7th November 2017, Tripoli, Lebanon
Collection, depositing and processing of waste

Competencies of the Municipal Sanitation Service

i. Garbage collection

ii. Collecting trimmings and other bulky objects

iii. Street cleaning and cleaning of communal spaces

iv. Washing of streets, squares, covered public car parks, open marketplaces and municipal dumpsters
Solid Waste Management

- Handles mixed municipal solid waste (MSW)

- The permanent population served is 200,000 citizens and the annual waste production is 176,000 ton/year.

- Handles both mixed and source separated material and can produce compost and SRF simultaneously.
Solid Waste Management

• A Mechanical – Biological Treatment Plant (MBT) for the treatment of solid waste

• A material recycling facility (MRF) 20,000 t/y, for the recovery of recyclables sorted in the source

• A composting plant for the composting of the organic material sorted in the source

• A Sanitary landfill site with an annual capacity of 88,000 t/y and a minimum time-life of 20 years (total volume 2.8 million m$^3$)
MSW (tonnes) sent to Waste treatment Facility from Larnaka Municipality (2011)

Jan  2900
Feb  2900
Mar  2900
Apr  2900
May  2900
Jun  2900
Jul  2900
Aug  2900
Sep  2900
Oct  2900
Nov  2900
Dec  2900
Municipal Solid Waste (kg) per Capita across the EU (2008)
Recycling

- PMD, Paper, and Glass

- 2,500 tonnes packaging waste collected at source in 2011 (7% of total Municipal Solid Waste)

- Improved collection methods & expansion of types of waste could increase recycled waste to around 50% for Municipal Solid Waste
Pilot PAYT area: St. Nicholas Area

HOUSES - 450
BUILDING BLOCKS - 61
Pilot PAYT area: St. Nicholas Area

i. Description
   i. Central area of Larnaka
   ii. Age of the population is 30-50 on average
   iii. 3000 residents (approximately)
   iv. Higher median income than average
   v. Mostly new households and new building blocks
   vi. Small scale workshops
   vii. Trade and services

ii. Current recycling

![Graph showing recycling quantities: PMD 30 tons, Paper 38 tons, Glass 10 tons.]
PROBLEMS

1. Collection Tax – Legislation
2. Collecting Trucks
3. New agreement should be made with GREEN DOT
4. Existing containers for the non-reusable material
5. Culture and lack of willingness

Demetris Georgiou
Collaboration with private sector

vi. Recyclable materials: **Green dot Cyprus**

vii. Clothing and footwear: Anakyklos Perivallontiki

viii. Batteries: AFIS Cyprus Ltd

ix. Electrical and electronic devices: **WEEE Electrocyclosis Cyprus Ltd**

x. Disposal of animal cadavers: Sigan Management Ltd.
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