



**Online Course on Solid Waste Management (SWM)  
towards Circular Economy**



# **Promotion of 3Rs and Extended Producer's Responsibility (EPR) towards Circular Economy in the Law on Environmental Protection**

*Nguyen Trung Thang*

*Institute of Strategy, Policy on Natural Resources and Environment (ISPONRE)*

*14-16/11/2022*

# **Contents**

- 1. Context and Waste management in Viet Nam**
- 2. 3Rs and EPR regulations in the LEP**
- 3. Key constraints in 3R and EPR implementation**
- 4. Ways forward**

# Global and National Context

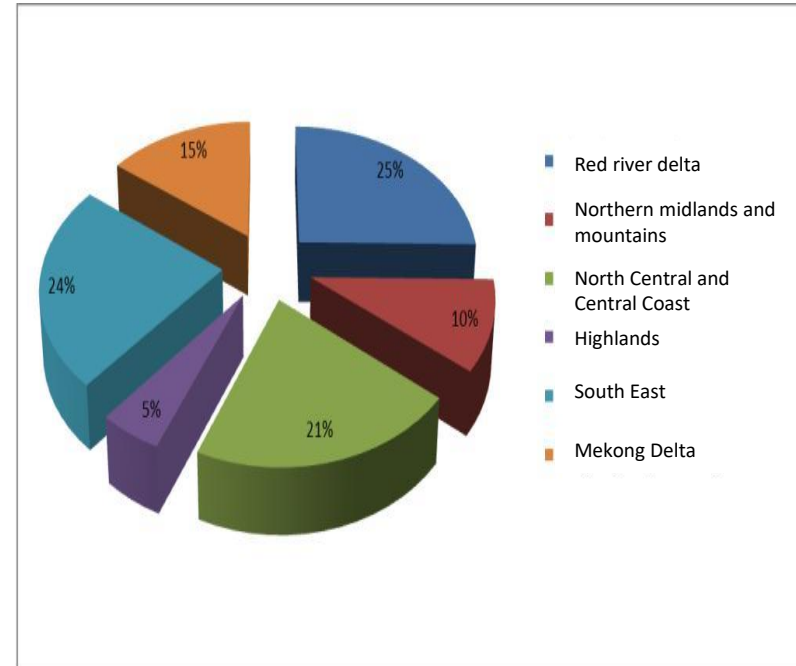
---

- **Covid pandemic** impacted the global development in all aspects.
- The **war in Europe** has impacted energy supply, economy development.
- **Climate change** has been increased, impacted socio-economic development in all regions in the world.
- **Natural resources and biodiversity continue to decline**, threatening big impacts to ecosystem, species and gene worldwide.
- **Environmental pollution** become worse: air pollution in big cities; water pollution; increasing waste generation in both volume and type.

*Countries are implementing **Sustainable Development Agenda 2030**; Paris Agreement on Climate change and COP26 commitments; Commitment on CBD... **Circular Economy** is a solution toward green economy and sustainable development.*

# Generation of domestic solid waste (DSW)

- Total national DSW is **23 million tons** in 2019, in which: **55% from urban area** (35,624 tons/day) and 45% from rural area (28,394 tons/day).
- Key regions are **Red River Delta and South East**.
- Urban domestic solid waste has an **organic rate of about 54-77%**, recyclable waste (plastic and metal) accounts for 8 - 18%.
- The amount of domestic solid waste generated in 2016-2020 continues to increase rapidly. It is estimated that the amount of domestic solid waste in urban areas **increases on average 10÷16%/year**.
- Total **GHG emission is 284 mill tons CO<sub>2</sub>eq (2014) from waste: 21.5 mill tons (~7.5%)**.



*Source: MONRE (2021), Report on the state of the national environment for the period 2016-2020*

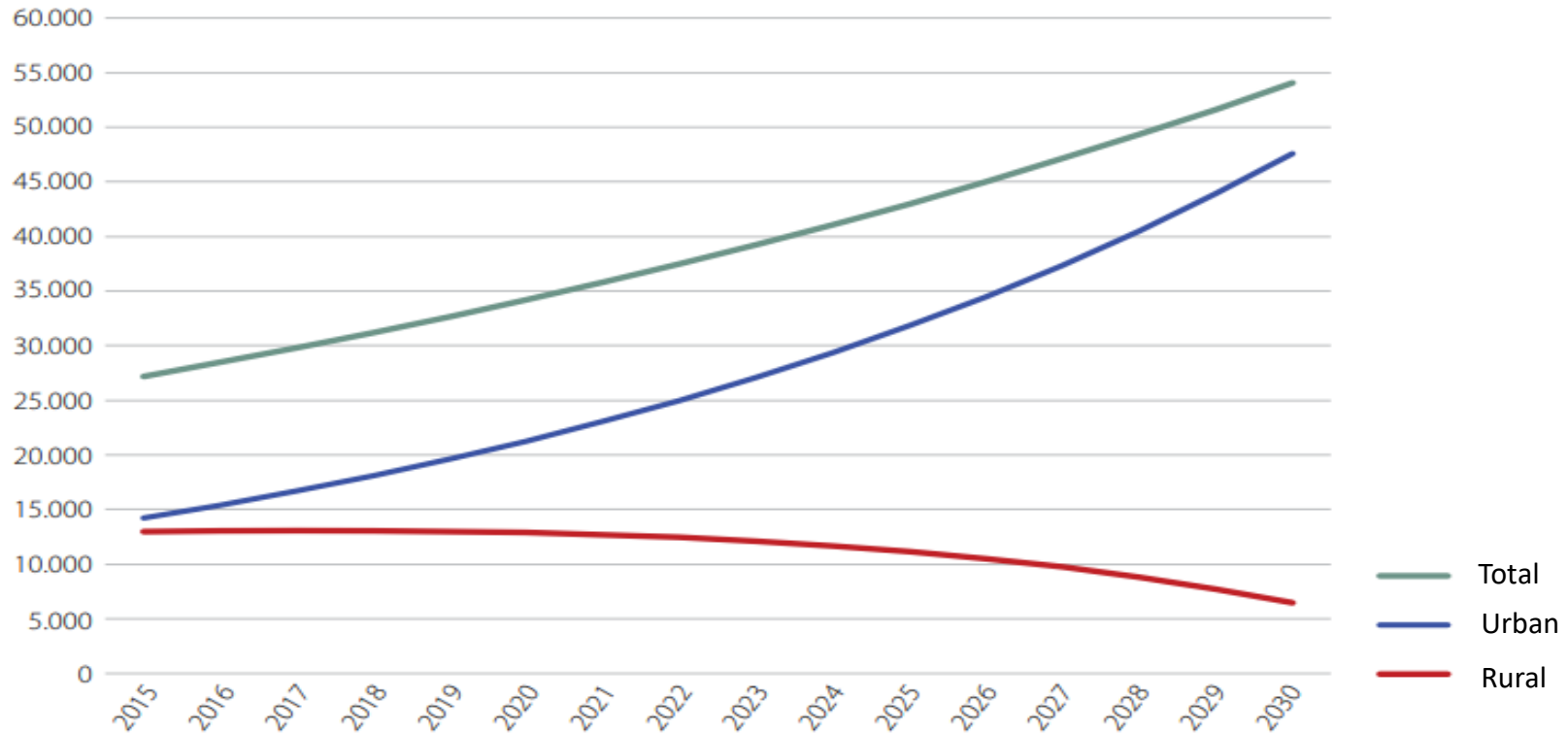
# Management of DSW in Vietnam

---

- DSW is **not separated at source**, in some large urban areas such as Ho Chi Minh City, it has only been piloted in some wards and districts.
- In 2020, the **collection rate** in the inner city areas of urban areas reach about 92% on average; **urban area is about 87%; in rural areas about 63%.**
- In urban areas, the collection and transportation of domestic solid waste is carried out by urban environmental companies or private enterprises. In rural areas, the collection and transportation of solid waste is largely done by cooperatives and collection teams with collection costs agreed with the people.
- **DSW is landfilled (~71%),** in which many unsanitary landfills pollute groundwater, surface water, air pollution (smell) directly affecting the community near by.
- There are about **35 composting facilities; nearly 300 incinerators**, mainly small-scale incinerators at communal level.

*Source: MONRE (2021), Report on the state of the national environment for the period 2016-2020*

# DSW forecast to 2030



Source: World Bank (2018), Assessment of the management of domestic solid waste and hazardous industrial waste

# Viet Nam's commitments at COP 26

## ❖ Vietnam's commitment

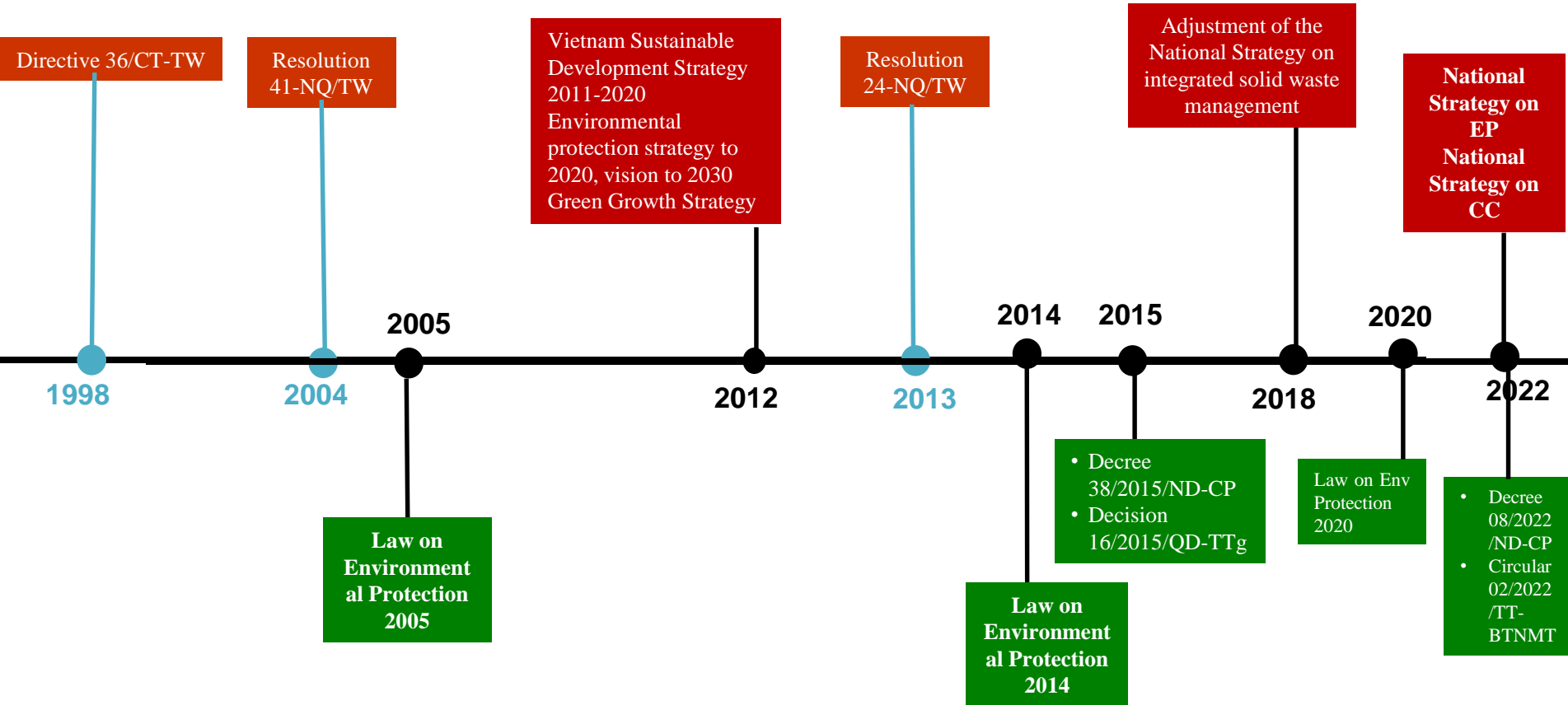
- Net Zero Emissions by 2050
- No new coal power project after 2030 and phase out coal power from 2040
- End deforestation by 2030
- 30% reduction in methane emissions by 2030 compared to 2020 levels



## ❖ Establishment of Steering Committee for COP26 commitment:

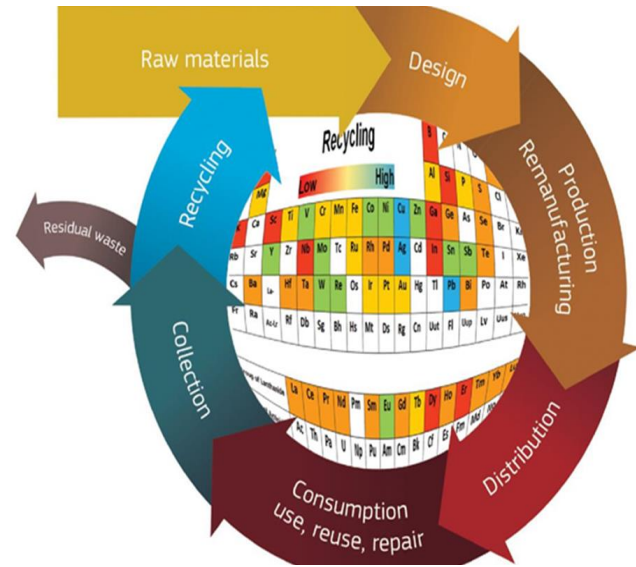
- National Steering Committee for the implementation of commitments at COP26 led by the Prime Minister, members are Ministers/Leaders of several ministries and sectors.
- SC function: direct the development and implementation of strategies, programs, action plans and projects to implement Viet Nam's commitments at COP26
- SC meeting has been held 3 times and has issued important directives and decisions for the implementation of Vietnam's commitments

# SWM Related Policy Development in Viet Nam





# CE Regulations in the LEP 2020



- CE is an economic model in which **design, production, consumption and service activities** aim to **reduce the exploitation of raw materials, extend the product life cycle, limit waste generated and minimize adverse impacts on the environment.**
- Implement **CE integration** right from the stage of developing **development strategies, master plans, plans, programs and schemes**; waste management, reuse and recycling.
- Enterprises are responsible for **establishing management systems and implementing measures to reduce resource exploitation, reduce waste**, improve the level of waste reuse and recycling right from the project design stage, product and goods design to the production and distribution.

# *Regulations on separation-at-source*

- DSW must be separated at source into **3 categories: recyclable; foodwaste and other**
- **Provincial/City People Committee is responsible for implementation after December 31, 2024.**
- The collection company has the right to **refuse to collect** if they have not been classified.
- **Encouraging the application of digital transformation solutions**, development and application of business models based on digital platforms to promote generation reduction, reuse, classification, collection, transportation, recycling and treatment of solid waste.



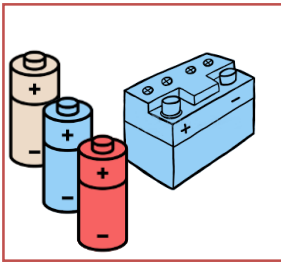
# *Regulations on Pay-As-You-Throw mechanism*

---

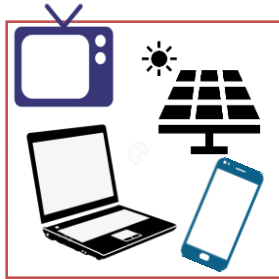
- ***Principle of fee collection:*** The cost of solid waste treatment is calculated **correctly, enough** for a volume unit to carry out the treatment. **Recyclable waste is collected for free**, promoting people to reduce solid waste generation.
- ***Service charges for collection, transportation and treatment of domestic solid waste arising from households and*** individuals are calculated on the principle of compensation through the local budget.
- ***Provincial-level People's Committees shall decide on the form of collection of service charges*** for domestic solid waste collection, transportation and treatment in one of the following cases:
  - **Through the selling price of domestic solid waste packaging**, including the cost of packaging production and service price of collection, transportation and treatment of domestic solid waste
  - **Through the volume of equipment containing** domestic solid waste;
  - **Through weighing and determining the volume** of domestic solid waste (for agencies and organizations)
  - **Or other forms.**

# EPR regulations

- **Responsibility for product collect and recycling (EPR).** Manufacturers and importers must collect and recycle 6 groups of packaging and discarded products. There are three options for producers/importers:
  - Take back products and recycle by themselves or contract with a recycling company;
  - Authorize an intermediary agency (PRO) to collect and recycle
  - Contribute funds to the Vietnam Environmental Protection Fund (VEPF).
- **Publish the list of recycling units and authorized to organize recycling.** MONRE shall publish a list of recycling organizations and PRO.



Battery,  
accumulator



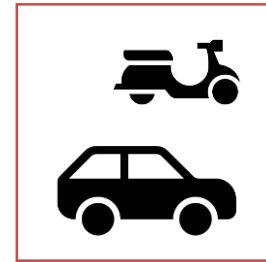
Electronic  
devices



Oil



Tire

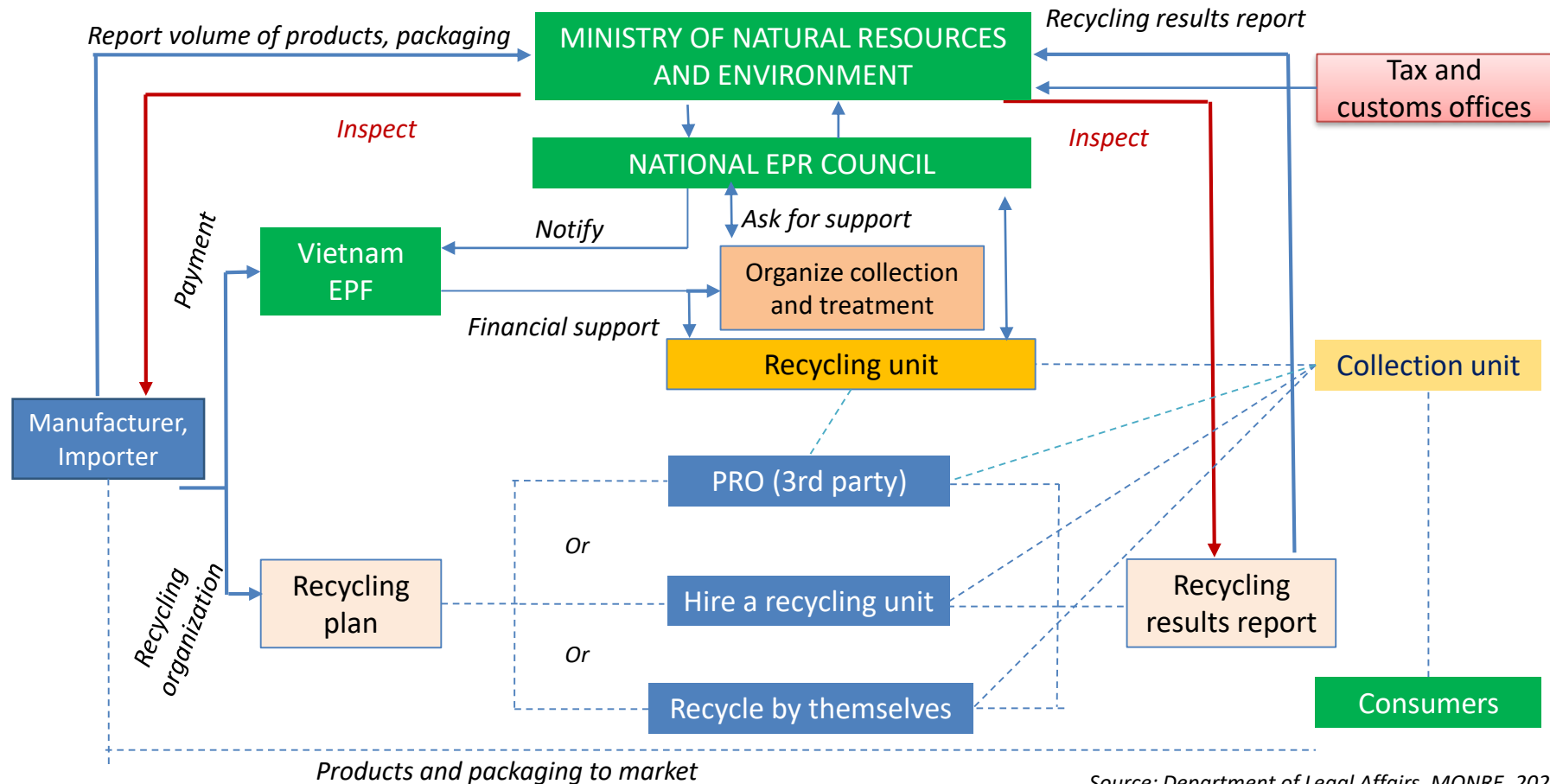


Transportation  
vehicles



Packaging

# EPR model according to the LEP 2020



## ***Regulated Recycling Rate – 40% of take-back products volume***

No	Products	Regulated rate of take-back (% of sold volume)	Effective date
I	Packaging	10-22	01/01/2024
II	Bateries	8-12	01/01/2024
III	Engine oil	15	01/01/2024
IV	Tyres	5	01/01/2024
V	Electronics	3-15	01/01/2025
VI	ELV	0.5-1	01/01/2027

*Source: GoV, Decree 08/2022/ND-CP, 2022*

# Administrative penalties for violations against EPR regulations

## Violation

- Do not publicize, provide information about products, packaging
- Violating regulations on hiring a recycling unit, authorizing an intermediary to organize recycling
- Violation of regulations on implementing compulsory rate of recycling
- Violation of regulations on submitting of recycling plan registration and report on recycling results
- Violation of recycling companies, third parties



## Method of handling and remedial

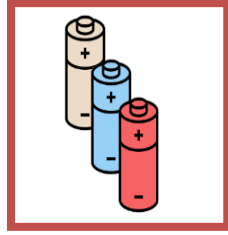
- Fine: up to 2 billion VND
- Forced to pay to Vietnam Environmental Protection Fund
- Forced to provide and publicize the information
- Forced to terminate the contract
- Disclose information of the violation

# Regulations on financial contributions to support waste treatment activities

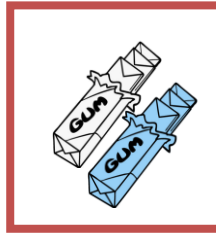
**Manufacturers and importers with 6 groups of products that are difficult to collect and recycle must have financial contribution to support waste treatment.** Amount of financial contribution is subjected to product or revenue.



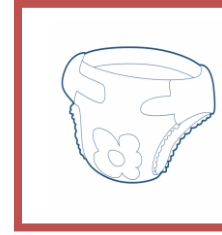
Plant protection product



Disposable batteries



Chewing gum



Diapers



Cigarettes



Products containing synthetic resin



Disposable plastic items



Disposable products



Clothing and accessories



Leather goods, bags, shoes



Toy



Interior



Building materials



Non-biodegradable nylon bags



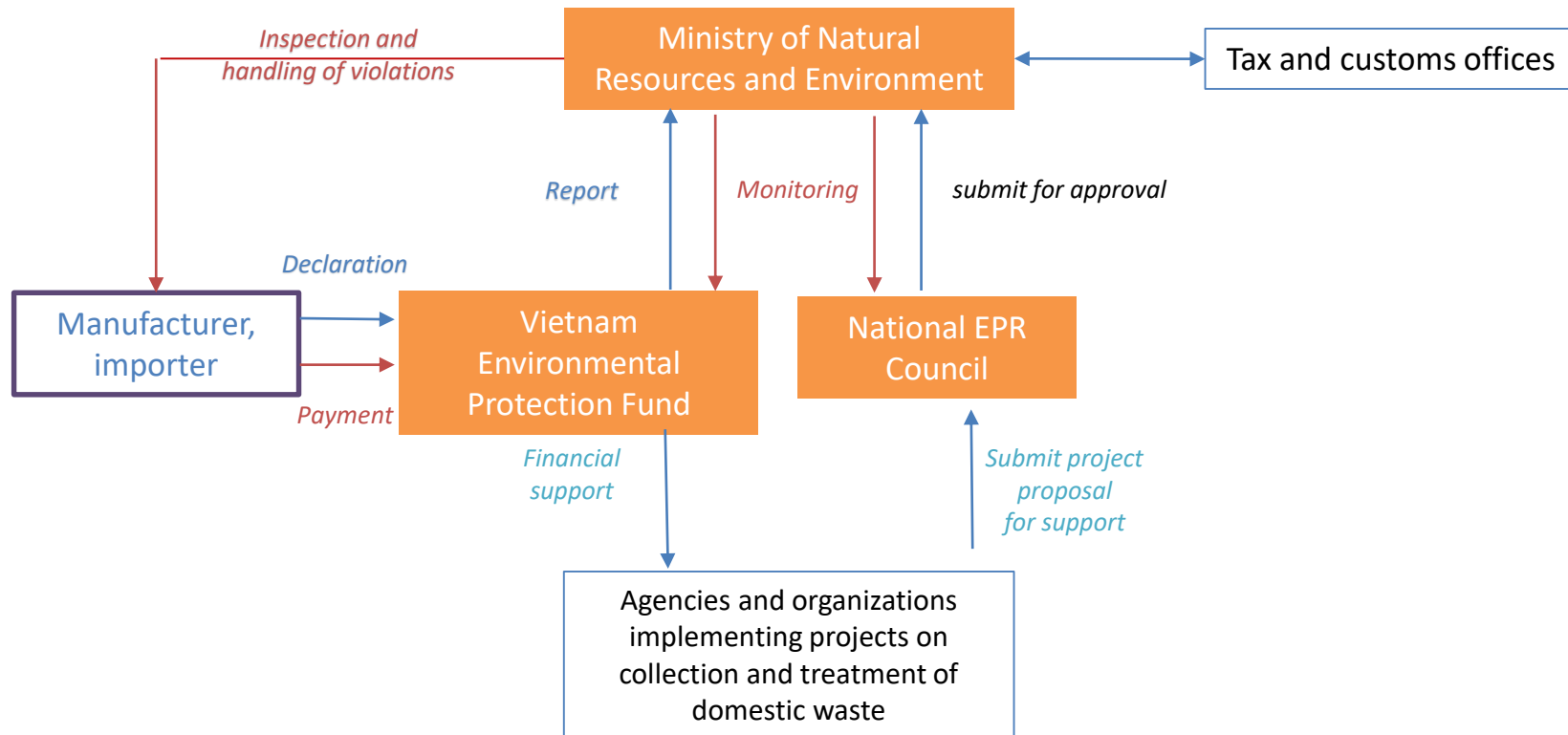
# Contribution norm to facilitate the waste treatment

No. (1)	Product and packaging type (2)	Form (3)	Volume/Size (4)	Contribution amount (5)
1	Plant protection product packaging	Plastic bottle, box	Less than 500 ml	50 vnd/piece
			Over 500 ml	100 vnd/piece
		Plastic bag	Less than 100 g	20 vnd/piece
			From 100 g to less than 500 g	50 vnd/piece
			Over 500 g	100 vnd/piece
		Glass bottle, jar	Less than 500 ml	150 vnd/piece
			Over 500 ml	250 vnd/piece
		metal bottle, jar, box	Less than 500 ml	150 vnd/piece
			Over 500 ml	250 vnd/piece
2	Disposable batteries	All	All	01% of the product's revenue in the case of production or 01% of the import value of the product in the case of importation
3	Diapers, sanitary napkins, disposable wet wipes	All	All	01% of the product's revenue in the case of production or 01% of the import value of the product in the case of importation
4	Chewing-gum	All	All	01% of the product's revenue in the case of production or 01% of the import value of the product in the case of importation
5	Cigarette	All	All	60 vnd/20 piece

# Contribution norm to facilitate the waste treatment

No. (1)	Product and packaging type (2)	Form (3)	Volume/Size (4)	Contribution amount (5)
6	Products with synthetic resin ingredients			
6.1	Disposable trays, bowls, chopsticks, glasses, cups, knives, scissors, chopsticks, spoons, forks, straws, stir sticks, containers, food wrap	All	All	1.500 vnd/01 kg of plastic used
6.2	Balloons, duct tape, ear buds, toothpicks; disposable toothbrush; disposable toothpaste; disposable shampoo, conditioner; disposable razor			
6.3	Clothing and accessories			
6.4	Leather goods, bags, shoes			
6.5	Toys			
6.6	Interior			
6.7	Building materials			
6.8	Non-biodegradable plastic bags with dimensions less than 50 cm x 50 cm and a film thickness of less than 50 µm			

# Waste treatment responsibility of manufacturers and importers



# Administrative penalties for violations against regulations on implementation of waste treatment responsibilities

## Violation

- ✓ - Acts of making false declarations, declaring lack of information in the declaration of financial contributions
- ✓ - The act of submitting the declaration of financial contributions beyond the prescribed time limit
- ✓ - Wrong declaration, incomplete declaration, dishonesty in the amount to be contributed



## Method of handling and remedial

- Fine: up to 2 billion VND
- Pay the fine to the environmental protection fund to fulfill the violation responsibility
- Disclosure of infringing information

# *Regulations on restricting solid waste landfilling*

---

*Regulations restrict the technology of direct landfilling of solid waste, thereby encouraging investment in modern recycling facilities and solid waste treatment facilities.*

- Localities, when investing in new or putting into operation solid waste treatment **facilities, prioritize investment in modern and environmentally friendly technologies**; ensure the gradual reduction of the proportion of domestic solid waste treated by direct burial to meet the target of integrated solid waste management.
- Landfill facilities must make a **deposit to restore the landfill**; promote the reduction of waste generation and reuse and recycling.

# ***Regulations on the roadmap to reduce plastic waste***

---

- **From January 1, 2026, it is prohibited to produce and import non-biodegradable plastic bags** with dimensions smaller than 50cm x 50cm and a film thickness of less than 50 m, except for the case of production for export or production. export and import to pack products and goods for sale to the market.
- **After 2025, stop circulate and use single-use plastic products, non-biodegradable plastic packaging** (including non-biodegradable plastic bags, styrofoam packaging and food containers) **commercial center, supermarket, hotel, tourist area.**
- **After 2030, stop the production and import of single-use plastic products** (except for products certified with Vietnam's eco-label), non-biodegradable plastic packaging (including non-biodegradable plastic bags, styrofoam packaging, food containers) and products and goods containing microplastics.

## *Regulations on incentives and support for solid waste management*

---

- ***Incentive regulation for 3R and waste management projects:*** in terms of land, investment capital and tax
- ***Subsidies on environmental protection products and services:*** Public products and services related to environmental protection, including the collection and transportation of solid waste, are subsidized.
- ***Green procurement:*** Public investment projects are to buy Viet Nam eco-labelled products and services.
- ***Green credit and green bonds.*** Waste management projects are included in the list of green taxonomy and will receive preferential credit from banks and green bonds.

## *Mechanism to support the development of power generation projects from solid waste*

---

### *Decision 31/2014/QĐ-TTg dated 05/05/2014*

- National plan on development of electricity sources using solid waste.
- EVN is responsible for purchasing all electricity produced from power plants from solid waste; contract period is 20 years;
- Electricity purchase price:
  - For power generation projects burning solid waste directly is 10.05 UScents/kWh;
  - For gas-fired power generation projects recovered from landfills CTR is 7.28 UScents/kWh.
- The Government provides information and incentives on capital and taxes; About land.



# Key constraints in 3Rs and EPR implementation

---

- ***Constraints in awareness and thinking of people for circular economy and EPR.*** People has not fully understand waste value so that difficult to change the habit for seperation of waste.
- ***The legal regulations on classification at source and EPR have just been guided, and localities and businesses still face many difficulties in implementing.*** The Law on Environmental Protection 2020 and the newly promulgated Decree 08/2022/ND-CP, localities and businesses are currently preparing for implementation with many difficulties and obstacles in terms of infrastructure, awareness and sense of responsibility.
- ***There is no diversity in solid waste treatment technology, lack of synchronization of stages in waste management,*** so it is difficult to promote the classification at source of waste effectively. If the source segregation is finished and processed together, the classification doesn't make much sense.
- ***There is no formal, modern, large-scale solid waste recycling industry. The capacity of recycling enterprises is still limited:*** The production of compost still faces many difficulties; recycling materials from domestic solid waste mainly at informal establishments in craft villages; Energy recovery from solid waste treatment is not yet common.

# Key constraints in 3Rs and EPR implementation

---

- ***Budget for domestic solid waste management is still difficult in many localities, the scale of solid waste generation is small and regional linkages are limited,*** so it is difficult to attract private enterprises with modern technology.
- ***The organization and selection of enterprises providing domestic solid waste management services is still limited,*** not yet open and transparent, creating fairness and equality between state-owned and private enterprises; short contract period discourages investment; There is no sample contract for PPP investment project.
- ***Constraints in access to incentive and support from government:*** The administrative processes and procedures to receive incentives and support are still complicated, causing many difficulties; the level of incentives and support is still low compared to the investment level of large projects; The mechanism to support the development of power generation projects from solid waste is inadequate (not yet regulated for biogas power generation projects).

# Ways forward

---

- ***Raise awareness and understanding*** of mechanisms, policies and legal regulations on DSW, especially on classification at source and EPR. Changing awareness and thinking about circular economy development in industries.
- ***Provincial/city authorities*** to develop and implement plan for DSW separation at source, PAYT; organize public and transparent bidding; developing and implementing PPP project...
- ***MONRE*** to provide guidelines on separation at source; simplify and reform administrative procedures in incentive regulations; guidelines on EPR implementation; develop guideline on green taxonomy and; National Action Plan on Circular Economy.
- ***The Ministry of Industry and Trade (MOIT)*** shall review, evaluate, amend the mechanism to support the development of power generation projects from solid waste.
- ***The State Bank of Vietnam*** shall guide credit institutions and foreign bank branches in Vietnam to concentrate and arrange suitable capital sources for preferential loans to encourage investors to green projects.



Thank you for your attention !

*ntthang@isponre.gov.vn*