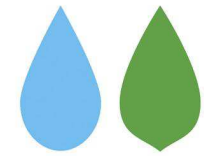


TOTO

あしたを、ちがう「まいにち」に。

Eco-Cities Network South East Asia



TOTO GREEN CHALLENGE

~ Towards a Water-saving type Society ~

TOTO's Commitment to the Environment



Oct. 20th , 2013
ESG Promotion Department
TOTO Ltd.
Yoshimi Shigenaga

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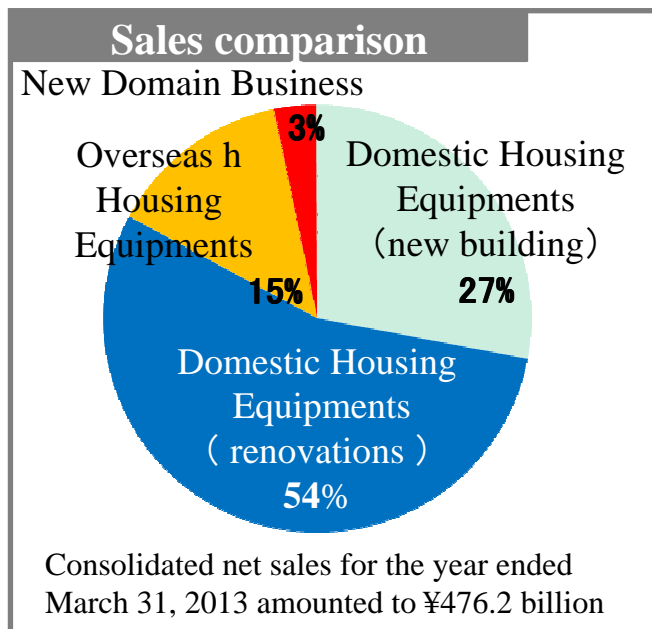
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1. About TOTO

■ Main Products



Domestic Housing Equipments

- sanitary ware

- bathroom

- kitchen

- Washlet

- washroom

- water faucets

Overseas Housing equipments

- sanitary ware

- Washlet

- water faucets

- bathtubs

New Domain business

- paints and building materials utilizing HYDROTECT

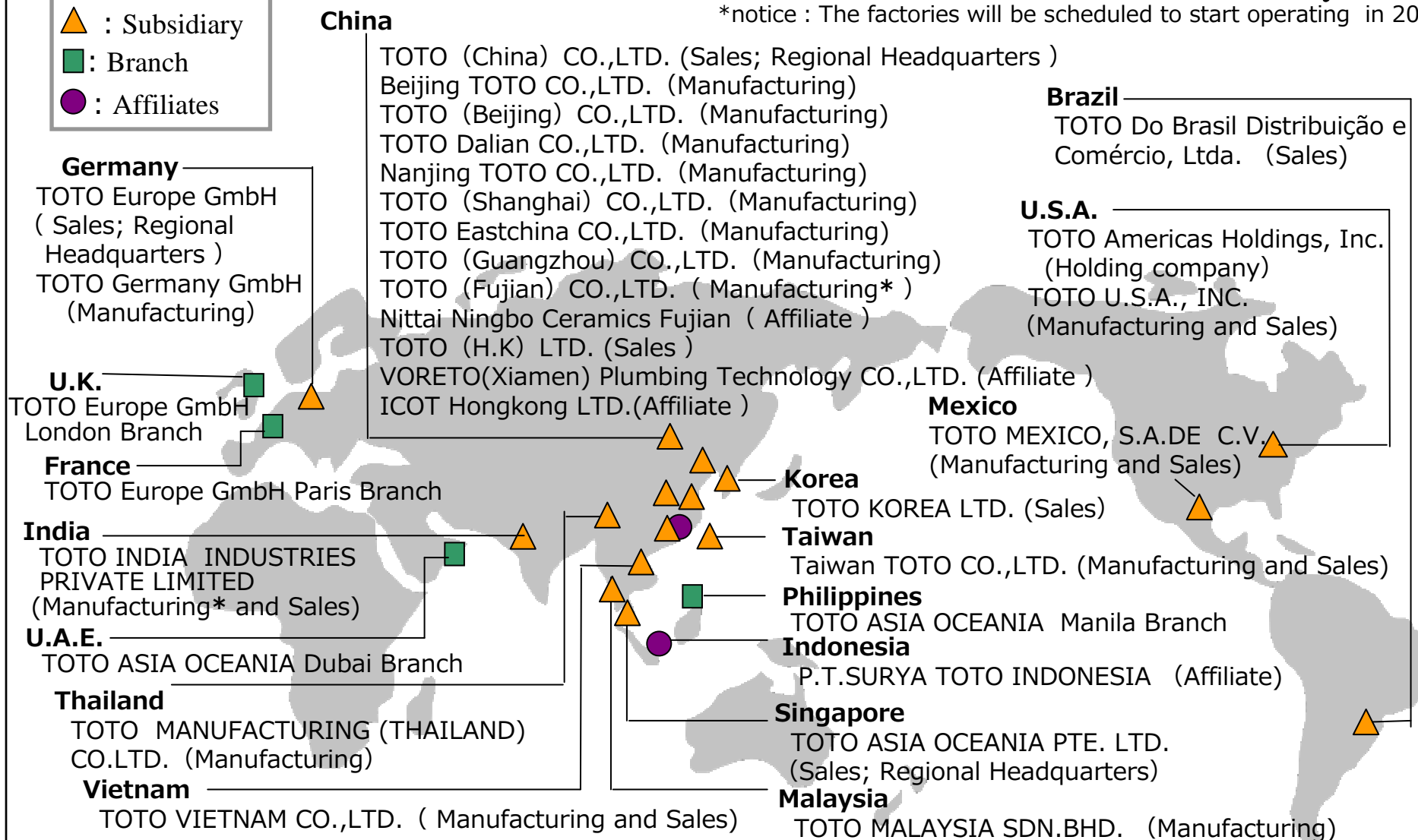
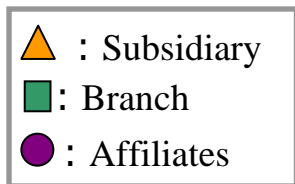
- ceramics

1. About TOTO

TOTO

As of July 2013

*notice : The factories will be scheduled to start operating in 2014



17 Countries 31 locations (16 Sales + 19 Manufacturing)

■ TOTO V-Plan 2017 (Long-Term Management Plan)



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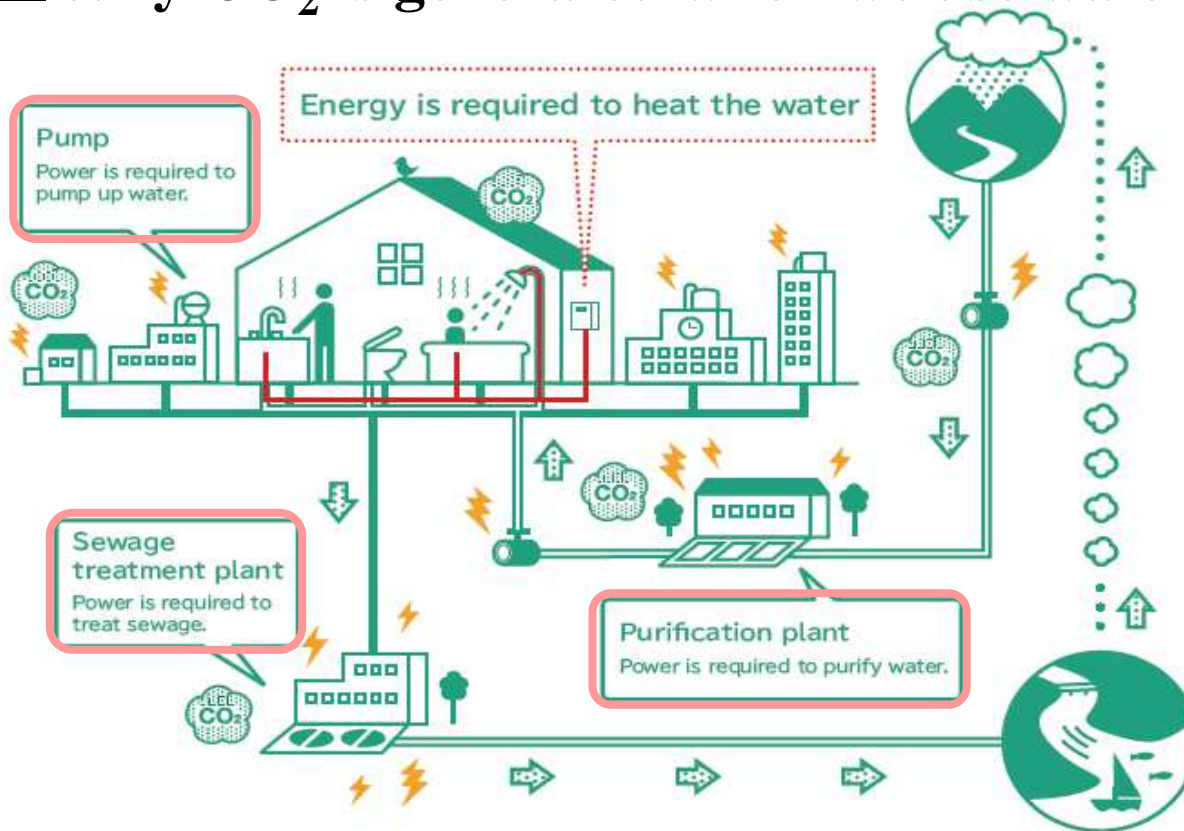
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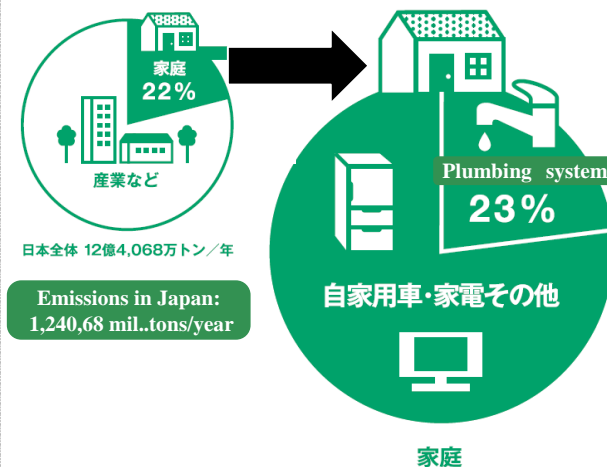
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■ Why CO₂ is generated when we use water



CO₂ Emissions from household water facilities



**22% * 23% ⇒ About 5%
of total emissions in Japan**

Source: Greenhouse Gas Inventory Office of Japan :
GHGs Emissions Data of Japan (fiscal 2011)
Within the "Power etc." category of "CO₂ emissions from households," toilet seats with warm water shower feature and dishwashers stated in "Power consumption per device in the home (2005 estimate)" are treated as plumbing equipment.

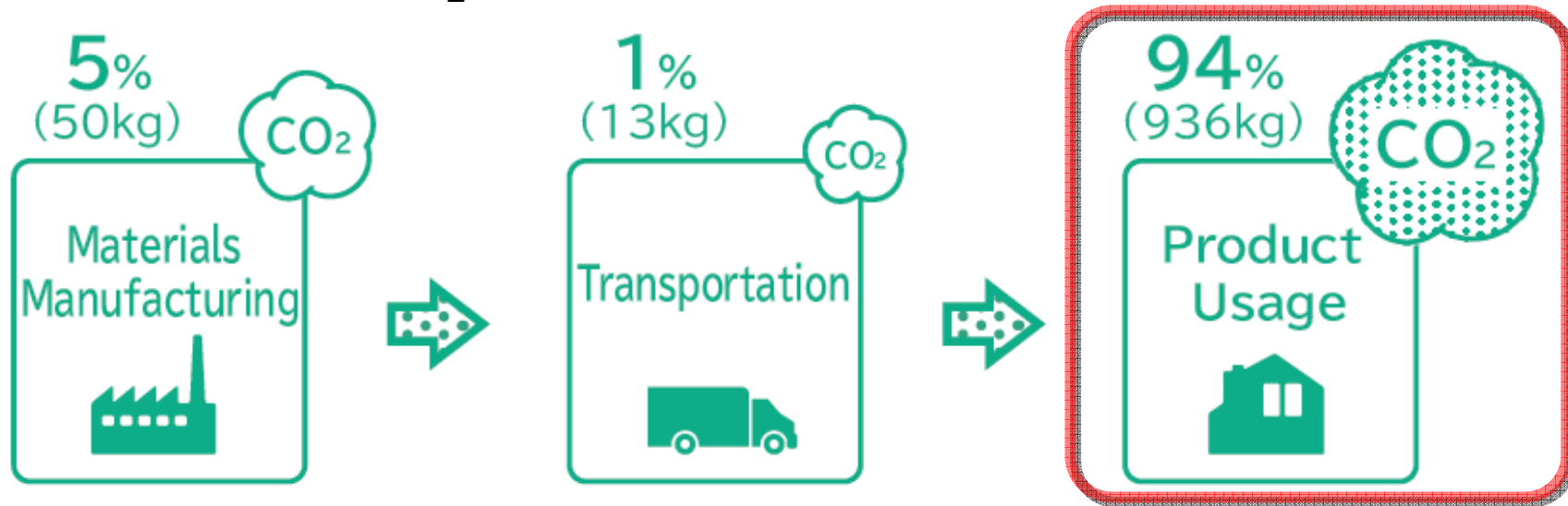
When we use water, power is needed to purify the water,
and energy needed to heat it.
Conserving water and hot water thus leads **to reduced energy use.**

With 1m³ water saved ■■■ 0.59kg-CO₂ reduced ※1

※1 Ministry of the Environment,
Environment and household accounts

2. TOTO and Environmental Conservation

■ Comparison of CO₂ emissions in Product Lifecycle



The NEOREST toilet with integrated Washlet (launched 2005, 8L flushes)

*Estimate based on TOTO product and environmental assessment criteria (assuming a product lifecycle of 10 years)

TOTO products emit the most CO₂ in the “Product Usage” stage

TOTO makes the biggest environmental contribution by providing water saving products for its customers

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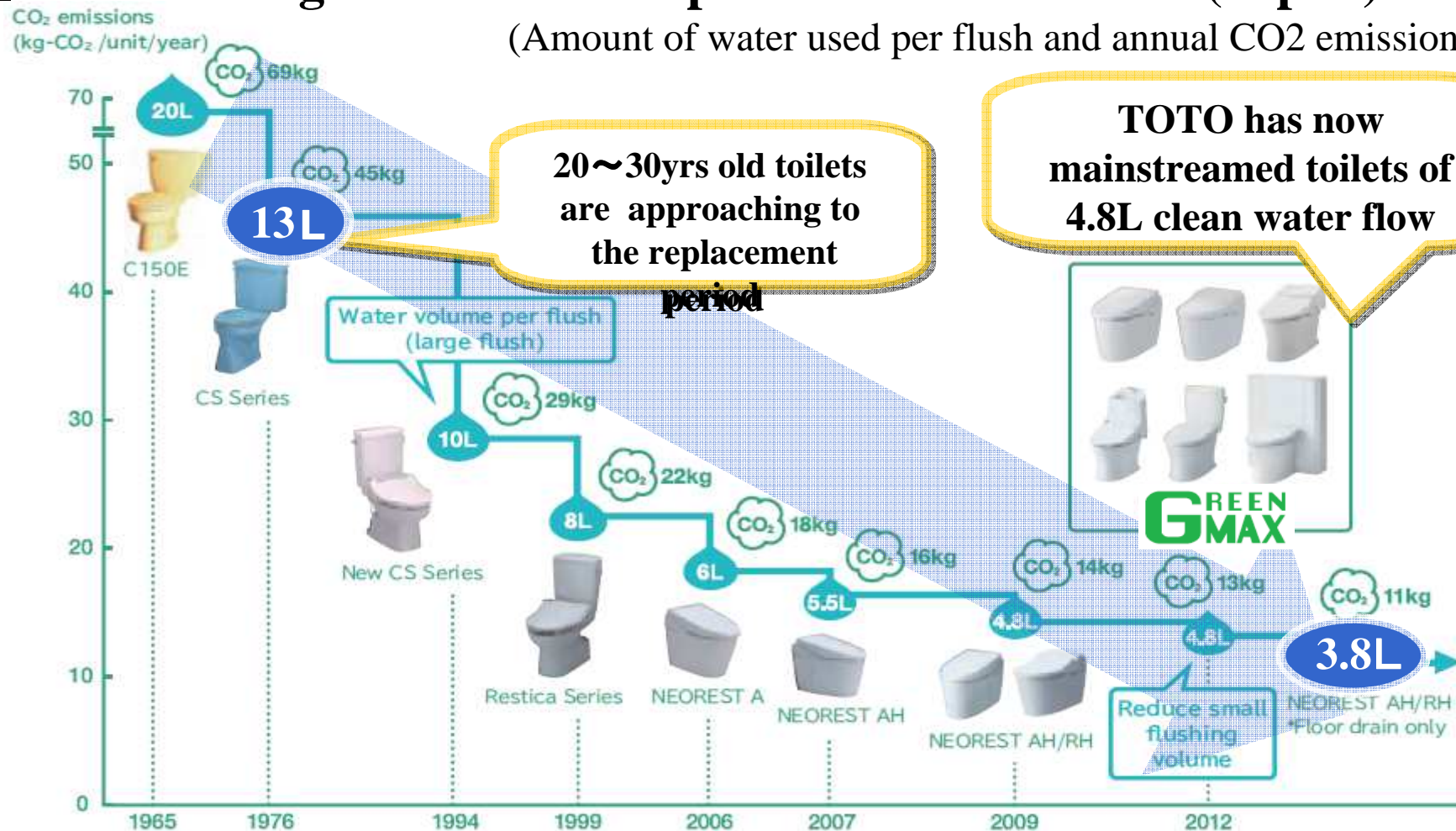
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3. TOTO's Commitment to the Environment



■ The evolving environmental performance of toilets (Japan)

(Amount of water used per flush and annual CO2 emissions)

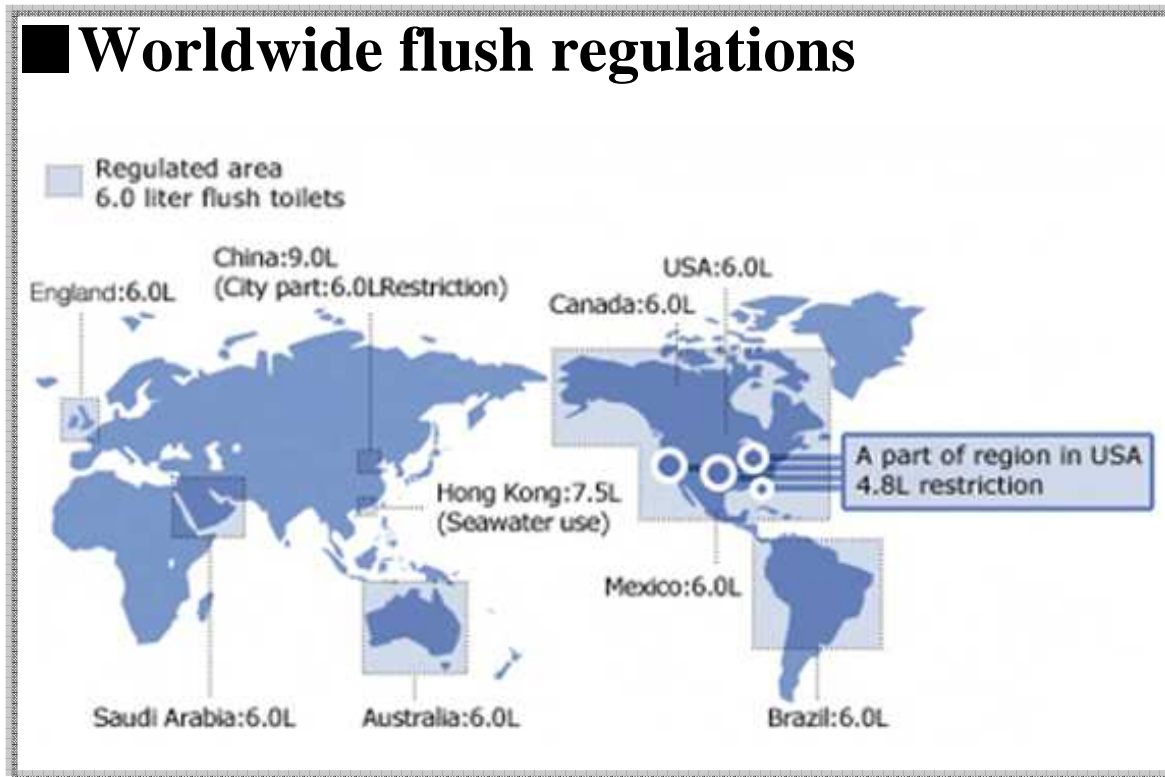


Toilets, in particular, use the most water in the household, and for many years, TOTO has worked to develop technology to control flushing water.

3. TOTO's Commitment to the Environment



Worldwide flush regulations



Japan

Neorest Hybrid Series

3.8L

GREEN
MAX

4.8L



The common standard worldwide is 6L. However, TOTO envisions a 4.8L standard.

Abroad

4.8L



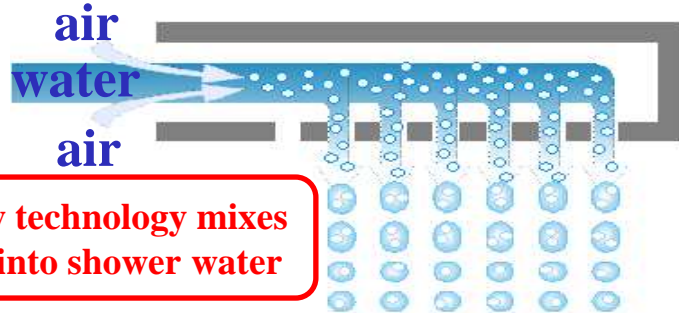
TOTO will push for 4.8L as the **global standard**, and popularize the even more water efficient 3.8L toilet

3. TOTO's Commitment to the Environment

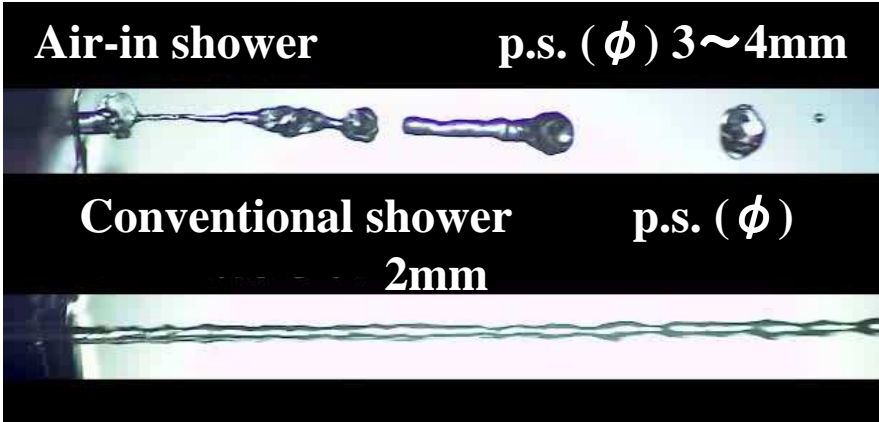


Air-in shower A combination of "water saving" and "comfort"

An new innovation was realised by creating a showering sensation with a fixed water volume.
Each drop is enhanced thanks to the air bubbles.



New technology mixes air into shower water



<p>Conventional shower</p>  <p>10L/min</p> <p>※ In case of optimal flow rate</p>	➔	<p>Water saving shower</p>  <p>8.5L/min</p>	➔	<p>Air-in shower</p>  <p>6.5L/min</p>	➔		➔	<p>Air-in shower with Temporary stop button</p> 
		About 15% water saving		About 35% water saving		About 48% water saving		

Even while saving water you can enjoy the luxurious sensations of the shower. A new showering experience.

3. TOTO's Commitment to the Environment

Changes in CO2 emissions and water consumption during product usage (Japan)



* When using the latest main products for the four major plumbing spaces (assuming a four-person household)

Environmental technologies, such as saving water and air purification, are being spread worldwide and are helping to solve global environmental issues.

あしたを、ちがう「まいにち」に。

TOTO