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NEWS RELEASE



March 28, 2018 AEON CO., LTD.

#### Aeon Sets Decarbonization Vision for 2050

For the realization of a decarbonized society, Aeon Co., Ltd. has established the 'Aeon Decarbonization Vision 2050' as well as an interim greenhouse gas emissions reduction target to be achieved by 2030.

Based on the vision, Aeon will work to reduce the total emissions of  $CO_2$  and other greenhouse gases from its stores to zero, while cooperating with all stakeholders, including customers of its stores and business partners across the supply chain (such as manufacturers and logistics companies), for the realization of a decarbonized society.

Aeon will work to reduce CO <sub>2</sub> and other greenhouse gas (hereinafter "GHG") emissions by taking the following three-pronged approach, thereby contributing to the realization of a decarbonized society.		
We will reduce	the total GHG emissions from our stores to zero by 2050.	
[Products and logi	stics]	
We will continuoperations.	e our efforts to achieve zero GHG emissions from our business	
[Hand in hand wit	n customers]	
We will coopera	te with our customers for the realization of a decarbonized society.	

2010 level).

For the attainment of the interim target, Aeon will foster energy conservation measures regarding the use of electricity, which accounts for about 90% of total  $CO_2$  emissions from its stores and business operations, thereby meeting the challenge of reducing its emissions by at least 1% per year while continuing to achieve business growth. Aeon will also advance the 'Smart Aeon' initiative, which the company has continued to promote in order to demonstrate a model for environment-friendly stores, toward developing 'the next-generation Smart Aeon' store where  $CO_2$  emissions will be reduced by 50% relative to the amount emitted from a standard Aeon store.

In combination with the aforementioned measures, Aeon will promote the installation of solar panels and foster a shift to renewable energy for electricity procured from external suppliers, thereby reducing its total  $CO_2$  emissions.

Moreover, in relation to the formulation of the Vision, Aeon has become the first major Japanese retailer to participate in the RE100 international initiative, which is made up of companies committed to using 100% renewable energy in an effort to shift the entire international community onto renewables.

Furthermore, the interim target was set in line with the target-setting criteria provided under the Science Based Targets (SBT) international initiative launched for the achievement of the 2 degree target\* upheld in the Paris Agreement. The interim target will be SBT-certified as a "science-based" target.

Aeon has long been committed to cutting  $CO_2$  emissions. In 2008, the Company became the first in the Japanese retail industry to set a  $CO_2$  reduction target when it released the 'Aeon Manifesto on the Prevention of Global Warming'. It achieved the target in 2011, one year earlier than planned. Subsequently, in the same year, Aeon formulated the 'Aeon Sustainability Principle', which includes the realization of a low-carbon society as one of the core principles. Aeon has thus been promoting sustainable management to make corporate growth and social development compatible.

The global decarbonization movement is gaining momentum thanks to the Sustainable Development Goals (SDGs) and the effectuation of the Paris Agreement. Against this backdrop, the Aeon Group will work to attain the targets set in the Vision to make contributions to the realization of a sustainable society.

\*Target of keeping the global average temperature rise to below 2 degrees Celsius above pre-industrial levels



# AEON Sets Decarbonization Vision for 2050 —To Achieve a Decarbonized Society—

March, 28, 2018 AEON CO., LTD.

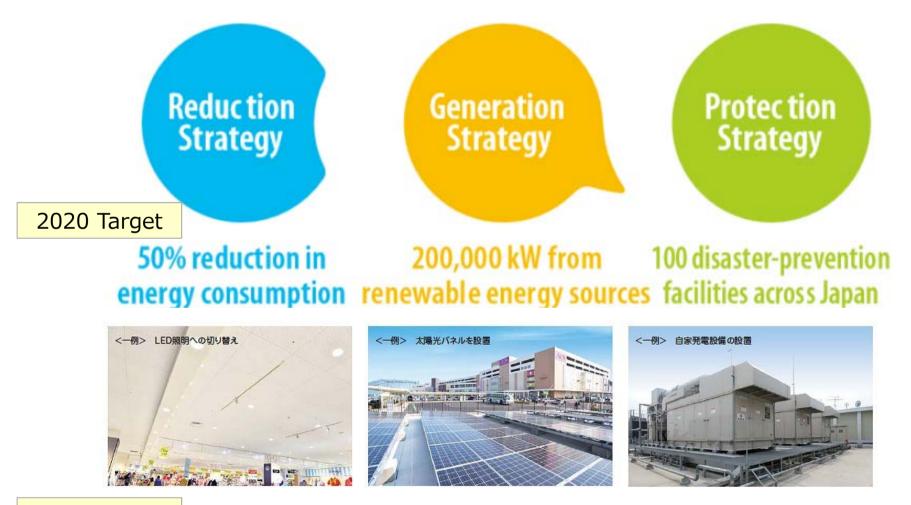
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### Aiming at a Decarbonized Society



#### Aeon's Eco Project (2012-2020)





2016 Results

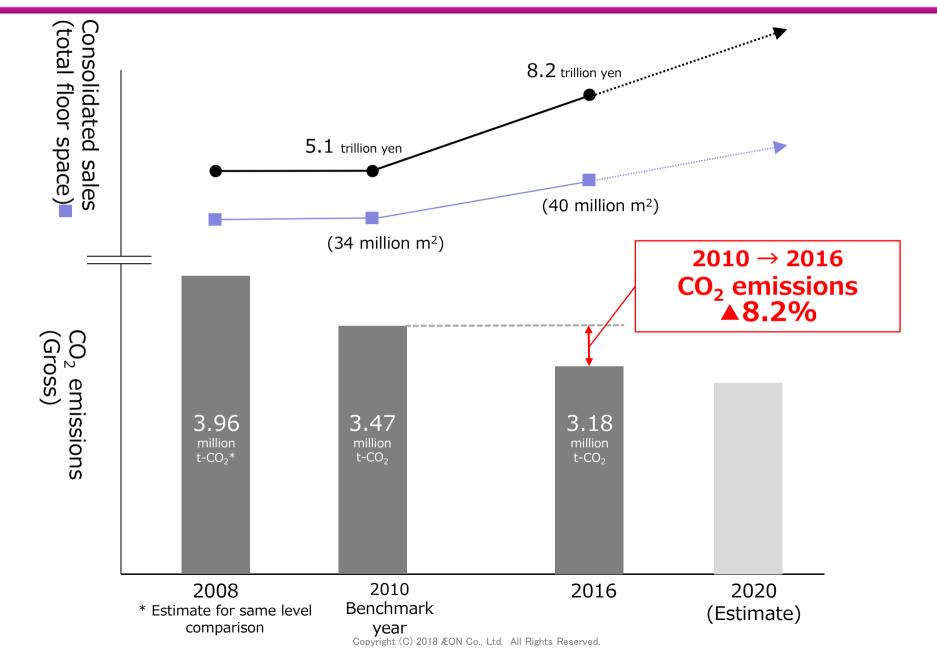
22% Reduction

Cumulative 62k Kw

33 places

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#### Aeon's Business Growth and $CO_2$ Emissions





#### Paris Agreement Content

- Below 2 degrees Celsius
- Net zero emissions

From low-carbon to decarbonization

- Ratchet-up mechanism
- Three paradigm shifts
- 1) Backcasting from zero CO<sub>2</sub> emissions \_ by the 2nd half of this century
- 2) Promote participation and cooperation of all stakeholders, including governments, municipalities, businesses, and citizens
- 3) Expanding growth opportunities, not limiting corporate activities (investment decision)

Big shifts

Aiming to Achieve a Decarbonized Society

## AEON Decarbonization Vision 2050

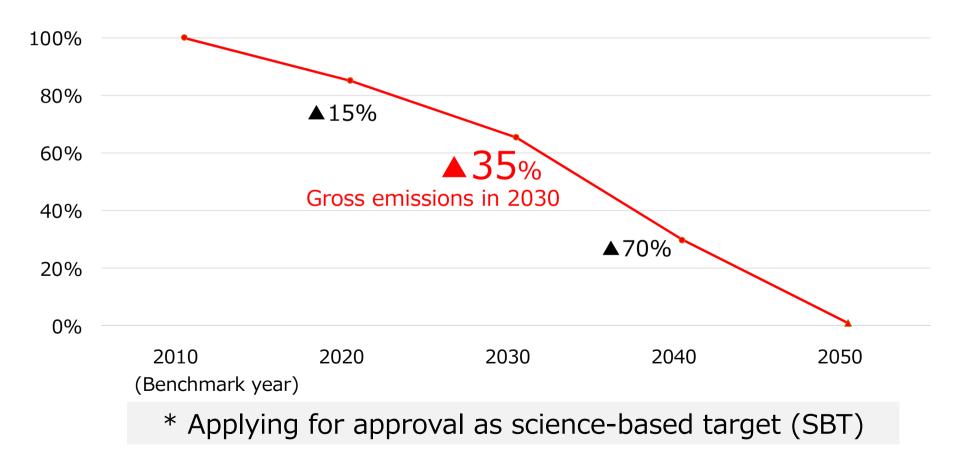
<u>Aeon will work to reduce CO<sub>2</sub> and other greenhouse gas (hereinafter "GHG")</u> emissions by taking the following three-pronged approach,

thereby contributing to the realization of a decarbonized society.

Stores	We will reduce the total GHG emissions from our stores to zero by 2050.
Products and Logistics	We will continue our efforts to achieve zero GHG emissions from our business operations.
Hand in hand with customers	We will cooperate with our customers for the realization of a decarbonized society.

Interim Target (CO<sub>2</sub> Emissions by 2030)

#### Set the target for 2030 by backcasting from emissions by 2050 CO<sub>2</sub> emissions reduction pathway by 2050 (scopes 1 & 2)





Reduce CO<sub>2</sub> emissions by 35% by 2030 (from the 2010 level)

<Means for achieving the target>

# About 90% of AEON's CO<sub>2</sub> emissions are attributable to electricity

Reduce energy consumption at stores and switch to renewable energy

Energy conservation Renewable energy

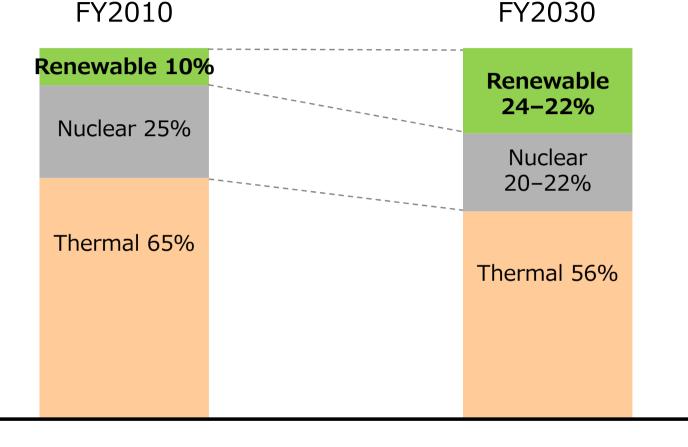


Aeon's electricity consumption accounts for about 1% of Japan's total electricity consumption.

	Japan's total*	Aeon	Aeon's % of Japan's total
Electricity consumption	850.5 billion kWh/year	7.4 billion kWh/year	0.9%

\* Agency for Natural Resources and Energy, METI. Fiscal 2016 Electricity Survey Statistics.

# Expectations for Further Increase of Renewable Energy



# $\begin{array}{c} \text{CO}_2 \text{ emission factor} \\ \textbf{0.35} \text{ kg-CO}_2/\text{kWh} \end{array}$

Emission factor adjusted with average (The Federation of Electric Power Companies of Japan)

#### $CO_2$ emission factor

**0.37** kg-CO<sub>2</sub>/kWh Basic policy and judgment criteria of the Act on the Promotion of Use of Nonfossil Energy Sources and Effective Use of Fossil Energy Materials by Energy Suppliers (Ministry of Trade, Economy and Industry)

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#### Means for Achieving the Target for 2030 /



Promote energy conserva tion	<ul> <li>Introduction of energy- saving facilities, operational improvement with IoT, etc. (lighting, air-conditioning, refrigeration case, etc.)</li> </ul>	Reduce by at least 1% a year		
Switch to renew- able energy	<ul> <li>In-house procurement of renewable energy, introduction of solar power generation systems</li> </ul>	Introduce at large stores + small stores		
	<ul> <li>Contract on renewable electricity</li> </ul>	FY2018-		
	<ul> <li>Use of renewable electricity credit</li> </ul>	_		
<ul> <li>Development of next-generation Smart Aeon</li> <li>Electricity business by Aeon Delight Co., Ltd.</li> </ul>				



# **Specific Initiatives**

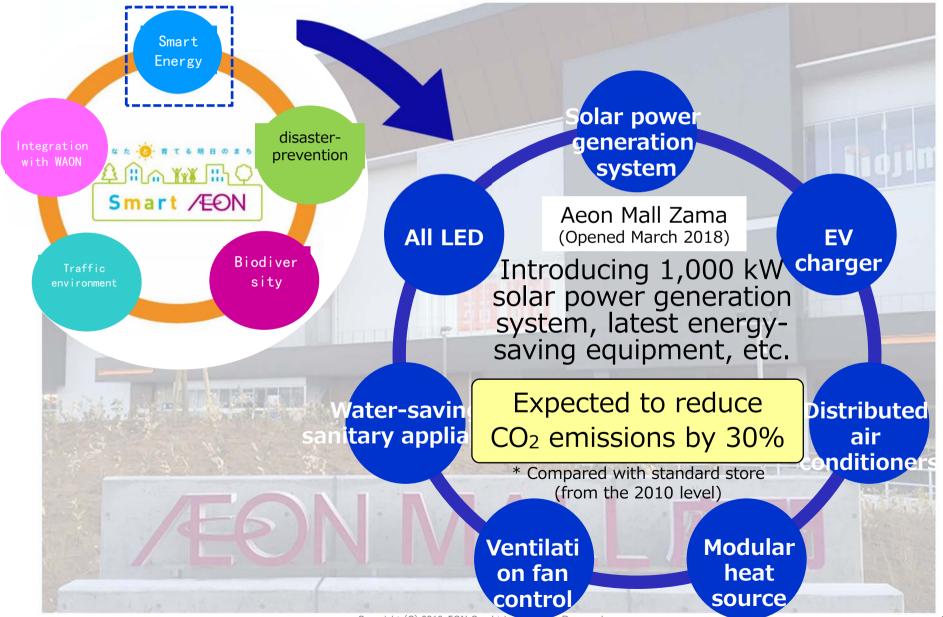
# Develop Next-Generation Smart Aeon

# Start to develop next-generation Smart Aeon aiming at 50% CO<sub>2</sub> emissions reduction to achieve the target for 2030

2005-	2013-	2020-
Eco-store	Smart Aeon	Next-generation Smart Aeon
	CO <sub>2</sub> emissions Average 24%	CO <sub>2</sub> emissions <b>50</b> % reduction
	reduction	* Compared with standard store (from the 2010 level)
<ul> <li>Provide eco-friendly stores and products/services.</li> <li>Carry out environmental activities together with customers.</li> </ul>	<ul> <li>Contribute to sustainable town &amp; community development.</li> <li><five standards=""></five></li> <li>Smart energy, disaster- prevention/local infrastructure, biodiversity/landscape, integration with WAON, traffic environment</li> </ul>	<ul> <li>Contribute to achieving a decarbonized society.</li> <li>Combination of various methods for energy-saving &amp; renewable energy to:</li> <li>Introduce next-generation smart technology</li> <li>Use AI and big data</li> <li>Achieve remote collective energy management</li> <li>Use local electricity from renewable sources</li> </ul>

#### The next-generation Smart Aeon' store





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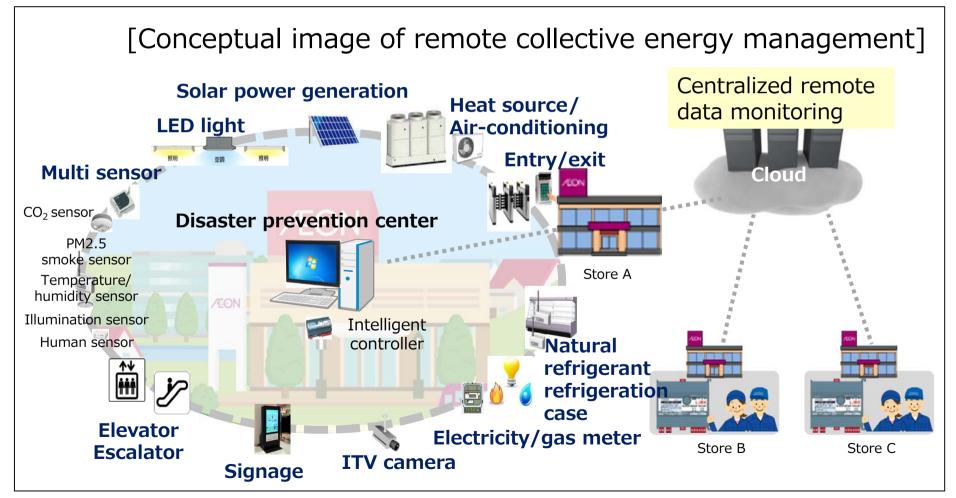


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## [Promote Energy Conservation]



Use IoT for remote collective management of energy allocation among Group stores to switch from partial optimization to total optimization of energy



 Aeon Delight's Electricity Business (Image)
 ■ In fiscal 2019, Aeon Delight Co., Ltd. will launch management and retailing of local renewable energy using new technology.



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# **RE** 100

# Aeon will move to 100% renewable energy by 2050 in terms of energy required for its business operations

Message from Sam Kimmins (Head of RE100, The Climate Group)

"Congratulations to AEON on this bold commitment. As a large international retailer, AEON has a substantial electricity demand, and going 100% renewable will send an important signal to the market in Japan and beyond that business wants to power itself using renewable energy." "AEON is demonstrating that businesses can lead on the decarbonization of energy systems whilst also reaping the business benefits of the emerging clean energy transition."



Aeon Mall Co., Ltd. joined EV100 in November 2017. Completed installation of EV chargers at all malls in Japan. 18 [Switch to Renewable Energy] Contract on Renewable Electricity



As of March 2018, the Head Office (Aeon Tower/Aeon Tower Annex, Chiba City) uses 100% renewable electricity.



Using TEPCO's "Aqua Premium," hydroelectric power with no CO<sub>2</sub> emissions [Switch to Renewable Energy] Contract on Renewable Electricity

ÆON

Take on a challenge to go 100% renewable at all Group stores, contributing to local production and local consumption of energy.



Locally purchasing electricity from renewable sources to use a wide variety of local renewable energies with a view to cooperating with municipalities.



# Initiatives across the Value Chain

# [Products/Logistics]



Aim to achieve a decarbonized society with efforts across the value chain, encouraging partners & customers to cooperate for  $CO_2$  reduction.

- Encourage product suppliers to:
- Request PB product manufacturing subcontractors to set CO<sub>2</sub> reduction target.
- Develop products that can contribute to CO<sub>2</sub> reduction.



Topvalu's "Peace Fit" functional underwear

- Promote modal shift
- Jointly operate dedicated trains with seven manufacturers; increase the train service.
- Use domestic vessels.



Modal Shift Study Group's dedicated train

## [Together with Customers]



Aim to achieve a decarbonized society with efforts across the value chain, encouraging partners & customers to cooperate for  $CO_2$  reduction.

- Aeon Cool Choice Declaration
- Encourage customers to make energy-saving & 3R efforts at home through events/products.



 "Bring your own shopping bag" campaign

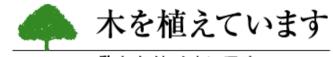
- Environmental education by Aeon Cheers Club
- Theme in fiscal 2018: "Energy"



#### Aiming to Achieve a Decarbonized Society







#### 私たちはイオンです

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