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LESS WASTE II



The Regional

Integrated **W**aste **M**anagement
System

of Western Macedonia

*and the **Less Waste II** Project*

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Programmes*

*Sensitization Event
Thessaloniki, 10-12-2018*

Responsible Body for Waste Management (DIADYMA S.A.)

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□ DIADYMA SA was founded in 1998, with the participation of 61 "Capodistrian" Municipalities & Communities - being one of the largest inter-municipal partnerships at country level.

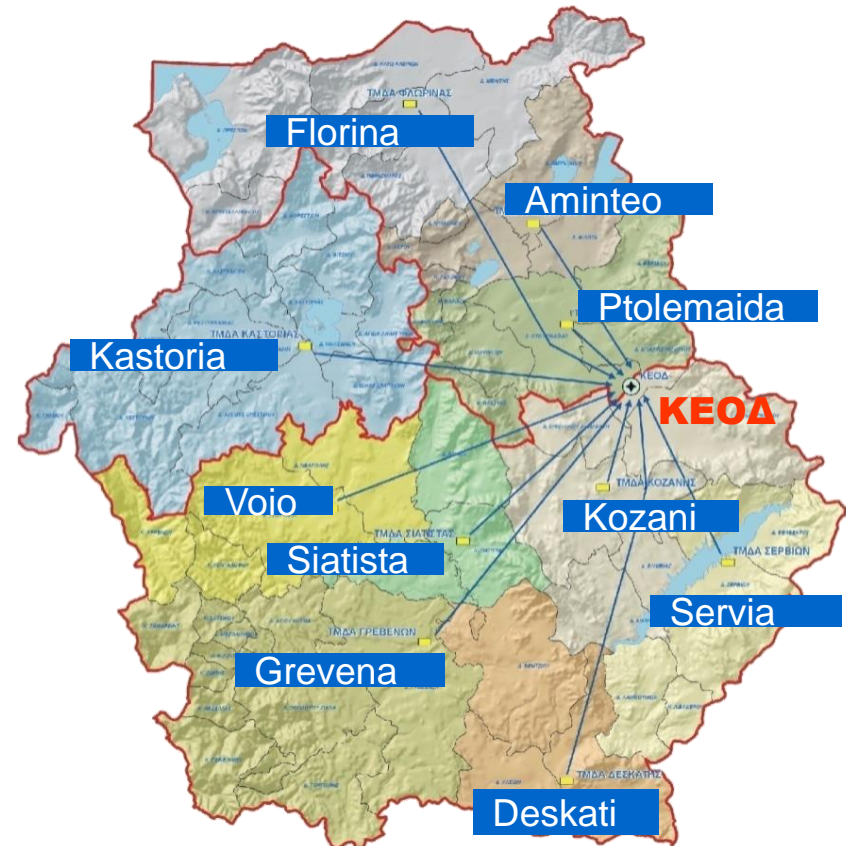
□ Shareholders (today after the new "Kallikratis" administrative structure): The 12 Municipalities of the Region of Western Macedonia - Aminteaon, Voio, Grevena, Deskati, Eordea, Kastoria, Kozani, Nestorio, Orestida, Prespa, Serbia-Velvento & Florina

□ The main objective of the Company since its establishment was the design, implementation and operation of the Integrated Waste Management Plan in Western Macedonia Region, through the application of sustainable management methods, in order to achieve the objectives of the National and European legislation on waste management, with the lowest cost to the citizen.

IWMS Facilities

The IWMS has been in operation since July 2005 and consists of:

- The Integrated Waste Management Central Facilities (IWMCF) where the Municipal Solid Waste is processed and finally disposed of
- The 10 Local Waste Management Units, where the mixed waste, recyclable materials, bulky, electrical and electronic waste, green and other separately collected waste streams are initially registered and transferred and then through LWMU are transhipped and transported to the IWMCF.



Evolution of IWMS of Western Macedonia

1st Phase: Ensure Landfill & restoration of Dumpsites XΑΔΑ (03-07)

- Construction of 9 LWMU, 1 Regional Sanitary landfill (A & B Cells), Supplies of mobile equipment for waste transfer and land filling (Cohesion Fund, 13 million €)
- 207 Uncontrolled dumpsites were restored (38 with funding of 6 million € from Operational program ‘Environment and sustainable development’, 169 with funding of 3 million € from program THISEAS “Development Program for Local Government)

2nd Phase: Development of Recycling with Collection at Source programs & Exploitation of waste with the MBT plant (09-15)

- Development of Collection at Source programmes with the use of four different bins (each for different recyclable material) (ESPA 4 million €, Hellenic recovery recycling corporation 1,5 million €)
- Construction of C’ cell of sanitary landfill and Supplementary mobile equipment (ESPA 10 million €)
- Signing of Contract for the construction of MBT plant - through PPP project Total Investment 48 million €)

Evolution of IWMS of Western Macedonia

3rd Phase: Prevention and Reuse (2016-2020)

- ✓ **Green Points Network for reuse and exploitation**
 - a) Urban type “Green Points” in specific settlements (<3.000 inhabitants)
 - b) Collection of items for reuse in Materials Reuse Centers (logistics centers)
 - c) Networking of facilities – Online access for citizens (e-platforms)
- ✓ **Expansion of existing networks of Collection At Source of recyclable materials**
- ✓ **Development of Collection At Source networks for biowaste**
- ✓ **Information and public awareness raising actions on waste prevention**

Local Waste Management Unit (LWMU)



Transshipment of mixed waste

Management of Recyclable materials

Area for reuse centers

Integrated Waste Management Central Facilities

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Management System Operation Recyclable Materials



1. Collection at Source



2. LWMU



3. Regional Recycling Center



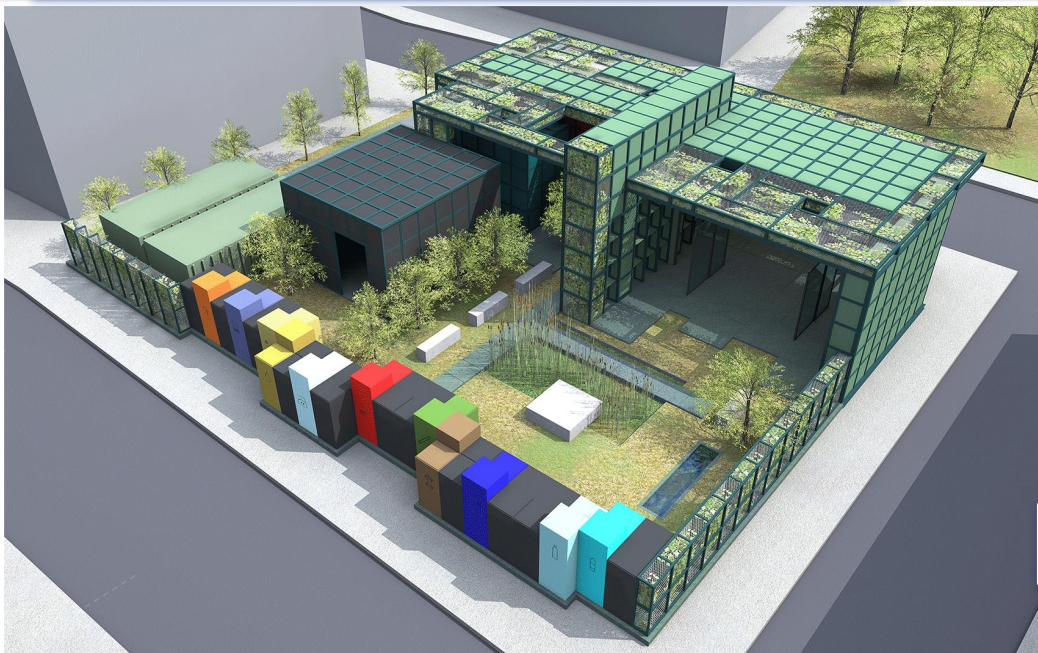
4. Recyclables



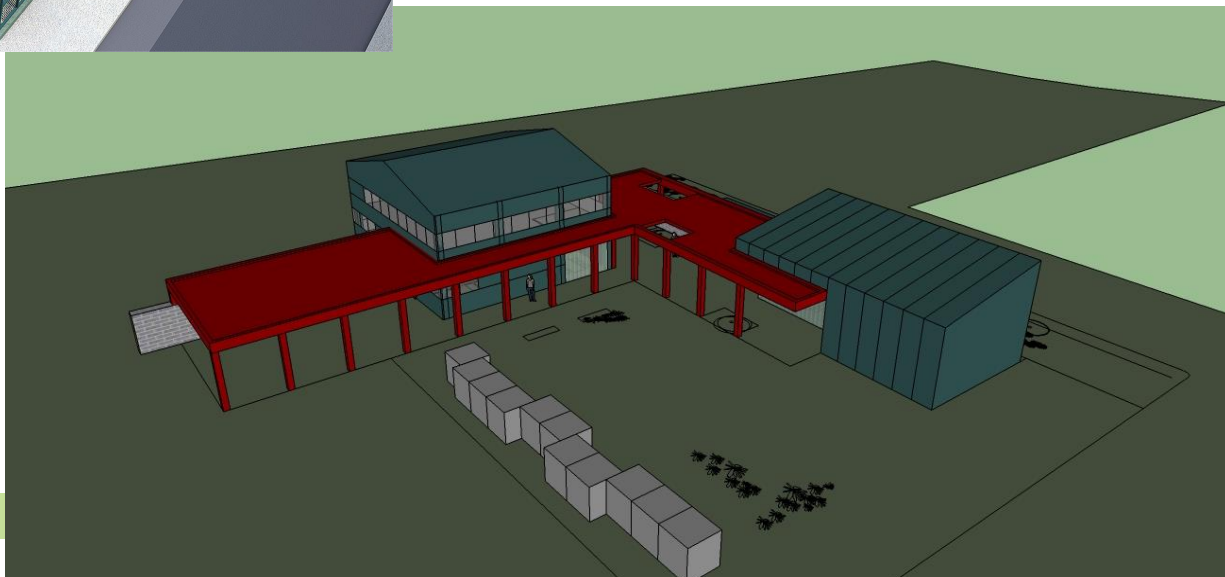
- a) The 10 existing LWMUs can operate as Big Green Points as each of them already has 7 waste streams (paper, plastic, glass, metals, WEEE, green, bulky) - Adding equipment to serve the other streams
- b) Construction of 12-15 Urban Type Small Green Points in specific settlements with at least one per Municipality in accordance with the Local Waste Management Plans
- c) Supply of 5 Mobile Units of prevention and reuse to serve remote settlements
- d) Construction of 5 Materials Reuse Centers within the LWMUs for the management of materials (logistic centers) and with Internet access for citizens' online access



Urban Type Green Point



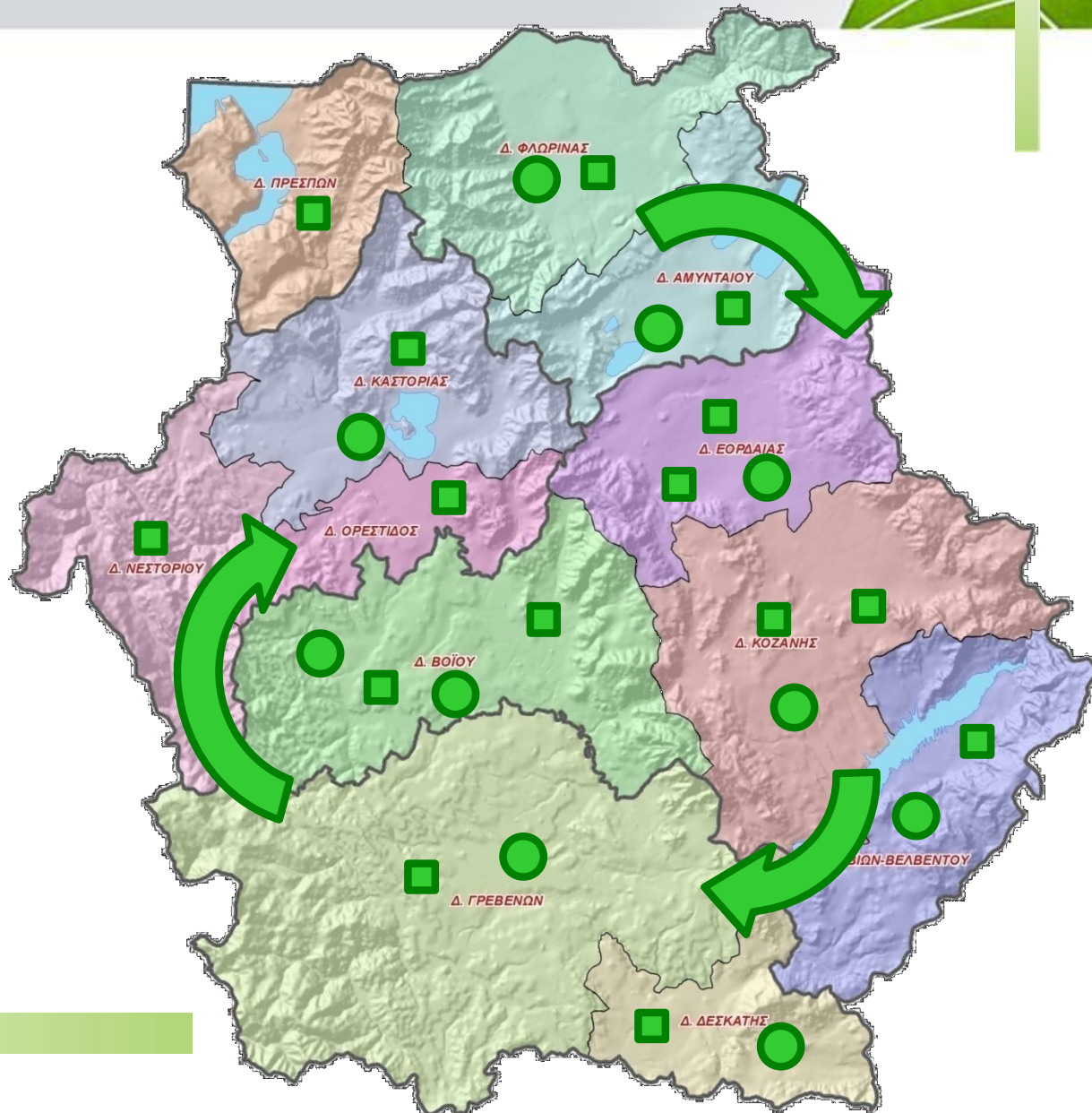
Reuse Center



Green Points and Reuse Centers Network



- : Big Green Point
- : Small Green Point
- ↻ : Mobile Unit of prevention and reuse



Finished:



Development of Innovative Actions in Waste Management
Knowledge Clusters of Western Macedonia - Information Society Program



Recycling and Material Recovery: Regional Environmental Management Capacity and Infrastructure
INTERREG IIIA Greece – FYROM



LESS WASTE - Joint Waste Prevention Plans and Promotion of Recycling
INTERREG CBC Programme “Greece – Albania”



WASTE-C-CONTROL - Waste Management Options for Greenhouse Gases Emissions Control
LIFE+ Programme 2007-2013

Under implementation:



LIFE M3P: “Material Match Making-Industrial Symbiosis”
LIFE Programme 2014-2020

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LESS-WASTE-II: “Development of an Action Plan for the Management of Bio-wastes at the Cross-Border Region Greece-FYROM”
Interreg IPA Cross-border Cooperation Programme "Greece - The former Yugoslav Republic of Macedonia 2014-2020"

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SYMBIOSIS: “SYMBIOTIC NETWORKS OF BIO-WASTE SUSTAINABLE MANAGEMENT ”
Interreg IPA Cross-border Cooperation Programme "Greece - The former Yugoslav Republic of Macedonia 2014-2020"



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WASTE RREACT : Integrated waste management facilities for boosting recycling and composting in 7 Regions through cross-border activities

Interreg IPA Cross-border Cooperation Programme "Greece - Albania 2014-2020"

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GREENPOINT-MOB : Development of a mobile Green Point at the cross-border region and promotion of prevention and recycling

Interreg IPA Cross-border Cooperation Programme "Greece - The former Yugoslav Republic of Macedonia 2014-2020"

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LESS-WASTE-II: Promotion of waste prevention and recycling at the cross-border area

Interreg IPA Cross-border Cooperation Programme "Greece - The former Yugoslav Republic of Macedonia 2014-2020"

Promotion of waste prevention and recycling at the cross-border area

➤ Lead Partner:

- Waste Management of Western Macedonia SA – DIADYMA SA

➤ Nr. Project Partners: 6

BP2: Centre for Research and Technology Hellas

BP3: Municipality of Grevena

BP4: Municipality of Kastoria

BP5: Urban Research Institute

BP6: Municipality of Skrapar

➤ Brief Summary

The overall objective of LESS-WASTE-II is waste prevention through promotion of recycling/composting practices by joint development and implementation of demonstration actions in the project partner areas.

Project's strategy is to combine centralized management of bio-wastes, to achieve 2020 targets for less landfilling.

➤ Project targets

- a) To improve significantly the waste management capacities in the targeting areas, especially in composting and recycling sectors.
- b) Improve significantly the containers capacities for composting/recycling either in neighborhood level or in houses (Waste separation-at-source) improve the overall capacity at 30%.



➤ Main outputs of the project

- Training activities and Local Publicity events for raise awareness.
- Conduction of current study analysis of Waste Management that lead to the Development of 3 Waste Management Scenarios and the development of a complete Waste Prevention Strategy in the CBC area.
- Supply of the necessary equipment for set-up a complete composting unit.
- GIS system will be set to monitor the improvement of the composting levels.

➤ Project's direct results

Environmental Results

Improve significantly the waste management capacities in the targeting areas, especially in composting and recycling sectors.

Improve significantly the containers capacities for composting/recycling either in neighborhood level or in houses (Waste separation at source)

Capacity Building Results

Demonstrations of use of equipment for the management of bio-wastes for rural residents, open calls for home-composting bins to all residents, trainings for related municipal and other stakeholders.

Thank you for your attention!

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