



## Promoting Innovations in Wastewater Management Making Sanitation a Sustainable Business

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# Background

## ❁ Strategy 2020:

- water as a crosscutting core business area of ADB's operations for infrastructure and the environment

## ❁ Seven-point water agenda (2008):

- comprehensive sanitation approach “from toilet to river” to address household and environmental sanitation in both urban and rural areas

## ❁ Water Operational Plan, 2011–2020

- expanded wastewater management and reuse, including sanitation and hygiene
- expanded knowledge and capacity development using technology and innovation more directly
- enhanced partnerships with the private sector



# Wastewater Management

## Compelling arguments

- ✿ Increasing access to toilets not enough
- ✿ Untreated wastewater has high socioeconomic cost
- ✿ Increasing scarcity of water
- ✿ Wastewater can be a viable business
- ✿ Benefits from recycling essential resources from wastewater

**Innovation: key to changing mindsets and structures.**



# Promoting Innovations in Wastewater Management

## Components of the new TA:

- Knowledge drive
- Technology drive
- Financing and incentives drive
- Awareness and advocacy drive



# Knowledge Drive

## ✿ Compendium of solution options

- Case studies and project briefs:
  - ✓ Policy, Enabling environment, Institutional Arrangements
  - ✓ Technologies
  - ✓ Financial mechanisms
- Database
- Virtual knowledge center: web-based information system



**Compilation and dissemination of case studies  
and project briefs to get political buy-in**

# Technology Drive

## Technology drive

- ✿ Technology inventory and classification by system, treatment type and reuse application
- ✿ Technology applications
  - Information briefs/technology datasheets
  - Standards and guidelines



**Match technologies with needs and performance targets**

# Financing and Incentives Drive

## ❁ Fast-track wastewater investment projects based on Knowledge and Technology Drives

- Pre-feasibility studies with financing mechanisms
- Business opportunity briefs (based on pre-FS)
- Innovative delivery and financing mechanisms
- Encourage extraction of resources from wastewater
  - Show potential revenues from biogas, power, fertilizer, reclaimed water
- Promote partnership with the private sector
  - Assist in developing bankable projects with cost-effective technologies and cost recovery mechanism



# Awareness and Advocacy Drive

## *Going beyond advocacy*

### ✿ Awareness and capacity development

- Sub-regional knowledge-sharing conferences and capacity development workshops
- Increase public awareness and involve stakeholders
  - to stimulate demand and willingness to pay

### ✿ Investment roundtables

- “**willing**” stakeholders taking up identified business opportunities

### ✿ Advocacy and knowledge products

- Policy briefs, discussion notes, articles
- Multi-media
- Toolkits

- **Develop sustainable business opportunities**
- **Have stakeholder buy-in**





# Conference on Promoting Innovations in Wastewater Management

## Why are we here?

- ❁ **Needs assessment:** To analyze current sanitation status, pros and cons of the existing systems and identify real needs
- ❁ **Knowledge sharing:** To recognize what technology and financing options are available for practical, doable and sustainable solutions
- ❁ **Action planning:** To have DMCs/cities develop action plans to:  
(a) meet their sanitation needs; (b) identify potential wastewater and septage management projects; and (c) address constraints
- ❁ **Enhancing partnerships:** To meet and network with governments, development partners, donors, NGOs and private sector and develop deeper collaboration
- ❁ **Have fun!**



# Conference on Promoting Innovations in Wastewater Management

## Program contents and focus

### ✿ Session 1

- Setting the tone for the conference
- Encourage active participation

### ✿ Session 2

- Understanding the issues, barriers and constraints

### ✿ Session 3

- Triggering demand, getting stakeholder buy-in
- Enabling conditions
- Dealing with land availability and other constraints
- Applying innovative designs, technologies and financing



# Conference on Promoting Innovations in Wastewater Management

## ✿ **Session 4: Turning problem into a resource**

- Innovative institutional arrangement and financing mechanism to make sanitation viable and inclusive
- Harvesting water, food, nutrients and energy from wastewater and sludge treatment
- Enhancing tourism

## ✿ **Session 5: Financing and incentives**

- Various financing and delivery mechanisms
- Enabling effective PPP
- Using subsidies and grants wisely
- Meeting the donors



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## ✿ **Session 6: Technologies**

- Assessment: Centralized vs. Decentralized
- Technology options for sewerage, treatment and reuse

## ✿ **Session 7: Heading outdoors**

- Field visit to septage and wastewater treatment plants
- Cleaning up the waterways

## ✿ **Session 8: Tools**

- Tool for planning: Wastewater Management Expert system (WaMEX)
- Preparing bankable projects

## ✿ **Session 9: Action Planning**



# Conference on Promoting Innovations in Wastewater Management

## **Expected outcomes**

- Confirmation of commitment
- Identification of projects (septage and wastewater management) in the cities for development into investment opportunities
- Formulation of action plans (next activities with timeline and responsibilities)



# Conference on Promoting Innovations in Wastewater Management

## **Next steps**

- In-country consultations
- Capacity-building and knowledge-sharing workshops
- Conduct of pre-feasibility studies
- Identifying financing and delivery mechanisms
- Packaging bankable projects
- Roundtables to promote investment opportunities





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Thank you.

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