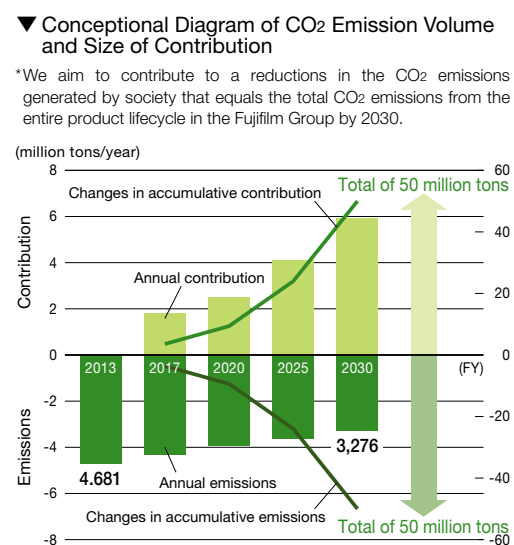
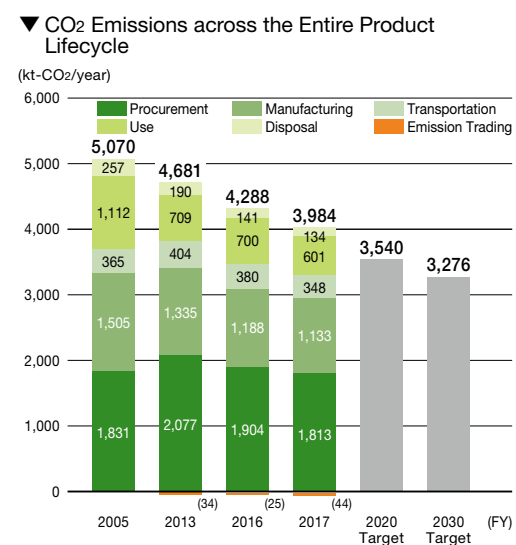


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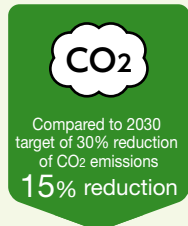
# Address Climate Change

- Target for 2030**
- (1) Reduce the Fujifilm Group's CO<sub>2</sub> emissions by 30% by FY2030 (compared to the FY2013 level).
  - (2) Contribute to a reduction in the CO<sub>2</sub> emissions generated by society by 50 million tons by FY2030.

The Fujifilm Group has set new targets to create of a carbon neutral society aimed at by the Paris Agreement. Along with CO<sub>2</sub> emissions reduction across the entire product lifecycle (from material procurement, product manufacturing, transportation, use and disposal), we are continuing to actively reduce CO<sub>2</sub> emissions in society through providing our products and services. At the manufacturing stage, we direct our efforts at using lower carbon energy sources, including adopting and utilizing renewable energy, in addition to the promotion of energy saving and efficient energy usage.



- Outline of Activities in FY2017**
- Dissemination and expansion of energy-saving measures at production sites. (Highly efficient operations by controlling the number of in-house cogeneration systems, Energy loss reduction by rationalizing chillers and air conditioners, Energy usage reduction by installing LED lighting and inverters.)
  - FY2030 CO<sub>2</sub> emissions reduction target was approved by the Science Based Target (SBT)\* initiative.
  - Establishing the environmentally conscious products certification program.
  - Our highly energy-saving magnetic tape won the Prime Minister's Prize under the 7th Monodzukuri Nippon Grand Award (hosted by METI, MLIT, MHLW, and MEXT in Japan) in recognition as the "large-capacity data tape with outstanding performance in total user costs, an achievement bolstering the era of big data and IoT." (Fujifilm)
  - Development of innovative toner technology realizing low environmental impact and high image quality won the Environment Minister Prize under the 16th Green and Sustainable Chemistry Award hosted by Japan Association for Chemical Innovation. (Fuji Xerox)
  - The Next Generation Managed Print Services that utilizes the energy-saving reconditioned devices won the Minister Prize of Economic, Trade and Industry, under the Energy Conservation Grand Prize 2017 in Japan. (Fuji Xerox)
- \* SBT: An international initiative established by Carbon Disclosure Project (CDP), World Resources Institute (WRI), World Wide Fund for Nature (WWF), and United Nations Global Compact. The organization recommends science-based targets for reducing greenhouse gas emissions among companies to keep global temperature increases below 2 degrees Celsius compared to pre-industrial temperatures. There are 16 Japanese companies certified by the SBT initiative (as of April 2018).



Related Data and Information: Environmental information Page 63

- Future Activities and Targets**
- Seek the further opportunities to use and actual utilization of renewable energy (introduction of energy purchase based on renewable resources and renewable energy facilities).
  - Promote creation of environment-conscious products through our Certification System.

TOPICS

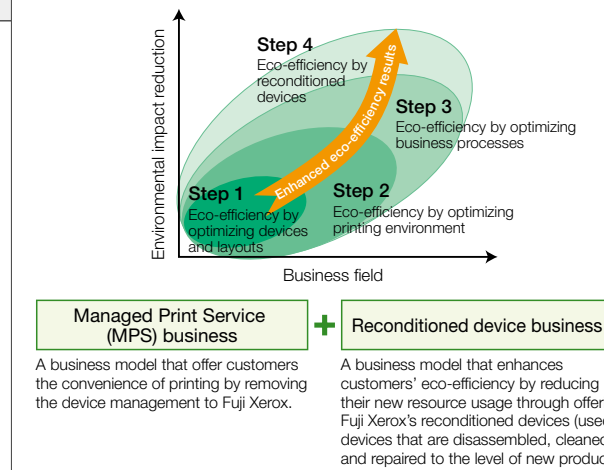
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## Energy-Saving Activities with Customers

Energy Conservation Grand Prize awarded in recognition of our next generation energy-saving business model

Fuji Xerox's Next Generation Managed Printing Service (MPS), which utilizes energy-saving reconditioned devices, won the Minister's Prize of the Ministry of Economy, Trade and Industry, in the category of products and business. This is the highest ranking prize in that category of the Energy Conservation Grand Prize 2017. The Energy Conservation Grand Prize is given for model energy-saving efforts undertaken in business or business sites, as well as products and business models with excellent energy-saving features. This is the second time for Fuji Xerox to receive the Minister's Prize. The Next Generation MPS is a new business model that offers energy-saving, resource-saving and productivity improvement through the integration and evolution of reconditioned device business and comprehensive office equipment management business to offer the optimum printing environment. Special staff members analyze the volume of printing, frequency, power consumption, and other copying and printing activity information in an office in order to visualize the working conditions of each multifunction device and printer, and then offer the optimum printing environment by reviewing the installed devices and models—as well as their layout in the office. In addition to this actual usage data, they conduct questionnaire surveys and process analyses to offer a process efficiency improvement plan that includes paper usage reduction and enhanced productivity by converting paper-based processes into digital processes. Reconditioned devices, which have been serviced to the level of brand-new products, are offered as replacements for older equipment, enhancing the overall

▼ Diagram of Next Generation Managed Print Service



environmental friendliness of our customers' businesses. Through this service, we have reduced the number of devices by 23% on average in the two years of FY2015 and FY2016, as well as reducing paper usage by 810 million sheets and CO<sub>2</sub> emissions by 10,040 t-CO<sub>2</sub> (approx. 5,170 kL when converted to crude oil consumption). Also, more than 40% of the devices provided through this service are reconditioned devices. Fuji Xerox is promoting further energy conservation in offices though expanding this business model across the world.

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## CO<sub>2</sub> Emissions Reduction Working Together with the Industry

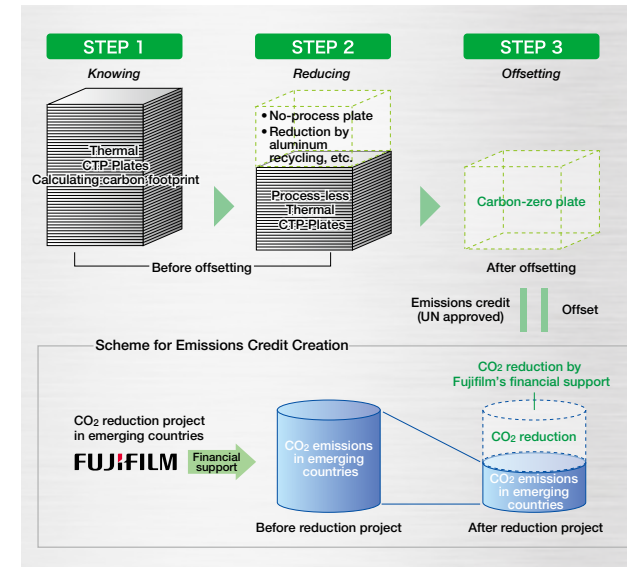
CO<sub>2</sub> emissions reduction by carbon offset achieved with printing industry customers



In April 2018 Fujifilm started the Carbon Offset\* scheme with its process-less thermal CTP plates. Process-less thermal CTP plates are printing plates used in offset printing that can significantly reduce environmental impact by making unnecessary for an automatic processor and chemicals in the plate processing.

At the same time, FUJIFILM Global Graphic Systems Co., Ltd., which sells printing devices and materials, started the Green Graphic Project (GGP), a CO<sub>2</sub> emissions reduction scheme, by working together with the printing companies who purchase our CTP plates.

▼ Carbon Offset Scheme by the Process-less Thermal CTP Plates



The GGP manages carbon offsets to make the CO<sub>2</sub> emissions from process-less thermal CTP plates across their lifecycle to zero by utilizing the CO<sub>2</sub> emissions rights obtained by Fujifilm through supporting CO<sub>2</sub> emissions reduction projects in developing countries. Through this scheme, printing companies that purchased and utilized process-less thermal CTP plates can discount some of the CO<sub>2</sub> emissions generated during their printing process to zero. Further, customers can then display the GGP mark, which makes an appeal as their CSR activities to stakeholders. This also indirectly contributes to clean energy, employment generation, and infrastructure construction in developing countries.

Fujifilm has led environmental contribution activities in the printing industry, such as through the Plate to Plate System, a closed loop recycling system that recycles the aluminum from printing plates used. Through the GGP, we are further spreading usage of process-less thermal CTP plates using the carbon offset, thereby contributing to reducing environmental impact in the printing industry.

\* Carbon offset: Offsetting the CO<sub>2</sub> volume that is inevitably emitted in our daily life and business activities and could not be reduced despite appropriate efforts, with the CO<sub>2</sub> emissions reduction volume achieved in other activities. The GGP is certified by the Carbon Offset Scheme hosted by the Ministry of Economy, Trade, and Industry.



### ● Reduce the Fujifilm Group's CO2 Emissions

In FY2017, CO2 emissions from the entire product lifecycle in the Fujifilm Group achieved a large reduction of 7% over the previous year. Our new target set in FY2017 was "Reduce the Fujifilm Group's CO2 emissions by 30% by FY2030 (compared to the FY2013 level)" and our actual achievement so far against this target is 15%. We are steadily making progress in our CO2 emissions reduction efforts. CO2 emissions were reduced in all stages in the product lifecycle. Particularly in the manufacturing stage, energy usage increased by business expansion was compensated for by energy-saving activities propelled across the company and we attempt to realize continuous CO2 emissions reduction.

The Energy Strategy Promotion Committee has been working group-wide to maximize efficiency in energy usage and to seek in the energy purchase based on lower carbon resources. The Fujinomiya Factory of FUJIFILM Corporation's Functional Materials Manufacturing Headquarters, introduced a small energy supply system in FY2016 to maintain efficient energy use when the demand for energy varies, to ensure that it can fulfill customers' orders in a timely manner. In FY2017, the factory cut its CO2 emissions by 14,000 ton by using the small energy supply system and being flexible in using the large system to match the production quantity, improving the overall energy efficiency. FUJIFILM Hunt Chemicals U.S.A. reduced its energy consumption per product by 18% by introducing LED lighting, contributing to a reduction in CO2 emissions. More than ten facilities in Japan, the United States and South East Asia introduced LED lighting in FY2017.

In the future, we will continue to enhance our energy-saving efforts towards our FY2030 targets through promotion and reinforcement of renewable energy-derived procurement and introduction of renewable energy facilities.

In our overseas sites, our factory in the Netherlands already succeeded in sourcing 100% of its electric power from renewable energy in FY2016, and two factories in Belgium worked together to find a 100% renewable energy-derived power supplier and concluded a contract with them to receive supplies in 2020. The entire Fujifilm Group is working in an integrated manner to reduce CO2 emissions in order to prevent global warming.

Our efforts for FY2030 CO2 emissions reduction target are certified through the Science Based Target (SBT) initiative under the We Mean Business\*. Our efforts are also internationally committed to Responsible Involvement in Climate Change Countermeasures.

\*We Mean Business: An environmental platform operated by international organizations, think tanks, and NGOs that are promoting global warming countermeasures among corporations and investors.

### ● Contribute to a Reduction in the CO2 Emissions Generated by Society

The Fujifilm Group has been working to reduce environmental impact through our products and services, based on internal rules concerning Design for Environment. We are also making progress in the visualization and calculation of contribution to CO2 emissions reduction through products and services, based on the internal guidelines. For our FY2030 target, "Contribute to a reduction in the CO2 emissions generated by society by 50 million tons by FY2030 (total contribution from FY2017)," we had a amount of contribution of 4.63 million tons in FY2017 through high capacity magnetic tape storage (energy saving through the storage for archive data), multifunction devices (products and solutions), and medical IT systems. The achievement rate for the FY2030 target was 9%, which was a steady progress. The magnetic tape was awarded by the Prime Minister's Prize under the 7th Monodzukuri Nippon Grand Award in evaluation of its contribution to big data storage with lower power consumption and cost in Japan (see page 33).

We have been implementing a range of energy-saving technologies in both hardware and software in all new multifunction devices and copiers. We are promoting to reduce electricity usage in our customer by replacing the older models with new ones. In FY2017, we received an award from the Environment Minister Prize under the 16th Green and Sustainable Chemistry Award for "Development of innovative toner technology to realizing low environmental impact and high image quality," as well as the prize of the Minister of Economy, Trade and Industry, under the Energy Conservation Grand Prize 2017 for "a next generation managed print services" that utilizes an energy-saving reconditioned device in Japan (see page 18). Combining the integrated management service that offers the optimum printing condition for customers, and our reconditioned multifunction devices and copiers, we are contributing to realizing all of energy conservation, resource conservation, and improvement of productivity.

As for one of our CO2 emission reduction measures, carbon offsets, we have also started working on process-less CTP plates as printing materials in addition to current cosmetics (see page 18). The Fujifilm Group is thus working towards CO2 emissions reduction with a comprehensive approach that combines a wide range of measures.

