

CITY, Country

City Information

Population

Yangon city is situated in Yangon Region and it is the largest city of Myanmar. In Yangon region, there are 45 townships, while there are 33 township in Yangon city. The population of Yangon city is 5.2 million (5,209,541) which represents 70.8 % of the entire population in Yangon Region according to the result of 2014 Myanmar Population and Housing census.¹ Among the 33 townships in Yangon city, Pabedan has the highest population density at 53,615.6 per square kilometer, while Dala has the lowest at 755.2 per square kilometer. The average population density is 5363.6 per square kilometer.



Yangon City and Yangon Region

	Yangon City	Yangon Region
Population	5.2 million	7.55 million
Township	33	45
Area	961.28 sqkm	9,804.09 sqkm



Area (km²)

Thirty-three townships, 630 wards, and 54 village tracts form Yangon city which fully cover eastern and western districts of Yangon, while partly covers the northern and southern districts of Yangon. It means that the townships only under the administration of Yangon City Development Committee (YCDC) are part of the city. Therefore, we can call the 33 townships in the city as ‘YCDC townships.’ Among the four districts, only the western district is exclusively composed of wards without any village tracts. The total area of the entire Yangon city is 961.28 square kilometers which is 9.9% of Yangon Region.²

Climate

Yangon has a tropical climate with three seasons. The hot and dry season is from March to May and the rainy season starts in June and ends in October. This is then followed by the cool and dry season which is from November through February.

¹Population and housing census of Myanmar, 2014

²Local Governance Mapping the state of local governance: trends in Yangon (UNDP Myanmar, February-2015)

Seasonal Climate in Yangon

Seasons	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dry			X	X	X							
Rainy						X	X	X	X	X		
Winter	X	X									X	X

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The average temperature for the year in Yangon is 27°C. On the average, the hottest month is April with an average temperature of 37°C. The coolest month on average is January with an average temperature of 17.9°C.

Maximum, minimum and average temperature in Celsius

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max	32	35	36	37	33	30	30	30	30	32	32	32	32
Min	18	19	22	24	25	25	24	24	24	24	22	19	23
Ave	25	27	29	31	29	27	27	27	27	28	27	25	27

Heavy rain usually falls from May through October, where August has the highest rainfall with 602 millimeter.

Precipitation in millimeter

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
precipitation	5	2	7	15	303	547	559	602	368	206	60	7	2681

In terms of humidity, the highest percentage is in August with 87 while the average annual humidity is 74.4 percentage.

Humidity in percentage

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Humidity	62	66	69	66	73	85	86	87	85	78	71	65	74.4

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Main Economic Activities

Yangon is the country's main center for trade, industry, real estate, media, entertainment and tourism. The city alone represents about one fifth of the national economy. According to official statistics for FY 2010–2011, the size of the economy of Yangon Region was 8.93 trillion kyats, or 23% of the national GDP.⁵ There are around 14 light industrial zones in Yangon with over 4000 factories employing 150,000 workers. It is also the center of garment export industry especially to Korea. Yangon mainly produces textile, soap, rubber, aluminum, iron and steel. More than 80 percent of factory workers in Yangon work on a day-to-day basis.

Construction is a major source of employment. However, the construction industry has been negatively affected by new regulations introduced in August 2009 requiring builders to provide at least 12 parking spaces in every new high-rise building.

³Facts about Yangon city development committee.

⁴www.yangon.climateps.com

⁵Kyaw Hsu Mon and Yadana HtunYangon (Monday, November 7, 2011). Region govt facing K22b budget black hole.

Tourism represents a major source of foreign currency for the city although by Southeast Asian standards the actual number of foreign visitors to Yangon has always been quite low.

Yangon's wholesale market, the Bayint Naung market, is the largest wholesale market in the entire country for rice, beans and pulses, and other agricultural commodities. Aside from market, there is a great deal of informal trade, especially in street markets that exist alongside street platforms of Downtown Yangon's townships which generate the local's income.

Yangon is the terminus of five railway lines, has a seaport, including the Thilawa deep-water port, which handles most of Myanmar's imports and exports, the country's main airport (in Mingaladon township, just north of Okkalapa township), and is connected with Ayeyarwady Region by the Twantay Canal, which connects the Yangon River with the Irrawaddy (or Thande) River.⁶

Country Information

Population

Provisional results of the 2014 Myanmar Population and Housing Census show that 51,419,420 (51.4 million) persons were in the country on the 29th March 2014. This includes a population of 1,206,353 (1.2 million) persons estimated not to have been counted in the census in parts of the States of Rakhine, Kachin and Kayin.⁷

Area (km²)

Myanmar is the second largest country in Southeast Asia with a total area of 676,578 square kilometers where total land covers 653, 508 square km and total water covers 23, 070 square km.⁸ The length of contiguous frontier is 5876 kilometers, sharing 2,185 kilometers with China, 1,800 kilometers with Thailand, 1,463 km with India, 193 km with Bangladesh and 235 km with Laos respectively. It stretches 1,931 km from north to south; 925 km from east to west.⁹

Economy and GNI/Capita

[according to WB classification <http://data.worldbank.org/about/country-classifications> low, lower middle, upper middle and high income; GNI/Capita in USD]

According to World Bank classification, Myanmar is under the category of low-income economies which means the GNI per capita is equal or less than 1,045 USD.¹⁰

Main Economic Activities

According to the GDP of Myanmar in the fiscal year of 2010-2011, the main economic activities which contribute to the GDP of the country are agriculture (rice, beans, pulses, livestock and fisheries, forestry), trade, industry, services, construction, electric power, and mining. Agriculture had the highest percentage of GDP by 36 %, which is followed by trade with 20 %. The next highest contributors to GDP are industry and services with 19% and 18% respectively. Moreover, construction supports GDP by 5%, while electric power and mining adds GDP by 1 % each.¹¹

⁶Local Governance Mapping the state of local governance: trends in Yangon, p.13. (UNDP Myanmar, February-2015)

⁷Population and housing census of Myanmar, 2014

⁸http://www.themimu.info/May9_2-15

⁹http://www.nationsencyclopedia.com/May19_2015

¹⁰http://data.worldbank.org/about/country-classifications/May19_2-15

¹¹Data collection survey on agriculture sector in the republic of the union of Myanmar (December, 2013)

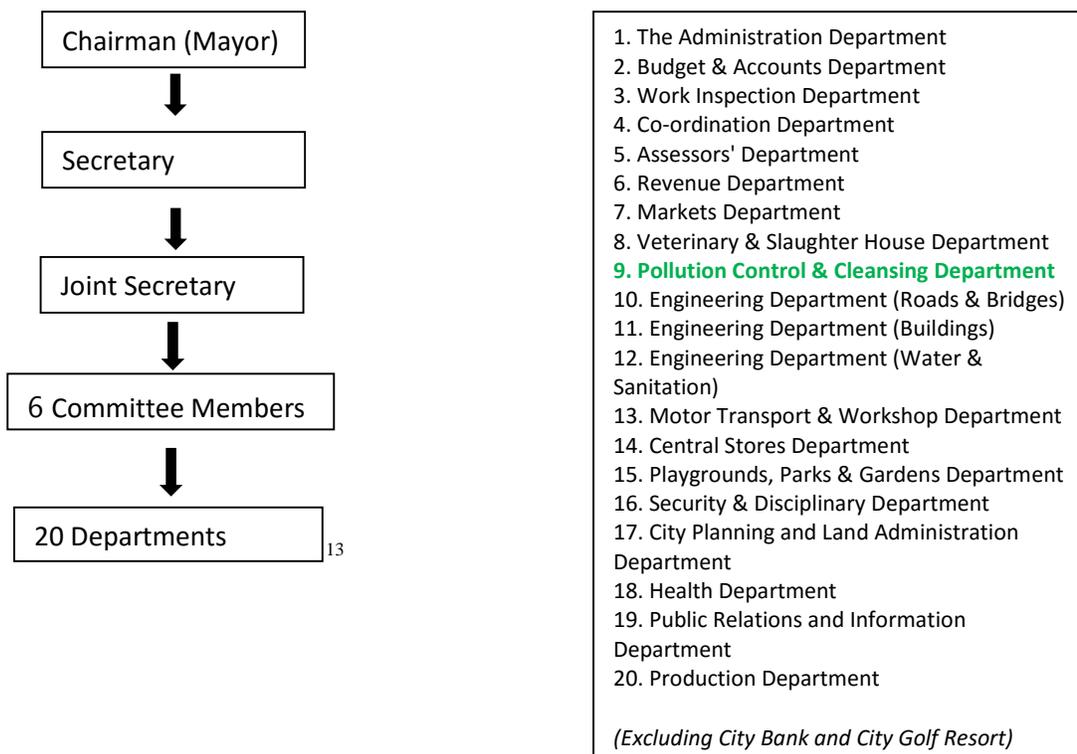
In line with foreign direct investment by sector by the month of April, 2015, the top five sectors which received the highest foreign are oil and gas, power, manufacturing, transport and communication, and mining. Oil and gas got the highest investment at 34.79% of the overall investment. The next four sectors extract 34.22 %, 9.93%, 5.64%, and 5.08 % of the foreign investment respectively. In this foreign investment, China stood at the highest investor in Myanmar by 26.13 % of the whole investment, which is followed by Thailand by 18.18%, Singapore by 18.12%, Hong Kong by 12.64%, and United Kingdom by 7.16%.¹²

Government Agencies responsible for guidance on waste legislation

[include name and weblink]

1. Yangon City Development Committee (YCDC)

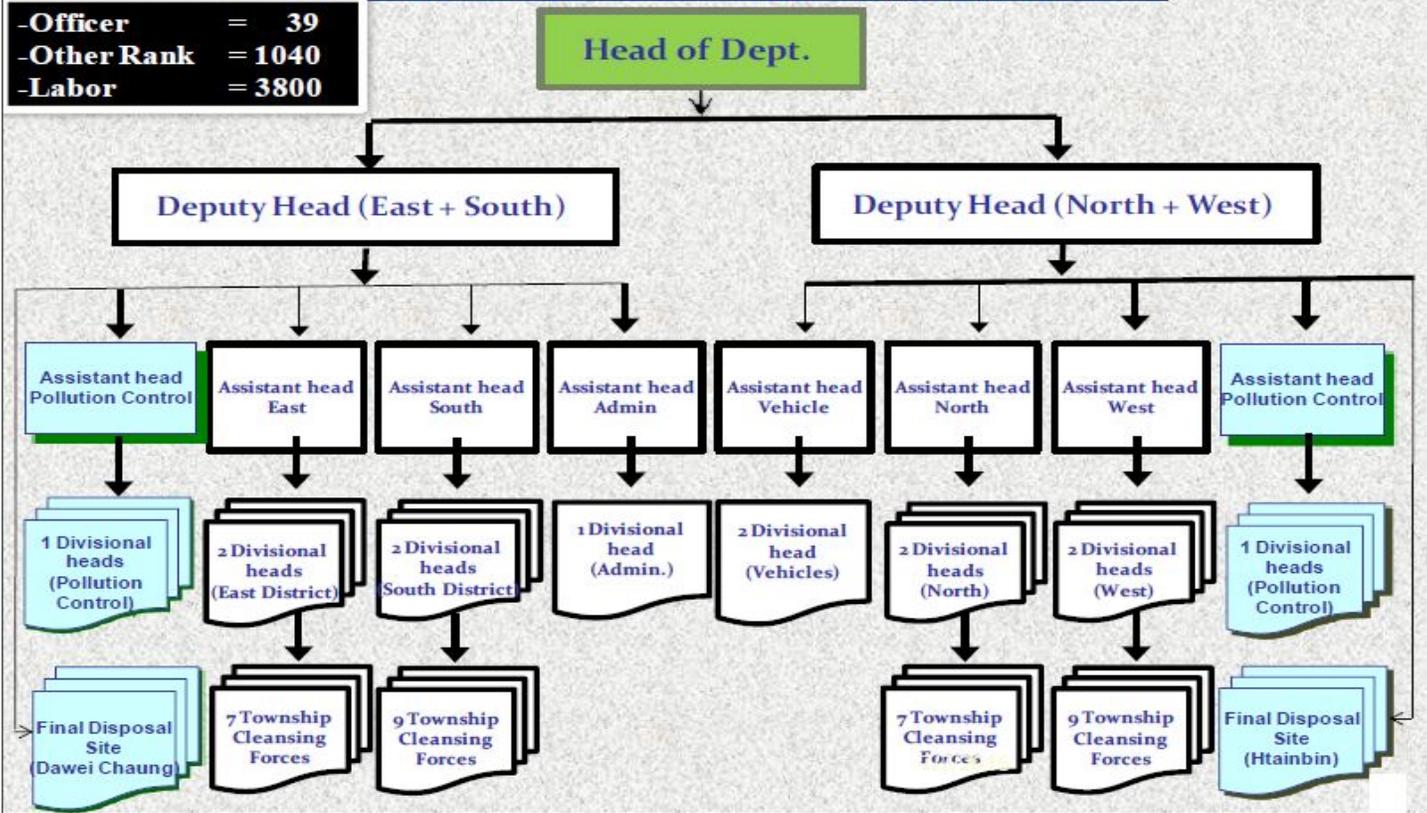
Organization Chart of YCDC



¹²http://dica.gov.mm.x-aas.net/June4_2015

¹³Facts about YCDC: Yangon City Development Committee

Organizational Chart of Pollution Control and Cleansing Department



Source: IGES, 2014

MSW Sector Overview: City Level

Classification of MSW

[what waste types are classified as MSW, only households or also commercial entities like restaurants; hospitals etc.]

The MSW are generally classified into four types:

Composition of Waste	
Organic	76%
Paper & Textile	4%
Plastic	10%
Others (1. woods, 2. rubber and leathers, 3. metals, 4. glasses, 5. crockery and stones)	10%

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¹⁴Institute for Global Environmental Strategies, March 2014.

MSW Generation

[total in tonnes/year and per capita in Kg/year]

Currently, there are six final disposal sites (FDS) in Yangon City. On the average, over 1,690 tons of garbage is generated per day and around 0.396 kg per person.

Final Dumping Sites (FDS)	Constructed Year	Total Area/ Used in Acre	Ton of Waste/Day	Remark
1. Htein Bin	2002	150/70	847 tons per day	Open dumping
2. Htawe Chaung	2001	55.77/47.4	612 tons per day	Open dumping
3. Shwe Pyi Thar	2005	1	50 tons per day	Low landfill temporary site
4. Mingalardon:	2003	0.91	25 tons per day	Low landfill temporary site
5. Dala	2003	1.3	10 tons per day	Low landfill temporary site
6. Seikkyi Khanaungto	2003	0.25	5 tons per day	Low landfill temporary site



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Collection Coverage and Type

[e.g. approximately 80% of the waste generated is formally collected and disposed. State if source segregated collection of different waste streams takes place or not, e.g. Publicly sited collection bins for paper & cardboard; glass and metals]

In Yangon, 97% of the waste are formally collected and only 3% of them are illegally disposed. Generally, solid waste are segregated publically into two: wet and dry. Wet waste such as kitchen waste, left-over, flowers can be discarded safely tight with blue bags daily. Dry waste such as paper, cork, plastic, broken toys, pieces of metal, pieces of wire can be discarded safely tight with green bags weekly (Wednesday and Sunday). But they are loaded on the same vehicle for transportation to the sanitary landfills.

Facilities of Pollution control and cleansing department (PCCD)	
Number of vehicles	294
Number of dozer	2
Number of dust bins	3472
Number of brick tanks	617

¹⁵bid.

Waste Composition

[Actual composition if known for organics; metals; plastics; glass; paper & cardboard etc. or a descriptive idea of the composition such as “the waste stream has a high organic waste content estimated to be around 70% with low levels of recyclable materials such as plastics, paper and glass]

Seventy-six percent of solid waste are organic. It is estimated by YCDC that 86 tons which is 5% of the total waste are recycled. YCDC is running a small-scale plastic plant which produces green and blue plastic bags from the plastic waste.

Waste Management Practice

[identify what is predominant practice e.g. open dumps, no biological treatment or formal recycling; include disposal, recycling and recovery rates where known; type of materials reused, types of materials recycled;]

All of the landfills are open dumpsites and the government does not practice formal recycling, but by the private sectors through the junkshops and the door to door individual purchasers. The valuable recyclables are stored at household level and sell to the nearby junkshops and the door to door individual buyers as well.

Composition of recyclables are: Glass – 56.3%, cardboard – 15.29%, paper – 12.43%, tin can – 7.09 %, plastic- 7.09%, steel-1.1%, Copper- 0.42 %, leather- 0.14%, and lead – 0.14%.¹⁶

Formal Waste Sector

[type of ownership and management e.g. publically owned and operated, PPP etc; outline the different waste operations in place locally e.g. landfill; composting plants; energy recovery; recycling and what waste types are exported for treatment, e.g. separated recyclables]

1. Pollution control and cleansing department (PCCD) under YCDC plays the key role in providing the facilities, man power, and the finance. There are 37 officers in PCCD with 1040 in the other rank and 3500 labours. In terms of the facilities, PCCD provides 294 trucks for carrying the wastes to the final dumping sites, 617 brick tanks for collecting the wastes, and 3472 dust bins for segregating and holding the wastes.¹⁷

Informal Waste Sector

[collection coverage, type of materials, if the informal sector makes up a large or small part of the waste sector]

1. Itinerant waste buyers: In and out of the city center, there are local itinerant waste buyers who are pushing their hand carts and purchasing the wastes especially the recyclable things with the minimum price they could deal with the sellers.

2. Child waste pickers: secondly, some children who could not go to school are picking the recyclable wastes on the streets and they also go to the brick tanks and sorting out the wastes which they could sell to the junk shop to support their family.

3. Junk shops: In Yangon, there are so many informal junk shops which collect the recyclable wastes. After gathering lots of recyclable wastes, they send them to the recyclable plants.

¹⁶Nirmala Menikpura (July 30, 2013). *Present situation of solid waste management in Yangon city.*

¹⁷Institute for global environmental strategies, March 2014.

Financing of MSW

[what type of model is used to finance waste services e.g. through household fees, general tax, etc. Is the cost a significant part of the city budget?]

1. Fund from the regional government

The regional government is the main funder for waste services in Yangon city. It allocates budget for the salaries of the staffs, for buying and maintaining the facilities (for examples: carts, trucks, dozers), for uniform, etc. According to U Tun Tun Thaug, assistant engineer, the regional government funded about 8.2 million USD for the waste services in Yangon city during the fiscal year 2013/14.

2. Cleaning and Collection of tax and revenue according to townships

Monthly Fee of Waste Collection is collected in 33 townships in the boundary of Yangon City Development Committee. The townships are divided into three groups: Central Business District, Sub-Urban and Satellite. Currently, waste collection fee is collected by on-line receipt since October 2014.

1.1 Collection fee is 20 kyat per day in Central Business District (15) townships and collect 600 Kyats (0.6 USD) per month

1.2 Collection fee is 15 Kyats per day in Sub-Urban (10) township and collect 450 Kyats (0.45 USD) per month

1.3 Collection fee is 10 Kyats per day in Satellite (7) townships and collect 300 Kyats (0.3 USD) per month

3. Collection of tax for commercial waste

The enterprises such as Hotel, Motel, Inn, Guesthouse, hospitals and clinic and in the area of Yangon City Development Committee are collected for tax based on the kind and size of the enterprises as follows-

2.1 Minimum of 500 Kyats (0.5 USD) to maximum of 550,000 Kyats (550 USD) for business

2.2 Minimum of 1500 kyats (1.5 USD) to maximum of 300,000 Kyats (300 USD) for hospital /clinic

2.3 Minimum of 4000 kyats (4 USD) to maximum of 300,000 Kyats (300 USD) for Hotel, Motel, Inn, Guest house

4. On Call System

People who want to discard construction waste, factory waste, garden waste and the waste from tax free places for cleaning services, except from kitchen waste and ordinary commercial waste, shall pay fees fixed by the committee for vehicle –

3.1 Governmental organizations: 30000 kyats (30 USD)/ trip (Vehicle capacity - 4 tons) (or) diesel oil + 15000 kyats (15 USD) without staff

3.2 Private: 35000 kyats (35 USD)/ trip (Vehicle capacity - 4 tons) (or) diesel oil + 20000 kyats (20 USD) without staff.

5. The charge for the people who discard the waste at final disposal sites with their own plan

If a person who does not use the collection system of the committee or on call system discards the waste at designated final disposal sites with his own plan, shall pay the designated charge 5000 kyats (5 USD) for the 1st ton and 2000 kyats (2 USD) for additional one ton.¹⁸

¹⁸ http://www.ycdc.gov.mm/May30_2015

Exchange rate considered as 1 USD = 1000 Kyat

Waste Management Challenges

[list areas of work that could be carried out in your city: indicate priority, general timeline, intended outcomes, and assistance required]

1. Lack of detailed planning of solid waste management
2. Inefficient waste collection system
3. Old equipment for waste collection and transportation
4. Improper final disposal
5. Unclear enforcement of hazardous/infectious waste management
6. Weakness of solid waste management registration¹⁹
7. No enough budget allocated for solid waste management.
8. Low resources and technical skill to turn the wastes to energy

Technical Assistance

[list any technical assistance required in order to take projects forward]

In order to improve waste management in the community, the European project “Environmental protection and sustainable development: building local capacities on solid waste management in Myanmar” conducts a Community Awareness Campaign. In the last week of December 2014, the second set of community awareness days were conducted in Tarmwe, Thingangyun and Hlaing Thar Yar. In the first year, the community awareness campaigns were conducted in Myitta Nyunt Ward Tarmwe Township, 25th Ward in Thingangyun Township and Kyan Sit Thar Housing compound in Hlaing Thar Yar Township. These awareness were conducted with the collaboration of one of the project partner, Pollution Control and Cleansing Department, Yangon City Development Committee. After the training, all participants conducted the awareness campaign with the bell-ringing waste collection of PCCD. *The activities include picking up waste along the road, distribution of awareness pamphlet, 2015 awareness calendar and waste bags to houses, teashops and shops, the people passing by, taxis and rickshaw.*²⁰The local authority in Yangon city enhances its own capacity through seminars concerning solid waste management as well.²¹

MSW Sector Overview: Country Level

To date, the government and the relevant departments of solid waste management could not do any data collection and any research at the country-wise level. There are mainly three committees which are dealing with solid waste in three cities: Yangon, Mandalay and Nay Pyi Taw community development committees. Among them, even the most active one, PCCD/YCDC is still struggling to provide the detail data of solid waste on the monthly basis because they normally collect record from the two main FDS (Htein Bin and Htawe Chaung); whereas they do not collect from the rest FDS on the monthly basis. According to Saw Min Aung, the deputy head of PCCD, they collect data on the district base in Yangon city and if we sum up the number of tons from all four districts (East, West, North, South), we can get the amount of waste generation per day. Therefore, we cannot provide country-wise data so far.

¹⁹Institute for global environmental strategies, March 2014.

²⁰http://www.swmproject.eu/May30_2015

²¹Municipal waste report: status-quo and issues in Southeast and East Asian countries, p, 13, 2010.

General description and overview of common practice

[e.g. approximately 85% of waste generated is not collected and disposed of in a sanitary manner. Improper disposal methods include burning, household burying, and open dumping along streams and roads]

N/A

Waste Generation (per capita/year)

N/A

Collection Coverage

[% of population receiving collection services]

N/A

Number of Landfills/MSW Disposal rate (tonnes/year)

N/A

Recycling Rate

[if known; ideally for different fractions: metals, glass, plastics, paper & cardboard. If no figures are available descriptive information can be given]

- We can only get the recycle rate in Yangon, while we cannot get for the country level.

Waste management of Organic fraction (composting, anaerobic digestion)

[Are practices like AD and composting in place and on what scale]

N/A

- The government has not practiced any of composting and anaerobic digestion yet.

Energy Recovery Rate

[Mention if energy is recovered from waste, and if so by what means (landfill gas; anaerobic digestion; thermal treatment etc.) and from what quantities of waste, if known.]

- There is no energy recovery from waste in the whole country.

Plans, Strategies, Policies (incl. financial instruments) & National Objectives

City Level

Aimed at improving Waste Management in General

Integrated and strategic development policy [Middle and long term] of Solid Waste Management in Yangon City	
Vision	
Creating a City with a Sound Material Cycle through 3Rs Policies and Its Execution	
Three Basic Policies	
1) A controlled and sound solid waste stream in sanitary manners	<p>The first policy is the minimal requirement for safe living environment for the city. The following are considered for deciding applicable measures:</p> <ul style="list-style-type: none"> • Solid waste management system development should be carried out in a way that there is little or no environmental and social impact from generation to final disposal. • Waste collection services should be provided and maintained for the whole urban population by the target year.

2) Restraint of waste generation and 3Rs (waste reduction, waste reuse, waste recycling)	<p>The second policy is a challenge for the next steps required to achieve waste reduction and wise use of natural resources which are intended not only for the present but also for the next generations. The following matters are to be discussed:</p> <ul style="list-style-type: none"> • Waste segregation at the source, which is a waste reduction measure, should be promoted as YCDC envisages. • Recent concepts such as Sound Material Cycle Society and Extended Producer Responsibility at the long term of the urban planning should be adopted and introduced.
3) Application of feasible methods of waste management in terms of environment, society, economy and technical aspect	<p>The third policy is to be considered for selecting treatment options in the future. There is a possibility of using new technology of treatment as well as improvement of the existing technologies in the middle and long terms. The optimum options should be selected based on evaluation from the view point of environmental, social, economic and technological aspects.</p>

Goals and Effect Indicators

- 1) Solid waste is collected from the living environment of all people and business entities. The collected amount of municipal waste: 14,000 ton/day
- 2) The operation of 3R policies and necessary actions are monitored by YCDC and the monitoring result is shared with stakeholders. The diverted recyclable material from the municipal waste stream: 7,000 ton/day
- 3) Hazardous waste is collected and treated appropriately. The treated hazardous industrial waste: 500 ton/day, Infectious waste: 20 ton/day

Development Strategy

Controlled sound solid waste stream in sanitary manners

- (1) Procurement and regular replacement of vehicle and equipment for waste collection
- (2) Facility development in accordance with Urban Planning [sanitary landfill, transfer station, treatment facility]
- (3) Capacity development for maintenance of vehicle and equipment
- (4) Environmental monitoring

Cooperation and coordination with stakeholders

- (1) Enhancement of coordination among departments of YCDC
- (2) Promotion of community activity
- (3) Environmental education,

Public 3R policies and organizational reinforcement

- (1) Promotion and regular update of policies of solid waste management, 3R promotion such as Recycling Act
- (2) Preparation, monitoring and update of the integrated solid wastemanagement plan [facility development, revision of management systemetc.]
- (3) Capacitydevelopment of personnel
- (4) Improvement of data management

Fair cost allocation and promotion of Public Private Partnership [PPP]

- (1) privatization of collection and transportation, landfill management, operation of treatment facility
- (2) Review and update of waste fee system
- (3) Cost sharing to promote and support 3R [promotion of recycling industry, extended producer responsibility]²²

²²The Project for the Strategic Urban Development Plan of the Greater Yangon: Final Report I, 2013

Aimed at addressing Climate change and reducing SLCPs through waste related activities

Country Level

Aimed at improving Waste Management in General

Aimed at addressing Climate change and reducing SLCPs through waste related activities

Legislation

City Level

Legislation governing MSW management

- The City of Yangon Development Law No. 11/90 by SLORC (State law and order restoration council)
- The City of Rangoon Municipal (Amendment) Act 31/1960

Guidance for MSW management (after legislation, before inspection activities)

Inspection activities/supervision and enforcement of legislation

National Level

Legislation governing MSW management

1) The Environment Conservation Law, 2012

Chapter 4: Duties and Powers relating to the Environmental Conservation of the Ministry

Article 7. The duties and powers relating to the environmental conservation of the Ministry are as follows:

- (a) implementing the environmental conservation policies;
- (b) planning and laying down national or regional work plans relating to environmental management;
- (c) laying down, carrying out and monitoring programmes for conservation and enhancement of the environment, and for conservation, control and abatement not to cause environmental pollution;
- (d) prescribing environmental quality standards including standards on emissions, effluents, solid wastes, production procedures, processes and products for conservation and enhancement of environmental quality;
- (e) submitting proposals to the Committee for economic incentive mechanisms and terms and conditions which may not affect the environment or cause least environmental affect for sustainable development in addition to legal affairs and guidelines relating to environment;
- (f) facilitating for the settlement of environmental disputes and, if necessary, forming bodies to negotiate such disputes;
- (g) specifying categories and classes of hazardous wastes generated from the production and use of chemicals or other hazardous substances in carrying out industry, agriculture, mineral production, sanitation and other activities;

- (h) prescribing categories of hazardous substances that may affect significantly at present or in the long run on the environment;
- (i) promoting and carrying out the establishment of necessary factories and stations for the treatment of solid wastes, effluents and emissions which contain toxic and hazardous substances;
- (j) prescribing the terms and conditions relating to effluent treatment in industrial estates and other necessary places and buildings and emissions of machines, vehicles and mechanisms;
- (k) negotiating, cooperating and implementing in respect of international, regional and bilateral agreements, instruments and programmes relating to matters of environment;
- (l) implementing the international, regional and bilateral agreements accepted by Myanmar for environmental conservation and enhancement of environmental quality in accord with the guidance adopted by the Union Government or the Committee;
- (m) causing to lay down and carry out a system of environmental impact assessment and social impact assessment as to whether or not a project or activity to be undertaken by any government department, organization or person may cause a significant impact on the environment;
- (n) laying down guidance relating to the management, conservation and enhancement of environment for the matters of protection of ozone layer, conservation of biological diversity, conservation of coastal environment, mitigation and adaptation of global warming and climate change, combating desertification and management of non-depleting substances and management of other environmental matters;
- (o) managing to cause the polluter to compensate for environmental impact, cause to contribute fund by the organizations which obtain benefit from the natural environmental service system, cause to contribute a part of the benefit from the businesses which explore, trade and use the natural resources in environmental conservation works

Chapter 7: Environment Conservation

Article 13. The Ministry shall, under the guidance of the Committee, maintain a comprehensive monitoring system and implement by itself or in co-ordination with relevant Government departments and organizations in the following matters:

- (a) the use of agro-chemicals which cause to impact on the environment significantly;
- (b) transport, storage, use, treatment and disposal of pollutants and hazardous substances in industries;
- (c) disposal of wastes come out from exploration, production and treatment of minerals, industrial mineral raw materials and gems;
- (d) carrying out waste disposal and sanitation works;
- (e) carrying out development and constructions;
- (f) carrying out other necessary matters relating to environmental pollution.

Article 14. A person causing a point source of pollution shall treat, emit, discharge and deposit the substances which cause pollution in the environment in accord with stipulated environmental quality standards.

Article 15. The owner or occupier of any business, material or place which causes a point source of pollution shall install or use an on-site facility or controlling equipment in order to monitor, control, manage, reduce or eliminate environmental pollution. If it is impracticable, it shall be arranged to dispose the wastes in accord with environmentally sound methods.

Article 16. A person or organization operating business in the industrial estate or business in the special economic zone or category of business stipulated by the Ministry:

(a) is responsible to carry out by contributing the stipulated cash or kind in the relevant combined scheme for the environmental conservation including the management and treatment of waste;

(b) shall contribute the stipulated users charges or management fees for the environmental conservation according to the relevant industrial estate, special economic zone and business organization;

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(b) shall contribute the stipulated users charges or management fees for the environmental conservation according to the relevant industrial estate, special economic zone and business organization;

(c) shall comply with the directives issued for environmental conservation according to the relevant industrial estate, special economic zone or business.

Guidance for MSW management (after legislation, before inspection activities)

N/A

Inspection activities/supervision and enforcement of legislation

N/A

Current Projects or Activities Aimed at Reducing SLCP Emissions

According to U Saw Win Maung, deputy head of PCCD and U Tun Tun Thaung, assistant engineer, the department (PCCD) cannot do any activities which could reduce SLCP emission so far. The department is negotiating with two Korean company to establish incineration plant in two FDS, Htein Bin and Htawe Chaung. If they could implement this program, this would surely reduce the emission of SLCP from the open dumping sites.

Key Stakeholders

[Provide Name of Organisation and Weblink]

Yangon City Development Committee: <http://www.ycdc.gov.mm>

Pollution Control and Cleansing Department

Township Development Committee

Department of Development Affairs

Contacts

MSW Initiative City Lead

Pollution Control and Cleansing Department (Under YCDC)

MSW Initiative City Representative

U Than Lwin Oo (Head)

Contact Phone: (+95) 1-246571 (Head Office)

Address: No. 267, 3th Floor, Seikkanthar street (Upper Block),
Kyauktada Township, Yangon, Myanmar.

Contact person: U Saw Win Maung

Position: Deputy Head of Department

Phone: (+95)1-246571

Mobile: (+95) 9-5051742

Email: pccdygn@gmail.com

References

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