C40-CCAC SWS Workshop and Waste Finance Academy Follow Up Event
Ho Chi Minh
CITY CONTEXT
HO CHI MINH, VIETNAM

- Population: 8,993,082 (04/2019)
- Climate: monsoon tropical climate
- GDP per capita: US$5,428 (2016), aim to US$9,800 in 2020
Waste Management Context of Ho Chi Minh

- 9000 t/d MSW Generation
- 0.8 kg/d Per Capita MSW Generation
- 100% Estimated Collection Rate
- 31% Diversion from Landfill

[Ho Chi Minh] In figures

Est. ???% of Waste Segregation at Source
Type of Seg. X 3 Bins
CITY CONTEXT

Waste Management Responsibilities of HCMC DoNRE

Solid Waste Management

- Implement the strategies, master plans, plans on waste management
- Promulgate and inspect the implementation of waste management regulations
- Norms, unit prices and urban sanitation quality standards
- Develop and approve the technical process of solid waste collection, transport and treatment...

Decentralize some responsibilities of solid waste management to district PC
Municipal Solid Waste Management Players and Infrastructure

- **Collection**
  - Door to door
  - Public collection system (CITENCO & Public Service Companies) – 40%
  - Private collection system (informal waste pickers, collection trade unions and sanitation cooperatives) – 60%

- **Intermediate treatment**
  - 27 transfer stations: 06 standard transfer stations, 13 upgraded and renovated stations, 08 temporarily operating stations
  - 1 incineration plant (without energy recovery) **1300 t/d**
  - 1 composting factory **1800 t/d**

- **Final disposal**
  - 7 landfills
  - 5 closed and 02 operating
  - What infrastructure in place? (biogas collection, flare, leachate treatment, etc)

**FINANCING FOR MSW MANAGEMENT:**

- HCMC People’s Committee issued the general legal framework
- District People’s Committee issue detail service fee
- Now, this service fee just meet collection costs. In near future, it will be raised to cover transportation cost
- The treatment cost is covered by city budget
Location of municipal solid waste treatment complex
Main projects and ambitions

AMBITIONS:

- **Until 2025, 80% of solid waste generators will do the separation at source in accordance with regulations**
- **Until 2025, 80% DSW will be treated with advance technology (only 20% DSW to landfills)**

**SEPARATION AT SOURCE**
- Separate into 3 types
- Decentralize to districts
- Revise the separation at source program

**WTE PROJECTS**
- Technology conversion of existing projects
- Call for investment for new projects

**LANDFILL RENOVATION PROJECT**
- 02 closed landfills near residential areas
- Material recovery
- Clean land for urban development

C40 CITIES

C4O CCC WORKSHOP 2019 – HO CHI MINH CITY 7
Main challenges

- THE PUBLIC PARTICIPATION IN SEPARATION AT SOURCES
- THE FORMALIZATION OF WASTE PICKERS
- THE CONVERSION OF COLLECTION & TRANSPORT VEHICLES IN ACCORDANCE WITH THE UNIQUE SITUATION OF HO CHI MINH
- PROBLEMS WITH EXISTING TREATMENT TECHNOLOGIES
- SHORTAGE OF LOCAL BUDGET FOR SOLID WASTE MANAGEMENT
- LEGAL FRAMEWORK IS INCOMPLETE
City Clinic focus:
“Which types of collection and transport equipment are most efficient to operate in Ho Chi Minh's most densely populated areas?”

WHAT WE HAVE DONE:
- PROHIBITION OF USING VEHICLES THAT DO NOT GUARANTEE SANITARY QUALITY (3-WHEEL VEHICLES);
- CONVERTING TO OTHER VEHICLES (660L WHEEL BARRELS, ELECTRIC MOTORCYCLES FOR PUSHING 660L BARRELS AND SMALL VAN).
Main challenges

• HOMEMADE COLLECTION VEHICLES WITH VARIOUS TYPES (BARRELS OF 660 LITER, 3-WHEEL VEHICLES, TRUCKS, ...) WHICH DO NOT ENSURE HYGIENIC QUALITY.

• DIFFICULTIES IN SOLID WASTE COLLECTION OF HOUSEHOLDS IN MANY SMALL ALLEYS (HCMC HAS MANY SMALL ALLEYS)

• DIFFICULTIES IN COLLECTING AND TRANSPORTING IN THE CONDITION OF HIGH TRAFFIC DENSITY ON CITY ROADS
City Clinic focus:
“Improve capacity of management and supervision in solid waste service provision?”

- Installing equipment to monitor solid waste transportation
- Install surveillance cameras at all transfer stations and solid waste treatment plants
Main challenges

• NOT ENOUGH HUMAN RESOURCE (MBS, SWMD AND DISTRICTS)

• MANUAL SUPERVISION SO IT IS NOT EFFECTIVE
THANK YOU!

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