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Landfill Tax in Greeceⁱ

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Brief summary of the case

Waste management is a serious environmental issue in Greece, with a very high fraction of municipal waste still going to landfills, implying very low waste recovery and recycling rates and low resource efficiency. The Greek Government adopted a law in 2012 which required that as of January 2014 organisations or enterprises disposing of untreated waste into landfills have to pay a tax starting at EUR 35/tonne and reaching EUR 60/tonne; if these charges are paid by final consumers, they amount to an additional cost of EUR 50-150 per household per year. However, this tax has not been implemented yet. The stated reason for these postponements was the concern that the tax would worsen the bad financial situation of local authorities – implying that local authorities would have to pay for the landfill tax but would not be able to pass the extra costs through to their citizens. An increase in the cost of official waste disposal might also lead to a rise in illegal dumping of waste, thereby causing failure to achieve both environmental and revenue-raising objectives. The role of civil society in the formulation of this policy has been limited: only environmental NGOs, the Greek Ombudsman and some academics have supported the adoption of economic instruments for waste management. The broader society may be hostile to a landfill tax because of social equity concerns and lack of trust in authorities. Future windows of opportunity are related to the demand for actual implementation of the Waste Framework Directive; this is reinforced by the fines imposed on Greek authorities since 2014 as a result of condemnations from the European Court of Justice for breaching EU waste legislation.

1 Description of the design, scope and effectiveness of the instrument

1.1 Design of the instrument

Waste management is one of the most serious and complicated environmental issues in Greece. Landfilling is still dominant – over 80% of municipal waste is disposed of in legal and illegal landfills, an extremely high percentage compared to the EU average of less than 40% (Bipro, 2012). The country has been condemned during the last decade by the European Court of Justice for breaching EU legislation due to the existence of 70 illegal landfills and the lack of restoration of another 223 illegal landfills that have been closed. Since 2015 the Hellenic Republic has been ordered to pay fines of several million Euros per year for these infringements (Watson Farley & Williams, 2015). There are currently no serious economic incentives for households or the industry to reduce the amount of waste generated, since waste charges and landfill gate fees are flat and are not linked to the amount of waste produced. The major reason for this was the perception that the tax would impose an additional economic burden that would be politically hard to tolerate.

In compliance with the EU Waste Framework Directive 2008/98/EC, the Greek Government adopted a law in 2012 which required (Article 43) that as of January 2014 organisations or enterprises disposing of untreated waste into landfills have to pay a tax starting at EUR

35/tonne, increasing by EUR 5/tonne every year up to a maximum of EUR 60/tonne (Hellenic Republic, 2012). Based on the fact that more than 500 kg of municipal waste are generated per capita in Greece every year (Eurostat, 2016) and 80% of these quantities are disposed of in landfills, this tax – if passed through to final consumers – would amount to an additional cost of EUR 50-150 per year for each Greek household. However, this tax has not been implemented yet because subsequent laws postponed the start of implementation of the landfill tax until at least 31 December 2016.

1.2 Drivers and barriers of the instrument

The EU Waste Framework Directive (2008/98/EC) has clearly been the main driver for the legal adoption of this instrument. Pressure from environmental NGOs or academics would not have been sufficient. However, as already mentioned, the legislated landfill tax has not actually been enacted so far. The major reason for this is the notion (commonly shared by the Government and other stakeholders) that the tax would impose an additional economic burden that would be politically hard to tolerate. Local authorities (municipalities and communities) that have to pay the landfill tax would have to choose to either:

- a) pass this tax through to households and firms, thereby risking exacerbating political reaction or even social equity problems; or
- b) absorb the costs of this tax without changing the waste charges to individuals, which would nevertheless put a burden on local authorities that are already under significant financial stress.

A further barrier is the widespread use of illegal landfills around the country. As mentioned in Section 1.1, there were around 300 illegal sites some years ago, and around 70 still remained in early 2016. An increase in the cost of official waste disposal might just lead to a rise in illegal dumping of waste, thereby causing failure to achieve both environmental (i.e. landfill reduction) and revenue-raising objectives.

1.3 Revenue collection and use

According to Article 43 of Law 4042/2012, all revenues from the landfill tax are supposed to go to the 'National Green Fund' set up by the Greek Government in 2010, with the aim of them being used to finance waste recovery and disposal projects. Taking into account that the amount of municipal waste generated per year is around 5,000 kilotonnes (kt) and that about 82% of this waste is disposed of in landfills (Bipro, 2012), a landfill tax of EUR 35 to 60 per tonne might lead to revenues of approximately EUR 140 to 250 million per year.

However, since the tax has not been enacted yet, these revenues have not materialised so far. At the same time, it is important to keep in mind that a significant part of such revenues might not be received by the Government in the end, because a fraction of the waste might be disposed to illegal landfills to avoid the higher cost of disposal at official landfill sites.

At any rate, in line with the New National Waste Management Plan adopted by the Greek Government in autumn 2015 in compliance with Law 4042/2012, substantial public funds will have to be devoted to infrastructure projects around Greece in the near future (Watson Farley

& Williams, 2015). Therefore, the lack of implementation of the landfill tax will deprive the Greek Government of valuable public revenues.

1.4 Environmental impacts and effectiveness

The reduction in quantities of landfilled waste thanks to the enforcement of a landfill tax yields several environmental benefits – e.g. higher resource efficiency, moving waste up the waste management hierarchy (away from disposal towards energy valorisation, recycling and prevention), less soil and water pollution (from landfill leachate), less need for the construction of large waste treatment plants etc. Such effects are implied – though not explicitly mentioned – both in the 'Green Proposal' of environmental NGOs that is mentioned in Section 2 below and in the national legislation that foresees the adoption of the landfill tax. However, no concrete ex-ante assessment of the effect of this measure on specific environmental indicators has been carried out. In general, analysts and authorities have considered the landfill tax as part of a broader reform in waste management policy and practice, so they did not try to assess the potential environmental impact of this measure in isolation.

1.5 Other impacts

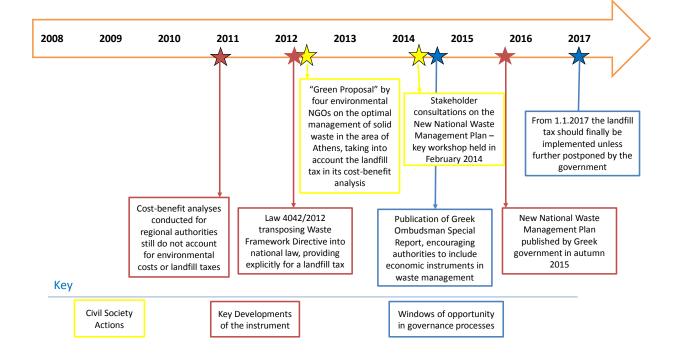
As with environmental impacts, potential socio-economic aspects from the adoption of a landfill tax in Greece have not been estimated in detail. There is a general perception that any additional tax on a necessary good or service would disproportionately burden low-income households, hence consumer associations are opposed to it and policymakers are reluctant to enforce it. International experience shows that there are many misconceptions about the effect of environmental taxes on social equity (Sterner and Coria, 2011). For example, household expenditure data show that some taxes considered to be regressive (i.e. to hurt poor households more than rich ones) are not so in reality; or that the additional burden of a tax on low-income households is lower than other (often neglected) everyday costs faced by consumers. However, in a country with a long history of tax avoidance and after several years of economic recession, with local authorities in tough economic circumstances and many opportunities for illegal landfilling, social fairness concerns even if exaggerated cannot be neglected. Only detailed economic analysis might provide evidence on whether these concerns are valid or not; in the absence of such hard facts, the fear of opposition from the public is often a difficult barrier for the implementation of waste charges.

2 Stakeholder engagement

There is a broad range of stakeholders involved in the discussions about waste management and related economic instruments in Greece. Consumer associations (interested in the effects of waste charges on the cost of living of households), business associations (such as the Hellenic Recovery Recycling Corporation or the Hellenic Solid Waste Management Association concerned about requirements for reduction or reuse of industrial waste and the related costs), local authorities (who are supposed to bear the costs of a landfill tax), private investors (interested in building and operating waste treatment plants), environmental NGOs (such as the Ecological Recycling Society, Mediterranean SOS, Greenpeace and WWF Greece) and several academics have been involved in the consultation processes that have taken place in the past as well as in 2015 during the latest consultation on the Government's New National Waste Management Plan.

An important initiative by environmental NGOs was the preparation of a detailed proposal entitled 'Green Proposal for Waste Management' (Ecological Recycling Society, 2012) for the metropolitan area of Athens, which recommended alternative waste management options. In contrast to official cost-benefit studies conducted for local and regional authorities in the recent past (e.g. Frantzis & Associates, 2011), the 'Green Proposal' included cost-benefit analyses that for the first time factored in the existence of landfill taxes. Moreover, the Greek Ombudsman's Office published a Special Report in 2014 urging local authorities to incorporate economic incentives in their waste policy, so that waste generation is linked to the corresponding waste charges, in line with the 'polluter-pays-principle' (Greek Ombudsman, 2014). This report, although not addressing economic instruments in depth, was a further stimulation for policymakers to consider such policies.

The graph below illustrates the timeline of major developments for this instrument.



Timeline of Key Developments for the Introduction of a Landfill Tax in Greece

Although environmental NGOs and some academics have promoted the use of economic instruments, authorities have avoided implementing the landfill tax; in fact it would be safe to assume that this tax might not have been included in the relevant national Law if not required by the EU Directive 2008/98/EC. There are several reasons for this reluctance to include economic incentives in waste management:

- National and local authorities and large parts of civil society commonly share the belief that further regulations involving economic incentives will merely lead to an increase in the overall tax burden of households and firms. Since Greece has been undergoing an economic recession since 2010, authorities are reluctant to impose an additional tax – in fact they do not impose 'pay-as-you-throw' schemes either, although these could reduce the economic burden to households which take steps to reduce their waste generation.
- Illegal landfill sites are spread all over the country. Although their existence has been the main cause of condemnations from the European Court of Justice and fines by the European Commission, some of these continue to operate. Policymakers and environmental NGOs alike believe that an increase in the cost of waste going to legal landfills – e.g. through a landfill tax – would simply divert a larger amount of waste to illegal landfills, to avoid paying the tax.
- There are strong economic actors with substantial economic interest in different types of
 waste management, especially in building large waste treatment plants which may not be
 economically viable if waste quantities are reduced or a large fraction is recycled. Such
 actors often have significant influence over national and local policymakers. As a result,
 measures that would lead to the reduction of waste going to landfills such as a landfill
 tax are discouraged.
- Civil society in general is not favourable towards alternative waste management schemes that would lead to the construction of waste processing or treatment units in their neighbourhood. As a result of strong public reactions to such plans, the whole waste management system often comes to a halt and hence alternative systems that include pricing instruments are not put forward.

3 Windows of opportunity

As mentioned in Section 1.2, the main driver for the introduction of a landfill tax in Greece has been the EU Waste Framework Directive 2008/98/EC. Therefore, major windows of opportunity come from the requirements for implementation of this Directive – the transposition of the Directive to national law in 2012 and the adoption of the New National Waste Management Plan in 2015 in line with the Directive. A further opportunity comes from pressure by the European Commission through the fines imposed on Greek authorities as a result of condemnations from the European Court of Justice since 2014.

As for the near future, the next window of opportunity may be associated with the end of the 'grace period' granted by the Greek Government, in which the landfill tax is not implemented. This period ends on 31.12.2016, although it may be extended further as has been done in the past. Otherwise local authorities will have to impose and collect the landfill tax from 2017 onwards, in line with national Law 4042/2012.

As the instrument has not actually been implemented at the time of writing, it is not possible to describe the processes and windows of opportunity within a "policy cycle" in more detail,

because major components of this cycle (implementation, monitoring and evaluation of the instrument) are still missing.

The role of civil society in the formulation of this policy has admittedly been quite limited: only environmental NGOs, the Greek Ombudsman and some academics have supported the adoption of economic instruments for waste management. The broader society may be hostile to a landfill tax because of social equity concerns and lack of trust in authorities that their revenues from waste-related charges will indeed be used for waste prevention actions.

4 Insights into future potential/reform

The main lesson learned from non-implementation of landfill taxes in Greece up to now – despite the legal adoption of this measure – is that environmental tax reforms have to be adapted to the social environment in which they are to be implemented. Widespread use of illegal waste dumping, vested economic interests and a society that is sceptical of the effectiveness of new taxes make it difficult for policymakers to enforce a measure that is necessary for compliance with EU legislation and will certainly yield environmental benefits.

In such an environment, NGOs, national authorities and experts have to take a leading role to explain to the public and to local policymakers the real effects of such measures. This, however, can only be done gradually because the suspicion of the public towards waste-related charges can decrease only after some successful case studies (e.g. in individual municipalities or regions) can be demonstrated. Examples of successful implementation from other Mediterranean countries may also be helpful. If public opinion becomes more amenable to such a reform, it will also be easier for policymakers to oppose the strong economic (business) interests that may want to discourage waste-reducing measures. The implementation of the tax may be a lengthy but inevitable process. At the same time, pressure from the European Commission and international organisations can urge national authorities to adopt a more pro-active approach to its implementation.

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