



Implementation 3R in Vietnam



**Vietnam Environment Administration (VEA)
Ministry of Natural Resources and Environment (MoNRE)**

Contents

1. Overview of waste management in Vietnam
2. Major achievements in 3R
3. Challenges and difficulties
4. Implementing master plans for 3R



I. Overview of waste management in Vietnam

Municipal solid waste (MSW) generation: 23 million tons/year

MSW is not separated at source, except on several unsuccessful pilot projects.

Collection rate in urban areas is around 85-90% and rural area is around 40-55%. The privatization of waste collection, treatment is on the first steps of implementation.

Popular method for treating waste is open landfills. There are over 660 operating landfills (203 sanitary landfills) with various scales in Vietnam.

No municipal waste treatment project meets all requirements on economic, technological, social and environmental aspects after investing and operating.

Industrial waste generation: 6.8 million tons/year

Waste separation at source is majorly implemented on recyclable waste. The other one is disposal together with municipal waste

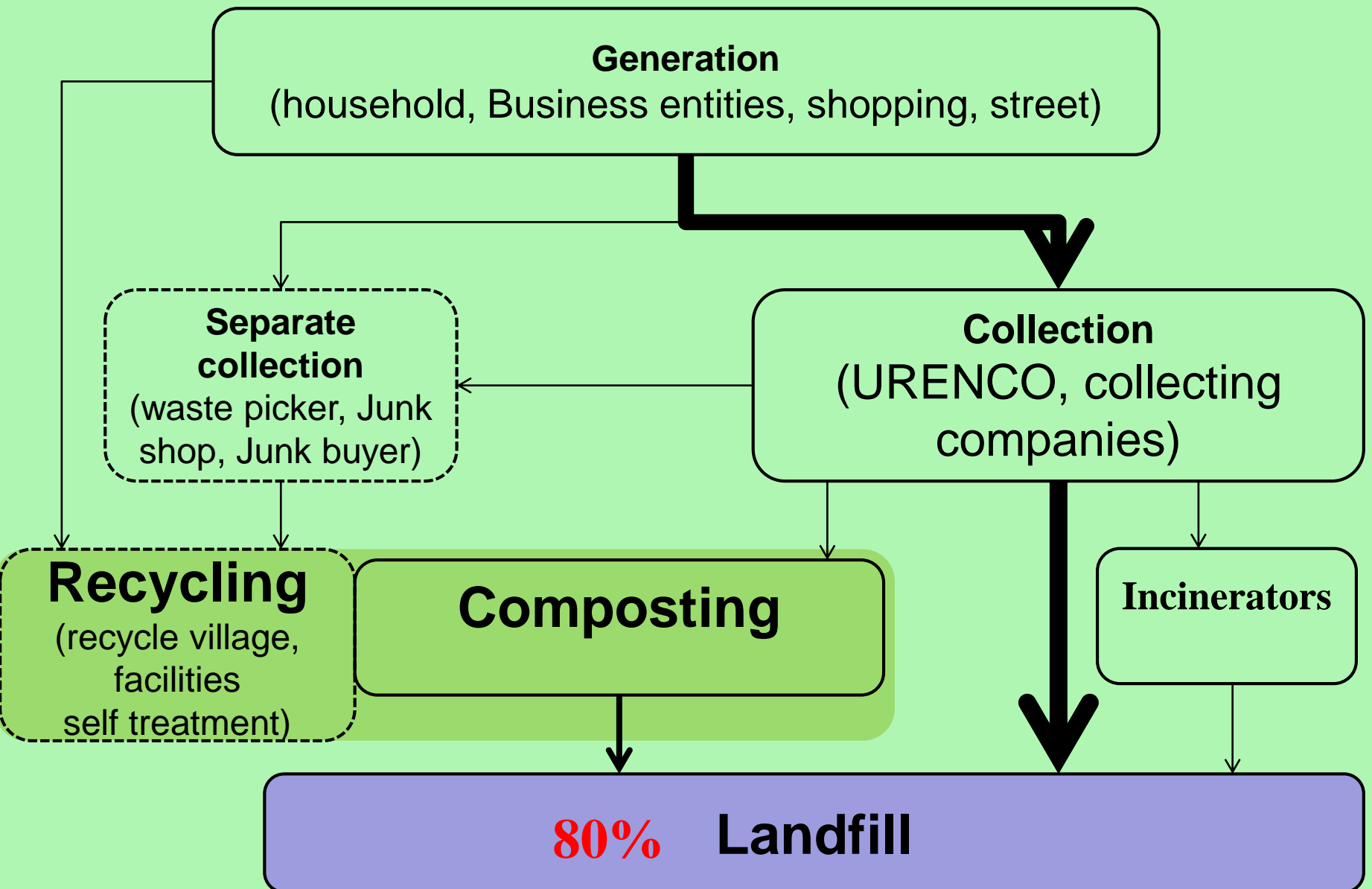
Waste collecting and recycling activities are spontaneous and in small scale

Lack of large-scale industrial waste treatment facilities

Hazardous waste generation: 850,000 tons/year

There are 124 licensed enterprises for hazardous waste treatment with a capacity of over 1.3 million tons/year.

Municipal Waste Flow in Vietnam



II. Major achievements in 3R

Promulgate the Circular No.34/2017/TT-BTNMT on regulations of taking back and treatment of discarded products

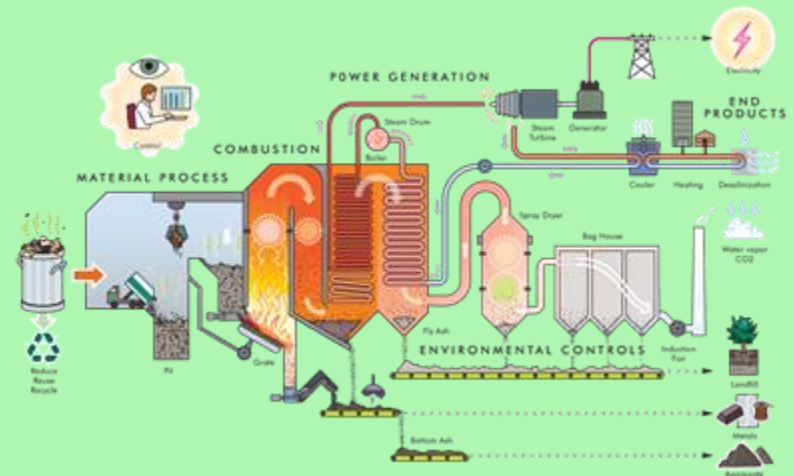
- **Owners of production, business, services have to retrieve, disposal of discarded products**
- **Consumers are responsible for transferring discarded products to designated places**
- **Producers must use the delivery book or the manifest of hazardous waste to transfer the disposed product to the centralized retrieval point or transfer it to a suitable recycling and disposal facilities.**
- **Detail regulations of technical conditions for retrieval places of e-waste, accumulators/batteries, waste lubricant,...**

National efforts are recognized as trying to introduce the EPR mechanism, which were enacted from July 2016 to deal with many kinds of e-waste.

II. Major achievements in 3R

Waste to energy is implemented in Vietnam

- The Nam Son Waste Treatment Complex, a state-of-the-art facility that can convert waste into energy was completed in March 2017. The plant has an incineration capacity of 75 tons of waste a day, generating 1.93 MW of energy in total, 1.2MW of which was funneled into the national power grid. The technology and equipment were provided by Hitachi Zosen.
- Some projects related to the same technology are implemented in Phu Tho, Can Tho, Ba Ria-Vung Tau, Ho Chi Minh City, ...



III. Challenges and difficulties

- **There is a lack of a consistent inventory of waste generation and waste management in Viet Nam.**
- **Waste is almost not separated at source, except on several unsuccessful pilot projects.**
- **Recycling activities in the informal sector take place mainly in craft villages with backward technologies, causing major pollution to the environment and impacting health.**
- **Unhygienic open landfill is popular. Hygienic landfills and waste treatment facilities are majorly available in big cities.**
- **Almost provinces do not have enough resources for investing a centralized, big-scale waste treatment facilities.**
- **Technical infrastructure has not yet met the speedy demand of development and waste generation.**
- **Some ODA projects for waste treatment operate ineffectively because imported technologies are not suit with Vietnamese's waste (no separation at source).**
- **Viet Nam needs a big investment to upgrade its waste treatments facilities.**

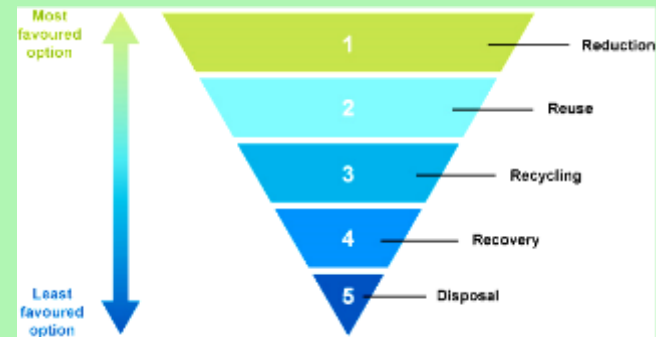
IV. Implementing master plans for 3R

National solid waste management strategies

- **Decision 2149/2009/QD-TTg dated 17th December 2009 of the Prime Minister on ratifying the National Strategy for integrated management of solid waste to 2015, with a vision to 2050**
- **Decision 1216/2012/QD-TTg dated 05/9/2012 of the Prime Minister on ratifying the National Strategy on Environmental Protection to 2020, with a vision to 2030**
- **Decision No. 166/QD-TTg dated 21/01/2014 of the Prime Minister on issuing the Plan for implementation of the National Strategy on Environmental Protection up to 2020 with a vision to 2030**
- **Decision No. 491/QD-TTg dated 07/5/2018 of the Prime Minister approving the adjustment of the national strategy on integrated solid waste management to 2025, vision to 2050**
- **National Strategy for Green Growth (Decision 1393/QD-TTg, dated 25/9/2012) and National Action Plan for Green Growth 2014-2020 (Decision 403/QD-TTg dated 20/3/2014)**

IV. Implementing master plans for 3R

- Solid waste management must be carried out in an integrated manner in order to prevent and minimize the generation of waste at source as a top priority task, to increase the reuse and recycling, reducing the waste to be buried.
- Generated solid waste must be managed as a kind of resource, classified and collected in accordance with the selected treatment technology; encouraging the treatment of waste into materials, fuels, environmentally friendly products; waste treatment combined with energy recovery, saving land and suitable to natural and economic conditions of each locality, region and country.
- The National Strategy for Integrated Management of Solid Waste until 2025, and Vision toward 2050. To 2025 set up the target of recycling as follows:
 - To 2020: 85% of MSW will be recycled, reused, recovered for use as an energy source or to produce organic fertilizer.
 - To 2025: 90% of MSW will be recycled, reused, recovered for use as an energy source or to produce organic fertilizer.



Thank you for your attention!

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Reduce
Reuse
Recycle

SEPERATE WASTE
CAUSE IT'S A PRECIOUS RESOURCE
IF YOU LOVE YOUR LIFE
COME ON & SHARE HAND
TO PARTNER WITH THE ECOLIFE

The graphic features three women in green and brown uniforms, each carrying a broom on their back. They are standing in front of a large green '3R' logo. Below them is a green wheelbarrow filled with colorful flowers. The text 'Reduce Reuse Recycle' is written in a simple font, and the bottom section contains a bold message about separating waste.

