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## REVIEW

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Incentive-based pricing in the financing of public waste collection and treatment services

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### Abstract

The law of August 3, 2009, on the implementation of the ‘Grenelle de l’environnement’, lays the foundations for the future widespread introduction of incentive-based pricing for waste collection and treatment services. This law requires local authorities, within five years, to integrate into the household waste collection fee (REOM) and the household waste collection tax (TEOM) “a variable incentive component that takes into account the nature and weight and/or volume and/or number of waste collections”. There are three methods of financing the public household waste collection and treatment service in France : financing by the general budget, TEOM and REOM. These financial tools are designed to ensure the financial viability of the public household waste management service.

## Incentive-based pricing in the financing of public waste collection and treatment services

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### 1 Introduction

Each year, the communes or inter-communal cooperation establishments (EPCI) responsible for this area define the expected TEOM revenue and set the tax rate. These are forwarded to the government agencies responsible for collecting the tax. The proceeds are then paid back to the local authorities. The TEOM is paid by the taxpayer to “provide for the expenses of the service”.<sup>1</sup> TEOM is based on 50% of the cadastral rental value and, as a result, its logic is reduced to pragmatic financing of the service.<sup>2</sup> This logic does not seek to reconcile the price of the service with the actual individual use of the service. The REOM, on the other hand, aims to individualize the pricing of the service provided.<sup>3</sup> The implementation of this fee is more onerous for the commune, which must assume responsibility for collection and maintain a separate budget. Its creation implies that the REOM must cover the cost of the public service, and that any contribution from the main budget to balance the annexed budget is in principle prohibited.<sup>4</sup> Unlike the TEOM, the REOM rate must reflect the service rendered to the user, in the interests of fairness: each taxpayer is only charged for his or her contribution to the service.

The principle of incentive-based invoicing was introduced in the ‘Grenelle I’ law of 2009 and is intended to contribute to the financial realization of the ‘polluter pays’ principle. The term ‘incentive-based pricing’ is used when the REOM or TEOM rate includes a variable component based on the quantity of waste produced by each user. The aim is no longer to adapt the price paid to the user's behavior, but to modify this behavior through a financial incentive. This is based on the creation of a price signal that is sufficiently significant for users to change their behavior. The creation of a price signal is achieved by integrating a social and environmental cost into the gross cost of the household waste collection and treatment service.<sup>5</sup> In 2010, the ‘Grenelle II’ law gave communes and EPCIs the option of introducing, on an experimental basis and for a five-year period, a

TEOM with an incentive component.<sup>6</sup> Lastly, the 2012 Finance Act created the incentive based TEOM (TEOMi), which local authorities are free to introduce.<sup>7</sup> More recently, the law of August 17, 2015, on energy transition for green growth provided for the extension of incentive financing for the public waste service.<sup>8</sup> It sets a target of 15 million inhabitants by 2020 and 25 million by 2025.

In the current context of growing awareness of the impact of waste production on the environment, the quest for virtuous management of waste collection and treatment services has become a major challenge at local levels.<sup>9</sup> To illustrate the importance of local management in this area, it should be remembered that the combined revenue from TEOM and REOM represented around 7 billion euros in 2015. This amount should be compared with revenue from property tax on non-built-up properties (around 1 billion euros) and business property tax (around 7 billion euros) for the same year.<sup>10</sup> While the French state does have a major fiscal influence on waste management, through value-added tax (VAT) and the general tax on polluting activities (TGAP), local elected representatives have become key players in improving the management of this public service. However, we need to consider whether these local financial mechanisms, whose original purpose is to finance a local public service, can be given a real incentive dimension.

Firstly, this study should highlight the specific issues involved in implementing incentive-based pricing. Classically, all public services are classified within the *summa divisio* of Administrative Public Services (APS) or Industrial and Commercial Public Services (ICPS). This is the case for public waste management services, depending on whether they are financed by a TEOM or REOM fee: if a public service is financed by a tax, it is classified as an APS, whereas if it is financed by a fee, it is classified as an ICPS. Today, however, the desire to introduce an incentive-based

<sup>1</sup> Art. 1520 of Code général des impôts: CGI (French General Tax Code) ; Conseil d'État, 24 oct. 2018, n°413895 ; AJDA 2019, p. 148.

<sup>2</sup> Art. 1522/II of CGI.

<sup>3</sup> Art. L. 2333-76 of Code général des collectivités territoriales: CGCT (French General code of local authorities).

<sup>4</sup> Art. L. 2224-1 of CGCT.

<sup>5</sup> HOURCADE (2013), p. 180-181.

<sup>6</sup> Law n° 2010-788, 12 juillet 2010 “portant engagement national pour l'environnement” (JORF n°0160).

<sup>7</sup> Law n° 2011-1977, 28 décembre 2011, Finance act for 2012 (JORF n°0301).

<sup>8</sup> Law n°2015-992, 17 août 2015 “relative à la transition énergétique pour la croissance verte” (JORF n°0189).

<sup>9</sup> NAIM-GESBERT (2014), p. 112: “Le principe pollueur-payeur est le fondement de la fiscalité écologique”; CAUDAL (2015).

<sup>10</sup> Report from the Observatoire des finances et de la gestion publique locale, juill 2018.

dimension into the financing of public waste services seems to be calling this binary classification into question. Indeed, the REOMi and TEOMi systems converge to the point of merging: they are both made up of a fixed portion related to the cost of the service and a variable portion related to user behavior. The convergence of these two financing methods would put an end to the dichotomy between REOM and TEOM. The introduction of incentive-based pricing would seem to create an environmental public service that would be somewhere between an APS and an ICPS.

Secondly, it should be noted that TEOM and REOM are not appropriate tools for providing real incentives to users. The fixed cost of household waste collection and treatment is becoming increasingly significant for local budgets, given the numerous national and European requirements in this area. This explains the growing share of waste-related taxes in local budgets. This fixed cost prevents incentive pricing from generating a genuine price signal. The few French experiments with incentive-based pricing have resulted in a general increase in the price of the service, making the incentive-based dimension of pricing weak or even non-existent. A comparison with incentive-based financing systems currently in force in Europe reveals that incentive-based pricing is not the ultimate tool for combating waste production. Ultimately, the taxpayer's involvement is the result of a financial constraint weighing increasingly heavily on local authorities. However, the latter are already burdened by the effects of VAT and TGAP, which are an indirect drain on their budgets and thus, once again, on the local taxpayer. It would seem, however, that in order to respect the 'polluter pays' principle, waste production should be better regulated upstream. With this in mind, the European Commission has adopted its first strategy on plastic waste, with the aim of making 100% of plastic waste in circulation recyclable or reusable by 2030.

## 2 The creation of an environmental public service financed by behavioral taxation

The public waste collection and treatment service has traditionally been financed by a household waste tax or fee. Environmental imperatives have led legislators, since the Grenelle Environment Round Table laws, to introduce incentive-based pricing. Based on user behavior, this form of taxation, comprising a variable and a fixed component, would be a compromise between the TEOM and the REOM.

### 2.1 REOM/TEOM: a pragmatic choice for financing a local public service

The household waste collection tax (TEOM) applies to taxpayers who are both owners and usufructuaries

of property.<sup>11</sup> In accordance with article 1520 of the French General Tax Code, the purpose of this tax is to cover the costs of the household waste collection service, which "are not covered by ordinary non-tax revenues".<sup>12</sup> The TEOM is implemented by communes and EPCIs with a waste collection service, provided that local tax revenues, which are ordinary tax revenues, are not sufficient to cover the expenses of this service. For communes and their groupings, TEOM is the preferred means of financing the public waste disposal service. For example, the July 2012 report by the Observatoire des finances locales showed that 67% of communes and their EPCIs used this tax, compared with 29% for REOM and just 4% for the general budget<sup>13</sup>. This trend, which has been rising slightly since 2013<sup>14</sup>, shows how easy it is to set up this means of collection.

Unlike the REOM, the TEOM is payable without any correlation between the service rendered and the local taxpayer. Even if the latter does not benefit from this service, he or she must pay this tax unlike the fee, which is paid according to the service rendered. The Senate report of January 29, 2014, reveals that for supporters of the TEOM, this tax is a means of "financing a public hygiene and public health service [...]". As such, it is not appropriate to conceive this service in a logic of individualized services"<sup>15</sup>. In fact, TEOM is a pragmatic financing method based on property tax bases<sup>16</sup>. Insofar as this optional additional tax to the property tax on built-up properties (TFPB) applies to all properties subject to property tax, it is established on the basis of the net income used to calculate the property tax<sup>17</sup>. As a result, the tax base may only imperfectly reflect the service actually rendered to the user.

However, it should be noted that the TFPB exemption provided for in articles 1390, 1391 and 1391-A of the French General Tax Code does not affect the TEOM tax base. In other words, taxpayers who are exempt from the TFPB remain liable for the household waste collection tax. Like the property tax, the TEOM is collected by the State,<sup>18</sup> with the Direction Générale des Finances Publiques, which also levies charges for discharges and non-discharges<sup>19</sup>. The exceptions offered to local authorities appear to provide a degree

<sup>11</sup> Art. 1523 pf CGI.

<sup>12</sup> Conseil d'État, 19 mars 2018, SAS Cora c. Commune de Livry-Gargan, n°402946.

<sup>13</sup> See [https://www.collectivites-locales.gouv.fr/files/files/2013012876\\_brochure.pdf](https://www.collectivites-locales.gouv.fr/files/files/2013012876_brochure.pdf).

<sup>14</sup> Report from the Observatoire des finances locales, published in 2013.

<sup>15</sup> GERMAIN and JARLIER (2014), p. 16.

<sup>16</sup> Art. 1521-I of CGI.

<sup>17</sup> This corresponds to 50% of the cadastral rental value (Art. 1522, CGI).

<sup>18</sup> Lyon Administrative Court (in French: "Tribunal administrative", TA), 16 juin 2017, Soc. Auchan France, n°1502423.

<sup>19</sup> This is the principle for direct local taxes.

of flexibility that enables “*the system to be adapted to the local situation*”.<sup>20</sup> In addition to these adjustments, Article 1521 of the CGI provides for exemptions from TEOM for factories; public buildings used for public services<sup>21</sup>; industrial or commercial premises; etc.<sup>22</sup> While this is the preferred method of financing for local authorities, the introduction of TEOM is not intended to encourage users to reduce the amount of waste they dispose of. In application of the principle of free administration, local authorities may modulate rates according to the service provided, but there is no real incentive to do so.

The household waste collection fee (REOM), a popular financing method for rural areas according to the French Court of Auditors<sup>23</sup>, was introduced by the 1975 Finance Act<sup>24</sup>. Unlike the TEOM, this is not a tax measure, as the fee is paid by the user in proportion to his or her use of the waste service.<sup>25</sup> It should be noted, however, that since the NOTRe law of 2015, waste treatment and disposal is compulsory responsibility for EPCIs with their own tax authority<sup>26</sup>. While the introduction of the REOM predates the ‘Grenelles de l’environnement’, the incentive dimension is no stranger to it, unlike the TEOM, which is based on ‘housing characteristics’<sup>27</sup>. The principle of local self-government allows communes to set their own ‘pricing terms’ for such a fee<sup>28</sup>. The fact that the amount of the REOM is calculated on the basis of the service rendered reflects a form of incentive-based pricing, in parallel with conventional pricing for the same fee. Indeed, the commune can decide to apply a fee based on the amount of waste produced per tax household. This situation reflects a flat-rate pricing system calculated on the basis of an average amount of waste produced per user. However, article L. 2333-76 of the Code général des collectivités territoriales (French General Code of Local Authorities) refers to a pricing system that could be described as incentive-based, since the REOM can also be calculated according to the volume of waste. By taking user behavior into account, the amount of the fee inevitably varies according to the amount of waste reduction produced. However, the various

surveys carried out by the Union Nationale des Associations Familiales (UDAF) since 2013, among communes with REOM, show that two-thirds of them have opted for pricing based on the “*number of people in the household*”<sup>29</sup>. In other words, while REOM offers an incentive-based approach, communes have largely preferred flat-rate pricing.

The introduction of this fee, however, is fraught with practical difficulties, which explains why local authorities are so attracted to the TEOM system. Case law has reminded us that the management of the REOM constitutes an ICPS, for which disputes are referred to the judicial courts<sup>30</sup>, while the assessment of the legality of a deliberation instituting this REOM constitutes a regulatory measure referred to the administrative judge.<sup>31</sup> Management of this household waste collection service as an ICPS requires the creation of a separate budget, in accordance with article L. 2224-1 of the CGCT. This organization would appear to be beneficial in terms of transparency, as revenues and expenses are mentioned<sup>32</sup>, but it also presupposes that the budget is balanced<sup>33</sup>. Consequently, the fee must cover the cost of the service, as the French Council of State reminded us in a ruling dated June 25, 2018<sup>34</sup>. Unlike the TEOM, the introduction of the REOM entails a number of constraints for the local authority<sup>35</sup>. In fact, it is up to the local authority to create a file of people liable to pay the charges, to draw up invoices and to deal with unpaid bills. It is also up to the local authority to set the base<sup>36</sup>, the price and the collection procedures, which must be handled by its own departments. These constraints explain why local authorities and their groupings are shifting away from this method of financing. The rising cost of public waste collection and treatment services<sup>37</sup> has prompted legislators to introduce incentive-based pricing<sup>38</sup>.

<sup>20</sup> GERMAIN and JARLIER (2014), p. 16; for example: articles 1521; 1521 III-4 et 1636 B undecies al. 2. CGI.

<sup>21</sup> About this specific exemption, Conseil d’État, 3 juin 2013, n°346987, Lambert in RDF 2013, n°37, p. 66-71.

<sup>22</sup> Art. 1521-II of CGI.

<sup>23</sup> Thematic public report, Les collectivités territoriales et la gestion des déchets ménagers et assimilés, sept. 2011.

<sup>24</sup> Codified in articles L. 2333-76 and seq. of CGCT.

<sup>25</sup> Conseil d’État, 24 mai 2006, Commune de Larnage, req., n°283070

<sup>26</sup> Law n°2015-991 du 7 août 2015 “portant nouvelle organisation territoriale de la République” (JORF n°0182).

<sup>27</sup> Art. L. 2333-76 of CGCT, al. 11.

<sup>28</sup> *Ibid.*, al. 9; Court of Cassation, ch. com., 16 fév. 2016, req., n°15-13.406 (unpublished), RJCf 2016, n°6, p. 759-761.

<sup>29</sup> See [https://www.unaf.fr/IMG/pdf/fiscalite\\_et\\_tarification\\_s.pdf](https://www.unaf.fr/IMG/pdf/fiscalite_et_tarification_s.pdf).

<sup>30</sup> Bordeaux Administrative Court of Appeal (In French: “Cour d’appel de Bordeaux”, CAA), 1er fév. 2011, n°10BX00695; Cass., ch. com., 26 fév. 2002, req., n°99-12.844, AJDA 2002, n°13, p. 922-923, Petit (2007), p. 24-25.

<sup>31</sup> Conseil d’État, 10 avril 1992, n°132539; CJEG 1992, p. 479, chron. LACHAUME.

<sup>32</sup> CAA Nancy, 9 oct. 2008, n°07NC00724.

<sup>33</sup> Art. L. 2224-1 of CGCT.

<sup>34</sup> Conseil d’État, 25 juin 2018, n°414056; Conseil d’État, 16 janv. 2018, n°401619.

<sup>35</sup> Art. L. 2224-13 and seq. of CGCT.

<sup>36</sup> Cass., ch. com., 5 juill. 2016, n°15-17.087 and 15-17.088.

<sup>37</sup> GERMAIN and JARLIER (2014).

<sup>38</sup> BILLET (2014), p. 2252; SAINTENY (2010), p. 9-17.

## 2.2 Legislative requirements for the widespread introduction of incentive-based pricing for household waste collection services

At the end of the 1990s, incentive-based pricing was still in an early stage in France, but some local authorities were quick to adopt it, such as Alsace in 1997<sup>39</sup>. By 2006, as François Bénard points out, fourteen communities comprising 280 communes had adopted the system, with a total population of 385,000<sup>40</sup>. In short, some thirty "pioneering" communes, mainly in the north-east and north-west of the country, opted for this pricing system before the major 'Grenelle' laws came into force<sup>41</sup>. With the aim of encouraging a reduction in household waste, the 'Grenelle de l'environnement' called for a pricing system linked to the quantity of waste produced per user<sup>42</sup>. The legislative framework, set out in the 'Grenelle 1' law<sup>43</sup>, provides for the implementation of this pricing system regardless of the financing method adopted by the local authority, except for financing by the general budget<sup>44</sup>: "*The [REOM and TEOM] must include a variable incentive component within five years*"<sup>45</sup>. The incentive portion is added to a fixed portion, the terms of which are set out in the General Tax Code<sup>46</sup>. The incentive-based method of calculation provided for in article 46 of the 2009 law has led to a rethinking of the funding system at local level.

The law of July 12, 2010<sup>47</sup>, known as 'Grenelle 2', marks a slight step back from the 2009 law. It allows local authorities to introduce a 'variable share' TEOM system, based on the weight or volume of waste, on an experimental basis and still for a period of five years<sup>48</sup>. It would appear that the legislator, wishing to clarify the provisions of the first 'Grenelle' law, has in fact created several ambiguities. The 'experimental' aspect over a five-year period, as well as the inclusion of the verb "*to be able to*", are in stark contrast to the 2009 concept, which was not intended to leave local authorities any choice as to the mandatory nature of incentive-based pricing. Moreover, the absence of any reference to the REOM would raise the question of maintaining this financing method, which already incorporates an incentive calculation, as well as that of

outlining a new form of household waste collection tax.

The French Finance Act for 2012 ratified this experiment, with a view to promoting efficient incentive-based taxation for local authorities and their groupings<sup>49</sup>. This law creates the 'incentive' household waste collection tax (TEOMi), with the aim of rethinking the compulsory nature of this mode of financing to give local authorities the opportunity to choose<sup>50</sup>. The legislator has abolished the five-year time limit, as well as experimentation, while preserving its optional nature. A trend confirmed by the Energy Transition Act of August 17, 2015, which amended Article L. 541-1 of the Environmental Code<sup>51</sup>. The trend is striking, as work by the French Environment and Energy Management Agency (ADEME) shows that it wasn't until 2010 that the threshold of 100,000 inhabitants, subject to incentive-based pricing, was reached<sup>52</sup>.

However, the implementation of incentive-based invoicing poses a number of difficulties<sup>53</sup>. Reports drawn up by AMORCE and ADEME on dozens of pilot local authorities highlight some negative aspects<sup>54</sup>. Nevertheless, these studies attest to undeniable advantages for the public waste service in terms of prevention, recovery, cost control and service optimization<sup>55</sup>. According to a study carried out by the French Ministry of Ecology, incentive-based pricing leads to a 28% drop in unsorted household waste tonnage (OMR) and a 33% increase in sorted waste<sup>56</sup>. Ultimately, the objective pursued by the local authority determines whether it adopts an incentive tax or a fee. The ADEME report reveals that of the 192 local authorities that opted for an incentive-based pricing system in 2016, 182 chose the incentive fee, while only 10 opted for the TEOMi<sup>57</sup>.

In many respects, TEOMi appears to be an amalgamation of TEOM and REOM. An in-depth study of the operating and collection procedures for this incentive tax reflects this change. Indeed, the implementation of this type of financing offsets the disadvantages of the TEOM, while preserving its advantages, but without being confused with the REOM.

<sup>39</sup> HERTZOG (1993), p. 136-149; BÉNARD (2008), p. 30.

<sup>40</sup> *Ibid.*

<sup>41</sup> ADEME (2018a), p. 17-20.

<sup>42</sup> BILLET (2012), p. 45-58.

<sup>43</sup> Law n° 2009-967, 3 août 2009 "programmation relative à la mise en œuvre du Grenelle de l'environnement".

<sup>44</sup> FONTAINE (2009), p. 13-18.

<sup>45</sup> Art. 46, law n°2009-967.

<sup>46</sup> Art. 1521, 1522 et 1636 B undecies of CGI.

<sup>47</sup> Law n° 2010-788, 12 juillet 2010 "portant engagement national pour l'environnement".

<sup>48</sup> Art. 195, law n°2010-788.

<sup>49</sup> Law n° 2011-1977, 28 décembre 2011, Finance act 2012.

<sup>50</sup> Art. 97, law n° 2011-1977.

<sup>51</sup> Law n° 2015-992 "relative à la transition énergétique" (JORF n°0189) modifier by art. L. 541-1 of Code général de l'environnement: CGE (French general environmental code):

<sup>52</sup> ADEME (2018b), p. 3.

<sup>53</sup> HILI (2012), p. 15-18.

<sup>54</sup> AMORCE and ADEME (2014), p. 9.

<sup>55</sup> *Ibid.*, p. 6.

<sup>56</sup> Commissariat général au Développement durable (2016).

<sup>57</sup> ADEME(2018b), p. 4.

TEOM may seem unfair, since the household waste collection service is financed by all taxpayers, including those who do not produce waste. In practice, the introduction of TEOM has a number of operational advantages for the local authority. It is relatively simple to implement for the public authority, which does not have to identify virtuous taxpayers, issue invoices, or ensure collection. In fact, the latter is covered by the State, which charges 8% of the tax (collection, assessment, rebate and non-assessment costs)<sup>58</sup>.

REOM is substantially different in that the user, rather than the taxpayer, pays according to his or her own use of the service, by means of a flat-rate or incentive fee. This type of financing encourages more environmentally responsible behavior and makes citizens more aware of the ‘polluter pays’ principle, as it identifies the cost of the service. However, participation in proportion to the amount of waste produced must not be allowed to overlook the negative effects of this fee. The operating and collection procedures are a heavy burden for the local authority, just like the unpaid bills it has to collect without the help of government services<sup>59</sup>. Admittedly, there are no collection or assessment fees, but this implies an additional cost for the local authority due to individualized invoicing (preparation of receipts, maintenance of a user file, etc.).

Article 1522 bis of the French General Tax Code stipulates that “the incentive portion is added to a fixed portion”. In other words, TEOMi is the sum of these two components, with the incentive component representing “between 10% and 45% of the total tax revenue”, calculated on the basis of the quantity of waste produced in a given year<sup>60</sup>. The fixed portion is always calculated in proportion to the rental value, based on files from the Public Finances General Directorate relating to property tax on built-up properties<sup>61</sup>, while the incentive portion takes into account the user's proportion of the waste service. The main criticism levelled at TEOM has been removed, with a dose of incentive-based pricing in line with the requirements of the ‘Grenelle’ initiatives of 2009 and 2010. The merit of this tax system is that it aligns the requirements of TEOM and REOM, for better prevention, optimization and equality of service. The operating procedures remain largely unchanged from those of the TEOMi, since the State's tax services continue to handle collection and unpaid bills<sup>62</sup>. TEOMi therefore enables local authorities to free

themselves from the constraints they had to face under the REOM system.

### 3 No revolution in the taxation of household waste collection

The financing of waste management services in France has no real incentive effect. The many limitations of this system prevent us from seeing it as a revolution in the face of the many constraints weighing on taxpayers and local budgets. The examples of European countries that have opted for this approach show a real difference from the French model, which does not exactly meet the European requirements of the polluter-pays principle. The pricing scheme should be rethought to ensure a truly circular economy, so that the burden of this tax does not fall mainly on local taxpayers.

#### 3.1 The illusion of truly incentive-based financing of household waste collection services

The cost of the incentive-based waste collection and treatment service is measured on the basis of the user's actual production, in order to make the user more responsible<sup>63</sup>. It is therefore up to each local authority to use a specific pricing method (based on the number of lifts, the implementation of a pay-as-you-go bag system, on-board weighing, etc.)<sup>64</sup>. However, the pricing method used by the public authority involves an investment that may be reflected in the pricing<sup>65</sup>. In other words, the incentive would automatically lead to an increase in the overall cost of the service.

Faced with a systematic increase in waste production, incentive-based pricing cannot curb the proliferation of incivilities (individual incineration, illegal dumping, etc.)<sup>66</sup>. In this respect, Professor Glachant notes that “the incentive fee suffers from a major drawback [which] may give rise to illegal behavior involving the detour of waste flows”<sup>67</sup>. While it is true that the incentive fee is not the direct cause of such behavior, it can lead users to adopt malicious attitudes aimed at disposing of their waste in another commune in order to pay less. This “waste tourism”<sup>68</sup> can be curbed, however, when neighboring communities adopt a common policy of tax incentives. This pooling of services, based on incentive-based pricing, logically postpones the distance users have to travel to dump their litter<sup>69</sup>. A study carried out on behalf of ADEME (the French Environment and Energy Management

<sup>58</sup> Art. 1641 of CGI.

<sup>59</sup> Ademe (2014), p. 20.

<sup>60</sup> Décret n° 2012-1407 du 17 déc. 2012 “pris en application de l'article 1522 bis du CGI”.

<sup>61</sup> *Ibid.*

<sup>62</sup> Art. 1522 bis and 1658 of CGI.

<sup>63</sup> HEINTZ (2000), p. 72.

<sup>64</sup> BARBIER (2005), p. 87.

<sup>65</sup> Cour des comptes, Rapport au Président de la République, Paris, 2003, 818 p.; Conseil d'État, 19 mars 2018, SAS Cora, req., n°402946.

<sup>66</sup> LE BOZEC (2008), p. 107; TURLAN (2013), p. 96.

<sup>67</sup> GLACHANT (2005), p. 85-100, §. 2.

<sup>68</sup> DE SDELEER (1995), p. 471.

<sup>69</sup> GNONLONFIN and KOCOGLU (2017), p. 6.

Agency) in 2005 reviews European experience with incentive-based invoicing<sup>70</sup>. The report reveals that “*pilot schemes have been accompanied by waste tourism to neighboring communes*”<sup>71</sup>.

This behavior obliges communes to measure the ‘degree of diffusion’ of incentive-based pricing, whether tax or fee, to avoid the spread of these inconveniences<sup>72</sup>.

When implemented, incentive-based pricing can also have an impact on local authority budgets. In theory, the aim is to charge users according to the quantity of their household waste. As the quantity of waste decreases, the pricing system achieves its initial objective, as the price paid by the environmentally friendly user decreases. However, while the amount of the fee, or tax, decreases, the cost of the service remains unchanged. A distinction must therefore be made between the incentive for users to act virtuously, whose contribution is paid according to their waste production, and the cost of the household waste service, which remains constant or may increase<sup>73</sup>. Expenditure on waste management has risen by 7% in ten years. Its cost has risen from 5 billion euros in 2000 to 8 billion today, corresponding to an average of 89 euros per inhabitant<sup>74</sup>. ADEME has observed that this trend is “*the result of rising management costs for all waste streams*”<sup>75</sup>. The rise in the cost of public waste management services stems from three main streams: residual household waste (RWH), dry recyclable household waste (DSWH), excluding glass, and waste from drop-off centers<sup>76</sup>.

It should also be noted that TEOM/REOM revenues are taken into account when calculating the tax effort of the commune or its grouping<sup>77</sup>. This benefits them when it comes to calculating their various grants<sup>78</sup>. When TEOM revenue falls, thanks to the incentive component of the TEOMi, the tax effort decreases, as do the allocations made to local authorities.

Tax incentives are widespread in Europe<sup>79</sup>. It plays an essential role in every national process to reduce waste production, treatment and management costs. Italy, Germany and the Netherlands are just some of the

European countries that have adopted this type of pricing even though no regulations required it<sup>80</sup>. A comparative study reveals that incentive-based pricing is not, in itself, the cause of the reduction in waste tonnage per household. More broadly speaking, it is one of the factors that make it possible to meet national challenges in a particular context.

Since 1996, Italian regulations have encouraged municipalities to implement incentive-based pricing systems, with a fixed portion based on the surface area of the dwelling or the size of the household, and a variable portion proportional to the volume of the bin and the number of lifts<sup>81</sup>. Incentive pricing based on weight was introduced to reduce household waste management costs, following on from the tax on storage, but also to comply with national requirements<sup>82</sup>. These obligations translate into recycling targets and financial penalties for Italian municipalities that fail to meet them<sup>83</sup>.

The Netherlands developed this type of incentive tax in order to reduce waste management costs, following the ban on the storage tax for ‘recyclable and incinerable’ waste in 1995<sup>84</sup>. There is a combination of a fixed and a variable component, which may relate to volume and frequency, volume alone, surcharged bags or weight with weighing<sup>85</sup>. The development of incentive-based pricing in recent years in Holland is part of the ‘from waste to raw material’ program launched in 2014<sup>86</sup>. Tax incentives play a key role in this scheme, helping to stimulate waste prevention and increase the rate of recovery and recycling. In 2016, 30% of the Dutch population benefited from this incentive to reduce household waste<sup>87</sup>.

Waste management financing methods in Germany, since the introduction of incentive pricing, reveal a combination of volume, number of lifts and weight criteria<sup>88</sup>. It should be mentioned that there is no federal rule for this, it is up to the local authorities to decide on the pricing system. But waste management financing has always be done by ‘Gebühren’ which means fees that have to reflect the relationship

<sup>70</sup> GALLIANO (2005).

<sup>71</sup> *Ibid.*

<sup>72</sup> GNONLONFIN and KOCOGLU (2017), p. 6.

<sup>73</sup> LE BOZEC (1995), p. 83; a noticeable trend abroad too, LITVAN (1995), p. 81.

<sup>74</sup> Référentiel national des coûts du service public de gestion des déchets, report of ADEME, “économie et déchets”, éd. 2015.

<sup>75</sup> *Ibid.*

<sup>76</sup> *Ibid.*

<sup>77</sup> Art. L. 2334-5 and L. 2334-6 of CGCT.

<sup>78</sup> Information note of 11 mai 2017 “relative à la dotation [...] des établissements publics de coopération intercommunale à fiscalité propre pour l’exercice 2017”, Ministry of the Interior; GERMAIN and JARLIER (2014), p. 28.

<sup>79</sup> BELTRAME and BIN (2010), p. 31-42; ADEME (2018c); ADEME (2017).

<sup>80</sup> *Ibid.*

<sup>81</sup> Law n°549/1995 “relative à la taxe sur le stockage de déchets municipaux solides (écotaxe)”; decree n°22/97, ‘decretoRochi’, allowing differentiated pricing according to waste production.

<sup>82</sup> ADEME (2018c), p. 76.

<sup>83</sup> Law n°152/2006 “sur les sanctions financières des communes en cas de manquements aux objectifs de collectes”.

<sup>84</sup> ADEME (2018c), p. 115-117.

<sup>85</sup> *Ibid.*

<sup>86</sup> *Ibid.*

<sup>87</sup> La tarification incitative de la gestion des ordures ménagères. Quels impacts sur les quantités collectées ?, coll. Étude et documents du S.E.E.I.D.D du Commissaire Général au développement durable, n°140, mars 2016, p. 11-12.

<sup>88</sup> ADEME (2018c), p. 14-15.

between the service and the costs unlike a tax<sup>89</sup>. Traditionally, it comprises a fixed and a variable component corresponding, for 95% of German municipalities, to door-to-door collection with bins<sup>90</sup>. ADEME's report on waste pricing practices in Europe, published in March 2018, attests to the decline in the production of OMR<sup>91</sup>. Waste management regulations in Germany have targeted ecological and environmental priorities, such as the recovery of recoverable materials since the Circular Economy and Waste Acts of 1994 and 2012<sup>92</sup>.

A description of the contexts and methods developed by these three countries shows that tax incentives for waste collection are not a panacea. While tonnage per household has fallen within a few years in those countries that have introduced this type of pricing, this is due to national environmental policies and far-reaching measures<sup>93</sup>. In Germany, local authorities have set up depot systems and collection points for certain types of waste. It is difficult to identify a single system within the federal state, as the way in which waste is treated depends on the different municipalities. This process reduces the tonnage of waste in taxpayers' garbage cans. This steady decline in production can also be explained by increased consumer awareness<sup>94</sup>. Changing consumer attitudes can also be achieved through communication aimed at preserving the environment and reducing waste volumes. Germany, for example, has developed 'multilingual communication media' for its cosmopolitan territories<sup>95</sup>. In France, ADEME recommends that local authorities in tourist areas adopt this type of initiative<sup>96</sup>. Incentive pricing therefore appears to be one of the fiscal levers that can be used to develop a local waste reduction policy<sup>97</sup>.

### 3.2 A tax system for household waste collection ill-suited to the search for financial incentives

The European Union has been tackling environmental issues since the 1970s, on the basis of an approximation of national legislation<sup>98</sup>. Insofar as environmental policy was an essential instrument of the common market, the polluter-pays principle was introduced to ensure that regulations did not hinder

free movement<sup>99</sup>. It was not until 1975 that the Council began to define the polluter-pays principle, transposing the OECD recommendations of 1972 and 1974<sup>100</sup>. This is a major turning point for the European Community in environmental protection. Attributing costs to those who cause pollution preserves free competition within the Community<sup>101</sup>.

The polluter-pays principle places an environmental burden on the polluter<sup>102</sup>, who must pay the environmental costs imposed by European standards<sup>103</sup>. Ultimately, the polluter, designated as such by the regulations, is the person who degrades the environment or "creates the conditions leading to its degradation"<sup>104</sup>. This is an interesting point, as it specifies that if the polluter is difficult to identify, we need to look at the "chain of polluters" to identify the faulty link<sup>105</sup>. European Directive 2004/35/EC is based on the 'polluter pays' principle for the prevention and remediation of environmental damage<sup>106</sup>. Thus, a company that causes environmental damage is obliged to repair it, cover the costs and remedy its shortcomings through preventive measures<sup>107</sup>.

This European concept of the polluter-pays principle is, however, quite different from incentive-based pricing in France. Indeed, under the TEOMi-REOMi system, consumers are responsible for paying the cost of disposing of their own waste, even though they sort it and dispose of it in the designated areas (bins, pay-as-you-go bags, waste collection centers). It would therefore seem appropriate to charge the producer for the simple fact of producing waste that must then be destroyed. The Extended Producer Responsibility (EPR) system for waste management must therefore be rethought, to encourage producers to 'eco-design' their products, reduce their waste quality and develop recycling<sup>108</sup>. This approach would bring domestic legislation more into line with European Union regulations, since the cost of waste management borne by local authorities, and by users, would be

<sup>89</sup> DEFEUILLY and QUIRION (1995), p. 69.

<sup>90</sup> HEINTZ (2000), p. 78.

<sup>91</sup> ADEME (2018c), p. 14-15.

<sup>92</sup> BENELLI et al. (2016), see note number 13.

<sup>93</sup> ADEME (2018c), p. 193.

<sup>94</sup> *Ibid.*, p. 55.

<sup>95</sup> ADEME (2018a), p. 8.

<sup>96</sup> *Ibid.*

<sup>97</sup> Law n°2015-992 relative à la transition énergétique pour une croissance verte; Decree n°2016-811, 17 juin 2016 relatif aux plans régionaux de prévention et de gestion des déchets.

<sup>98</sup> CJCE, 9 juill. 1992, Commission des Communautés européennes c. Royaume de Belgique, n°C-2/90.

<sup>99</sup> Council of Europe, Directive 75/442/CEE, 15 juill. 1975 relative aux déchets.

<sup>100</sup> Council of Europe, Recommendation relative à l'imputation des coûts et à l'intervention des pouvoirs publics en matière d'environnement, 3 mars 1975 (O.J. L 194, 25. 7. 1975, p. 1-4) ; DE SABRAN-PONTEVES (2008), p. 21.

<sup>101</sup> DE SADELEER (2016), §. 405-406.

<sup>102</sup> NAIM-GESBERT (2014), p. 110-112; DE SABRAN-PONTEVÈS (2007), p. 334, see the Communication from the Commission to the Council relative à l'imputation des coûts et à l'intervention des pouvoirs publics en matière d'environnement, JOCE n° L 194, 25 juill. 1975, p. 2-4.

<sup>103</sup> Council of Europe, Recommendation, n°75/436, op. cit., point n°5 - b).

<sup>104</sup> *Ibid.*, point n°3.

<sup>105</sup> *Ibid.*

<sup>106</sup> Directive 2004/35/CE relative à la responsabilité environnementale en ce qui concerne la prévention et la réparation des dommages environnementaux.

<sup>107</sup> GUEYE (2016), §. 268; MEMLOUK (2010).

<sup>108</sup> THIEFFRY (2012), note n°12.



considerably lightened<sup>109</sup>. The idea is not to place the entire burden of responsibility on the waste producer, but to achieve a pooling of responsibilities from the producer to the user. This scheme would help to ensure a better reception of the “circular” economy concept, notably envisaged by the law of August 17, 2015<sup>110</sup>. However, it is to be feared that the industrial producer of waste will adapt its prices to pass on the cost of recycling to the consumer at the end of the chain.

Recently, the European Commission has given new impetus to the transition to a circular economy for plastics<sup>111</sup>. The mandatory introduction of fully recyclable plastic packaging by 2030 will protect the environment while stimulating growth and innovation for businesses<sup>112</sup>. The manufacture of future packaging is of economic interest to the plastics industry. However, the industry will have to pay part of the costs of management and cleaning, and even fund awareness campaigns<sup>113</sup>.

#### 4 Conclusion

According to the Observatory of local Finances and Governing report published in 2018, local government tax revenues in 2017 were up by more than 3.8%<sup>114</sup>, whereas they had already risen by 3% in 2016 compared with 2015. In 2017, these revenues, direct and indirect, amounted to around 134 billion euros, whereas they had already recorded a 3% increase in 2016 to reach 129 billion euros<sup>115</sup>. This increase concerns local taxes<sup>116</sup> and other levies such as TEOM. Revenue from this tax, collected by municipalities and their groupings, reached 6.8 billion euros in 2017, representing growth of 1.6% and 2.1% in 2016<sup>117</sup>. The growth in TEOM is partly the result of an increase in property taxes, since TEOM is levied against property taxes. Between 2012 and 2016, property tax revenues in France rose sharply, from 13,424 to 15,113 million euros for local authorities<sup>118</sup>. Insofar as the TEOM applies to all properties subject to property tax on built-up properties, it is logical that the collection of this tax should continue to increase.

Indeed, the tax rate for these household taxes has also been rising steadily since 2012. The introduction of the incentive portion in 2014 has not helped to curb these trends, which weigh irremediably on local taxpayers. The evolution of TEOM and REOM revenues is interesting because it is fully in line with the results previously observed for local taxation. REOM revenue rose from 629 to 728 million euros between 2012 and 2015<sup>119</sup>. The incentive portion of TEOM followed this trend, rising from 2.9% in 2014 to 9.4% in 2016. TEOM revenue, including the incentive portion, increased by 2.1% between 2015 and 2016<sup>120</sup>. In 2020, it will amount to 7 billion euros, an increase of 2.3% between 2020 and 2021. In the final analysis, TEOM and REOM revenues have risen considerably since the 2000s, as the cost of treating household waste is passed on to local taxpayers<sup>121</sup>. Whether we're talking about TEOM or TEOMi pricing, this type of waste taxation fails to correct the differences in treatment between users of the same public service.

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<sup>109</sup> GLACHANT (2003).

<sup>110</sup> Law n°2015-992, 17 août 2015 relative à la transition énergétique pour la croissance verte.

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<sup>112</sup> *Ibid.*

<sup>113</sup> European Commission press release relatif aux nouvelles règles de l'Union européenne pour réduire les déchets marins”, 25 mai 2018, ec.europa.eu.

<sup>114</sup> Report of Observatoire des finances et de la gestion publique locale, published in juill. 2018, p. 19.

<sup>115</sup> *Ibid.*, p. 19.

<sup>116</sup> *Ibid.*, on local taxes, an increase of 3.0% in 2017 and 2,5 % in 2016.

<sup>117</sup> Report of “Observatoire des finances et de la gestion publique locale”, published in juill. 2018, p. 22.

<sup>118</sup> *Ibid.*, p. 19

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## elni

*In many countries lawyers are working on aspects of environmental law, often as part of environmental initiatives and organisations or as legislators. However, they generally have limited contact with other lawyers abroad, in spite of the fact that such contact and communication is vital for the successful and effective implementation of environmental law.*

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*elni coordinates a number of different activities in order to facilitate the communication and connections of those interested in environmental law around the world.*

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