

Implementation of pay-as-you-throw schemes in Greece: major benefits and future potential

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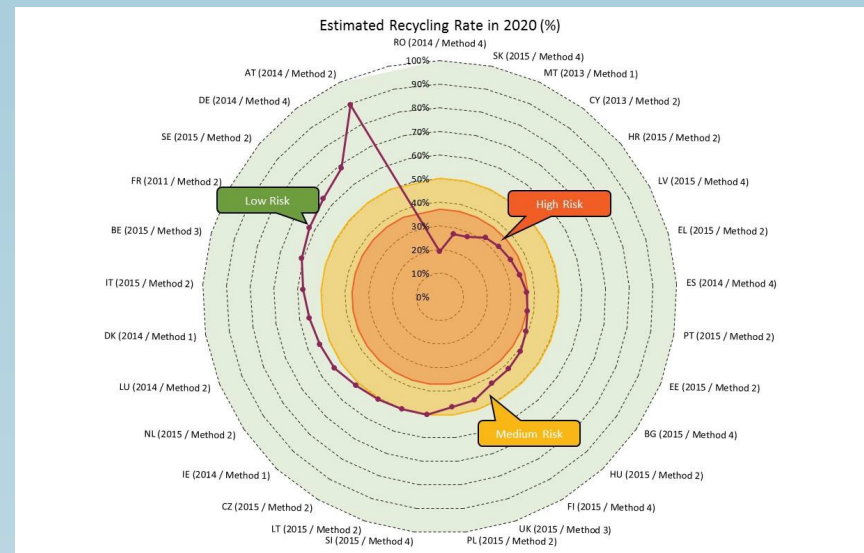
Why implementing pay-as-you-throw (PAYT)?

- Charging the residents and local businesses according to the amount of residual waste they produce.
- A mechanism for the fair distribution of waste management costs according to the “polluter pays” principle
- A strong economic tool to boost recycling and composting, support the transition to a circular economy and resource efficiency
- Widely applied in EU countries and globally. Why not in Greece?

- Barriers/challenges: lack of legislative support, ensuring a reliable mechanism for the collection of the waste fees.
- A Case study from Greece: **main problems** encountered and **conclusions** drawn
- Proposals for a well prepared introduction of PAYT in Greece

Greece at risk of non-compliance with the WFD 2020 target for 50% preparation for reuse and recycling

A recent study carried out by Eunomia in 2018 identified the EU member states at risk of failing to meet the WFD targets for 2020



Priority actions in order to achieve the recycling targets in Greece

- set legally binding targets for recycling or reduction of residual waste, at municipal and regional level
- penalties to municipalities that fail to meet the targets
- Implement the landfill tax
- Upgrade the municipal services in terms of separate collection and ensure the proper allocation of responsibilities among the municipalities and the Producer Responsibility Organizations (PRO)
- Provide technical support to municipalities
- Increase funding of prevention/reuse/recycling programs
- Focus on communication/ raising awareness campaigns
- Impose fines for buildings/homeowners/businesses that fail to comply with municipal waste regulations

Priority actions in order to achieve the recycling targets in Greece

Implement pay-as-you-throw schemes under the following prerequisites:

- proper function and provision of recycling services
- separate collection of waste streams (paper/cardboard, plastics, metals, glass and biowaste)
- optimising collection frequencies, offer door-to-door collection where possible, reduce size and frequency of residual waste collection

How to improve the recycling performance - Lessons to learn

ACR study in 2017 identified the best performing European cities in terms of residual waste minimisation and recycling performance

- Separate collection of paper/cardboard
- Separate collection of biowaste
- A dense network of civic amenity sites for the collection of source separated materials
- **PAYT**

Source: Association of Cities and Regions for Recycling and Sustainable Resource Management

A pilot Life - Environment program on PAYT implemented in Elefsina (2009-2011)

- It covered a population of 5500 inhabitants
- A door-to-door campaign prior to the program with detailed information to the residents

Infrastructure in the study area:

- 65 bins (1100 Lt) for the collection of dry recyclables (commingled materials)
- 99 bins (1100Lt) for the collection of residual waste
- 96 home composting bins to interested households
- 17 bulky containers for green waste

Results of the pilot program in Elefsina

(source: final report on PAYT in Elefsina)

| | Residual waste collected (tn) | Recyclable material collected (tn) | Total amount of waste collected (tn) | Amounts diverted for recycling |
|------------------------------------|--------------------------------------|---|---|---------------------------------------|
| One year before the project | 859.270 | 161.830 | 1.021.100 | 15,8% |
| During the project | 784.940 | 177.550 | 962.490 | 18,4% |
| Net difference (tn) | -74.330 | 15.720 | -58.610 | 2,6% |
| Difference (%) | -8.65% | 9.71% | -5.74% | 16.39% |

Conclusions from the pilot program in Elefsina

- The overall increase in the separately collected recyclables, from 15.8% to 18.4% (net difference 2.6%) – not so significant
- There are certain minimum requirements to be fulfilled by the municipality, prior to the implementation of PAYT
- The infrastructure to maximize separate collection (including biowaste) must be in place

Minimum Requirements to be met prior to the implementation of PAYT

| Priority Requirements | Time table (prior to the PAYT) | Responsible Authority |
|---|--------------------------------|--|
| Municipal Prevention plan | One year | Municipality |
| Separate Collection of waste streams (including biowaste) | 6 months | Municipality/ PRO |
| Civic amenity sites for the Collection of Recyclables | 6 months | Municipality/ Regional Authorities |
| Home Composting Programs | 3-6 months | Municipality |
| Door -to -door collection in part or all municipal districts | 8-months | Municipality/ Regional Authorities/ PRO |
| Tackling Administrative Constraints/ Municipal PAYT authority | One year | Municipality/ Regional Authorities /Hellenic Recycling Association |
| Raising Awareness Campaigns | 6 months | Municipality/Regional Authorities/Hellenic Recycling |

Obstacles to overcome – the landfilling cost is still very low in Greece

- In order to incentivize municipalities to reduce residual waste for third party treatment or disposal, *the landfill tax* should be implemented in Greece, increasing the disposal cost, according to the “polluter pays” principle
- Why not implemented so far? It is a matter of political will.
- In April 2019, the Greek Ministry of Environment amended the article 43 of the Law 4042/2012 and replaced the landfill tax with a circular economy fee (10 euros per ton of residual waste arising from municipalities and will be implemented from 1-7-2019. The provision for a landfill tax was 35

Legislative initiatives that encourage the implementation of PAYT schemes.

Address the following:

- Define the public authority responsible for the monitoring and support of the PAYT schemes in Greece (e.g. Hellenic Recycling Agency).
- Allow for voluntary implementation of PAYT in those municipalities that are willing to modify the charging mechanism.
- Allow for each municipality to select the appropriate PAYT scheme according to local and demographic characteristics
- Ensure that through the new charging system, there will be effective mechanism for the collection of the fees from the citizens and businesses.
- Address potential issues of illegal dumping.

A key issue for PAYT

The main problem which should be addressed prior to the implementation of PAYT is to ensure a guaranteed flow of municipal fees. A double rate fee can ensure steady flow of municipal fees: a flat rate based on the number of household members and the square meters of the household, and a variable charge that depends on the residual waste generation.

Conclusion

PAYT should be incorporated in a mix of environmental policy measures such as prevention programs, improved source separation and separate collection (including biowaste), successful collaboration between EPR organizations and municipalities, enforcement of the landfill tax or other taxes and public information campaigns. If it is combined with good recycling infrastructure, it will definitely result in great reductions in residual waste and increase in capture rates of the recyclables and biowaste.



Thank you for your attention!