

LEGAL FRAMEWORK FOR CIRCULAR ECONOMY IMPLEMENTATION IN VIETNAM

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Environmental developments in Vietnam in the 2016 - 2020 period



- **Population & urbanization:** in 2020, 862 urban areas, an increase of 60 compared to 2016; total population in 2020 at 97,58 million (urban areas, 37%).
- **Industrial development:** over 30% of national GDP (8.2%/year); 369 IZs, 698 industrial clusters, 4,575 craft villages; large production facilities outside IZs and industrial clusters make up 2% all over Vietnam but contribute over 30% to the total national production.
- **Energy development:** fossil fuels, hydroelectricity, biomass, wind, solar, etc.); hydroelectricity and coal-fired power make up the highest proportion.
- **Transportation development:** Transportation infrastructure especially roads has undergone quite strong development.
- **Tourist and medical activities:** Tourism plays an important role in the economy. The total of 13,674 medical facilities (1,253 hospitals) generates the total hazardous medical solid waste of about 23,925 tons/year.
- **Agricultural development:** Chemicals, crop and livestock waste.
- **Covid-19 pandemic:** social distancing leads to supply chain disruptions



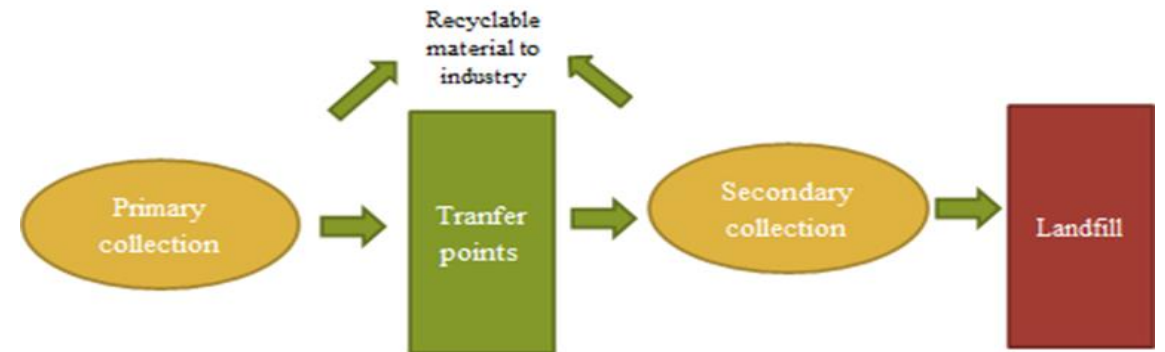
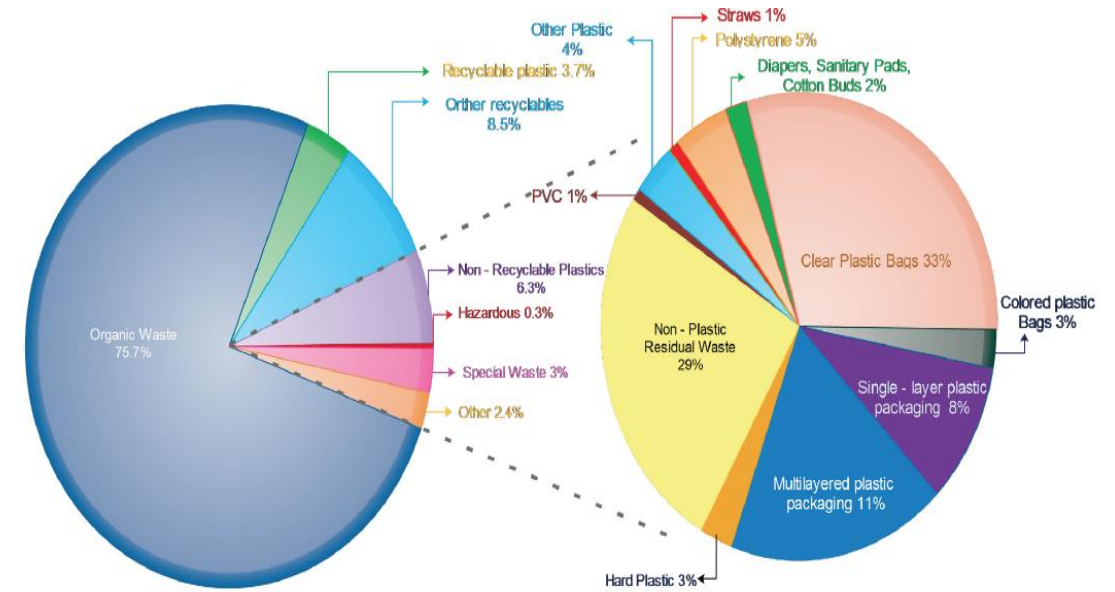
Characteristics of waste in Vietnam

According to WB 2018, urban areas in Vietnam generated an estimated 28 million tons of solid waste this figure is forecast to mount to 54 million tons by 2030 (a growth by 73%).

This waste contains mostly organic materials (food waste, clothing, paper, paperboard, etc.) and inorganic waste (plastic, rubber, metal).

Most of this waste is being disposed of in landfills.

Waste composition



Popular waste treatment model in Vietnam today

Population and waste generation by economic regions, 2019

Total waste volume:

3,562 tons/day; 10.3 mil tons/year; 1.08 kg/person/day

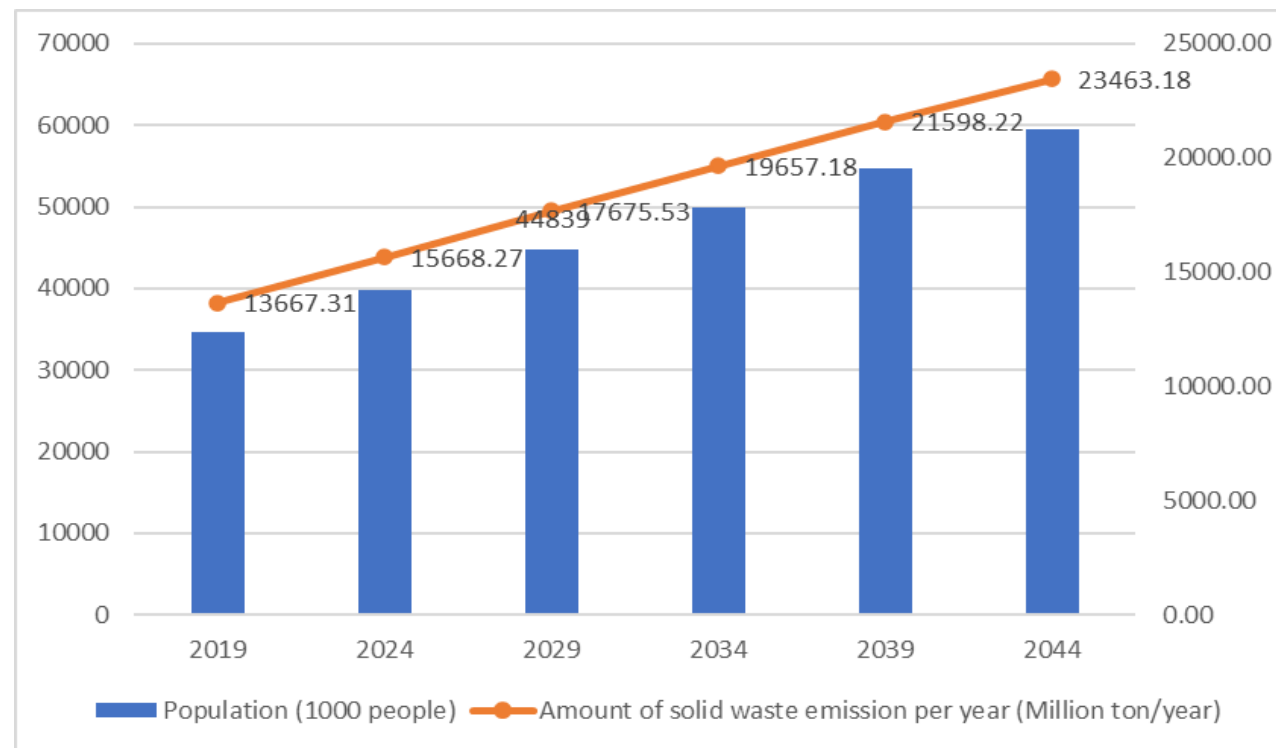
Indicator	Population (million people)	Volume incurred (tons/day)	Volume incurred (tons/year)	Incurred index (kg/person/day)
Economic zone				
Red River Delta	7.904784	8466	2784494	1,07
Midlands and Mountains north	2.282809	2740	1076428	1,2
North Central and Central Coast	5.720313	6717	2690517	1,17
Central Highlands	1.67603	1485	526586	0,89
Southeast	11.19648	12639	1149918	1,13
Mekong Delta	4.342132	3577	2135925	0,82
The whole country	33.122548	35624	10363868	1,08

Waste generation trends in Vietnam by 2045 according to the baseline scenario (variable factors)

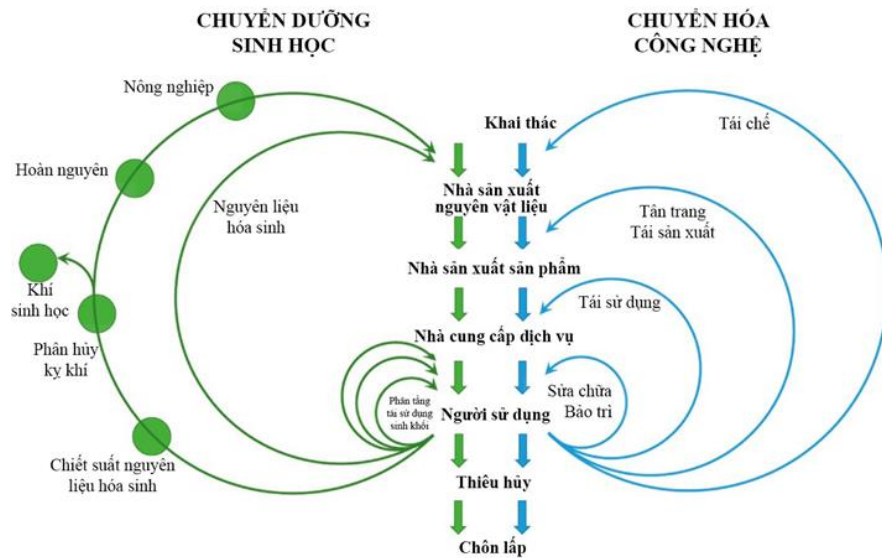
→ Population growth according to the GSO mean scenario,

→ Volume of waste generated equal to that of 2019

Estimations for stages



PRINCIPLES OF CIRCULAR ECONOMY

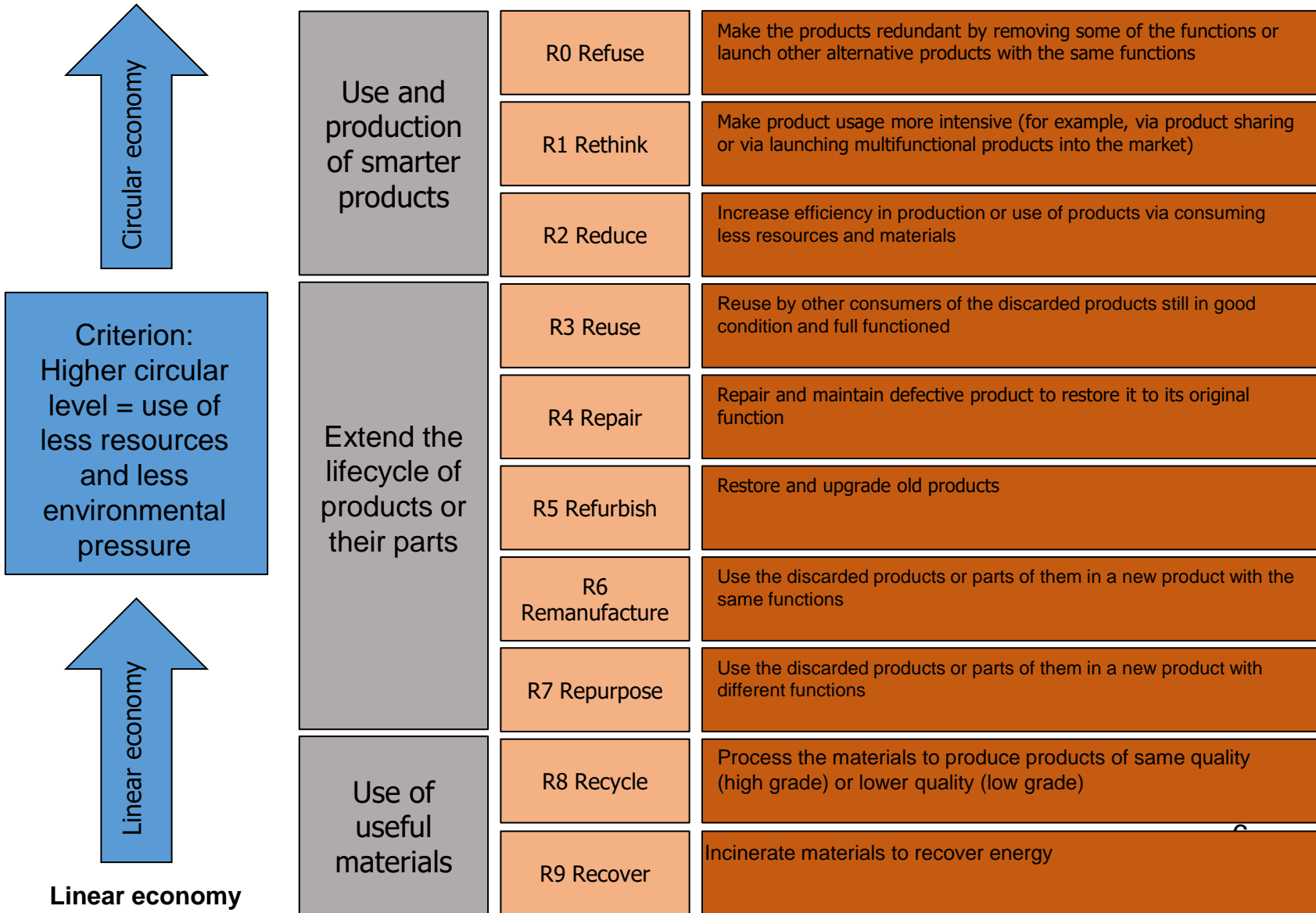


A system whose recovery and regeneration are driven by design

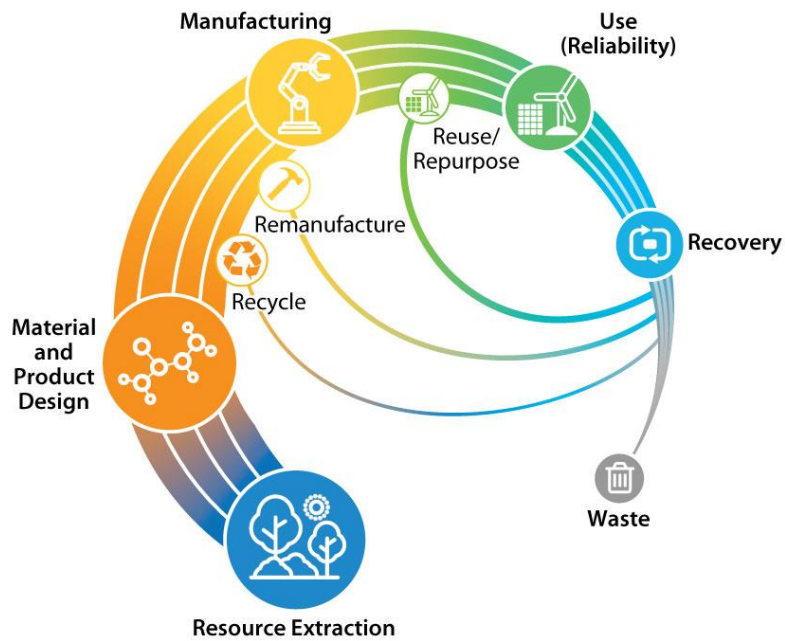
- 3 key principles (Andrew Morlet, 2015) are:
 - ➔ Conservation and enhancement of natural capital;
 - ➔ Optimizing resource productivity to the topmost benefit at all times in both the engineering and biological cycles;
 - ➔ Promote efficiency of the overall system via minimizing and designing towards eliminating of negative externalities.
- ➔ *Engineering materials can be recovered via the engineering cycle with different loops: maintenance and repair, reuse and redistribution, refurbishment and remanufacture, and finally recycling.*
- ➔ *Biologically derived resources are recovered differently. They circulate back into the biological cycle at the end of their life cycle so that they can be reused as nutrients in the new cycle.*



Circular economy approach



9Rs + Innovation, creativity + Scientific and technological achievements + Internet of things → *Circular business model*



LEGAL PROVISIONS ON CIRCULAR ECONOMY

❑ Article 142, Law on Environmental Protection

1. A circular economy is the economic model in which designing, production, consumption, and service activities are design-driven towards scaling down raw materials exploitation, extending product life cycles, reducing waste generation, and minimizing adverse impact on the environment.

2. Ministries, ministerial-level agencies, and provincial-level People's Committees shall integrate circular economy right from the stage of strategy, projects and plans formulation.

3. Production, business and services establishments are responsible for establishing a management system and taking measures to reduce resources exploitation, cut down on waste, and enhance the rate of waste reuse and recycling as early as the initiation of project development, product and goods design to the production and distribution stage.

4. The Government shall prescribe the criteria, roadmap and mechanisms to encourage the implementation of the circular economy in accordance with national socio-economic conditions.

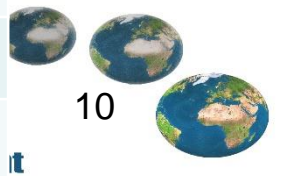
❑ **Other terms and conditions: green public spending, EPR) waste management, incentives, subsidy, etc.**



Some guiding documents related to circular economy

No.	Name of documents	Contents
2	Strategy for circular economy development for the 2021–2030 period, with a vision to 2045	"Building a roadmap, mechanism, policy and law to establish and operate the circular economy model". Encouraging the adoption of circular economy models for the effective use of the output of the Production Process."
3	National sector-specific strategies and plans	<p>National environmental protection strategy</p> <p>National strategy on green growth</p> <p>National strategy on sustainable production and consumption</p> <p>National strategy on solid waste management</p> <p>National strategy on livestock</p> <p>National strategy on renewable energy</p> <p>- Decision No. 158/QD-TTg, dated February 1, 2019 on consolidating the Steering Committee of Vietnam's industrialization strategy within the framework of Vietnam-Japan cooperation towards 2020, with a vision to 2030.</p>
4	Projects	<p>Environmental industry development project</p> <p>Environmental service development project</p> <p>Digital economic project....</p>

Industries, sectors	Vietnam	China	Europe	Industries, sectors (cont)	Vietnam	China	Europe
A. Production				6. Construction	X		X
1. Agriculture, forestry, aquaculture,	X	X		7. Wholesale and retail, repair		X	
- Crop	X	X		8. Other activities	X	X	
- Husbandry	X			B. Consumption			
- Aquaculture				1. Intermediary	X	X	
- Forestry		X		2. Government	X	X	X
2. Mining	X	X		3. Households, individuals	X	X	X
3. Manufacturing and processing industry		X		C. Intermediary			
- Food & Beverages	X	X		1. Urban areas	X	X	X
- Textile and garment	X			2. Rural and mountainous areas	X		
- Paper and pulp	X			3. Concentrated production and business clusters	X	X	X
- Leather and footwear			X	4. Environmental protection in craft villages	X		
- Wood processing and manufacturing of products from wood, bamboo, etc.	X	X		D. Waste Management			
- Chemicals	X	X		4.1. Solid waste	X		X
- Plastics	X		X	4.2. Wastewater	X	X	X
- Glass				E. National governance			
- Steel, metals	X	X		1. Creativity and innovation			
- Electronics, electrical equipment...	X	X		2. Digital conversion	X	X	X
- Machinery and other equipment	X			3. Administration		X	X
- Cars and other engines	X	X	X	4. Technology	X	X	X
- Repairs and maintenance				5. Education			



SPECIFIED DECREE

Article 141. General regulations on circular economy

1. General regulations

- Use in economical and rational fashion land resources, water resources, mineral resources, biological resources, sea and island resources, climate resources (solar energy, wind energy);
- Extend the use time of materials, equipment, products, goods, parts and components;
- Minimize adverse impacts on the environment: reduce waste and pollutants; minimize degradation of the ecosystem; cut down greenhouse gas emissions; enhance biodiversity conservation.

2. Ministries develop industry- and sector-specific criteria

ROADMAP FOR CIRCULAR ECONOMY IMPLEMENTATION

(Draft Decree)

Ministry of Natural Resources and Environment:

1. Developing a National Action Plan and submitting it to the Prime Minister for promulgation before December 31, 2023

- Analyzing current situation; context of circular economy implementation;
- Defining goals;
- Identifying tasks and diverging the implementation of the circular economy for industries and sectors
- Determining the types of investment projects, production and business establishments, services and products that should be design-driven to achieve circular economy criteria;
- Orientating solutions towards implementation of the circular economy
- Organizing the implementation: assigning responsibilities, monitoring, reporting; allocating resources for implementation.

2. Building and operating a platform for information connecting and data sharing for the application of the circular economy model

3. Issuing a framework to guide the application of circular economy

ROADMAP FOR CIRCULAR ECONOMY IMPLEMENTATION

(Draft Decree)

2. Ministries, provincial People's Committees:

- Developing an action plan for the implementation of the circular economy
- Integrating specific criteria for the implementation of the circular economy since the initiation of plans and projects
- Piloting the circular economy model in the energy, raw materials, and waste areas according to the circular economy implementation action plan;
- Developing technical guidelines, standards and regulations
- Propagating and disseminating knowledge and laws in this regard
- Managing and updating information and data on circular economy implementation and integrating them into the information and data system of the Ministry of Natural Resources and Environment.

ROADMAP FOR CIRCULAR ECONOMY IMPLEMENTATION (Draft Decree)

Enterprises

- ❑ Complying with the National Action Plan, the action plan of Ministries, provincial People's Committees;
- ❑ Implementing 9R solutions in the order of priority (**Project, production facilities**)
- ❑ Designing an optimized overall layout to improve efficiency and reduce consumption of land, water and energy resources (**IZs**)
- ❑ Adopting environmentally friendly transportation solutions that help reduce greenhouse gas emissions (**urban areas**);
- ❑ Making use of roof areas for setting up of rooftop solar energy (**urban areas**);
- ❑ Collecting and storing rainwater for reuse; promoting recovery and reuse of wastewater after treatment (**urban areas**);
- ❑ Implementing solutions for domestic solid waste management in accordance with the provisions of the Law on Environmental Protection and this Decree (**urban areas, IZs**).
- ❑ Encouraging the application of the circular economy earlier than the roadmap identified in the State's action plan.

INVESTMENT POLICIES, INCENTIVES, SUPPORTS (Draft Decree)

State investment

- Promote scientific research, application development, technology transfer and equipment production, human resource training for implementing of the circular economy;
- Provide a platform for information and data sharing about the circular economy.

State incentives and supports

- Incentives from the Vietnam Environmental Protection Fund, the provincial environmental protection fund;
- The granting of credit guarantees to small and medium-sized enterprises borrowing from lending institutions shall comply with the provisions of the law on credit guarantee
- Incentives on corporate income tax;
- Preferential import tax and export tax
- Tax incentives for non-agricultural land use
- Special consumption tax incentives
- Subsidized pricing for products and services on environmental protection
- Green credit, green bonds;

INVESTMENT POLICIES, INCENTIVES, SUPPORTS

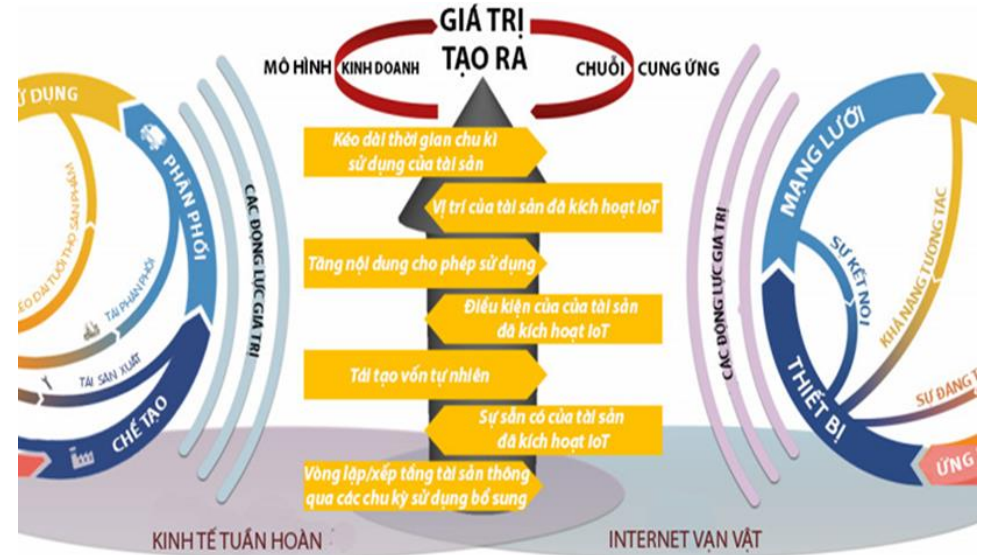
(Draft Decree)

The State encourages the following activities:

- Research and development of technology, technical solutions, provision of services in consulting, and design and evaluation of the implementation of circular economy in accordance with the law;
- Development of linkage models, sharing the circular use of products and waste; establishing of cooperative groups, cooperatives, unions of cooperatives, recycling alliances, models of regional linkage, urban-rural linkage and other models as prescribed by law to implement investment, production, business and service activities to meet the criteria of the circular economy;
- Developing of the market for reuse of discarded products and recycling of waste;
- Mobilizing of resources in society to implement the circular economy in accordance with the law;
- Boosting of international cooperation, exchange of experience, knowledge and technology in the circular economy in accordance with the law.

Future missions

- Develop the national action plan for circular economy implementation;
- Specify circular economy indicators and criteria according to levels (Macro), Intermediaries (Meso), Production and business establishments (Micro), products (nano);
- Guide the integrating of CE into waste management Strategies, Projects, Plans, Programs, and Schemes
- Organize training, coaching and guiding activities;
- Develop a platform for sharing of knowledge, information, data and policies;
- Pilot the application of the circular economy model in areas of priority
- Finalize other institutions and laws
- ...



Thank you for your attention!



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