



Ministry of Natural Resources and Environmental Conservation  
Environmental Conservation Department



## Project on Management of Hazardous Waste in Myanmar - Phase II

*Thin Thin Soe*  
*Deputy Director*  
*Pollution Control Division*

# Goal and Higher Outcome of HWM Phase II Project

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The goal of the project is to *build on the momentum created in Phase I* and to continue to strengthen the role and capacity of ECD and other relevant institutions on technical capabilities of hazardous and industrial waste management.

The higher outcome of the Phase II project is *“Strengthened technical capabilities of hazardous and industrial waste management”*.

# Main Outcomes of the Project Phase II (2019 – 2024)

- 1 Issues prioritised by the Myanmar Government from the hazardous waste Master Plan
- 2 Improved quantification on hazardous waste generation in Myanmar
- 3 Initiated co-processing in Myanmar's cement industry
- 4 Built technical capability on handling and treatment of hazardous waste
- 5 Strengthened awareness and capacity on environmental sound management of hazardous waste

# Timeline of HWM Phase II Project- 5 Years (2019- 2024)

Outcomes	Outputs	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4																
Outcome 1 Issues prioritised by the Myanmar government from the HW Master Plan	1.1 Submitted Inception report																				
	1.2 Project organisation put in place																				
	1.3 Administration and economy agreed																				
Outcome 2 Improved quantification on hazardous waste generation in Myanmar	2.1 Inventory- Household HW- NPT																				
	2.2 Inventory- prioritized/selected wastes																				
	2.3 Basis for regular reporting by industries																				
Outcome 3 Initiated Co-processing in Myanmar's cement industry	3.1 Built capacity on co-processing																				
Outcome 4 Built technical capability on handling and treatment of hazardous wastes	4.1 Built capacity on ESM of HW in Thilawa SEZ																				
	4.2 Guidance for take back system and recycling of WEEE																				
	4.3 Guidance for ESM of healthcare wastes																				
	4.4 Guidance for ESM of Mercury- ASGM																				
	4.5 Guidance for ESM of Expired pesticides and other POPs																				
Outcome 5 Strengthened awareness and capacity on ESM of HW	5.1 Conducted training/workshops																				
	5.2 Awareness raising materials on HWM																				
	5.2 Selected ECD officials enrolled in Asian Universities																				
	5.4 Conducted study tours abroad for selected officials																				
	5.5 Provided technical support on HWM to target stakeholders																				

# Outcome 1: Prioritised Issues in Master Plan



The Government of the Republic of the Union of Myanmar  
Ministry of Natural Resources and Environmental Conservation  
Environmental Conservation Department

## Master Plan for Hazardous Waste Management in Myanmar



17 April 2019

- Issues from the Master Plan will be prioritised in discussion with ECD during the Inception period of the Project (first six months of the Project)
- Inception report will be submitted to Embassy.

# Outcome 2: Improved HW quantification for Myanmar



2018-00357 - Restricted

## Final Report

### First Generation Hazardous Waste Inventory for Myanmar

Master Plan for Hazardous Waste Management in Myanmar

#### Author(s)

Palash Kumar Saha, Kåre Helge Karstensen, Ohnmar May Tin Hlaing, Phyo Naing Zay, Tin Aung Win, Khing Thwe Oo, Yin Yin Mar.



SINTEF Building and Infrastructure  
2019-03-29

- SINTEF had conducted the First-generation HW Inventory for selected private industries in Yangon and Mandalay, in SOEs, Oil and Gas sector, Mining sector etc.
- Under this outcome, the finding of the First-generation Inventory will be revised; the inventory of Household HW will be conducted in NPT and Basis for regular reporting by industries will be established.

# Outcome 3: Initiate Co-processing in Myanmar

- Myanmar has close to 10 Million tonnes of cement production capacity- which will increase many times in coming years (Thailand with similar population - produces 7 times)
- Cement production requires huge amounts of fossil fuel and virgin raw materials, and is responsible for 5-6 % of man-made CO<sub>2</sub>
- The use of alternative fuels and raw materials in the form of waste materials is becoming increasingly popular and widespread in the region and should be integrated in the strategy for cement industry development in Myanmar.
- Some of the cement plants in Myanmar (SCG (MCL), Alpha) are BAT plants
- In the long run, this can potentially save huge amounts of resources and energy, reduce the emissions of CO<sub>2</sub> from cement production significantly, and constitute a sound option for treatment of waste and hazardous waste in Myanmar.

# Recovery of wastes in resource and energy intensive industry sectors may be a win-win-win & cost-efficient concept



## Improved waste management

Cost-efficient waste management will reduce pollution, exposure to hazardous chemicals and reduce possible health impacts



## Resource Efficiency

Virgin non-renewable fossil fuels and raw materials will be saved improving sustainability!



## Emission reduction

Recovery or Co-processing often reduce all emissions in the long run because the industry will be regulated under another regulatory scheme and thereby improve their overall performance

# Outcome 4: Built technical capability on handling and treatment of hazardous wastes

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- Built capacity on ESM of HW in Thilawa SEZ
- Guidance for take back system and recycling of WEEE
- Guidance for ESM of healthcare wastes
- Guidance for ESM of Mercury- ASGM
- Guidance for ESM of Expired pesticides and other POPs

# Outcome 5: Strengthened awareness and capacity on ESM of HW

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- Conducted training/workshops
- Awareness raising materials on HWM
- Selected ECD officials enrolled in Asian Universities
- Conducted study tours abroad for selected officials
- Provided technical support on HWM to target stakeholders

# The HWM project Phase II & SDG targets

TARGET 9-4



UPGRADE ALL INDUSTRIES AND INFRASTRUCTURES FOR SUSTAINABILITY

SDG 9.4- By 2030, *upgrade infrastructure* and retrofit industries to make them *sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies* and industrial processes, with all countries taking action in accordance with their respective capabilities



SDG 12.4- By 2020, achieve the *environmentally sound management of chemicals and all wastes* throughout their life cycle, in accordance with agreed international frameworks, and *significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment*

TARGET 12-5



SUBSTANTIALLY REDUCE WASTE GENERATION

SDG 12.5- By 2030, substantially *reduce waste generation through prevention, reduction, recycling and reuse*

**Thank You**