



# Local waste management plans in Attica municipalities – Perspectives and constraints

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# Region of Attica

population 3.827.624 (2011)





# Waste Generation

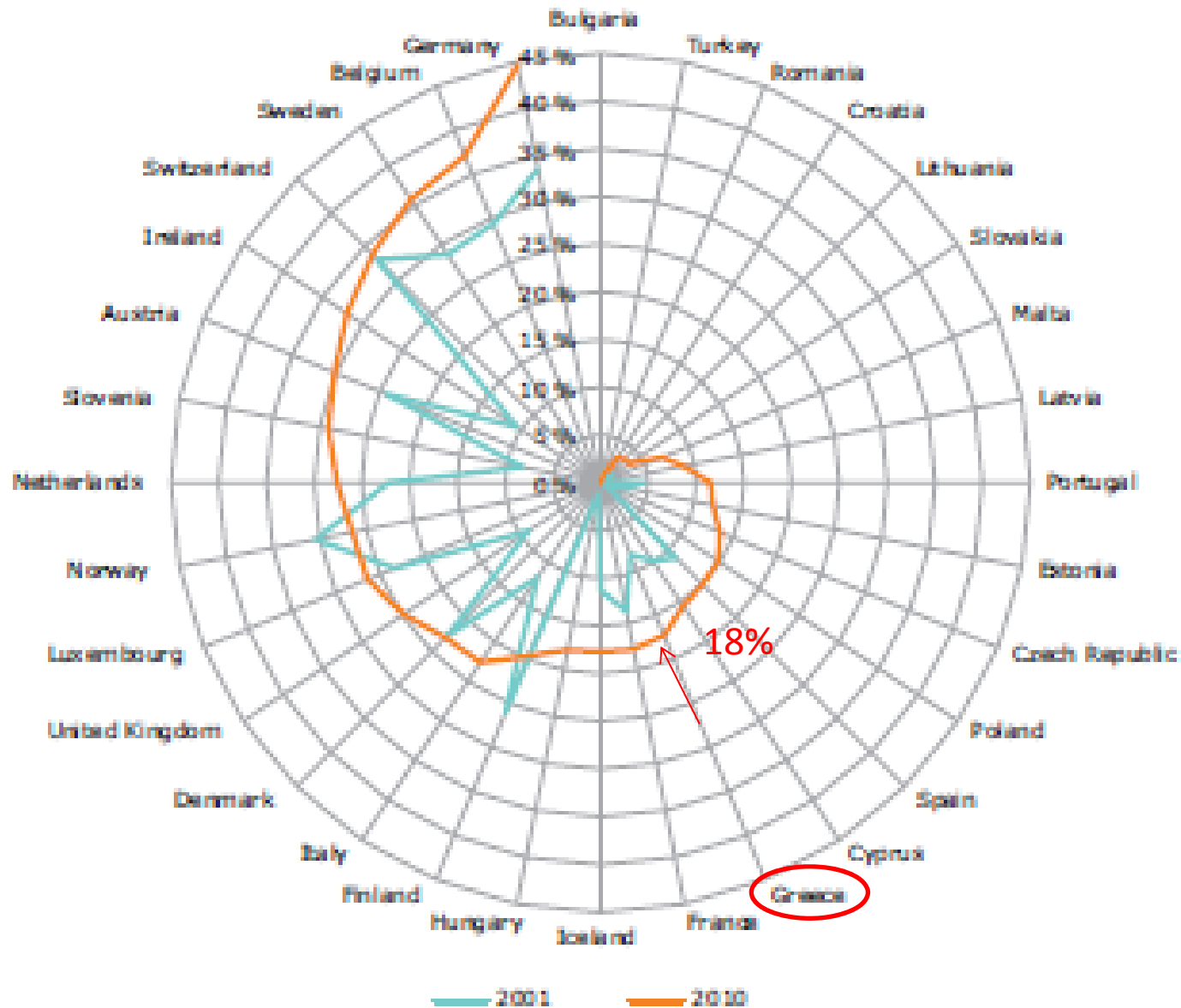
	Greece	Greater Athens Area
Population	10.815.197	3.827.624
MSW [t/a] (2014)	5.574.757	1.897.502
MSW [kg/cap.a]	515	496
Biowaste [t/a] (2014)	2.469.617	827.311
Biowaste [kg/cap.a]	228	216



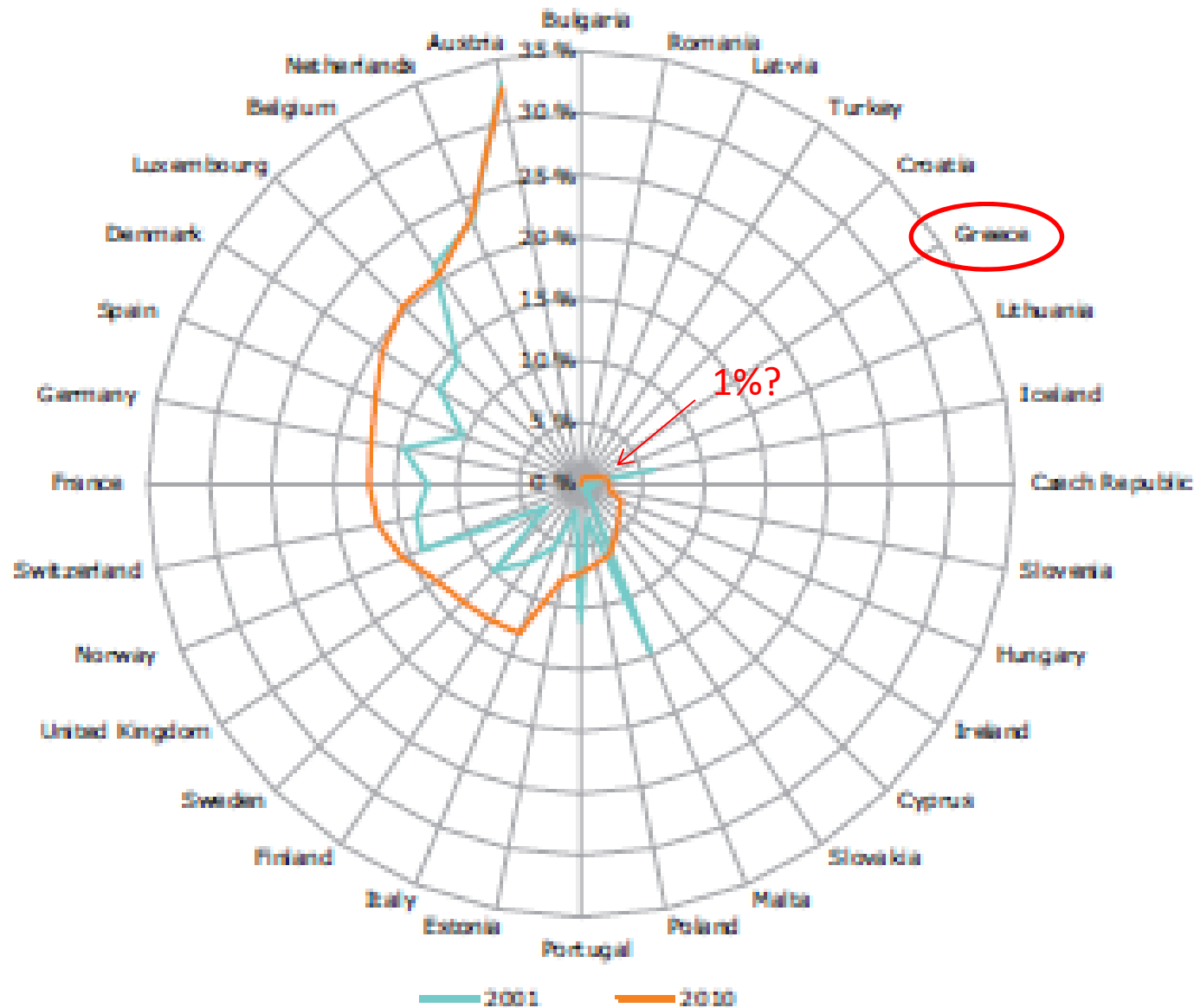
## Solid waste composition (%)

	(%) Regional Attica Plan 2011	(%) <i>Regional Attica Plan 2014</i>
<b>Biowaste</b>	<b>43,6%</b>	<b>44,3%</b>
Paper/cardboard	28,1%	22,2%
Plastics	13,0%	13,9%
Metals	3,3%	3,9%
Glass	3,4%	4,3%
Other	8,6%	11,4%
<b>Total</b>	<b>100,0%</b>	<b>100,00%</b>

**2.8 Material recycling as a percentage of municipal waste generation in 32 European countries, 2001 and 2010**



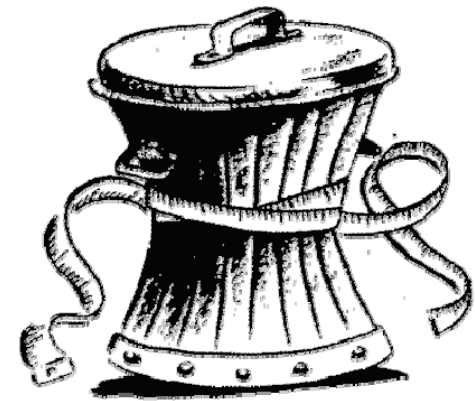
**e 2.10 Bio-waste recycling as a percentage of municipal waste generation in 32 European countries, 2001 and 2010**



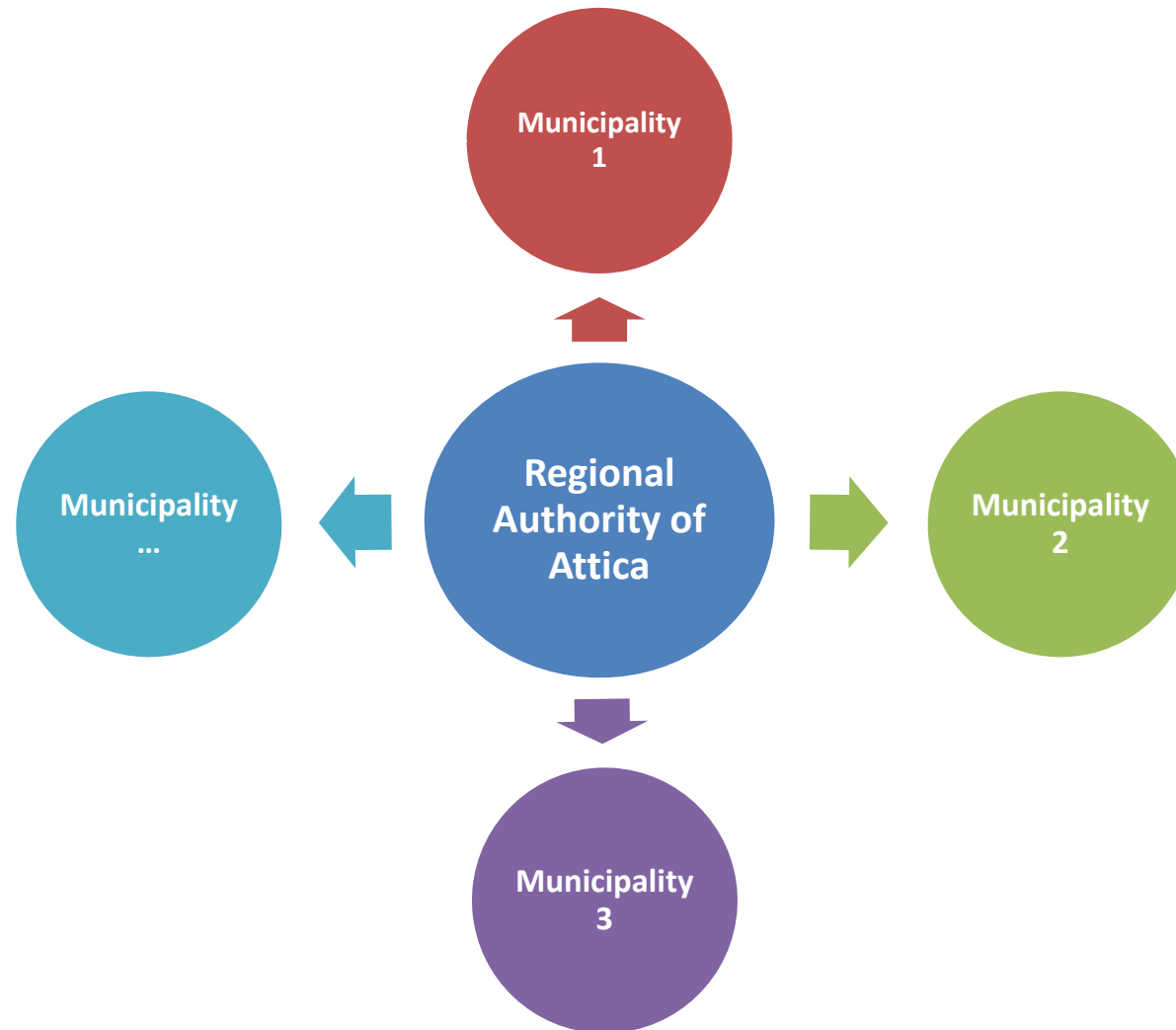


# Introduction

- The Regional Authority of Attica in September of 2015 requested from all the municipalities located in the region of Attica to compile their local waste management plans aiming at the reformation of the regional plan.



# Shift of focus to decentralized waste management







- Up to day, 64/66 local plans are published covering most of the municipalities of the region of Attica.



# Content of LWMP

The local waste management plans include data on:

- the demographics of the municipality,
- the waste management infrastructure and personnel,
- quantitative data of waste collection and recycling
- policy issues on the development of future waste management infrastructure and seeking means of funding



# Characteristics of local plans

- Emphasis on source separation
- 4 separate waste collection streams for dry recyclables
- Establishment of integrated Green Points
- Most plans: introduction of home composting and biowaste source separation





# Biowaste

## Home Composting



## Source separation of kitchen biowaste





# Collection, transport & Packaging recycling

- By the municipalities
- Private companies for transport of non-hazardous waste
- Packaging recycling
  - 64/66 municipalities served by the blue bin
  - 52/66 served by separate collection of glass





## In addition...

- Clusters of municipalities with a single local plan
  - Nea Philadelphia-Nea Chalkidona
  - Nea Ionia
  - Heraklio
  - Metamorphosi





# Establishment of Green Points

- All local waste plans foresee the establishment of Green Points (~300 m<sup>2</sup> to 7,000 m<sup>2</sup>) aiming at:
  - Waste prevention
  - Increase of reuse and recycling
  - Separate collection of paper, glass, metals and plastic





# Major challenges

- Spatial allocation of new facilities
- Need for new personnel
- Financing the new facilities
- Separate collection of biowaste (from practically 0% today to 40% in 2020)
- Introduction of 4 streams for dry recyclables





# Conclusions

- The region of Attica is in the process of transforming its waste management structure
- Emphasis is placed on municipalities and local waste management
- Many challenges to be addressed, but a process closer to circular economy principles has started



*Thank you for your  
attention!*

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