ESDAK INITIATIVES IN THE WASTE MANAGEMENT FIELD

Kalliopi Bormpoudaki, Chemical Engineer, MSc
Association for the Solid Waste Management in Crete, Greece (ESDAK)

17 Municipalities

Production 273,000 tn/yr MSW

440,000 Population served
Year 2003: >100 dumpsites in Crete!!!
Rehabilitation of 51 Medium & High-Risk Dumpsites in Heraklion, Rethymnon, and Lasithi prefectures
Rehabilitation of 51 Medium & High-Risk Dumpsites in Heraklion, Rethymnon, and Lasithi prefectures

Total Budget: 7,518,769,19 €
100% financed by regional and national funding programs

- slope stability analysis
- shaping of the waste body
- surface drainage
- leachate and biogas management
- final cover system with geosynthetic or compacted clay liner
- fencing
- planting
Construction of Pera Galini Sanitary Landfill, Heraklion and Dumpsite Rehabilitation

Total Budget: 16.123.985,31 €

*financed by regional and national funding programs
Pera Galini Sanitary Landfill, Heraklion

130,000 tn/yr
Tertiary Leachate Treatment Plant Of Pera Galini Landfill

110 m³ leachate treated/day
Biogas exploitation of Pera Galini Landfill

Biogas Power Generation Unit

1 MW

(ΑΔΑΜ: 19SYMV004696042)
Restoration of Maroulas Sanitary Landfill, Rethymnon

Budget: 2.636.824,03 €

80% co-funded by Cohesion Fund 2000-2006
Upgrade of Hersonissos, Kazantzaki, and Viannos Sanitary Landfills, Heraklion

Total Budget: 9,971,782,79 €

80% co-funded by Cohesion Fund 2000-2006
Upgrade of Ag. Nikolaos and Sitia Sanitary Landfills, Lasithi

Total Budget: 6,489,227,40€

80% co-funded by Cohesion Fund 2000-2006
Construction of MSW Transfer Stations

Ierapetra, Lasithi

Total Budget: 2,084,066,50 €

Heraklion

80% co-funded by Cohesion Fund 2000-2006
Construction - 4 yr Operation of Heraklion MSW Pretreatment Plant

Total Budget: 23,943,500,00 €

80% co-funded by Cohesion Fund 2000-2006
Heraklion MSW Pretreatment Plant

- Capacity: 75,000 tn/yr
- RT: 14 days process of biodrying
- Metal recovery

Final product
- > 25% w/w weight reduction
- < 20% moisture
- > 0.8 tn/m³ bale density
Construction Amari Landfill Cell 3

Total Budget: 625,470,30 €
(AΔΑΜ: 18SYMV004050823, 17SYMV001997657)

*financed by regional funding programs*
Construction of Landfill Cell C, Pera Galini, Heraklion

Total Budget: 4,468,901,60 €
(AΔΑM:16SYMV003657138)

*financed by regional funding programs
Construction & Operation of New Landfill Cell in Sitia, Lasithi

Total Budget: 1.621.752,91 €
(AΔΑΜ:19SYM005263067)

*financed by regional funding programs
Construction and Operation of Amari MBT Plant and Residual Waste Landfill

Total Budget: 45.319.439,51 €

(ΑΔΑΜ: 19SYM005777582, 20SYM007850773 23SYM012412523)

https://mea-amariou.gr/
• Capacity: 35,600 tn/yr MSW and 7,400 tn/yr biowaste
• Separate dry anaerobic digestion of MSW and biowaste
• Compost maturation and refining
• Recyclables recovery
• Compost and CLO production
• Energy recovery by biogas production (up to 1 MW)
MSW and Biowaste Treatment Plants in Process

- **MSW Treatment Plant & Residual Waste Landfill of Heraklion** (59,200 tn MSW/yr & 17,078,40 tn residuals/yr)
  
  (ΑΔΑΜ: 22SYM010977717, Budget: 49,766,814,20 €)

- **MSW Treatment Plant & Residual Waste Landfill Of Sitia** (15,000 tn MSW/yr & 300 tn WWTP sludge/yr)
  
  (ΑΔΑΜ: 22SYM010823809, Budget: 24,742,023,59 €)

- **Biowaste Treatment Plant Of Ierapetra** (4,700 tn/yr)
  
  (ΑΔΑΜ: 20SYM007414356, 21SYM009676957, Budget: 2,226,292,39 €)
European Funded Projects
LIFE10 ENV/GR/000622 - WASP Tool

Development and demonstration of a waste prevention support tool for local authorities

- **LOCATION:** Greece & Cyprus
- **BUDGET:** 1.804.081 €, EE Co-funding: 49,68%
- **IMPLEMENTORS**
  - Coordinating Beneficiary: Harokopio University
  - Associated Beneficiaries: ESDAK, DEDISA, EPEM, ENVITECH, Municipality of Paralimni
- **DURATION:** 01/10/2011 - 30/09/2014
Home composting

Prevention of textile waste production

Reduction of the plastic bag waste

Prevention of food waste production
Food for Feed: An Innovative Process for Transforming Hotels’ Food Wastes into Animal Feed «LIFE F4F»

Budget: 2.580.619,00 € 60% EC co-funding
Duration: 1/9/16-30/11/21
Leading Partner: ESDAK

http://life-f4f.gr/
Avoidable and Unavoidable Food Wastes: A Holistic Managing Approach for Urban Environments

Budget: 3,912,948.75 €
80% co-funding

Duration: 1/11/17-18/2/22

Autonomous Robotic System for Urban Waste Recycling - ANASA (Τ1ΕΔΚ-03110)

Budget: 957.640,00 €
82% funding

Duration:
31/7/18-31/1/2023

Partners

https://anasasorter.com/
Development of Robotic Recycling Sorters (RoReSos)

Budget: 474.056,50 €
EU funding: 402.948.02 €
Co-financing sources: ERDF

Duration:
1/9/2021-31/8/2023
Mediterranean sea basin lighthouse - Actions to prevent, minimize and remediate chemical pollution

Leachate Treatment Plant of Pera Galini Landfill

Total Budget: 9,352,552,50 €
Max grant amount 7,893,477,38 €

ESDAK: 100% funded participant

Duration: 1/6/23-31/5/26

26 partners

www.imermaid.eu
Other actions

- Environmental Park of Circular Economy in Heraklion
- Green Points
- Local Waste Management Plans
- Upgrading of Heraklion Packaging Waste Sorting Plant
Dissemination actions
ESDAK INITIATIVES IN THE WASTE MANAGEMENT FIELD

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