







## Implementation of environmental conservation

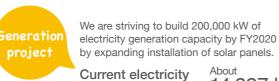
Through thorough implementation of energy-saving and waste control policies, we will develop a town in harmony with nature by introducing the latest technologies to minimize environmental burden and creating a mechanism to protect ecosystem.





Our target in the "AEON eco Project" that started in 2012 is to reduce energy usage by 50% compared to FY2010 in FY2020.

Reduction rate at malls owned and managed 46.0% by AEON MALL in FY2017 (compared to FY2010)



Current electricity at malls owned and

FY2010

20%

30%

40%

50%

generation capacity 14,397 kW

FY2017 FY2020

# managed by AEON MALL

Target reduction rate by 2020

### Energy-saving / utilization of natural energy

### **LED Lighting**

For malls opened in recent years, 100% of public areas is equipped with LED lights. We are also encouraging specialty stores to adopt LED lighting when a new mall is opened or when existing stores are renovated since, colors and brightness of lights can now be chosen by stores. As a result, a steady progress is being made in the switch to LED lighting. Additionally, LED lighting with lower power consumption is being adopted for exterior electric signs.

#### Introduction of an air-conditioning ventilation energy saving system

We have achieved remarkable energy-saving by introducing an air-conditioning ventilation energy saving system and managing energy of entire properties using an advanced IT technology. This system optimizes energy efficiency using IT by always monitoring outside air temperature, room temperature and humidity, and humidity and CO2 concentration, and controlling electric equipment, air conditioning equipment, water supplying and draining equipment, and the like.

#### **Solar Power Generation**

Moving ahead of other commercial properties, we have introduced solar power generation systems in stages to create electricity by utilizing natural energy. In addition, some malls have introduced systems where power generated by solar panels can be used in the event of a power outage due to disasters etc.

## Completed to install EV chargers at all our malls in Japan

This fiscal year, a total of 142 malls\* managed and operated by AEON MALL completed the installation of 1,476 EV (electric vehicle) chargers. We have also installed 461 EV chargers at 10 malls in China where EV vehicles have been rapidly spreading. In addition, in November 2017, we officially participated in "EV100", an international business initiative, to promote use of electric vehicles by enterprises as the first Japanese company.

\* Excludes some property management (the building management and operation being commissioned by the owner) malls.



## Promoting use of public transportation

AEON MALL is trying to make it easy for customers to be able to visit mall by using public transportation, and some of our malls within walking distance of station is doing much more, for example, by offering benefits to customers who come by train in cooperation with railroad company and transportation bureau. AEON MALL Chikushino (Fukuoka Prefecture) started full-fledged operation of Park & Ride in October 2017 in cooperation with Chikushino City, Fukuoka City, Fukuoka Prefecture, JR Kyushu, Nishitetsu. By preparing parking spaces for 70 cars on weekdays, the mall supports customers who visit the mall by car so that they can transfer from the closest station to Hakata and Tenjin by train.



## Implemented "Light Down Campaign 2017"

We are participating in the "CO Reduction / Light Down Campaign" advocated by the Ministry of the Environment, and we turned off some outdoor lights from 20:00 to 22:00 on the summer solstice June 21 and on the Cool Earth Day July 7 in

2017. About 1,700 facilities including stores and distribution centers belonging to the nationwide AEON group participated in this campaign and implemented simultaneously. In addition, as part of this

campaign, AEON MALL Makuhari New City (Chiba Prefecture) held a workshop where participants create luminous paper strips and penlights using magnesium batteries and attracted attention from the viewpoint of environmental load reduction.





### Cool sharing project "Suzumall"

As one of our efforts for the national campaign "COOL CHOICE" to take global warming countermeasures which the AEON group supports, we implemented the cool sharing project "Suzumall" at each mall just like last fiscal year. Each mall held various events such as opening our study rooms to the public and holding water events. Purpose of this event was to offer an opportunity for reduction of home air conditioner use by providing customers with an enjoyable and comfortable time at all malls.



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### **Smart AEON development**

We have been working on "Smart AEON" since September 2012 to implement the "AEON eco Project" which was formulated from five criteria that incorporate our efforts in cooperation with local communities (smart energy / electronic money and usage of Internet / traffic environment / biodiversity and landscape / disaster-prevention and regional infrastructure), in addition to conventional efforts to create properties with less environmental burden.



## Creating lush green malls

## Wall Greening / Planting

Not only does greening of mall roofs and walls improve the scenery but it also suppresses rising of temperature within mall during summer, thus leading to reduction of energy consumption by air conditioners. In addition, we produce pleasant and relaxing spaces by arranging rich green plants around each mall.



### **AEON Hometown Forests Program**

"AEON Hometown Forests Program" started in 1991 in Malaysia. Upon the opening of a new mall, we plant trees that are the most suitable to region's natural environment together with our customers. The cumulative number of planted trees reached 11.6 million trees (Group total) as of the end of February 2018.

### Reduction of waste and recycling

Safety Management at Malls

To reduce waste discharged from malls, it is important to gain cooperation from specialty stores and have them clarify "what, where, and how much waste is disposed of", and increase awareness. Each mall has introduced a system where waste is separated into 18 categories and weighed accordingly. After weighing waste of each category, specialty stores paste a sticker indicating weight of waste and collectively dispose of them at specified storage place for each category. We recycle separated garbage as much as possible and keep track of recycling rate for each category. Recycling rate for FY2017 was 86.1%.

## Promoting resource recovery and recycling

Some AEON MALLs have been promoting used paper recycling through introduction of a system where customers receive recycle points for the corresponding weight of old newspapers and old magazines they bring in. When a certain amount of points is accumulated, they can be exchanged for AEON gift coupons. This system is well received by customers because used paper is collected in dedicated boxes installed in malls, and customers can bring their used paper on the way to shopping at any time.

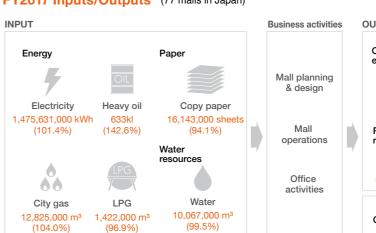
Additionally, we are implementing a system where customers can bring their PET bottles to be collected in exchange for WAON points that we give out in some AEON MALLs.



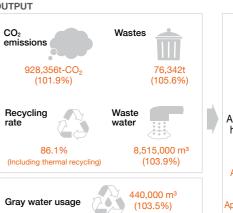
### Total amount of waste discharge and recycling rate in FY2017

Company recycling rate (including thermal recycling)			86.1%
Amount of waste discharge and recycling rate			
1	Garbage	16,660t	90.2%
2	Cardboard	21,383t	100.0%
3	Miscellaneous refuse	21,293t	64.1%
4	Waste plastic	3,365t	95.0%
5	PET bottle	624t	100.0%
6	Bottles	445t	96.4%
7	Can	647t	100.0%
8	Expanded polystyrene	123t	100.0%
9	Waste oil	1,919t	100.0%
10	Paper	2,794t	100.0%
11	Bulky refuse	254t	87.0%
12	Other incombustible refuse	e 1,300t	75.4%
13	Waste fluorescent lamp	22t	80.3%
14	Waste battery	10t	82.4%
15	Disposable chopsticks	114t	92.5%
16	Waste alkali peeling liqu	uid 27t	59.1%
17	Sludge	5,361t	86.0%
18	Waste engine oil	2t	_

### FY2017 Inputs/Outputs (77 malls in Japan)



OUTPUT



Absorbing CO<sub>2</sub> and heat, and keeping moisture Approx. 68,000 trees Total amount of trees planted Approx 2 466 000 trees

Note 1: For the whole mall including common use spaces, AEON and speciality stores. However, waste and the recycling rate apply to speciality stores and AEON MALL office, and copy paper applies to AEON MALL office only.

Note 2: Figures in parentheses are percentages over the previous year.

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