

ROAD MAP

Our vision is to enhance research in environmental sustainability such as water, waste, and air quality management is outlined in our roadmap. We aim to delve deeper into water accessibility, municipal solid waste, and air pollution issues with the ultimate goal of enhancing resilience and sustainability.

2021

Sustainable Waste Management

1. Mapping solid waste management actors
2. Identifying the potential of waste to energy for reducing solid waste in landfill
3. Analysing waste management implications on environmental health

Resilient Water Management

1. Exploring the potential of Nature-based Solutions (NbS) for water security
2. Understanding the significance of potential climate impact on water
3. Meeting basic WASH needs in emergency and recovery context

Clean Air Development

1. Knowledge management of reducing air pollution
2. Identifying Community behaviour in reducing air pollution



Sustainable Waste Management

1. Integrating inclusive society in solid waste management
2. Identifying untreated solid waste over land and water bodies waste in landfills

Resilient Water Management

1. Strengthening water security through water-saving practices (including Nature-based Solution intervention)
2. Analysing the emerging contaminants in water resources and options for their removal

Clean Air Development

1. Assessing policy intervention to reduce air pollution

2022



2023

Sustainable Waste Management

1. Increasing public awareness of specific solid waste (e.g. hazardous wastes, hazardous materials contained wastes, disaster-generated wastes, construction and demolition wastes, unprocessable wastes due to availability of technology and non-periodical generated wastes, e-waste)
2. Analysing the effect of improper solid waste disposal on the ecosystem and health
3. Establishing solid waste management by enhancing reuse and recycling in the circular economy system

Resilient Water Management

1. Exploring opportunities for water reuse and recycling
2. Developing pathways to inclusive, safe, adequate, and affordable WASH access

Clean Air Development

1. Enhancing air quality for human health
2. Studying ecological impact

Sustainable Waste Management

1. Sustainable management and efficient use of natural resources for reducing solid waste generation
2. Cross-sector and multi-stakeholder collaboration for sustainable solid waste management (source - segregation - collection - treatment - disposal), including finance and policy

Resilient Water Management

1. Conceptualising hydro-socio-ecological relationship to enable more integrated and inclusive water management planning
2. Identifying Policy and incentives for developing universal access to water and sanitation

Clean Air Development

1. Economic incentive approaches to air pollution control
2. Integrating health and air quality considerations into various sectors

2024

KEY NOTABLE PROJECTS

- Tetra Tech CCBO (2023) - Trash Collection and Transportation Efficiency Analysis in Makassar
- C40 Cities (2023) - Jakarta Air Quality Monitoring Plan & Transport Analysis Project
- NIES (2022-2023) - Study of Flood Waste and River Waste in Jakarta
- iDE Global (2022-2023) - CSmart: "A Study on Environmental Pollution Caused by Plastic Used In The Agriculture Sector" and "A Market Study On Plastic Mulching Film And Plastic Bags" in Cambodia
- Tetra Tech CCBO (2022) - Women and Solid Waste Management in Semarang
- SATU Joint Research Scheme (2021) - Urban Hydrometeorological Disaster Risk Reduction with Nature-based Solutions in Indonesia Planning and Design
- RDI x APEC (2021) - Workshop on Community-Based Waste to Energy Management
- Kurita Water and Environment Foundation (2019) - Stakeholder Acceptance Behavior of Infiltration Well and Rainwater Harvesting System as Runoff Water Management in Bandung City
- SNV (2017) - Climate Vulnerability and Resilience Assessment of WASH infrastructure in Bandar Lampung, Tasikmalaya and Metro City

