

# Circular Economy Initiatives in Sri Lanka

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## Policies Relevant to Circular Economy

National Environment Policy 2020 June

This policy aims emphasize the sustainable development and responsible management of environmental resources. It includes the circular Economy principals under life cycle approach and 3R concept Reduce, Reuse and Recycle.

- National Waste Management Policy 2020
   This address the integrated waste management system providing clear directives.
- National Policy on Sustainable Consumption and Production 2019
   This policy address the enhance the sustainability of the country economic development.

#### Contd.

 National Environment Act (NEA) No 14 of 1980 is the legislative instrument for enforcing above policies. Central Environment Authority is implementing this act. Recently some of plastic and polyethene items prohibited. So those items are cannot be produce or use in the country E.g. Sachet packets, plastic spoon etc.

• NEA will be amended near future to include principles such as extended producer responsibility. Now at the final stage of this amendment.

 National Environmental Action plan for 2020 to 2030 has been developed and implementing for 9 thematic areas including waste management.

## Plastic Inventory for Sri Lanka 2023

Description	Tonnes per year				
	MC	UC	PS	National	
Total plastic waste generation	67,663	26,143	155,231	249,037	
Per capita plastic waste generation	0.0286	0.0189	0.0091	0.0195	
Total collected	61,305	23,538	96,228	181,071	
Plastic waste collected by formal mixed waste collection	41,238	13,683	44,341	99,262	
Plastic waste collected by informal mixed waste collection	6,867	64	3,486	10,416	
Plastic waste collected by formal recycling collections	3,355	1,624	1,031	6,011	
Plastic waste collected by informal recycling collections	9,845	8,167	47,371	65,383	
Proportion of waste collected	91%	90%	62%	73%	
Total plastic waste recycled	12,499	5,906	8,370	26,775	
Proportion recycled	18%	23%	5%	11%	
Total plastic waste disposed to designated disposal sites	39,563	10,682	46,632	96,877	
Plastic waste disposed in controlled landfills	-	-	9,326	9,326	
Plastic waste disposed in uncontrolled landfills	39,563	10,682	37,306	87,550	
Recyclables taken from landfills by informal recyclers	3,537	513	527	4,577	
Net disposed (after waste plastics removed by informal recyclers)	36,026	10,169	46,105	92,300	

#### **Local Government Authorities Waste Collection**

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		Province	Number of Local Authorities	No of Institutions not carrying out WM Activities	No of Compost Yards	No of Night Soil Treatment Plants	No of Bio Gas Units	No of Incinerators	No of Landfills	Dumping sites
2	02	Western	49	÷	27	2	1	01	01	12
	2	Central	47	01 (Ambangangakorale PS)	23	7	0	03	01	02
	3	Southern	49	-	30	2	0	0	0	08
	4	North Western	33	01 (Giribawa PS)	25	5	1	0	01	02
	5	Sabaragamuwa	29	-	15	3	2	0	0	11
	6	Uva	28	01 (Bandarawela PS)	16	3	o	0	01	04
H	7	Northern	34	01 (Vavuniya South Sinhala PS)	10	3	o	0	0	42
	8	Eastern	45	02 (Verugal PS, Navithanveli PS)	18	2	o	0	05	20
¥	9	North Central	27	01 (Palagala PS)	16	0	0	03	0	02
7		Total	341	8	180	27	4	07	09	103

# INITIATIVES TAKEN TO IMPROVE 3R AND CIRCULAR ECONOMY IN SWM

## Introduce Waste Categorization through Detailed Leaflets and Public Awareness

- Bio-Degradable Waste
- Non-Recyclable Waste
- Recyclable Waste

#### **Colombo Waste to Energy Plant**

- First Waste to Energy Project in Sri Lanka
- Scope of the Project: Generation of 10 MW Electricity to the National Grid by incineration of 700 tons of Municipal Solid Waste per day
- Project Location: Kerawalapitiya
- Owner: Western Power Company (Pvt) Ltd (WPC), a subsidiary of Aitken Spence PLC
- Project Cost: Rs. 13 billion (USD 87 million)
- CMC signed an agreement for waste delivery to WPC for
   22 years
- Operation started in late 2020

#### **Recycling Initiatives**

Improve Recycling Waste Collection using No of Collection Methods:

Door-to-Door Collection, Eco Kiosk Centers, Waste Market, E - Waste Dropping Centers

Improve Recycling Waste Collection through Public Awareness

Plastic Palletization

Glass Recycling

E-Waste Dissemble and Export

Polythene Waste -Holcim

Plastic Waste to Yarn

Tyre

#### **Proposed Bio-Gas Plant from Organic Waste**

- Methane capture technology using food waste
- Pre-feasibility studies is in progress
- Supported by the Seoul Metropolitan Government

## Hand work using waste













#### Composting







Bio Gas



Farming







### Plastic Recycling

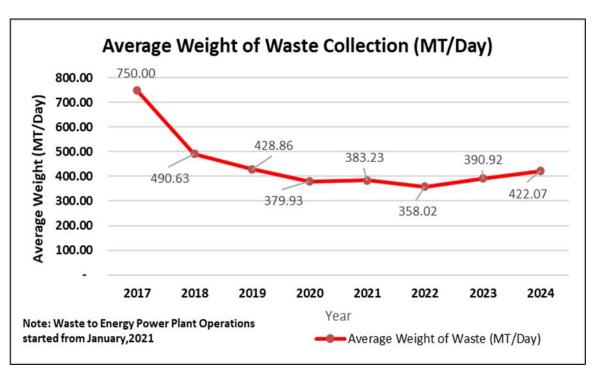




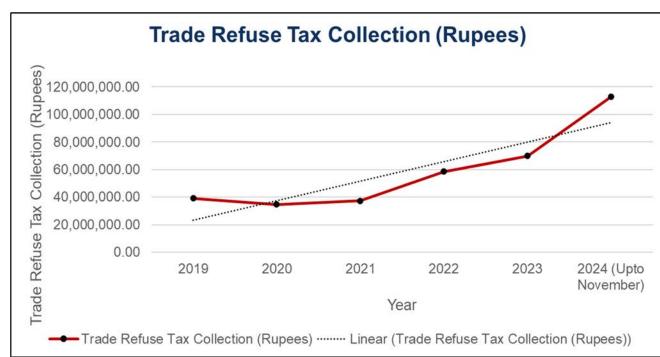


#### **ACHIEVEMENTS:**

# Waste Reduction in Colombo City



## Trade Refuse Tax Collection



#### **AWARDS FOR SOLID WASTE MANAGEMENT**

#### **2023 CityNet ESCAP SDG City Awards**

Colombo has been Selected as the WINNER in the Urban Planning Category for the year 2023 CityNet ESCAP SDG City Awards, competing against 35 other innovative case studies

http://www.urbansdgplatform.org/profile/profile caseVie w\_detail.msc?no\_case=649&from=list



Presidential Environmental Award - 2024

Colombo Municipal
Council wins SILVER
award in waste
management projects of
the Local Authority for
their excellent
contribution towards
environmental
conservation



## **Challenges and Positives**

- Challenges
- Limited Financial resources available for acquire enough people and vehicles for waste collecting.
- Limited advanced technologies available in the country for recycling
- Lack of awareness and negative attitudes of public towards the waste managements
- Limited land available in country
- Social issues
- **Positives are involvement and commitment of private sector and Youth.**

# THANK YOU!

**Reduce Reuse Recycle** 

