

PAY-AS-YOU-THROW



Background (REF: 1)

The 'polluters pays' principle is the commonly accepted practice that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment. PAYT (Pay As You Through) schemes are an application of that principle. In the traditional schemes for household waste management in Europe, the services are financed via general taxes or due a fixed recurring fee in bills of other supply services as electricity, regardless of the produced waste amount. The cost is usually calculated based on living space and the number of household members. This way of financing is unfair for people who produce little waste either because of their recycling-composting efforts or because they don't over-consume. Pay-as-you-throw is breaking with this tradition. In PAYT schemes household pay a variable amount depending on the quantity of waste generated by them and the corresponding service they obtained for its disposal.



ACTION

Calculate service fee based on the principle that the less waste you produce (and/or more and better you sort) the less you pay

Examples of good practice implemented

Project HEC PAYT (Greece) (REF: 1)



The project was funded by the European programme LIFE (2009 to 2011) implemented the first pilot PAYT system in Greece using four scenarios covering 1,500 households in Elefsina. Weighing equipment was purchased and installed on garbage collection trucks and a sensitivity analysis carried out to compare the impact to different pricing schemes.

Based on an exhaustive inventory of waste production, implementation was regularly assessed and adjustments made as required. The following waste management improvements were achieved, surpassing most objectives:

- ✓ 25.8% of waste was diverted from landfill
- ✓ Recycling of 56% of packaging waste
- ✓ Recycling of 4.6kg of WEEE per participating person
- ✓ Composting of 17.1% of organic waste

The results of the project were positive and it continued after the funding expired.

PAYT system in Interza (Belgium) (REF: 2)

The introduction of the PAYT system (door-to-door + recycling yards) in 2001 resulted in a decrease of residual waste and an increase in the separate collection of recyclables via door-to-door and bring banks. In 2005 the capacity of underground containers doubled (instead of over-ground level facilities) resulting in a further increase of separately collected recyclables via underground containers, the door-to-door separate recyclables collection remaining stable throughout the years. The residual waste door-to-door collection decreased throughout the years achieving a 50% drop in 2014 as compared to 2001.

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Keep in mind that...

- ⚠ Check the legal compliance in your country.
- ⚠ Charging for waste can result in some problems such as illegal dumping, open burning and illegal disposal methods. However, these problems have been reported very little by communities where PAYT has been implemented.
- ⚠ Some administrative processes are necessary to ensure billing and collection. Some communities forego billing by requiring the purchase of approved waste bags, or weight gauges.
- ⚠ For some forms of PAYT, user identification is necessary for proper functioning.
- ⚠ It is both critical and challenging to build public consensus, which will require good planning and public education efforts.

How to start? (REF:1, 3)

- ✓ Analyse the current collection systems, in order to define the best model for data collection and monitoring.
- ✓ Analyse and select the best PAYT system, according to the collection system in use:
 - **Bins.** Customers select an appropriate size or number of containers. Residents who dispose of more are charged more.
 - **Bags.** Customers buy bags printed with logos. The price of the bag includes collection, transport and disposal. The more bags one fills, the more pays.
 - **Stickers/Tags.** Customers buy stickers or tags to affix to the bag. Customers can use any type of bag they wish and attach the sticker on it.
 - **Hybrid programmes:** Combination of current collection system with a new incentive-based system. Instead of unlimited collection for one monthly fee, customers have a limited volume of service. If more waste is produced, then the customer must pay an excess amount.
 - **Weighing based programmes.** A modified scale on trucks weighs garbage containers, and customers are charged for their actual kilos disposed.

- ✓ Perform a costs-benefit analysis for the municipal collection and management systems.
- ✓ Select fees to be charged to citizens, accordingly to the PAYT system chosen.
- ✓ If necessary, implement a user identification system (particularly suitable for areas where the individual assignment of collection containers to the users is impossible or difficult to implement).
- ✓ Develop an information and awareness campaign to inform citizens about the new PAYT model.
- ✓ Monitor performance of the new system.



Potential benefits

			
Increase of paper and board collection	●	●	●
Increase citizen participation in recycling activities	●	●	●
A variable pricing promotes equity in user payments by basing cost on actual volume of waste generated	●		●
Higher transparency of service and thus promotion of a more reliable public image of waste services	●		●



References:

1. LIFE ENVIRONMENT PROJECT: Pay-as-you-throw
2. ACR+: Cross-analysis of 'Pay-As-You-Throw' schemes in selected EU municipalities
3. ENVIRONMENTAL PROTECTION AGENCY (US): Pay-as-you-throw
4. ENERGY AND ENVIRONMENTAL AFFAIRS (US): Pay-As-You-Throw (PAYT)/Save-Money-And-Reduce-Trash (SMART)
5. SUSTAINABLE CITIES INSTITUTE (US): Pay-as-you-throw Programs