Zero Source Pollution Initiative (ZSPI)

FIGHTING BIODIVERSITY LOSS: TACKLING WASTE IN WATER

THE CONTEXT

Water ecosystems are under critical pressure causing unsafe water supply and affecting:

- **More than half of the GDP in Asia and the Pacific is threatened by nature and biodiversity losses.**

In the Asia and the Pacific region, 11 major cities in coastal areas or river deltas are under risk of climate disaster (Source: WWF)

Southeast Asia is home to 28% of the global aquatic and semiaquatic species. Nearly 37% of these species are threatened by pollution

More than 77% of Southeast Asia’s population living by the coastlines is under threat (Source: GEF)

In the Lower Mekong Region, the annual fish harvest alone is worth $17 billion (Source: Mekong River Commission)

- **More than 600 million people in urban areas**

- **1.5 billion people in rural areas**

- **1.7 billion people in the Asia and Pacific region do not have access to basic sanitation**

80% of wastewater in the Asia and Pacific region is discharged without treatment

80% of wastewater in the Asia and Pacific region is discharged without treatment

- **80% of wastewater in the Asia and Pacific region is discharged without treatment**

- **SDG 6**

- **Climate change**

- **Biodiversity loss**

- **Institutional**

- **Technical**

- **Limited application of appropriate and cost-effective technical solutions**

- **Institutional**

- **Governance and institutional efficiencies for better implementation**

- **Financial**

- **$711 billion per annum globally needed for biodiversity by 2030**

- **Need to catalyze much greater scale of private capital to address the financing gap**

THE CHALLENGE

WATER POLLUTION is linked with:

- **Climate change**
  - Flooding water
  - Water scarcity

- **SDG 6**
  - Lack of access to clean water hinders equitable development

- **Biodiversity loss**
  - Declining fishing stock
  - Declining mangroves
  - Eroding coastlines

WASTE IN WATER SOURCES

- **Agricultural (runoff)**
- **Toxic industrial effluents**
- **Plastic pollution**
- **Municipal waste**
**ZSPI: An ADB Initiative**

**THE OBJECTIVE**
To identify and develop at least **10 Waste in Water (WIW) demonstration projects** with a clear impact on reducing water source pollution to zero.

Each project must integrate **3 aspects** to address the challenge:

1. **Advanced climate resilient technologies**
2. **Good governance and institutional structures**
3. **Innovative financing structures**

The initiative will start in Thailand and expand to other parts of Southeast Asia.

**ZSPI TARGETS**
- To prepare at least **10 high-impact and replicable projects across Southeast Asia** to be submitted to governments and possible financing entities by 2025.
- To mobilize at least **$1 billion** in investments by 2030 from public and private sources to tackle waste in water issues.

**THE APPROACH**

**PILLAR 1**
**Capacity Building and Knowledge Sharing**
Targeted at Southeast Asian governments, cities, rivers basins and waste management authorities.

Capacity building will be focused on **advanced tools and technical solutions** for waste in water management and **innovative sustainable finance approaches** for the sector.

**PILLAR 2**
**Stakeholders’ Engagement, policy dialogue, and Call for Proposals**
Aimed at prioritizing projects and undertaking initial studies including pilot demonstrations.

**PILLAR 3**
**Rapid Assessment and Concept Preparation (RACP)**
Provide selected projects with technical assistance for a rapid study to develop concept proposals (including financing and implementation plans).

Follow-on phases:
- After completion of the RACP and relevant agreements, projects will undergo further financing due diligence.

**PROJECT TYPES**
- Wastewater treatment and reuse
- Industrial effluent treatment plants
- Sanitary landfills, landfill upgrades, and recycling facilities
- Municipal/Food waste treatment plants
- Biomass to energy projects
- Water network and supply servicing
- River basin pollution control projects
- Agrichemical and plastic management

**TIMELINE 2023**

**MAY**
Kickoff – Engaging with Cities and Visiting Potential Sites

**JUN-AUG**
Prioritizing Sites and Formulating Project Pipelines

**NOV**
Sharing Knowledge and holding ZSPI roundtable

**DEC**
Rapid Assessment and Concept Preparation (RACP)

**PARTNERS**

- United Nations
- ACGF
- OPEC Fund

**ADB’S CONTACTS**
- Anouj Mehta, Country Director, Thailand Resident Mission, amehta@adb.org
- Kyaw Thu, Urban Development Specialist, Southeast Asia Regional Department, kthu@adb.org
- Manuela Cavaccini Cataldo, Green Finance Initiatives Coordinator, Thailand Resident Mission, mcavaccinicataldo.consultant@adb.org

**Technical Assistance (Grants)**
The ZSPI will be funded by grants under ADB’s technical assistance project 10079 and by further support by partners.

Creative Commons Attribution 3.0 IGO license

(CC BY 3.0 IGO)
© 2023 ADB. The CC license does not apply to non-ADB copyright materials in this publication.

Publication Stock No. ARM230281-2 https://www.adb.org/terms-use#openaccess
http://www.adb.org/publications/corrigenda