

Our life is supported by the blessings from nature (ecosystem services), and our values and the way of living leave heavy footprints on the global environment through our consumption pattern, energy and resources use. So a shift to a sustainable lifestyle is needed.

This chapter describes the changes in the mindset of Japanese people about "richness" and "goods," and the spreading new lifestyles and work styles such as the sharing economy and telework that also serve to help reduce environmental load.



ETHICAL CONSUMPTION

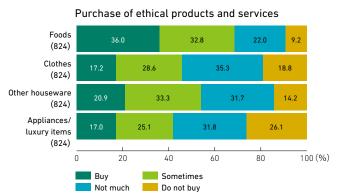
"SDG Goal 12: Ensure sustainable consumption and production patterns" calls for minimization in use of natural resources and toxic substances and discharge of waste and pollutants throughout the product life cycle from production to consumption. Sustainable consumption embodies diverse concepts, and one which is drawing particular attention in Japan is the concept of ethical consumption.

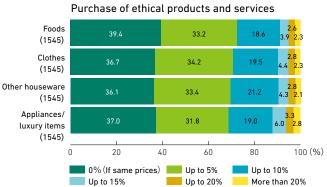
Household sector in Japan emits about 15% of total CO₂ emission and discharges nearly one-half

of food wastes. To address these problems, shift in both consumer mindset and household efforts are required.

About 70% of Japanese people believe that ethical products and services improve the corporate image, and about 60% want to purchase such products and services. The interest is quite strong. About 30% of the people have bought some ethical products in the categories of foods, houseware, clothes and appliances/luxury items in descending order.

Consumer awareness for ethical consumption





Source: Consumer Affairs Agency: "Consumer awareness survey for ethical consumption"

Supply consumers with sustainable agricultural, forestry and fishery products

Aeon Co., Ltd. launched its private brand "TOPVALU Green eye" series in 1993 that are characterized by the health-conscious and eco-friendly products. In 2002, the company introduced a set of original quality control standards based on the EUREPGAP (now GLOBALG.A.P), the international certification system for agricultural products. In this way, Aeon is actively promoting supply of sustainable agricultural products.

For fishery products, Aeon launched MSC-certified products to the market in 2006. In 2014, it became the first Asian retailer to sell ASC-certified products, a guarantee that the products came from environmentally and socially conscious fish farms. Aeon has been taking those initiatives to conserve limited resources.

In April 2017, in addition, Aeon decided its own procurement policies and targets for agricultural products, livestock, fishery products, paper/pulp/timber, and palm oil. It has put up targets for the amount of sustainability-certified products it will be handling by 2020.



Tomatoes grown in a GLOBALG.A.P-certified farm in Japan



MSC-certified Shisyamo fish

Source : Aeon Co., Ltd

SHARING ECONOMY

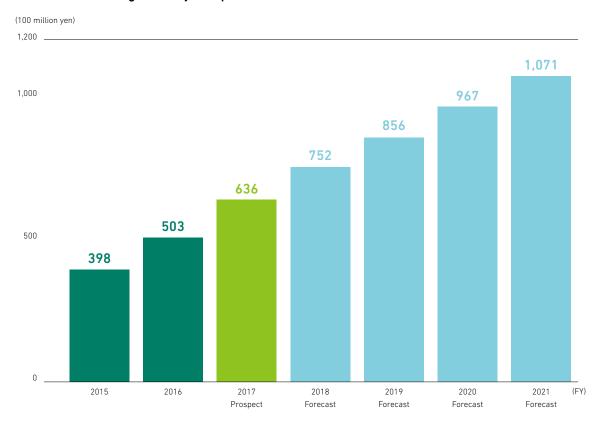
To increase resource productivity, the 3Rs (reduce, reuse, and recycle), especially the first 2Rs (reduce and reuse) are important. Traditionally, the store-type reuse business of waiting for customers to bring in used products and selling them to other customers has been the popular business model of the 2Rs.

More recently, the spread of smart phones and advance of AI have enabled sharing information

about the availability of personal assets (rooms, cars, etc.) and abilities (skills, knowledge, etc.) among many and unspecified users through the Internet. In Japan, too, the sharing economy is spreading, a trend that can accelerate 2Rs in a way different from the past.

The market size of sharing economy in Japan exceeded 50 billion yen in FY2016 and is expected to reach nearly 100 billion yen in FY2020.

Market size of sharing economy in Japan



Source: Yano Research Institute Ltd.: Sharing Economy Market 2017

Sharing economy offers to consumers a new choice of economic action and enriches their life. In addition, it can result in environmental improvements such as reduction in natural resources inputs and waste generation through more efficient use of resources

and reduction of CO₂ emissions through sharing of mobility and spaces. It is expected to raise the overall production value of Japanese economy and to produce in a new lifestyle replacing overconsumption and throwaway practices.

Bike sharing involving local government

DOCOMO BIKESHARE, INC. offers an environment-friendly bicycle sharing system by combining bicycles and mobile phones. Mostly in a joint venture with municipal governments, the company is engaged in "community cycle (bicycle sharing)" services in a number of cities. Currently, the company and nine cities of Metropolitan Tokyo (Chiyoda, Chuo, Minato, Shinjuku, Bunkyo, Koto, Shinagawa, Ota, and Shibuya) are implementing a demonstration project of "Tokyo Bicycle sharing" by which a user can rent a bike at a port in a city and return it in another city. The renting is very simple with smart phone, and one can rent a bicycle at any one of the ports. An increasing number of users ride the bicycle for sightseeing, business, and daily life.



DOCOMO BIKESHARE bicycles at a dedicated port

Source : DOCOMO BIKESHARE, INC.

FOOD WASTE REDUCTION

Food and Agriculture Organization of the United Nations (FAO) estimates that 789 million people around the world suffer from malnutrition (3 year average between 2014 and 2016). The SDGs have set up the target of halving per capita global food waste at the retail and consumer levels by 2030.

About one-half of food waste generated in Japan is attributable to general household. Intensified effort on the part of food businesses as well as awareness raising of consumers is neccessary reduce food waste.

NO-FOODLOSS PROJECT

A national campaign coined "NO-FOODLOSS RROJECT" is underway as a public-private joint project involving relevant government ministries to promote reduction of food waste.

As a part of the project, close reviews are made to reduce food waste at every phase of supply chain. They cover, for example, changing the delivery deadline of processed foods to retailers, labeling of "best before" date by year and month only, promoting "Order only as much as you can eat" campaign in restaurants, and enhancing use of food bank. To reduce food waste in household, various campaigns are carried out to change consumer behavior (over-purchase, excessive cooking, etc.).



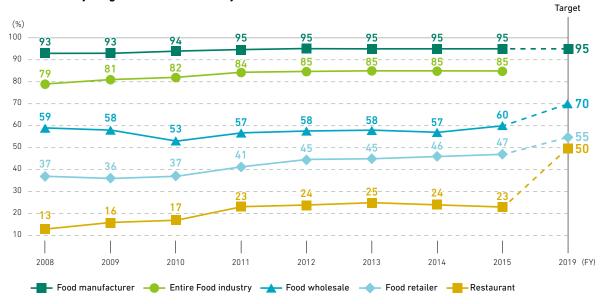
Logo mark of NO-FOODLOSS RROJECTSource: Ministry of Agriculture, Forestry and Fisheries

Effective use of food waste

For effective use of food waste inevitably generated, recycling and other measures are promoted in Japan by law. The target recycling rate by FY2019

are 95% for food manufacturers, 70% for food wholesale, 55% for food retailers, and 50% for restaurants.

Trends of recycling rate in food industry

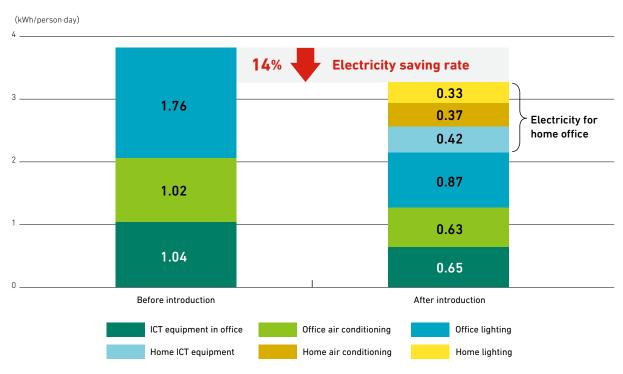


WORK STYLE REFORM

In Japan, telework and other flexible work styles have been gradually spreading, taking advantage of ICT to make better use of time and place. Such new work styles are expected to improve the work-life balance, alleviate the fatigue from long commute, and broaden job opportunities in rural areas. In addition, environmental benefits such as the reduction of CO2 emissions by less transportation and material conservation by promoting paperless are expected.

The Ministry of Internal Affairs and Communications estimates that introduction of telework to a certain number of employees, making office free-address, alternating lights-off by floor, thinning of lights, shortening the air conditioner run hours, and downsizing the office space, will cut per capita electricity consumption in office building by 43%. Taking into account the increase of power consumption at home because of telework, electricity saving of 14% at the office and home in whole will be achievable per capita.

CO2 reduction at office by telework



Source: Ministry of Internal Affairs and Communications: FY2010 Study on Next-Generation Telework Environment

In telework, business documents are sent electronically, and so paperless work becomes possible. This makes the work more efficient and also saves space to keep files of paper documents. The prefectural

government of Saga estimates that, after introduction of telecommute system, 14.4% saving in paper costs was achieved in FY2014 over FY2012.

Traffic congestion mitigation and environment protection by Telework Day

During the London 2012 Olympic and Paralympic Games, about 80% of firms operating in the city introduced telework in anticipation of traffic congestion. Telework is regarded as a key to preventing traffic congestion in the Tokyo 2020 Olympic Games.

The government has coined July 24, the day of opening ceremony of the Olympics, as the Telework Day, calling on companies and organizations throughout the country to try teleworking. On the 2017 Telework Day, some 63,000 workers from 950 entities participated. As a result, a large-scale work shift occurred and the traffic congestions were alleviated. There were also reports of office floor electricity saving and benefits of paperless work.

TELEWORK DAY
The Day we Change our workingstyle.





Leaflet of 2017 Telework Day

Poster of 2017 Telework Day

Source : Telework Promotion Forum