servers

- ▶ Thermal conductive sheets

Home

Televisions / laptop PCs

- ▶ Anisotropic conductive films (ACF)
- ▶ General-purpose double-coated tapes
- ▶ Dustproof nets with adhesive for speakers
- ▶ UV-curable / Thermosetting adhesives
- ▶ Thermal conductive sheets
- ▶ Optical elastic resins (SVR)
- ▶ Thermosetting tapes for FPC
- ▶ Surface mounted type fuses

Cordless electric power tools / vacuum cleaners

- ▶ Surface mounted type fuses

Factories / Others

Factories

- ▶ Water treatment agents
- ▶ Solar Panels
- ▶ Solar cell conductive films for photovoltaic modules

Medical Facilities

Protective gear for health professionals

- ▶ Eye shield material for medical use (DxShield®)

Artificial ventilators

- ▶ Surface mounted type fuses



For further details, please visit our website.

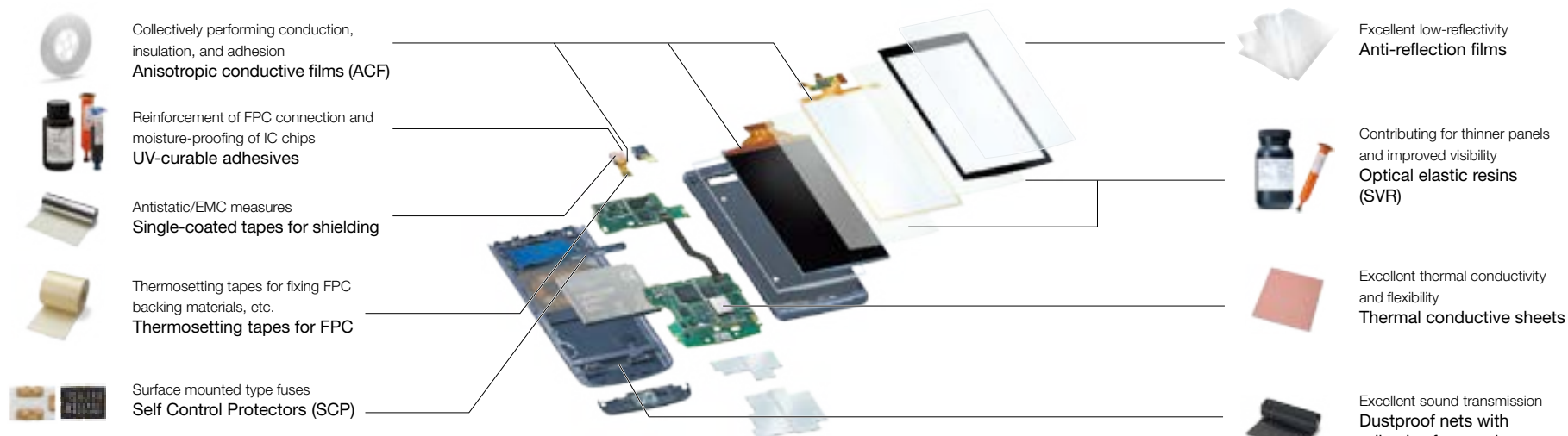
<https://www.dexerials.jp/en/ir/about/place.html>

For
example

Smartphones

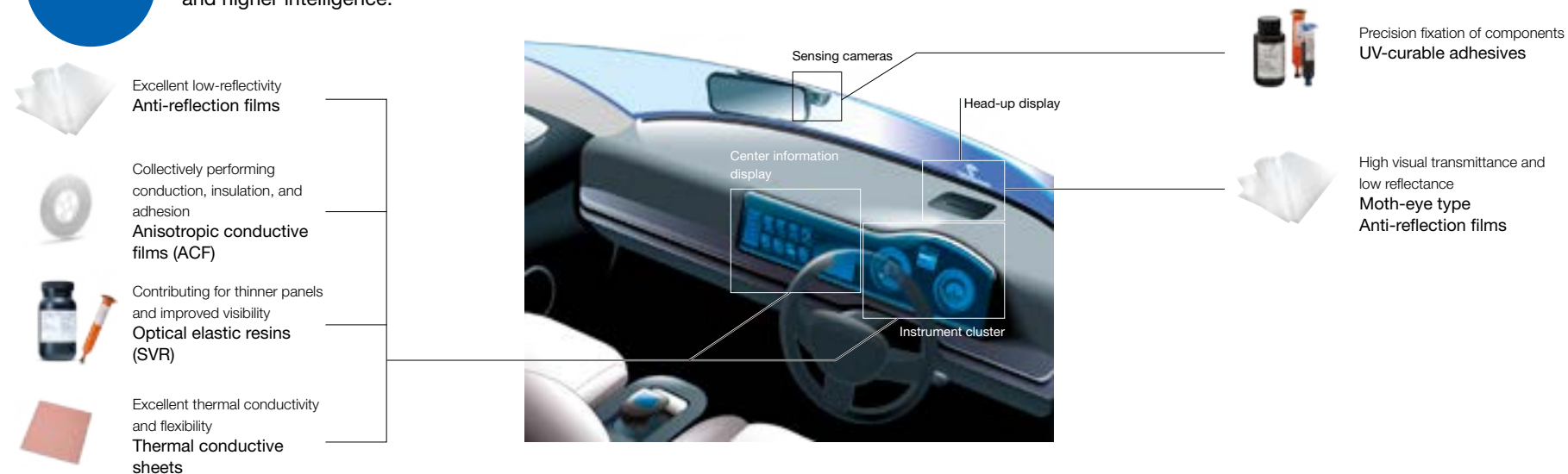
Smartphones have become thinner and more sophisticated.

To mount numerous circuit boards and components within limited space, Dexerials' functional materials are used.

For
example

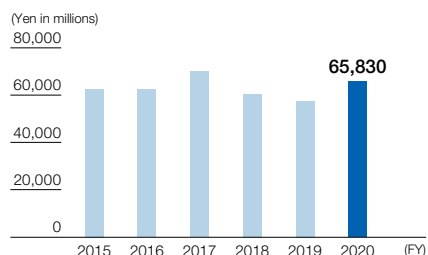
Automobile

Dexerials' functional materials are used in automotive field requiring higher visibility, smoother screen operation, and higher intelligence.

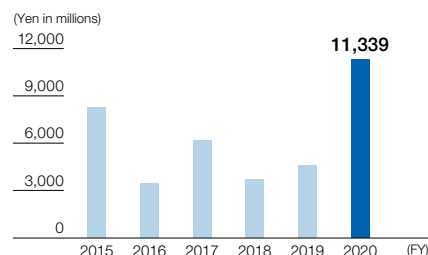


Consolidated financial performance indicators		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Net sales	(Yen in millions)	62,654	62,598	70,079	60,580	57,710	65,830
Operating profit	(Yen in millions)	8,306	3,491	6,178	3,724	4,617	11,339
Profit attributable to owners of parent	(Yen in millions)	4,587	949	3,426	2,284	2,734	5,329
Earnings per share (EPS)	(yen)	73.16	15.85	56.91	37.73	45.05	87.60
Total assets	(Yen in millions)	87,296	97,347	94,958	87,586	86,279	95,201
Capital to asset ratio	(%)	59.6	52.1	52.6	56.0	57.5	56.0
EBITDA	(Yen in millions)	13,083	8,543	11,561	9,680	10,786	17,590
ROIC	(%)	7.4	2.7	5.6	3.3	4.4	11.4
ROE	(%)	8.6	1.9	6.8	4.6	5.6	10.4

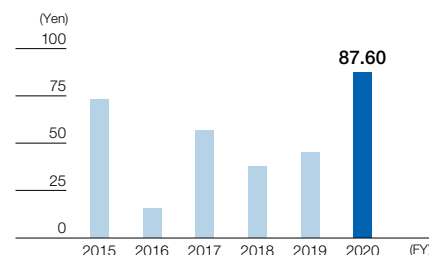
1 Net sales



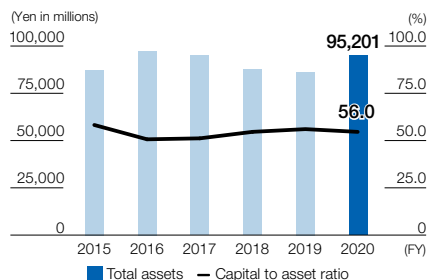
2 Operating profit



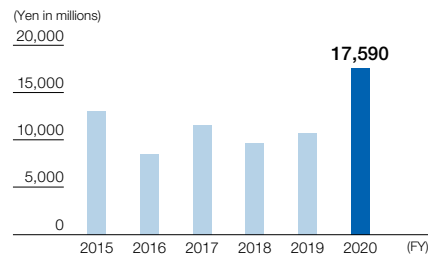
Earnings per share (EPS)



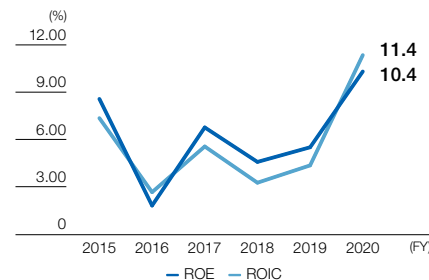
Total assets / Capital to asset ratio



EBITDA



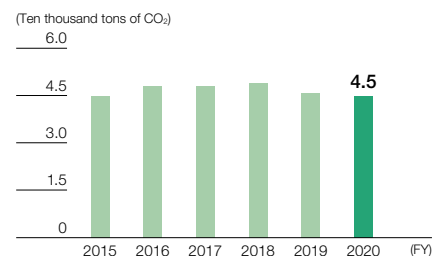
ROE / ROIC



Explanation of key aspects of financial performance

- In addition to increases in sales for anti-reflection film and Anisotropic Conductive Film (ACF), which are our differentiating technology products, and Surface mounted type fuses, productivity of anti-reflection film and ACF improved as well, leading to significant increase in profitability.

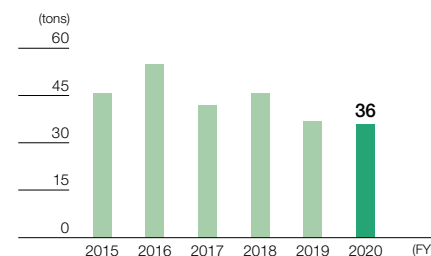
Non-financial indicators		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
CO ₂ emissions	(ten thousand tons of CO ₂)	4.5	4.6	4.8	4.9	4.6	4.5
Water usage	(ten thousand tons)	20	24	26	28	29	27
VOC emissions	(tons)	46	55	42	46	37	36
Waste emissions	(ten thousand tons)	0.21	0.21	0.24	0.29	0.26	0.25
Number of employees (consolidated basis)	(persons)	2,317	2,124	1,981	2,005	1,999	1,772
(non-consolidated basis)	(persons)	1,718	1,600	1,585	1,603	1,604	1,313
Composition of Directors and Number of Board of Directors (total / outside / female)	(persons)	10/7/2	10/7/2	10/7/2	10/7/2	10/6/1	9/6/1
Percentage of employees with disabilities	(%)	2.98	3.28	3.38	3.40	3.40	3.37
Rate of taking paid leave	(%)	59.4	62.4	61.8	67.2	68.4	60.0
Average number of days of paid leave taken	(days)	13.7	14.4	14.2	15.3	15.7	13.7

① CO₂ emissions

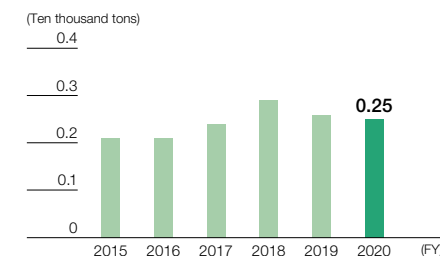
① Water usage



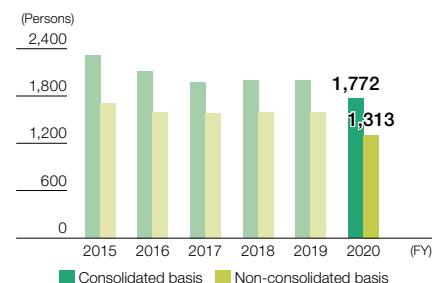
① VOC emissions



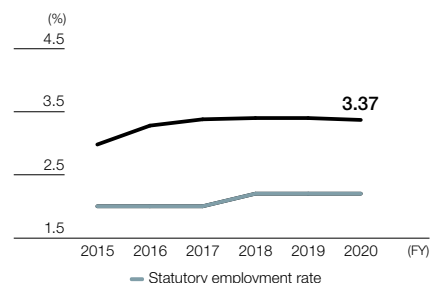
① Waste emissions



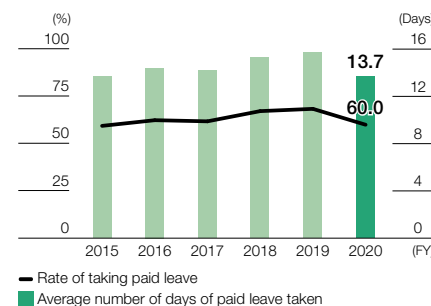
② Number of employees



Percentage of employees with disabilities



Rate of taking paid leave / Average number of days of paid leave taken



Explanation of key aspects of non-financial performance

① For various environmental indicators in fiscal 2020, such as CO₂ emissions, we were able to reduce the numbers compared to the previous year, as a result of the introduction of energy-saving equipment at manufacturing sites and improved yields in manufacturing processes.

See Page 38 for the details of the initiatives to reduce environmental impact.

② The number of employees decreased in fiscal 2020 due to such factors as personnel transfers related to the establishment of a manufacturing joint-venture company and the introduction of a "special early job transfer support program."