

TOTO's Commitment to the Environment



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TOTO Ltd.

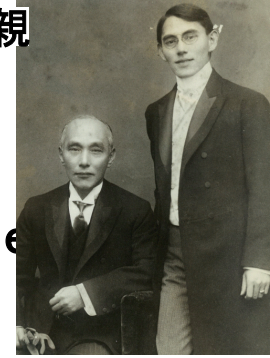
- ◆ Company name TOTO株式会社 (TOTO LTD.)
- ◆ Established May 15, 2017
- ◆ No of Employees 24, 159 (as of September 2010)
- ◆ Sales sales: JPY 4, 335mil. profit: JPY 138mil. (2010)



1. About TOTO: Its history of promoting culture of life **TOTO**

- Established in 1904 as Nippon Toki Goumei Kaisha 年
(Currently Noritake Company Limited)

大倉孫兵衛・和親



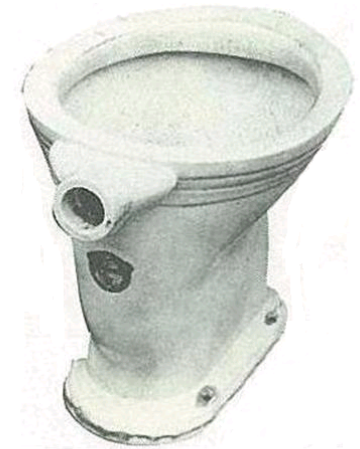
- In 1912 The Okura father and son invested their own funds to establish a ceramics research institute

■ In 1914 manufactured Japan's first sitting style toilet bowl.

- In selecting the location for the manufacturing factory,
 - Coal and clay ceramic raw materials were easily found in Chikuhō, Korea and Amakusa
 - Located near Moji Port, which was convenient for export to China and other Asian countries



For the above reasons, Kokura, Kitakyushu was selected



■ In 1917 established Toyo Toki Company



The company name reflects their will to expand into the Asia market

日本陶器合名会社の
マークをつけた製品

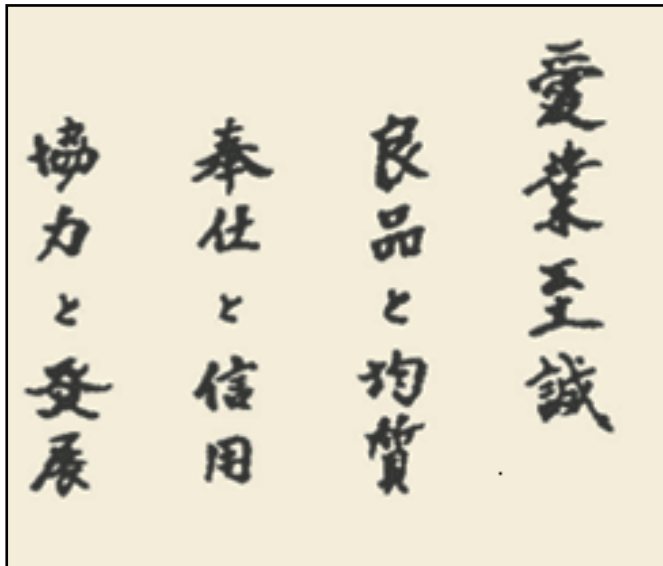


1. About TOTO: Its history of promoting culture of life

■ Succeeding the founder's will

Company creed

Established in 1962



五代目社長
江副孫右衛門

Predecessor's words were made into a corporate creed

「Offer healthy and cultural lifestyles」「Improve people's cultural lifestyles」、and 「to spread the use of sanitary ceramics will contribute to the development of the society」was the strong will behind establishment of the company

■ Main Products

Toilet



Bathroom/Kitchen



Tiles, Ceramics

Photocatalytic tiles
Hydrotect coat



光フェルール
光伝送用部品



エアースライド
液晶パネル製造用装置



Overseas Offices

(2011年4月現在)

Sales offices 14 in 12 countries
Production Sites 17 in 9 countries

- ▲ : Subsidiary
- : Business Office
- : Affiliate
- 赤 : 衛生陶器製造拠点

GERMANY
TOTO Europe GmbH
(販売・統括会社)
TOTO Germany GmbH
(生産会社)

CHINA
東陶(中国)有限公司(販売・統括会社)
北京東陶有限公司(生産会社)
東陶機器(北京)有限公司(生産会社)
東陶(大連)有限公司(生産会社)
南京東陶有限公司(生産会社)
東陶(上海)有限公司(生産会社)
東陶機器(広州)有限公司(生産会社)
東陶(香港)有限公司(販売会社)
東陶華東有限公司(生産会社)
厦門和利多衛浴科技有限公司(関連会社)

USA
TOTO U.S.A.,INC.
(生産・販売会社)

MEXICO
TOTO MEXICO,
S.A. DE C.V.
(生産会社)

KOREA
TOTO KOREA LTD.(販売会社)

UAE
トバイ営業所

TAIWAN
台湾東陶股イ分有限公司(生産・販売会社)

INDIA
TOTO India Industries Private
Limited (販売会社)
デリー営業所

PHILIPPINES
マニラ営業所

BRAZIL
TOTO Do Brasil Distribuicao
e Comercio, Ltda.(販売会社)

THAILAND
SIAM SANITARY WARE CO.,LTD(関連会社)
THE SIAM SANITARY FITTINGS CO.,LTD(関連会社)
バンコク営業所

INDONESIA
P.T.SURYA TOTO INDONESIA(関連会社)

SINGAPORE
TOTO Asia Oceania Pte.Ltd (販売・統括会社)

VIETNAM
TOTO VIETNAM CO.,LTD(生産・販売会社)

MALAYSIA
TOTO MALAYSIA SDN.BHD.(生産会社)

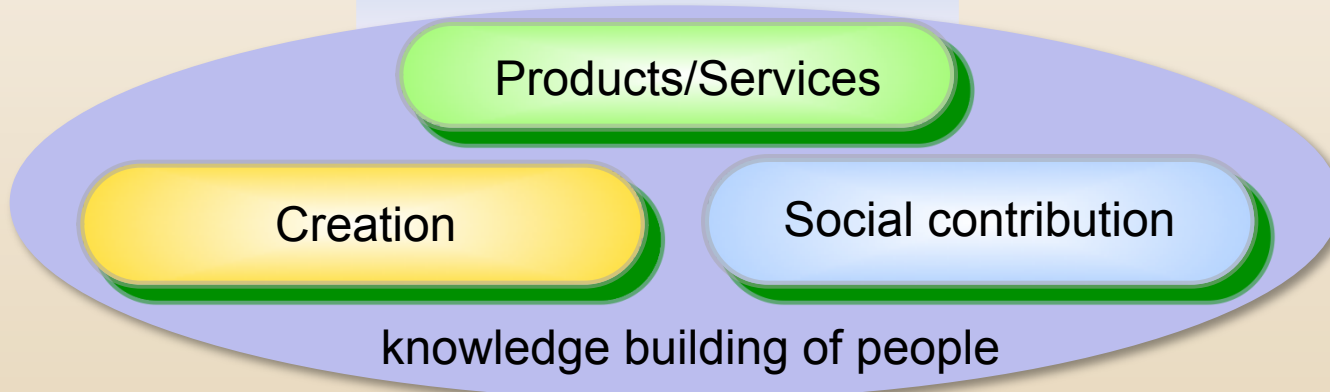
2. TOTO Group's Commitment to the Environment **TOTO**

TOTO's vision toward environmental contribution

Because it is used every day...



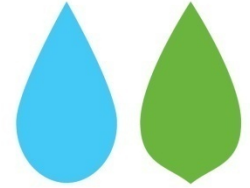
Ensuring a comfortable living environment at the same time contributing to global environment.



各活動における2017年までの環境ビジョンを策定

⇒ **TOTO GREEN CHALLENGE (TGC)**

TOTO GREEN CHALLENGE



TOTO GREEN CHALLENGE

Goal for FY 2017

Products
Services

- Provision of main products which can contribute to 50% reduction of CO₂ emissions from household water facilities (comparison to 1990)
- Global provision of Hydrotects with air purification functions (Nox removal)

Creation

A global Co₂ emission effort on production, logistics, sales and promotion

【Domestic】45% reduction from 1990

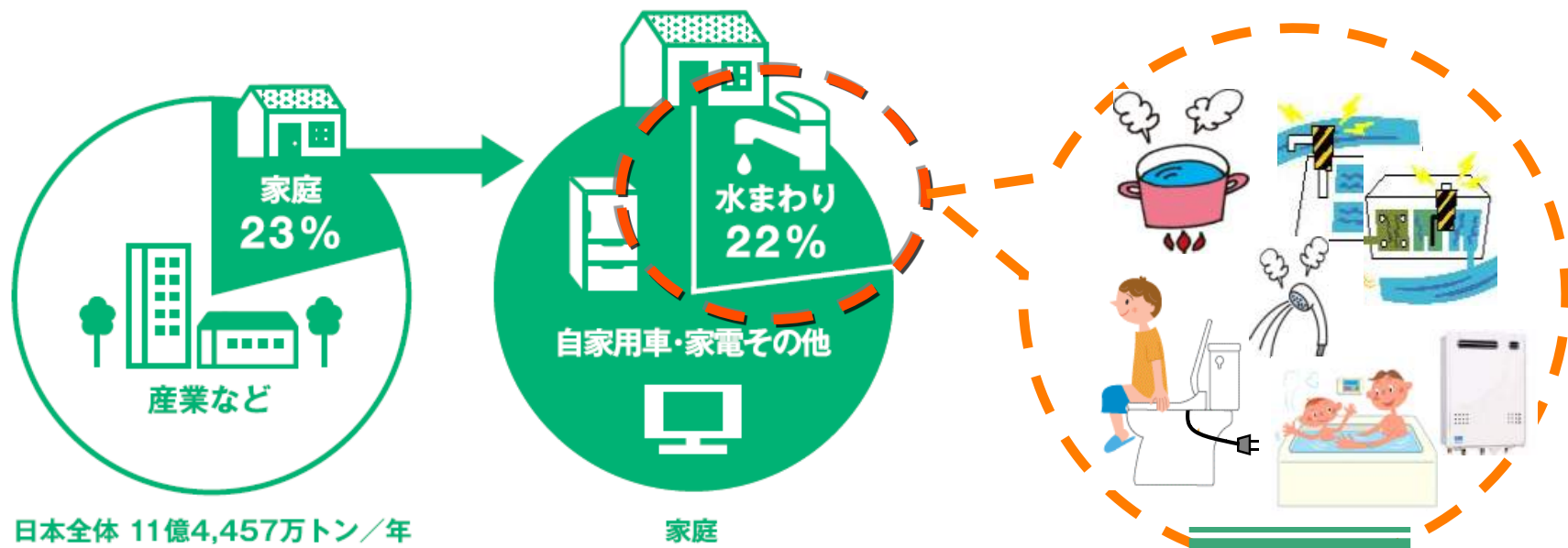
【Overseas】2% reduction annually

Social
Contribution

Promotion of environmental contribution from the viewpoint of bio diversity.

3. Contributing to the Environment through products and services

(1) CO2 Emissions from household water facilities



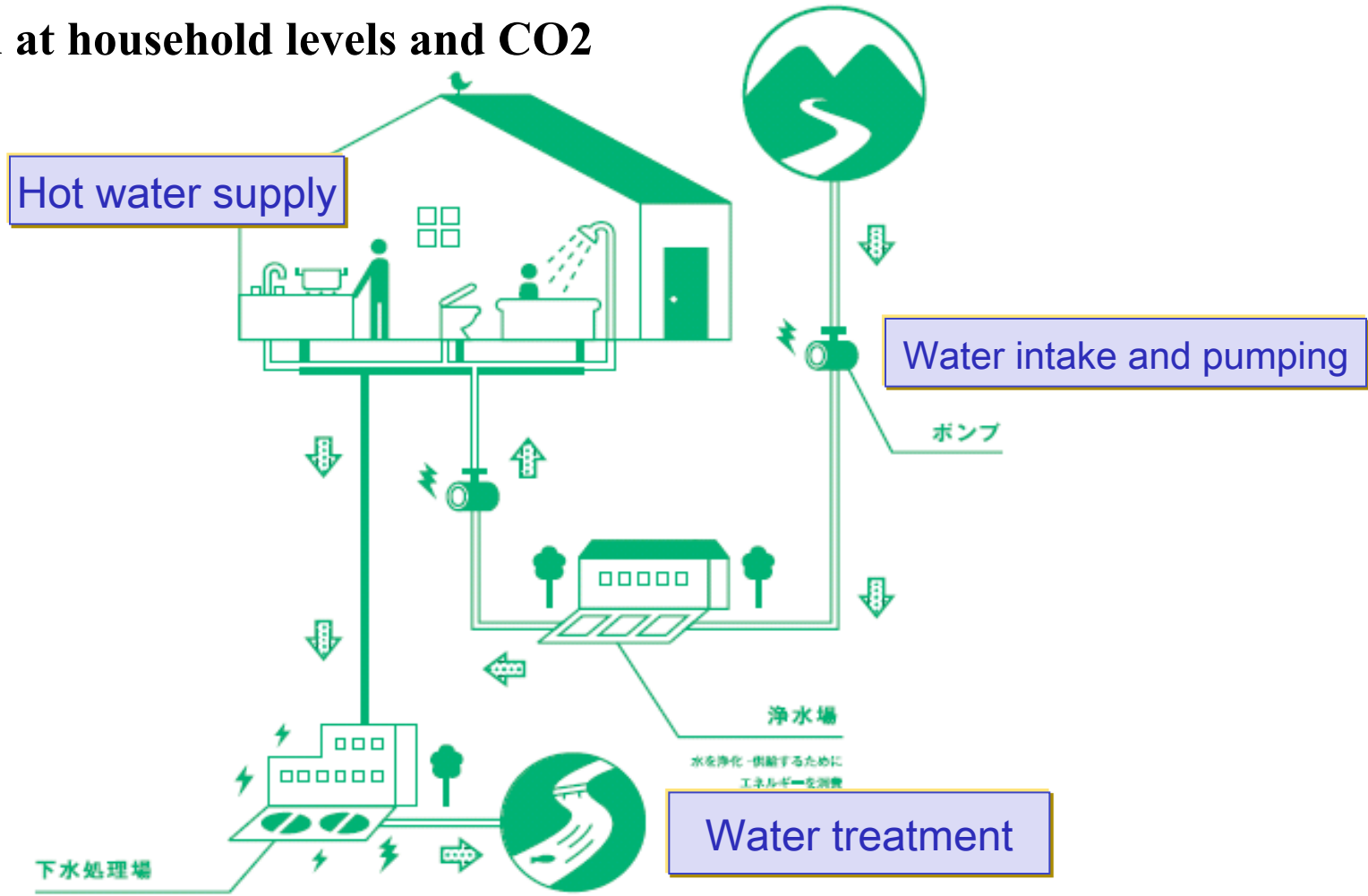
※出典：温室効果ガスインベントリオフィス 日本の温室効果ガス排出量データ(2009年度)
 「家庭からの二酸化炭素排出量」の「動力他」のうち、「家庭における機器毎の電気使用量(2005年想定値)」
 記載の温水洗浄便座、食洗機の割合を水まわりとして計上

Co2 Emissions from household water facilities ⇒ About 5% of total emissions in Japan

CO2 emissions from household water related facilities make about 5% of total emission in Japan

3. Contributing to the Environment through products and services

(2) Water used at household levels and CO2

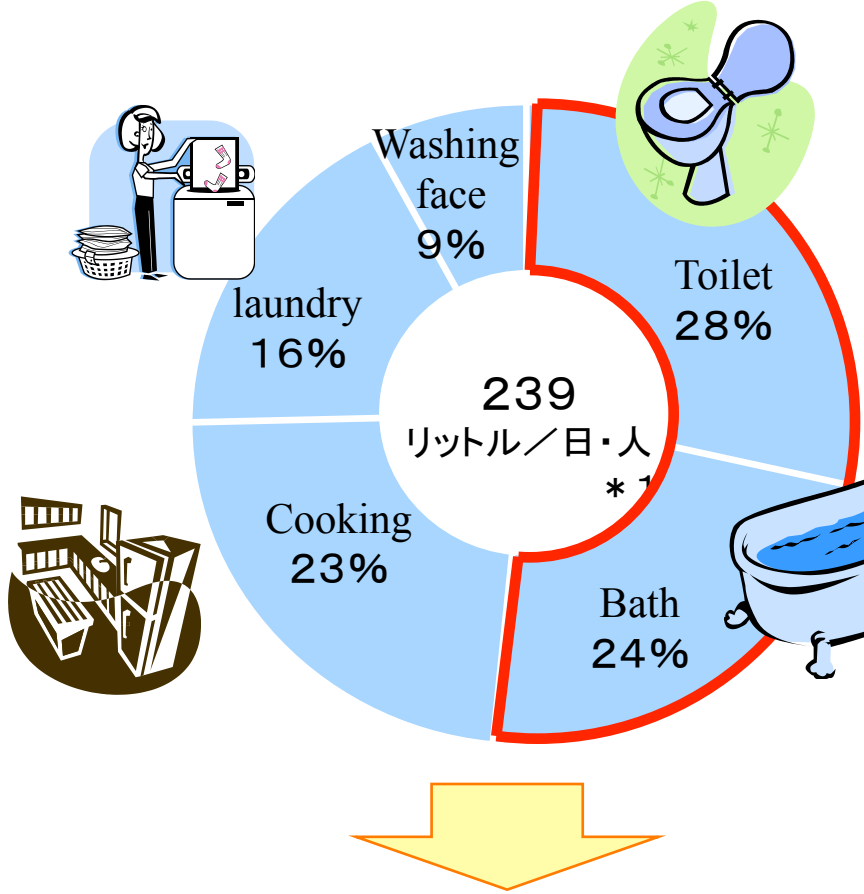


Water and hot water usages consumes energy = CO2 emissions

1 m³ consumption = 0.59kgのCO₂

3. Contributing to the Environment through products and services

(3) Water used at household levels



In Japan, one person uses 239 litres of water at home daily. (toilet and bath consists about half)

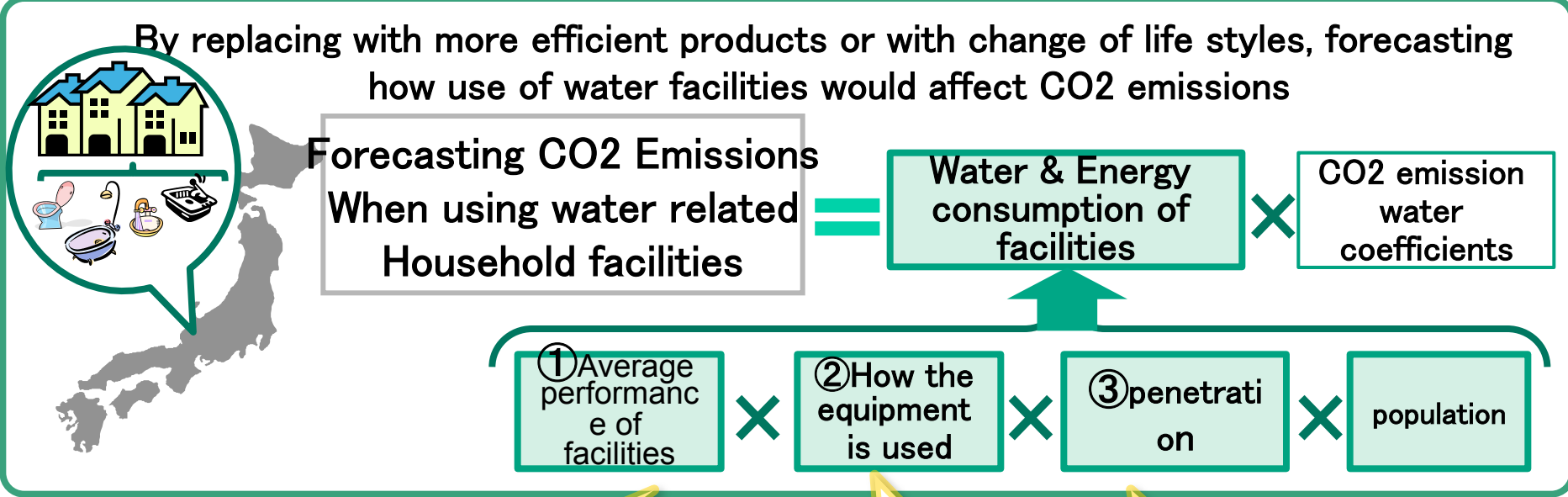
*1 東京都水道局調べ(2007年度)
内訳は、同 (2006年度)

Bathing uses massive amount of hot water and is the largest contributor to CO2 emissions (60% of household)

Larger use of water saving and energy saving household equipment
Will decrease energy consumption and contribute to reducing CO2 Emissions

3. Contributing to the Environment through products and services

(4) CO2 Emissions from water use related household facilities



In order to reduce CO2 Emissions

Corporate Efforts
 Development of superb water saving equipment and promoting replacement

Choice of life styles
 Raising environmental awareness of users
 e.g. no flushing twice

Support from authorities
 Formulation or measures to promote use of water saving facilities
 e.g. Eco Points

It is possible to reduce CO2 emissions of household facilities by 25%(which is 1% of total country emission) (in comparison to 1990) by 2020、

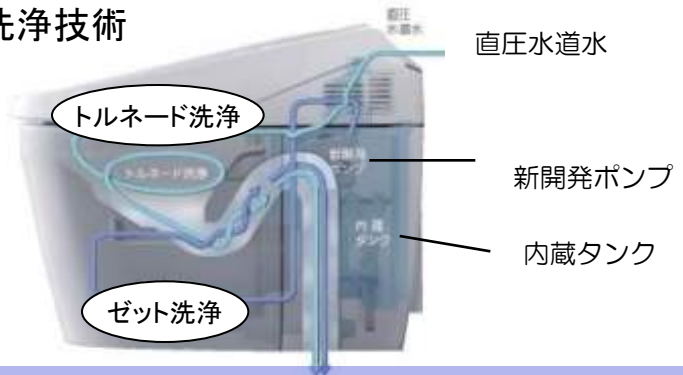
4. Introduction of technologies and products contributing to the environment: toilets

68%
Water saving

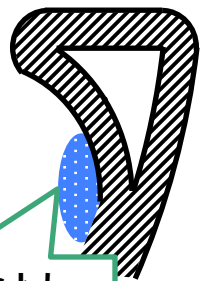
GreenMAX 4.8 (4.8L toilet)

Hybrid Ecology System

タンク+水道直圧式、両方の長所を融合させた世界初の洗浄技術



No-rim tornado flushing



掃除道具がフィットし簡単に汚れが取れる

Eco buttons

男性の小用時やお掃除の時など、少しだけ水を流したい時に小よりさらに少ない水で流せるeco小ボタン。



◎年間438L* (2Lのペットボトル219本分)の節水効果

※小とeco小の比較 (男子小を3回/日・人で算出)

ceFion Tech

ナノレベルで陶器表面を平滑にし、汚れをつきにくくした、画期的な防汚技術



従来便器 3~5年後相当の陶器表面*

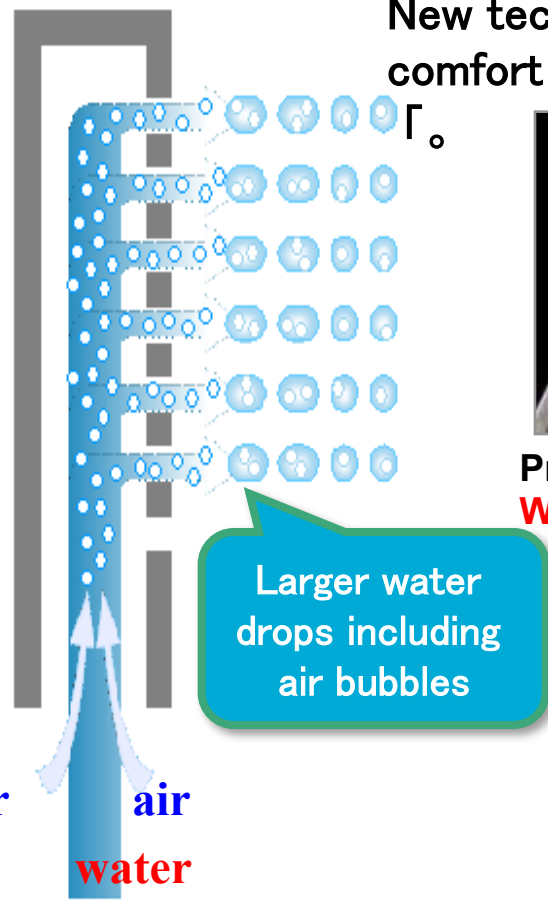
セフィオンテクト 100年後相当の陶器表面*

水流の最適制御と防汚技術で、トイレの水を徹底的に節水

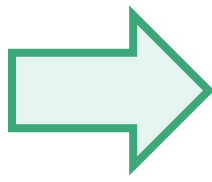
4. Introduction of technologies and products contributing to the environment: bathrooms

Air-In-Shower

New technology developed emphasizing on quantifying shower water comfort level . Created larger water drops by aerating the shower water



Previous shower models
Water flow: 10L/minute



35% water reduction



Air-in-shower
Water flow: 6.5L/minute

※いずれも最適流量の場合

	現行の節水シャワー 水滴の粒径(φ) 2mm 水滴の速さ 4.2m/秒
	エアインシャワー 水滴の粒径(φ) 3.2mm 水滴の速さ 3.4m/秒

A new shower technology enabling comfortable water flow while saving water use

4. Introduction of technologies and products contributing to the environment: kitchen washbasin

Eco Single Water Faucet

Previous Single water faucet levers

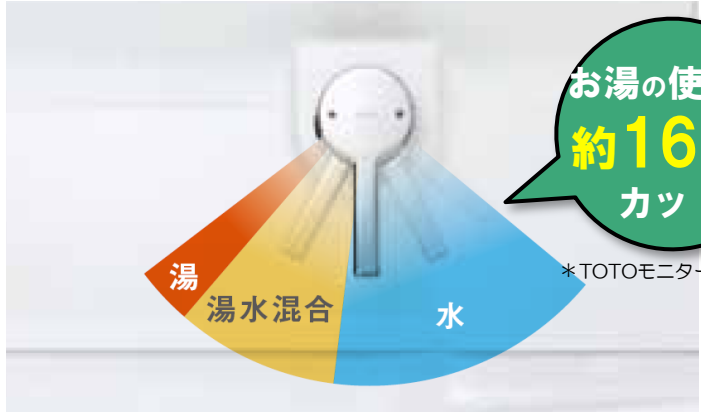


レバー中央部は「湯」と「水」の混合領域です。

湯水混合の範囲が広く、よく使われるレバー中央部も混合領域なので、不要な湯を無駄使いする事があります。



Eco Single Water Faucet



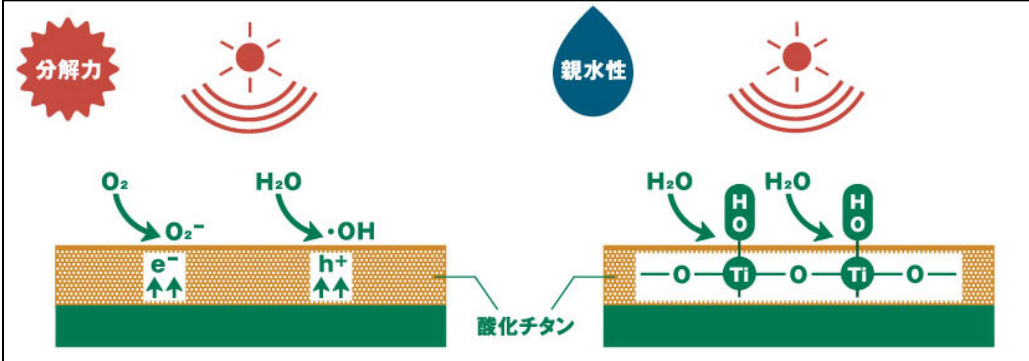
よく使われるレバー中央部までは「水」が出ます。

湯水の境目に「カチツ」とクリック感をもたせ、必要な時のみ湯水を混合して使う事ができます。

It prevents excessive use of hot water and saves energy use

4. Introduction of technologies and products contributing to the environment: building materials and paint

Hydrotect



内装用タイル・建材・塗料(コーティング材)



トイレ用床タイル



浴室用床タイル



キッチン用壁パネル



内装壁用カラーコート

外装用タイル・建材・塗料(コーティング材)



外装用タイル



外装用カラーコート



ガラス用クリアコート

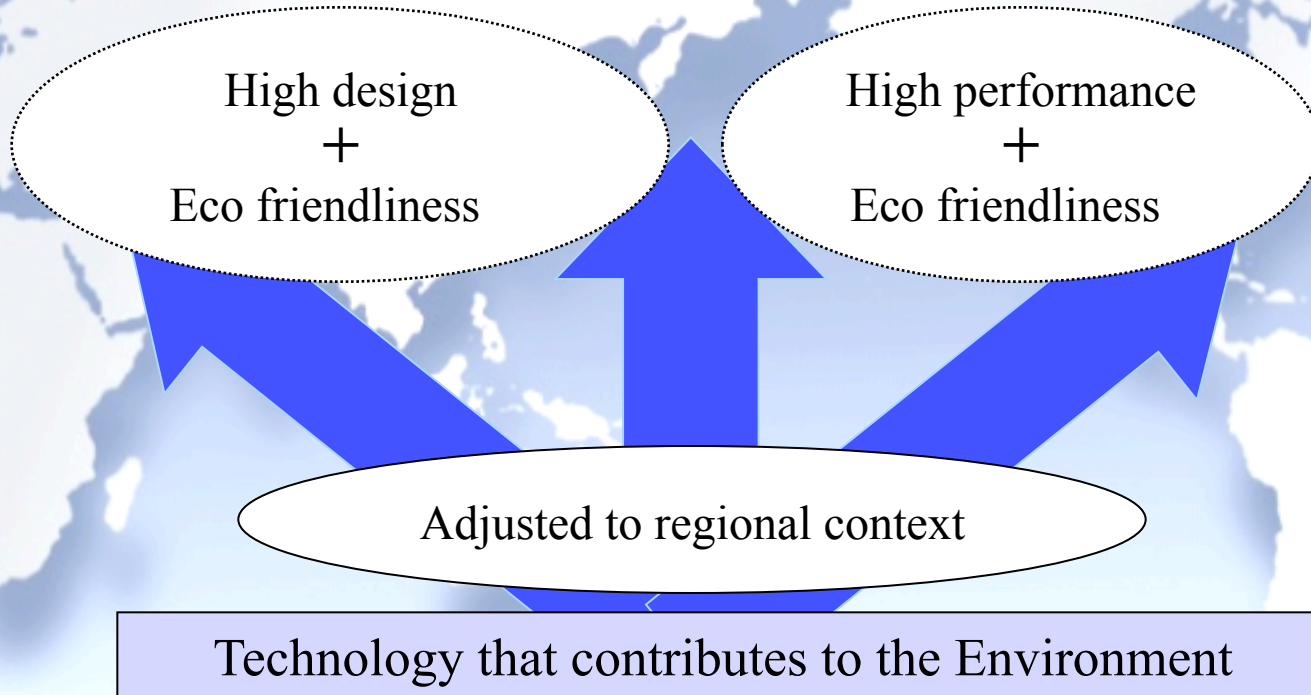


タイル・RC用クリアコート



An environmental purification technology and a brand developed by TOTO, by using photocatalytics. It uses degradation and hydrophilic nature as air purifiers and self cleaning effects.

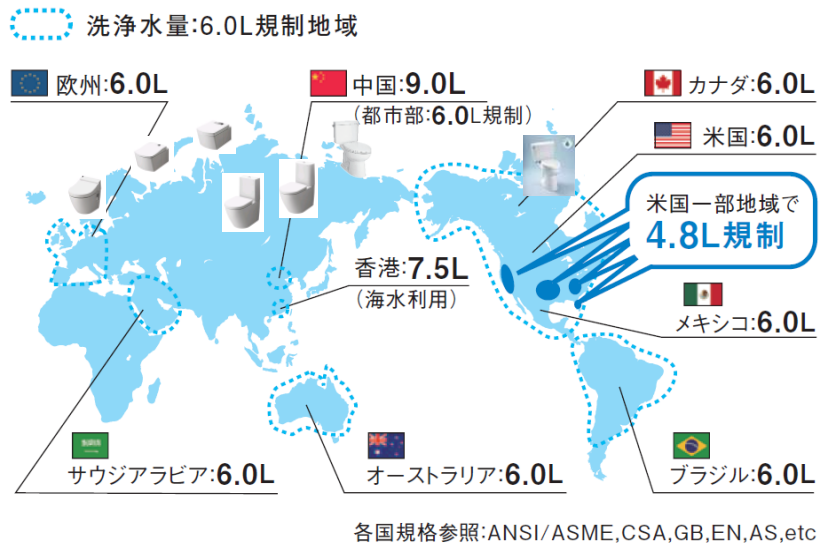
Expand and spread technology that contributes to the Environment; developed in Japan to the Global market



By disseminating water saving products and other environmental friendly technology, TOTO will contribute to addressing global environmental issues.

Global Expansions

Water flush regulations in the World



Water flush regulations at 6litre is the world mainstream; while TOTO aims to reach 4.8 litre standard

In Japan

**GREEN
MAX 4.8**



ネオレスト
ハイブリッドシリーズ



GG



GG-800



レストパル



ピュアレストEX

Global

米国



中国

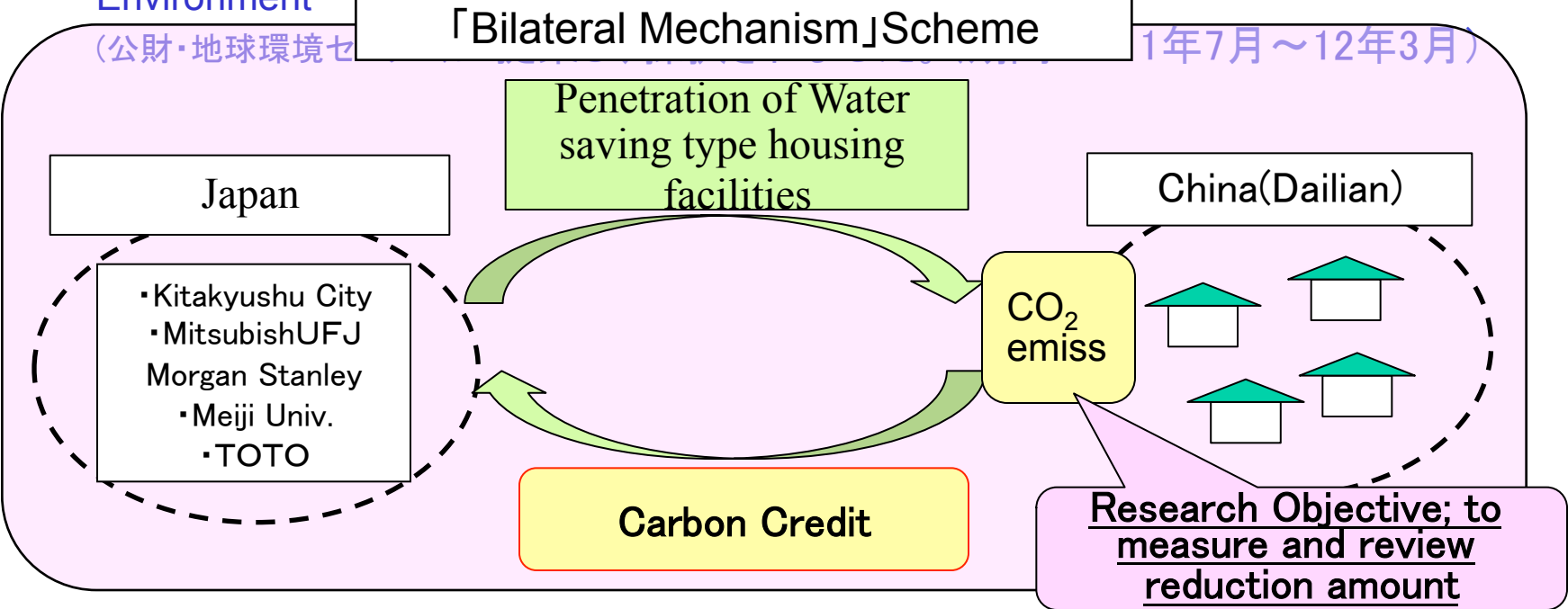


4.2L

Will standardize 4.8 litre water saving toilet types and spread both in Japan and globally.

To 'Carbon Credit' tize the water saving effect; a first ever attempt in the world

➔ A proposal on 'Research on CO2 emission effect by use of water saving facilities in Dailian, China' was jointly established by Kitakyushu City, Mitsubishi UFJ Morgan Stanley, Meiji University and TOTO. The proposal was accepted by Ministry of Environment



TOTO GREEN CHALLENGE: Globally expand the concept of 'CO2 emission by water saving'

あしたを、ちがう「まいにち」に。

TOTO