



## ISSOWAMA

### Integrated Sustainable Solid Waste Management in Asia

Bárbara De Mena - ttz Bremerhaven

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Research for Sustainability - Opportunities for Europe

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## Overview

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2. **The concept of Integrated Sustainable Waste Management**
3. **Why is ISWM an interesting approach for Asia?**
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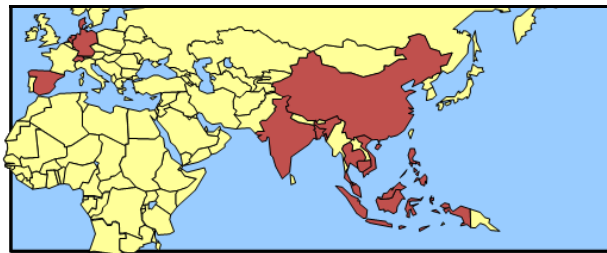


## What is ISSOWAMA?

### ISSOWAMA (*Integrated Sustainable Solid Waste Management in Asia*)

Coordination Action funded by the European Commission under the 7th Framework Programme, Theme 6 (Environment including climate change)

- Duration: **30 Months**
- Budget: **989.522 €** (100% funded)
- Consortium: **22 partners from 14 countries**



## Consortium

Partner name	Acronym	Country
Verein zur Förderung des Technologietransfers an der Hochschule Bremerhaven e.V.	TTZ	Germany
Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz	EAWAG	Switzerland
Wageningen University Sub-department of Environmental Technology	WU	The Netherlands
Stichting WASTE	WASTE	The Netherlands
BIOAZUL S.L.	BIOAZUL	Spain
Winrock International India	WII	India
The Energy and Resources Institute	TERI	India
Centre for Environmental Studies, Anna University	CES	India
Khulna University of Engineering & Technology	KUET	Bangladesh
Dhaka City Corporation	DCC	Bangladesh
Tsinghua University- Department of Environmental Science and Engineering	THU	China
Joint Graduate School of Energy and Environment at King Mongkut's University of Technology Thonburi	JGSEE	Thailand

Partner name	Acronym	Country
Asian Institute of Technology	AIT	Thailand
Center for environmental technology and management	CENTEMA	Vietnam
Department of Environment Phnom Penh Municipality	DoEPP	Cambodia
Royal University of Phnom Penh	RUPP	Cambodia
Demographic Institute at Faculty of Economics University of Indonesia	LD	Indonesia
Solid Waste Management Association of the Philippines	SWAPP	Philippines
School of Urban and Regional Planning University of the Philippines	UP-PLANADES	Philippines
International Solid Waste Association	ISWA	Denmark
IPM Construction and Development Corporation	IPM	Philippines
ZKK Foundation, Inc	ZKKF	Philippines



## The concept of Integrated Sustainable Waste Management (I)

**Integrated Sustainable Waste Management** proposes a **participatory approach** to waste management:

- Including all stakeholders in the process
- Taking into account not only technical, but socio-economical and environmental barriers
- Building capacity of practitioners during the planning stage



## The concept of Integrated Sustainable Waste Management (II)

Integrated Sustainable Waste Management (ISWM) recognises three important dimensions in waste management:

- **Stakeholders:** municipalities, authorities, NGOs, CBOs, private informal users, households...
- **Elements of the waste system:** Generation and separation, collection, transport, treatment, re-use, recycling...
- **Sustainability aspects:** technical, environmental, health, financial and economic, socio-cultural, policy and legal...



**Assessment with multidisciplinary teams**



**Planning of better, sustainable solutions**



Why is Integrated Sustainable Waste Management an interesting approach for Asia?

- More than 3.000 Mio inhabitants
- Fast growing urban areas
- Strong industrial development
  
- Lack of infrastructures
- Lack of specific tools
- Lack of legislation (implementation)



Need of adequate planning taking into account all the factors involved



**ISWM**



How will ISSOWAMA improve the ISWM methods?

**Our main objective:** to develop a **ISWM performance assessment system under different scenarios**, to enable including ISWM in current practices

How?



**Assessment of currently used waste management strategies**

**Integration of sustainability aspects into the existing waste management systems**



## The project: Scientific and technical objectives

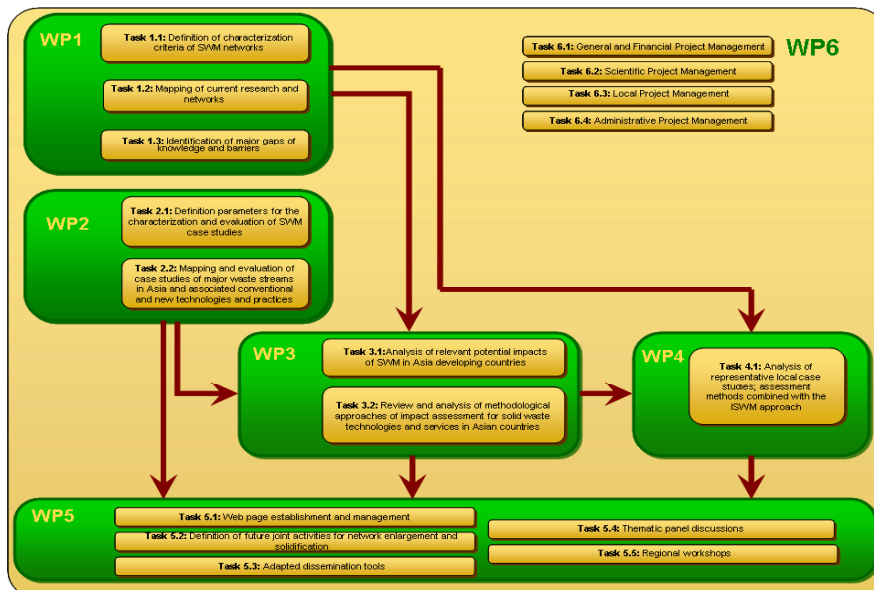
**Coordination of current research: expert and research platform**

**Analysis of the main constraints for implementing ISWM concepts in the countries addressed**

**Study the best adapted technologies based on case studies in Asian cities**



## Work plan overview





## Work plan (I)

### WP1

#### **Mapping of solid waste management networks and activities**

Objectives: To gain knowledge on current research and networks working in this field.

Results: Identify research actors and gaps in knowledge

### WP2

#### **Mapping and evaluation of solid waste management case studies**

Objectives: To identify suitable case studies that exemplify waste management problems and solutions in Asia

Results: Potential case studies for WP4



## Work plan (II)

### WP3

#### **Review and analysis of EIA methods and impact categories**

Objectives: Review and improve existing Environmental Impact Assessment (EIA) methods, overcome the methodological constraints and extract priority areas for policy intervention

Results: Improved EIA methods, including a global approach

### WP4

#### **Analysis of representative case studies**

Objectives: Use the knowledge compiled in WP 1→3 to test in practice the improved EIA methods

Results: Performance assessment system, guidelines for implementing ISWM for different waste streams



## Work plan (III), Dissemination strategy and its impact

WP5

### Tools:

Web site, experts, stakeholders and documentation public online database

5 scientific papers on the results obtained (national and international media)

Simplified ISWM assessment methods guide (**2.500 copies**, 9 languages)

Posters and leaflets (**10.000 copies**, 9 languages)

3 thematic panel discussions

8 national workshops



Estimated **>400** attendees from local stakeholder groups



## Summary: ISSOWAMA facts

- ISSOWAMA aims at the **adaptation of the concept of ISWM in Asian countries**
- **Networking of experts** at the international level and **sharing of research results** are two pillars of the project
- The third is the **integration of stakeholders' groups** in the assessment and adaptation of Environmental Impact Analysis methods
  
- The consortium is composed by experts from **14 different countries**
- It includes research institutions, NGOs and end users
- It is anticipated that **its impact will reach more than 12.000 practitioners in Asian countries**



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***Thank you very much for your attention!***

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