Separate collection of bio-waste in the Municipality of Vrilissia, Attica

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MUNICIPALITY OF VRILISSIA

Area: 3.8 Km²
Population: 30.660 (2011)
Indicator of Green: 14 m²/inhabitant
Waste generation: 15.463 tones/year
~440 Kg/capita year
LEGISLATION FRAME

EU
Directive 2008/98/EC

GR
Law 4042/2012

REG
Regional Waste Management Plan
(Decision of Regional Council 1/2016)

LOC
Strategic Local Waste Management Plan
(Decision of Municipal Council 102/2015)
SOLID WASTE MANAGEMENT SCHEME

- MSW GENERATION
  - MSW
    - SEPARATION AT SOURCE
      - GREEN WASTE
      - FOOD WASTE
      - PACKAGE WASTE
      - OTHER WASTE
    - MECHANICAL TREATMENT
      - RECYCLING-COMPOSTING
      - ENERGY RECOVERY
      - LANDFILL
I. SEPARATE COLLECTION OF GREEN WASTE

Separately collected: 1.150 t (49%)
Collection method: Door-to-Door
Frequency: 2-3 days/week
II. SEPARATE COLLECTION OF FOOD WASTE FROM PUBLIC MARKET

Separately collected: 112 tones

Collection method: Hand gathering of:
- Food waste
- Package waste
- Timber waste
- Mix waste

Frequency: Once a week
III. SEPARATE COLLECTION OF DOMESTIC FOOD WASTE

- Door-to-Door information of inhabitants (starting from the west side of Vrilissia)
- Brown bins located all over the urban network (283 bins today)
- Distribution of domestic bio-waste collectors (10L, 30L) and bio-degradable bags
- Collection method: Bring points
- Waste separately collected: 647 tones
- Frequency: 6 days per week
GOOD AND INNOVATIVE PRACTICES
ΝΑΙ στο χώμα
OXI στη χωματερή

τα οργανικά απορρίμματα της κουζίνας και του κήπου μας μετατρέπονται σε καλής ποιότητας φυσικό λίπασμα

μάθε για την κομποστοποίηση www.fisikolipasma.gr
Reward Recycling Program and public awareness

WHO is rewarded → citizens & schools

WHEN are they rewarded → when they are recycle or trained

HOW they rewarded → with points redeemed in promotions or donated to schools
3 COMPOSTING IN THE NEIGHBORHOOD

- Pilot network of composting bins in neighborhoods (placement and “adoption” of 5 composting bins in neighborhoods)

- Conducting experiential workshops (demonstration of composting process, advice-guidance)

- Follow-up of composting procedure (6 months) by composting consultant

- Production and use of the compost by the participants
Distribution of home composting bins (450 L) to households which meet the requirements of space and composting experience for the self-management of household organic waste.
Workshops for consultation and dialogue ("The Good Waste")

Cleaning of the urban forest "Theoclites"

**Feast for the Environment**
- Distribution of natural fertilizer bags (compost) from the NATURAL FERTILIZER program
- Distribution of biodegradable bags for the domestic collection of organic waste
- Distribution of questionnaires on the European program LIFE Pay As You Throw
SOLID WASTE MANAGEMENT
MINICIPALITY OF VRILISSIA (2018)

- MSW (MECHANICAL TREATMENT): 38%
- MSW (DIRECT DISPOSAL): 26%
- PACKAGE WASTE: 14%
- C&D WASTE: 10%
- GREEN WASTE: 7%
- FOOD WASTE: 5%
- OTHER WASTE: 0%
PARATE COLLECTION OF SOLID WASTE

% W/W Source separation rate of Solid Waste

National target (2020) 50%


12% 36%
PARATE COLLECTION OF BIO-WASTE PER SOURCE

- Green waste
- Food waste
- Organics (Public grocery market)
National target (2020): 26%
What we have achieved

Implementation of 5 innovative actions to arise public awareness on Separated Collection of bio-waste

☑ Separate collection rate of 36% MSW with increasing trend. Ability to reach the 50% of national target.

Bio-waste separate collection rate of 26% of total bio-waste generated, with increasing trend. Ability to reach the 40% of national target.

☑ Landfill disposal rate of 50% MSW with decreasing trend. Ability to reach the 26% of national target

☑ Reduction of waste management cost due to landfill diversion – Resource saving
Rewards

2019: Greek Green Awards
2018: Greek Green Awards Brown Bin Composting Programme
2017: Waste & Recycling Awards Local Authorities on Composting – natural fertiliser
2017: Best City Awards Composting
2017: Best City Awards Innovative policies on waste management for saving resources
The achievement is due to:

- Political will for the implementation of an integrated waste management scheme
- Long-term implementation of Source separation starting from packaging and green waste
- Good planning and flexibility of the Source-separation program (source targeting, short collection time)
- Active participation and good cooperation climate of the staff in the Environmental Directorate
- Continuous and innovative public awareness-raising actions
- Financial incentives
Obstacles and constraints

- Lack of waste management facilities
- Technical limitations (vehicle damage, vandalism)
- Lack of staff
- Administrative constraints (continuous amendments to the legislative framework for public supply / service contracts)
- Lack of financial resources (fleet renewal, recycling promotion campaigns, etc.)
The next day...

- Renewal of fleet of vehicles and equipment
- Continue awareness-raising campaigns (door-to-door, schools, etc.)
- Extension of FollowGreen Programme (access via mobile phone, reward for using public transport)
- Pilot program "smart bin" in the framework of FollowGreen
- Door-to-Door Separate Collection of other waste streams
- Implementation of the Pay As You Throw system (system for locking / weighing of bins)
Our vision

...living well within the limited resources of the planet, respecting the organic cycle.