

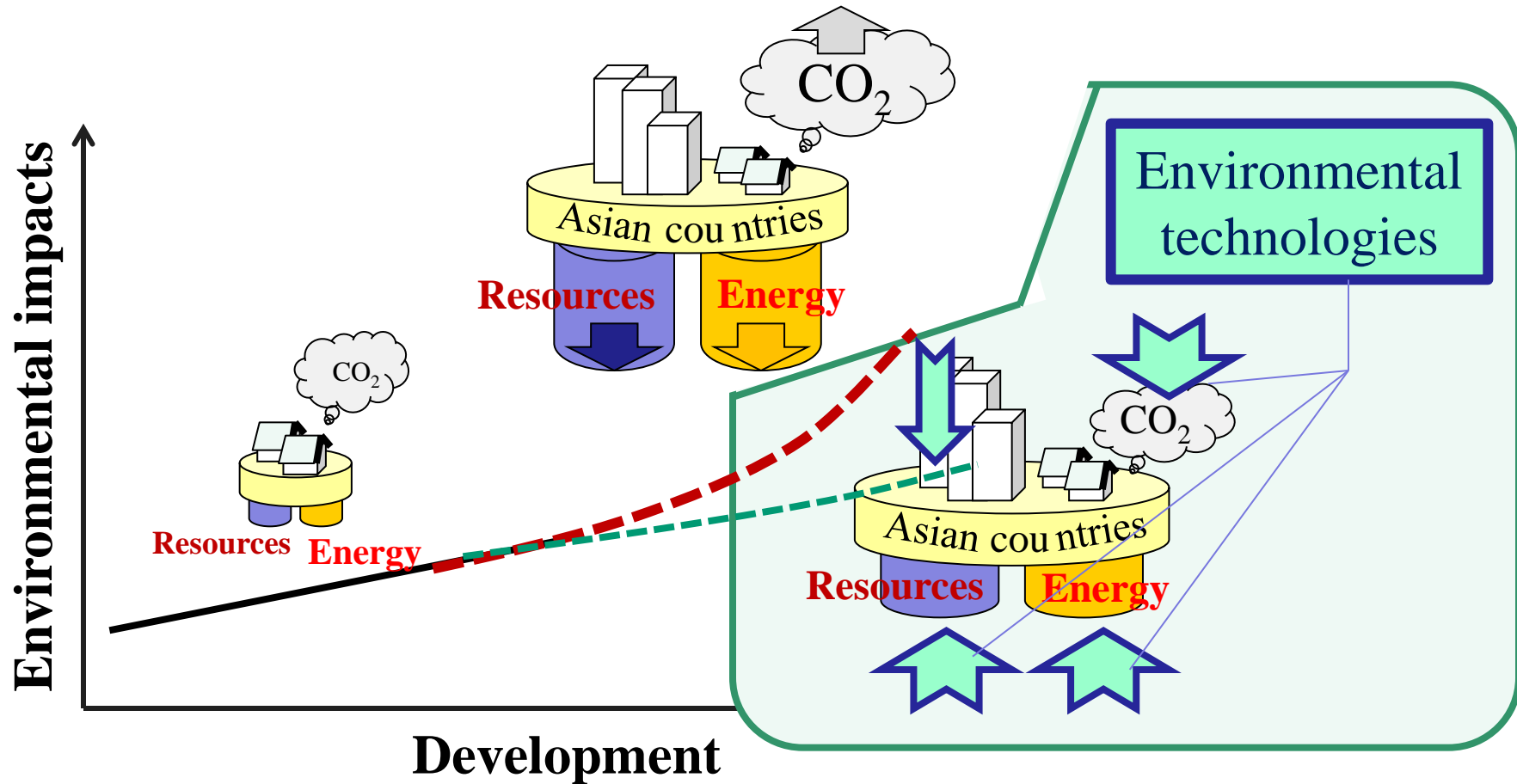
2013 High-level forum in Hanoi

Creation of Carbon Credits by Water Savings



March 20, 2013
Yasutoshi Shimizu
・Kanakano Toyosada

ESG Promotion Dept., TOTO LTD, Japan



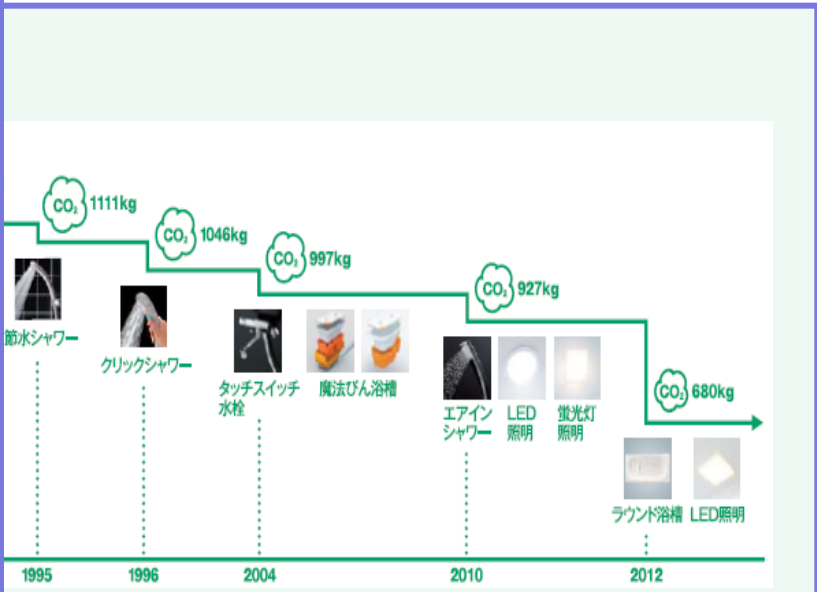
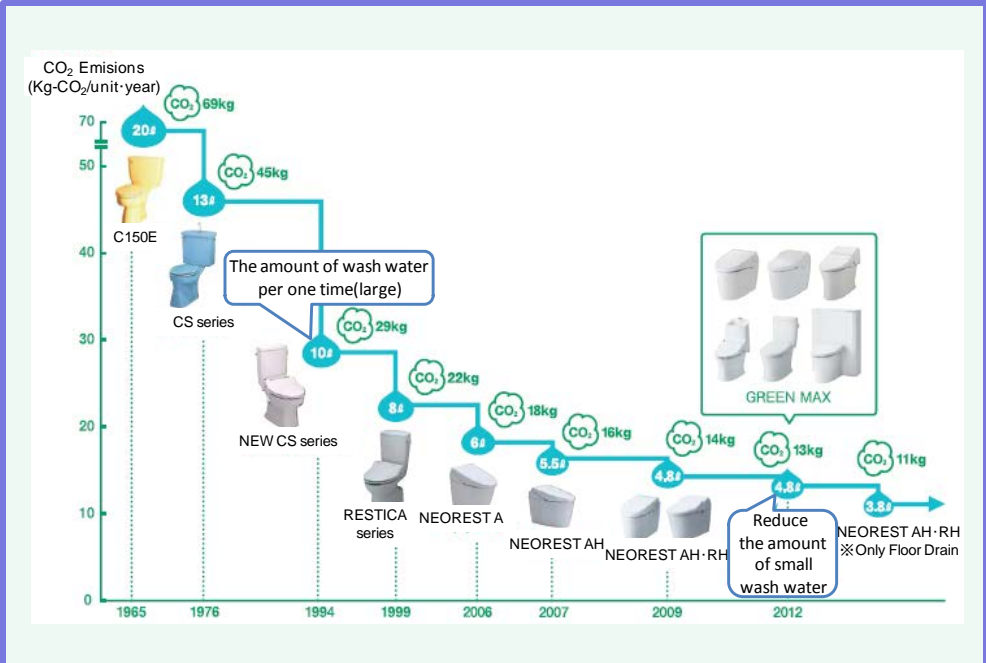
Environmental technologies help the sustainable development of Asian countries.

2. Co-benefit of water saving

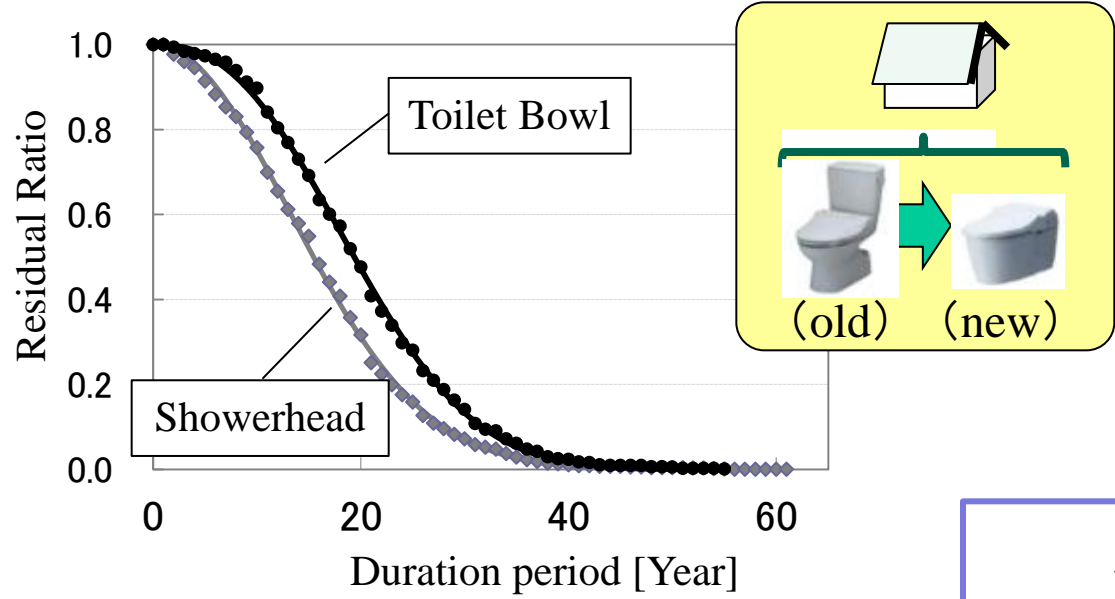
In Japan, we have developed water-saving technologies.

The driving force is to improve the competitive power of products (reduce operating costs).

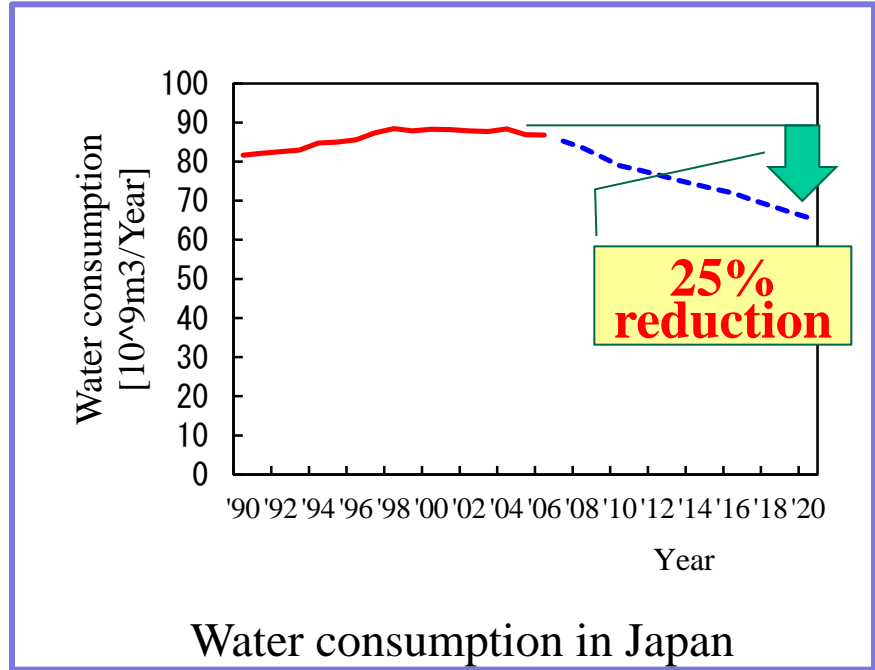
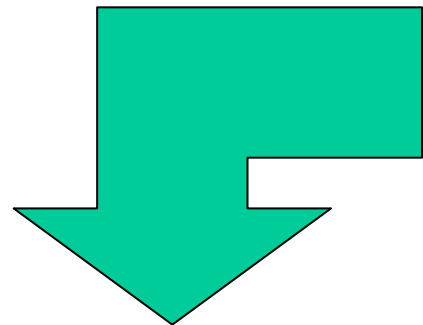
■ These technologies have been reflected in products.



2. Co-benefit of water saving

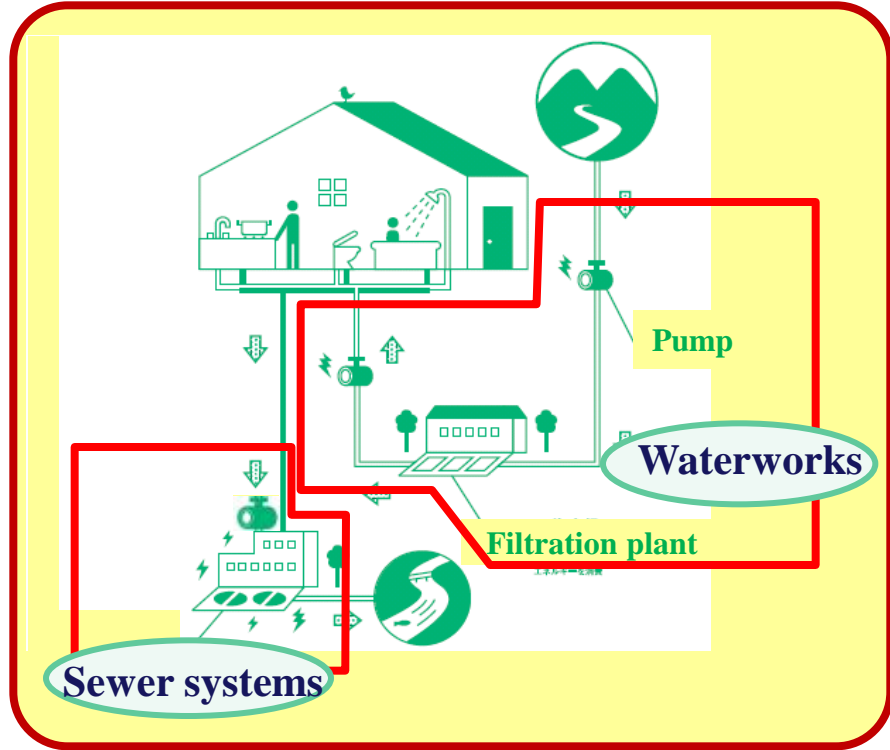
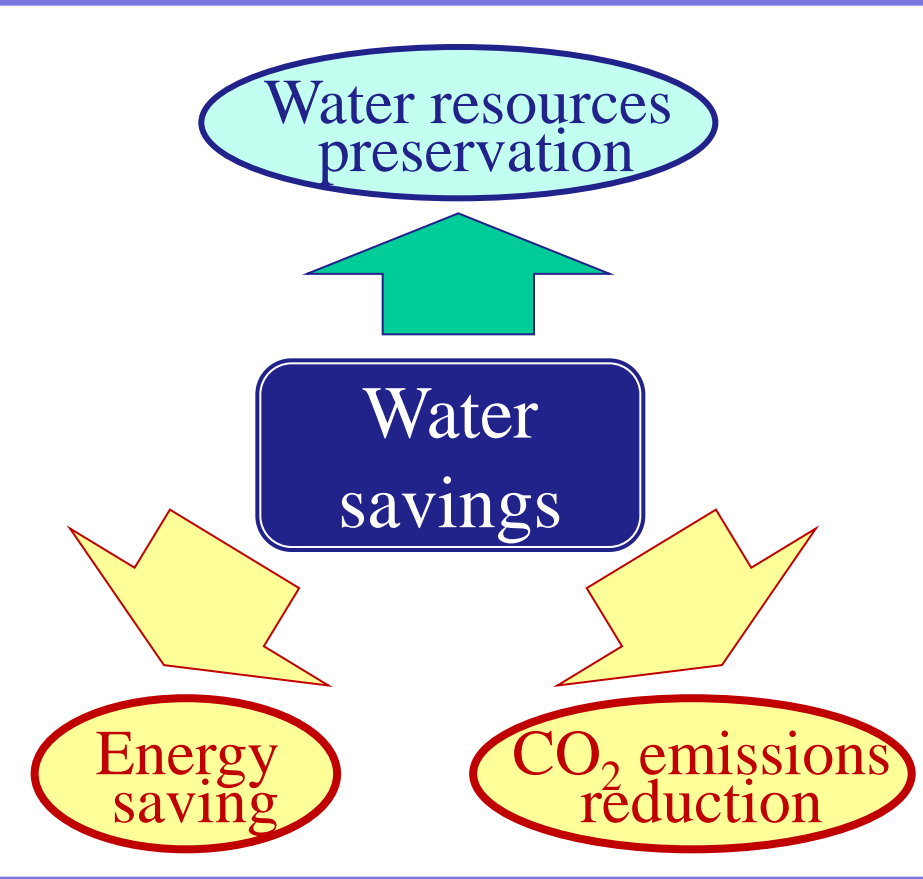


Duration distributions for household fittings.



Water consumption in Japan

2. Co-benefit of water saving

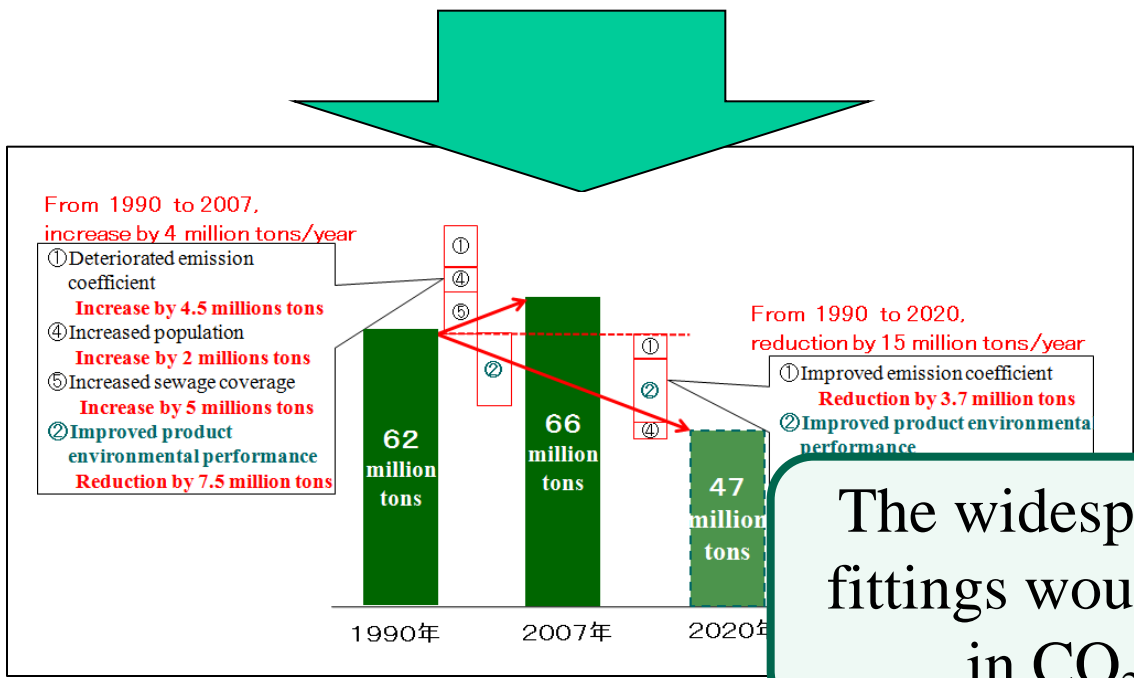


■ CO₂ emission factor of water
 = 0.44 kg-CO₂/m³



Water savings contribute to energy saving for water systems.

3. Creation of Carbon Credits by Water Savings TOTO

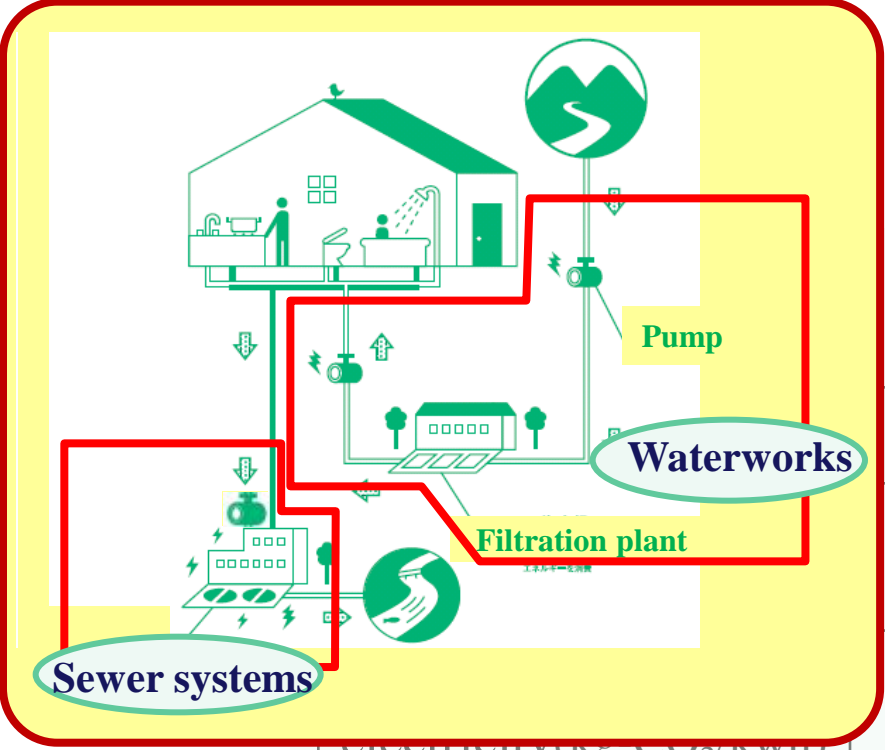


The widespread use of water-saving fittings would result in a **1% reduction** in CO₂ emissions in Japan

Eco-Point subsidies have been realized

Domestic & BOCM trials by water saving are underway.

3. Creation of Carbon Credits by Water Savings TOTO



of CO₂ emission factor of water

	Japan	China	Vietnam
	0.85	1.32	0.66
	0.41	0.84	0.58
CO ₂ emission factor of water (kg-CO ₂ /m ³)	0.44	1.11	0.39



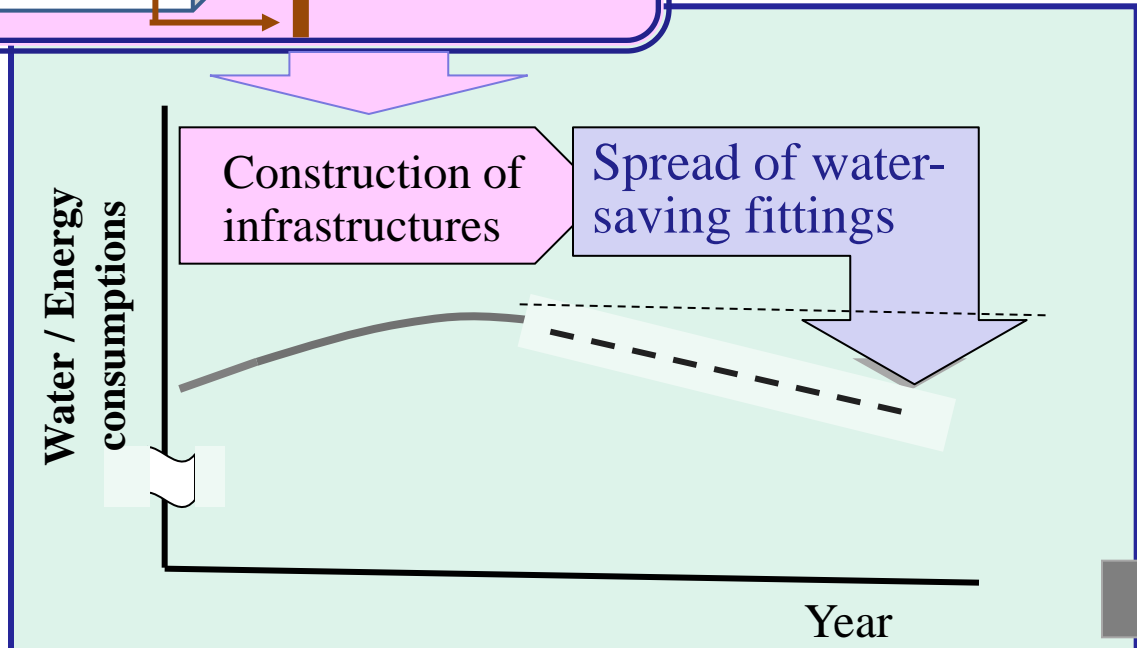
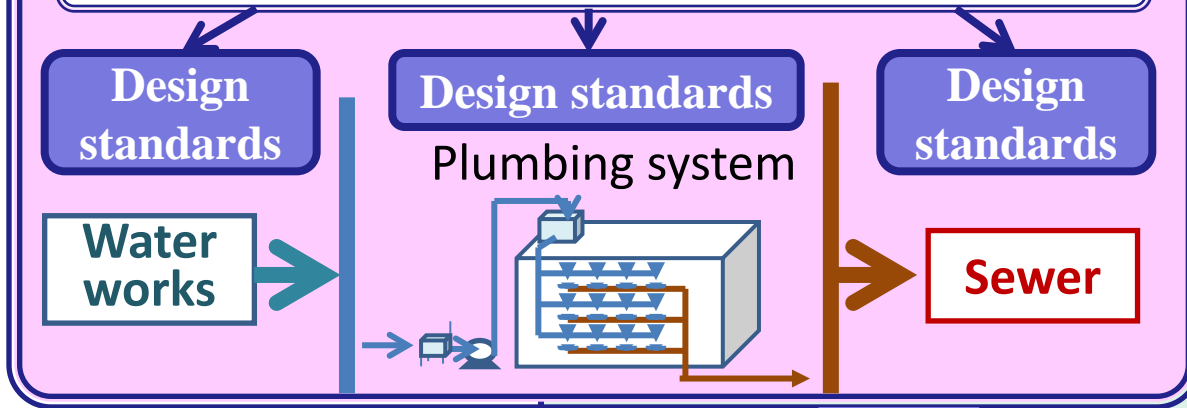
It is presumed that the CO₂ reduction by water saving would be effective also in other Asian countries.

4. Proposal to ASEAN countries

■ The conventional design concept

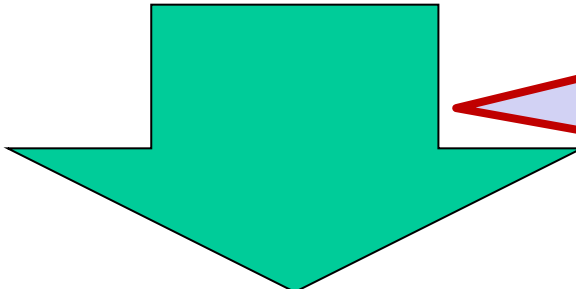
- • Basic unit for design is water consumption rate

Water consumption rate: 250 L/(person·day)

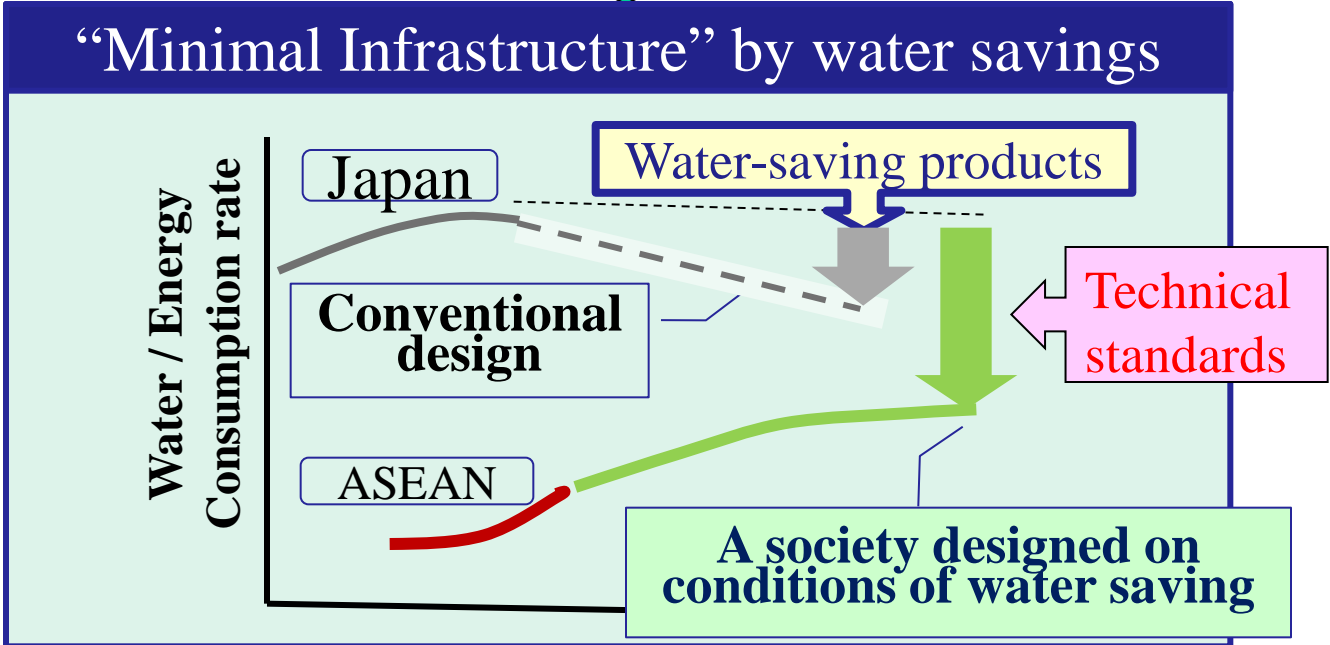


4. Proposal to ASEAN countries

We want to contribute to water-resources preservation and CO₂ reductions by ASEAN countries by water-saving technologies.



The environmental contribution effect may be able to be heightened by further investigating technologies.



あしたを、ちがう「まいにち」に。

TOTO