

Infrastructure Development Working Group Matrix

Highlighted cells indicate U.S. Action

Agenda Item	US Member	US ABAC action	USG Position	Other economy positions
2. Update on Eco-Cities		Monitor	Does not feel this is a core APEC issue	
3. Discussion on forward agenda on water security		Monitor	Does not feel this is a core APEC issue	
4. Presentation of PwC CEO Survey		Monitor		
5. Briefing on APEC Transportation Working Group Activities		Monitor		
6. Proposal for Joint Project with APEC Transportation Working Group	Alex Parle	Alex will provide an update on the proposal	US Department of Transportation is supportive of the project and a key partner	
7. Discussion of IDWG Key Messages for Dialogue with Leaders		Steer key message towards the need for APEC economies to improve the foreign direct investment environment.		
8. Review of ABAC report on infrastructure	Alex Parle	Alex will provide an update on the development of the document		
9. Review of IDWG issues for 2013				
10. Summary and Conclusion	Alex Parle			

Document: IDWG 32-024 Draft: FIRST Source: ABAC Japan Date: 21 August 2012 Meeting: Vladivostok, Russian Federation
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Meeting Document Summary Sheet Template

Document Title: Water Security Roadmap for 2013
Purpose: For discussions
Issue: Presentation of the Water Security Roadmap for 2013
Background: ABAC members agreed at 2012 ABAC1 in Hong Kong that water security would be a multi-year work plan. We will review the discussions of the past two years and present a roadmap for 2013 discussions.
Proposal /Recommendations: <ul style="list-style-type: none">• In 2011, ABAC identified the issues and challenges. As suggested at ABAC4 that year, in 2012 we narrowed down the focus of our discussions on urban household water security and identified PPP as an important means to achieving it. The findings were presented in the Report to APEC Economic Leaders and in letters to related ministers.• For 2013, we propose the main theme to be “securing efficient use of water resources” as was recommended to APEC Leaders in 2011, and focus on controlling wasteful use and conservation of water.• In light of the possible merger of IDWG and SDWG, we also propose possible venues for water security issues discussion in the future.
Decision Points: <ul style="list-style-type: none">• Endorse the proposal.

Water, Energy, Food and Ecosystem

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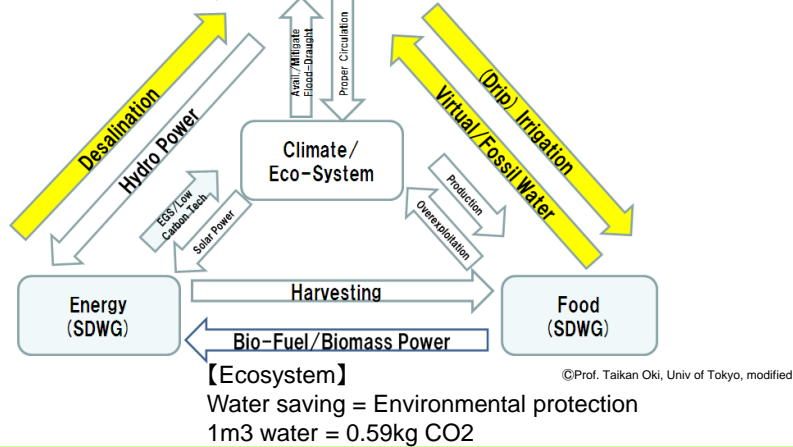
【Energy】

Water saving = energy saving
1m³ water = 980Wh electricity

Water
(IDWG)

【Food】

Water saving = Food security
1m³ water = 1000kcal food



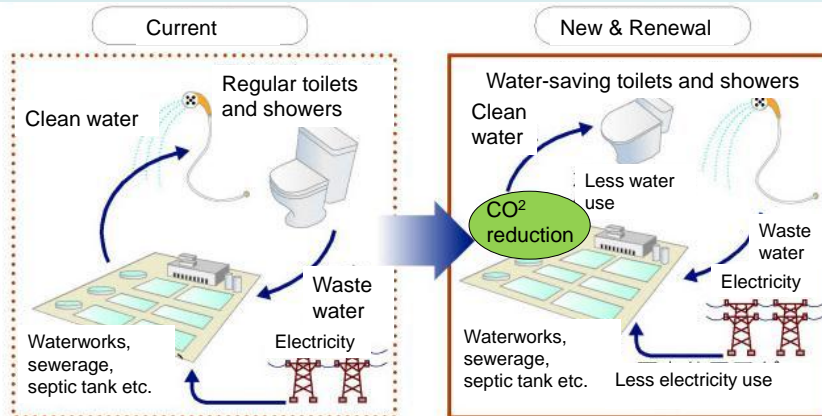
- IDWG and SDWG may be remerged in 2013
- Discuss efficient use of water in a broader picture (incl. energy, food etc.)

Efficient use of Water 1: Energy

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How household use of water-saving equipment leads to CO₂ reduction

Water-saving toilets and showers will use less water, leading to less use of electricity for water/sanitation facilities ⇒ Less CO₂ emission



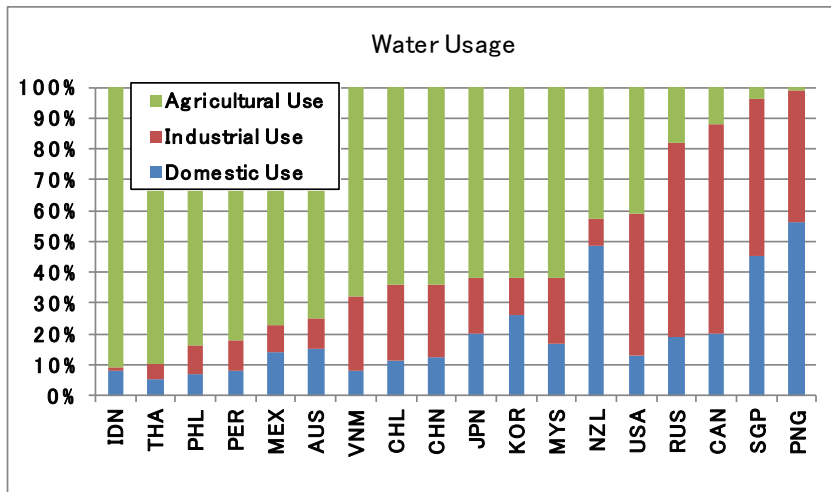
Note: Includes bathtub in case of renewal

Source: Nikkei article on TOTO

Water-saving leads to energy-saving:
e.g. Incentives for water-saving toilets in the USA

Efficient Use of Water 2: Food ①

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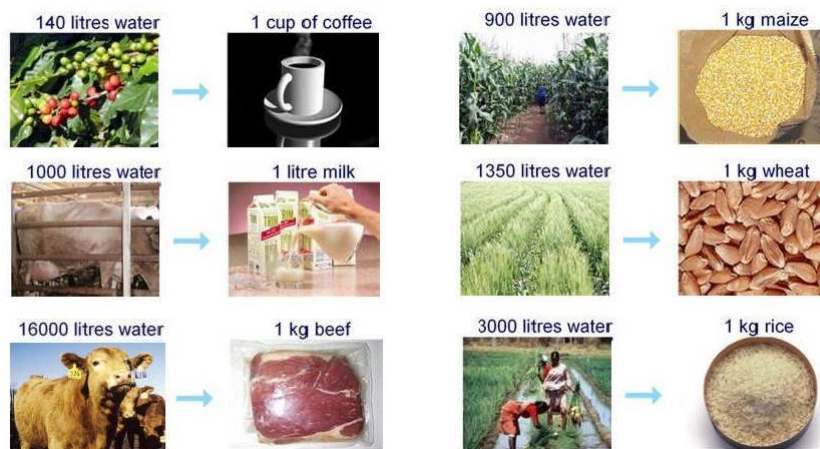


Source: World's Water

In most economies, agriculture is the largest user of water
 ⇒ Water conservation in agriculture will have a huge impact

Efficient Use of Water 2: Food ②

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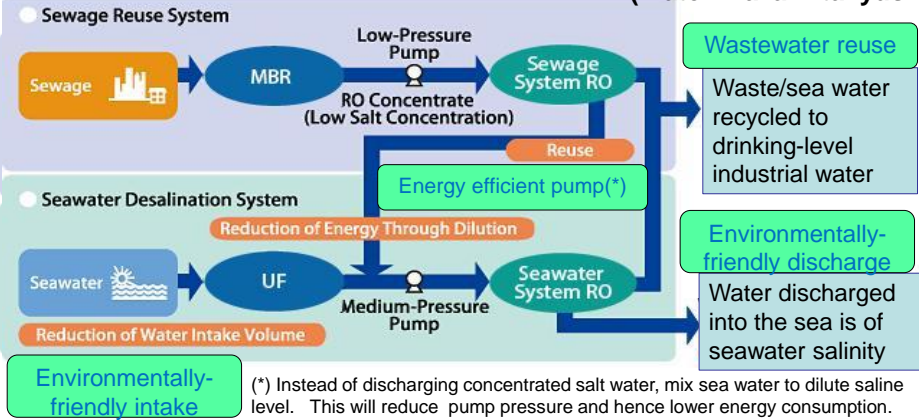
Source: Global Environment Centre Foundation
 (Data from Water Footprint)

Farm production uses volumes of water
 ⇒ Efficient use of water is key to larger output

Efficient Use of Water 3: Environment

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Integrated Seawater Desalination and Sewage Reuse System (Water Plaza Kitakyushu)



- MBR (membrane bioreactor): Wastewater treatment process that separates water and activated sludge with microfiltration or ultrafiltration membrane
- UF (ultrafiltration membrane): Pore size is $0.01 \sim 0.001 \mu\text{m}$ ($1 \mu\text{m} = 1/1000 \text{ mm}$); larger than reverse osmosis membrane (RO, NF) and smaller than microfiltration membrane
- RO (reverse osmosis membrane): Removes salt and ions from treated water. Pore size is smaller than UF; 2 nm ($1 \text{ nm} = 1/1000 \text{ micrometers}$)

Roadmap for 2013

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ABAC-1 Agricultural water; water-saving incentive programs



ABAC-2 Water-saving equipment; grey water; leak prevention



ABAC-3 Case studies



Onwards Discuss energy and food taking into account water perspective