

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE**

Working Party No. 2 on Competition and Regulation

WASTE MANAGEMENT SERVICES

-- Norway --

28 October 2013

This note is submitted by Norway to the Working Party No. 2 of the Competition Committee FOR DISCUSSION under Item VII at its forthcoming meeting to be held on 28 October 2013.

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JT03346267

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WASTE MANAGEMENT SYSTEMS

– Norway –

1. Foreword

1. This paper responds to the Competition Committee Chair's letter of July 2013 inviting written contributions for the upcoming Roundtable on competition issues in waste management. The Competition Authority is pleased to pronounce its view on the waste management markets, with reference to Norwegian cases and complaints.

2. The report is structured as follows. Firstly, the collection of municipal solid waste is discussed. The main competition issue in this market is the possibility of cross-subsidization from waste management companies' legal monopoly business units to its competitive business units. Secondly, there is a short review of the Norwegian extended producer responsibility and compliance systems. In particular compliance systems for packaging waste and the compliance system for electronic equipment is discussed. The report describes the main cases and complaints received by the Competition Authority within these markets. Finally, the markets for the service of incineration are discussed. Significant developments affecting the markets for combustible waste and incineration in Norway are presented.

2. Municipal solid waste

2.1 Introduction

3. Pursuant to Section 27 of the Pollution Control Act¹ solid waste is defined by source, rather than form. Consequently the solid waste emanating from industries, even if it otherwise is similar to household waste, is not subject to the same regulations as household solid waste.

4. Any waste from industrial premises is the responsibility of the company producing the waste, and the companies must themselves organize collection. The municipality must ensure that waste emanating from industries which is similar to household waste is properly collected, and that the relevant regulations are adhered to.²

5. Collection and processing of household solid waste is the responsibility of the municipality. The relevant regulation allows the municipality the discretion to choose appropriate waste management solutions.

6. A majority of the municipalities handle the collection of household waste themselves, either through an integrated department of the municipality or through an inter-municipal company owned by several municipalities in the region. Some municipalities tender out their responsibilities, resulting in privately owned companies providing household waste collection in certain municipalities.

¹ <http://www.regjeringen.no/en/doc/Laws/Acts/Pollution-Control-Act.html?id=171893>

² <http://www.lovdatab.no/cgi-wift/ldles?ltdoc=/for/ff-20031205-1909.html>

7. Most municipalities provide solutions for separate disposal of packaging waste, and in some cases food waste. The categories which are subject to extended producer responsibility schemes are then extracted at sorting stations, or collected from separate containers at waste sites. All municipalities must provide waste transfer and sorting facilities. However, they are not obliged to run these themselves.

2.2 *The issue of cross-subsidization*

8. The main competition concerns in the markets relating to municipal solid waste are related to the possibility for the legal monopolist to cross-subsidize the part of the company subject to competition by allocating costs to the monopoly business. The municipalities' legal monopoly on household waste provides a platform on which the publically owned company may build a strong competitor in neighboring markets such as tenders for household waste collection in near-by municipalities, treatment facilities for industrial waste, incineration facilities and other services.

9. A central issue in this respect is the calculation of the waste fee levied on the inhabitants of a municipality.

10. Pursuant to the Pollution Control Act section 34, the waste fee must cover all related costs including capital costs. A more specific guidance for calculating the fee is given in a paper issued from the Norwegian Environment Agency. A new regulation will replace the guidelines in the near future, but this remains a work in progress at the time of writing.

11. The issue of cross-subsidization is raised by private waste management companies on a regular basis. There have been claims from privately owned companies that more than a fair share of capital costs and other costs has been allocated to the business unit responsible for the legal monopoly of collection and treatment of household waste. The complainants argue that waste fees exceed operating costs, enabling eventual cross subsidizing strategies. The Competition Authority has opened several proceedings against municipally owned waste management companies. The issue has been approached in several different ways, from advocacy and similar forms of soft approach, to abuse of dominance-cases.

12. In "Reno-Vest" (Case 2004/139) an inter-municipal waste management company, Reno-Vest, won a tender for waste treatment from a nearby municipality. The bid was substantially under that of the privately owned competitor, thus giving rise to allegations of predatory pricing in breach of section 11 of the Norwegian Competition Act. The Competition Authority investigated the claim by analyzing all the relevant costs such as cost of capital, depreciation costs, capacity, any project related investments, potential synergies, cost of personnel, maintenance, machinery, and so on. However, the conclusion was that although the inter-municipal company had underestimated its incremental costs during the tender process, the evidence suggested that incremental revenues would still cover these.

13. The Competition Authority has also approached the issue of cross-subsidization with advocacy. Pursuant to Section 9(e) of the Norwegian Competition Act the Competition Authority may issue a formal letter of concern directed at any public regulation or activity. The receiving entity must reply addressing the competition concerns raised by the Authority.

14. In "BIR" (Case 2004/980) an inter-municipal waste management company, BIR, was accused of cross-subsidizing the competitive part of its business by overcharging the monopoly part. The Competition Authority formulated a letter of concern requesting that the owner municipalities undertake measures to ensure a satisfactory structural separation of the monopoly business and the competitive business, and a more clear allocation of costs. Several of the Competition Authority's proposals were adopted, decreasing the risk of cross-subsidization.

15. The EFTA Surveillance Authority has in a recent case³ addressed the issue of the differing tax regimes the waste collectors were subject to, based on whether they were publically or privately owned. Where a publically owned waste management company provided services in another municipality than that by which it was owned, it was exempt from paying income tax. The Norwegian government accepted the appropriate measures proposed by the EFTA Surveillance Authority, and consequently the case was closed.⁴

3. Extended producer responsibility and compliance schemes

3.1 Collection schemes for packaging waste

16. Various collection schemes ensure that packaging waste in Norway is collected and sent for recycling and thermal treatment. Most types of schemes for the collection of packaging waste are based on agreements between the Norwegian Government and the packaging industry. Producers have the responsibility to provide the means by which the goods they produce are collected and recycled at the end of their lifecycles.

17. As a result, recycling companies have been established through cooperation among participants in the industry. One example is Grønt Punkt Norge (the Green Dot Norway) which is responsible for developing, organizing, operating and administrating recycling schemes for packaging waste.⁵ The recycling costs are transferred to the consumers through an "environmental fee" on new products. Pursuant to the agreement with the Government producers are obliged to participate in a recycling scheme. Moreover the recycling companies must report their recycling and how they work to optimize packaging waste handling to the Environment Agency.⁶

18. Recycling of packaging waste can be divided into product markets for 3.1.1) organization of systems or solutions, 3.1.2) collection and sorting and 3.1.3) recovery service and secondary material. Competition issues related to these markets are listed below.

3.1.1 Organization of systems or solutions

19. There is limited competition in the market for organization of systems or solutions. There are 14 recycling companies handling packaging waste in Norway, nine of these are involved in recycling refillable packaging for beverages. However the companies are differentiated, in the sense that there is little or no competition between them. As mentioned above, producers are obliged to participate in a recycling scheme. This means that customers have an agreement with the incumbent which represent a barrier to entry in a market characterized by economies of scale.

³ Case no: 69911

⁴ <http://www.eftasurv.int/media/decisions/174-13-COL.pdf>

⁵ Green Dot Norway is developing, organizing and operating the recycling schemes for plastic, EPS (Styrofoam), carton packaging and beverage cartons. The company has also assumed responsibility for the administration of the material companies involved in plastic packaging, carton packaging and beverage cartons.

⁶ Recycling arrangements for packaging for beverages differs from other waste packaging recycling schemes in the sense that a "deposit-refund" system has been implemented in order to optimize the collection. A deposit fee is applied at the point of production of beverages and the refund is given to households when recycling the bottles.

3.1.2 *Collection and sorting*

20. As described above, collection and sorting of waste is to a large extent done by the municipalities. A majority of the packaging waste gathered by the recycling companies comes from households. As described above the municipalities have a legal monopoly on the collection of household waste. On the other hand collection and sorting of commercial or industrial waste, is open for competition. In order to collect and sort packaging waste, the recycling companies use tenders to hire subcontractors. Although the recycling companies often lack competition "in the market", there is competition "for the market" when it comes to collection and sorting of packaging waste. According to the agreements with the Government, the recycling companies have an obligation to secure downstream competition.

3.1.3 *Recovery service and secondary material*

21. The normal case is that one has to pay for the recycling of packaging waste. Secondary recycled material will also compete against new material, which often is perceived as of higher quality. In some cases recycling can create a new product with positive value used as input to production of other goods. This will apply to for instance aluminum cans and brown paper. In these cases the recycling company may have market power, if it is a major seller of such material. The Competition Authority has however, never received any complaints regarding the industry of packaging waste that has raised concerns of abusive behavior in the market for recovery service and secondary material.

22. There have however been other issues of concern in the packaging waste sector over the last decade. The "Rentpack case" (Case 2009/35) is an example. Rentpack AS is owned by the Norwegian Brewers Association (Bryggeri- og drikkevareforeningen). The company controls a range of standard refillable packaging types. Brewers and soft drink producers wishing to use these standard refillable packaging units for the Norwegian market have to pay a rent to Rentpack AS.

23. In 2005, Rentpack's Board of Directors, regarded as an association of undertakings under Section 10 (Agreements between undertakings that restrict competition) changed the fee structure for new reusable plastic bottles, which implied a differentiated tariff structure in the system for reusable bottles. Following this, the Competition Authority received letters from several producers of mineral water, requesting the Competition Authority to intervene against the fee increase imposed by Rentpack. The pricing structure of the recycling scheme for standard refillable packaging could have a discriminatory effect, for instance between participants within and outside the scheme or between participants within the scheme.

24. The Competition Authority considered that the changed fee structure in the recycling scheme for recyclable drinking containers would affect the participants in the market for soft drinks and bottled water in a discriminatory way. Small and medium-sized actors would be at a competitive disadvantage compared to bigger actors. Thus, the change would lead to competition-restricting effects in the markets for soft drinks and bottled water. Moreover, in the Competition Authority's view, the fee structure implied a decision by an association of undertakings which restricted or distorted the competition in the market for soft drinks and water in bottles, thus infringing Section 10 of the Norwegian Competition Act, as well as infringing Article 53 of the EEA Agreement.

25. After assessing the circumstances, where the Competition Authority in particular considered the fact that Rentpack AS subsequently changed their fee structure anticipating the envisaged decision by the Competition Authority, the process was terminated.

3.2 *Electronic equipment*

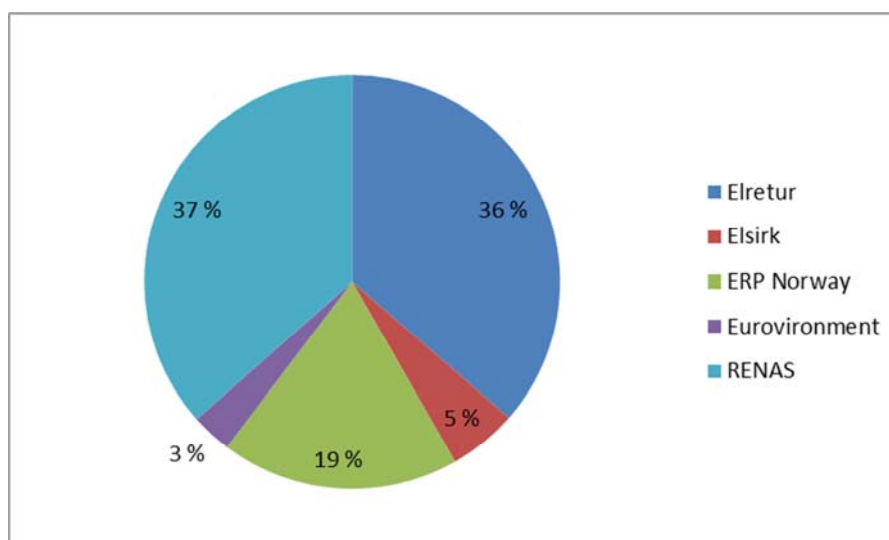
26. EE equipment is regulated in chapter 1 of the Waste Regulations⁷. According to the regulation distributors shall accept the return of EE equipment from households free of charge at the shop premises.⁸ Moreover, the municipality has an obligation to ensure that sufficient provision exists for the reception of EE waste.⁹ The producers and importers are obliged to ensure that EE waste is sorted, stored and forwarded. Quotas are set by the Environment Agency for the collection of EE equipment.

27. Analogously to the market for packaging waste, the market for EE equipment can be divided into product markets for 3.2.1) organization of systems or solutions, 3.2.2) collection and sorting and 3.2.3) recovery service and secondary material.

3.2.1 *The market for organization of systems*

28. In the market for organization schemes for EE-equipment there are currently five different market players competing for members to their schemes, namely Elretur, Elsirk AS, ERP Norway AS, Euroenvironment AS and RENAS AS.^{10, 11} The market share of the participants is shown in figure 1.

Figure 1. The market for organization schemes for EE-equipment



Source: Annual report of "EE-registeret" (2012)

29. As in the market for packaging waste there are regulatory barriers to entry. The main is the certification as a recycling company from the Norwegian Environment Agency, which is required to operate in the market. A criterion for obtaining such a certification is geographical coverage of all the

⁷ <http://www.miljodirektoratet.no/no/Regelverk/Forskrifter/Regulations-relating-to-the-recycling-of-waste-Waste-Regulations/>

⁸ Article 1-4 in the Waste Regulations

⁹ Article 1-7 *ibid*

¹⁰ Elretur acquired Euroenvironment in 2012, meaning there are only four independent competitors.

¹¹ Miljøstatus.no

counties in Norway and at least 70 per cent of the municipalities. Despite the entry barriers there are five actors present in the market. This is possibly due to the fact that the market of electronics consists of larger countrywide companies, some of which have a turnover sufficient to support a recycling organization.

3.2.2 *Sorting and packaging*

30. Approximately 59 per cent of the EE-equipment comes from the households. The sorting and packaging of EE-equipment from households is done by the municipalities and distributors according to their obligation by the Waste Regulations. At the time being, the EE-equipment delivered at municipal disposal sites is collected by Elretur and ERP. Since both Elretur and ERP also collect EE equipment from their own members, they collect more waste than they are obliged to according to the quotas set by the Environmental Agency. The surplus EE equipment is bought/cleared by other recycling companies, in order to fulfill quotas. When it comes to sorting and packaging of commercial or industrial EE equipment there is competition.

3.2.3 *Recovery service and secondary material*

31. The Competition Authority has never received any complaints regarding EE equipment and the market for recovery service and secondary material that has raised competition concerns. However, in the market for EE-waste schemes there have been several issues of concern over the last decade. Two of these cases are described briefly below.

32. Case 2005/1678 dealt with EE-schemes "overcharging" their members, in order to build a legally mandated security fund covering 6 months running costs. The fund eventually became far bigger than the necessary 6 months. This led to a situation where large members would have significant funds locked up in the scheme. This naturally led to higher switching costs, and thus decreased mobility amongst the customers.¹² When the scheme sought to return to the obligatory 6 months security fund, it reduced the environmental fee to such a degree that competitors complained about predatory pricing.¹³

33. In 2010 the Competition Authority received a complaint from Ragn-Sells Elektronikkretur AS concerning an exclusive agreement between Elretur and Avfall Norge.¹⁴ At the time Elretur was the largest recycler of EE equipment in Norway. Avfall Norge is an organization for companies in the waste industry including most of the municipal companies collecting household waste. The complainant was a competitor to Elretur in the market for organization of systems.

34. The complainant argued that the exclusive agreement foreclosed them from collecting EE-equipment at disposal sites controlled by members of Avfall Norge. The agreement would give Elretur an exclusive right to more than 50 % of the EE-equipment in Norway. In addition Elretur collected EE-equipment from its own members. The exclusive agreement could therefore limit the competitors of Elreturs access to EE-equipment, and make it impossible for them to meet the criterion of geographical coverage stipulated in the Waste Regulations.¹⁵ During the case process the complainant gained access to

¹² Case 2009/568

¹³ Case 2005/1678

¹⁴ Case 2010/0176

¹⁵ Section 1-14 in the Waste Regulations.

disposal sites controlled by members of Avfall Norge, and the Competition Authority terminated the process.¹⁶

3.3 *Sector inquiry*

35. The Competition Authority published a report on "Competition Concerns Related to Recycling in Norway" in 2004.¹⁷ The report addressed competition issues related to several specific categories of waste recycling and the schemes introduced to manage these categories and concluded that there was room for improvements. The report focused on the problem that several of the recycling systems encouraged or required competing firms to cooperate, that several of the recycling systems were *de jure* or *de facto* monopolies, and that these caused inefficiencies on the market.

36. In the report, the Competition Authority proposed the introduction of deposit schemes in order to provide better and cheaper collection and recycling of waste. Furthermore the report recommended a move away from extended producer responsibility systems negotiated between regulator and industry, and towards a system based on taxation. Subsequent exchanges with the relevant regulating authorities resulted in the application of some of the alterations proposed in the report. Some of the issues addressed, however, remain problematic.

4. **Incineration**

4.1 *Market dynamics*

37. One of the main trends of recent years is the commodification of waste. Waste is now increasingly viewed as a valuable resource, either for recycling or incineration. The increased value of waste has resulted in lower tipping fees as incinerators and material recovery facilities compete for waste supply contracts. Another manifestation of this is the sharp increase in waste exports (see figure 2).

38. The volume of waste being exported has increased significantly in recent years. In 2007 Norway exported 307 000 tons of waste, whilst in 2011 that number had risen to over 1.7 million tons.¹⁸ The substantial change has mainly been attributed to an increase in demand from incinerators, particularly in Sweden¹⁹, and a response to the 2009 ban on landfill disposal of degradable waste²⁰, which will be presented further in paragraph 4.2.

39. To export waste the waste holder must apply for a license, and report the destination and the treatment method. These licenses are not considered a major barrier to trade, but there have been examples of illegal exports of waste, particularly destined for less developed countries.

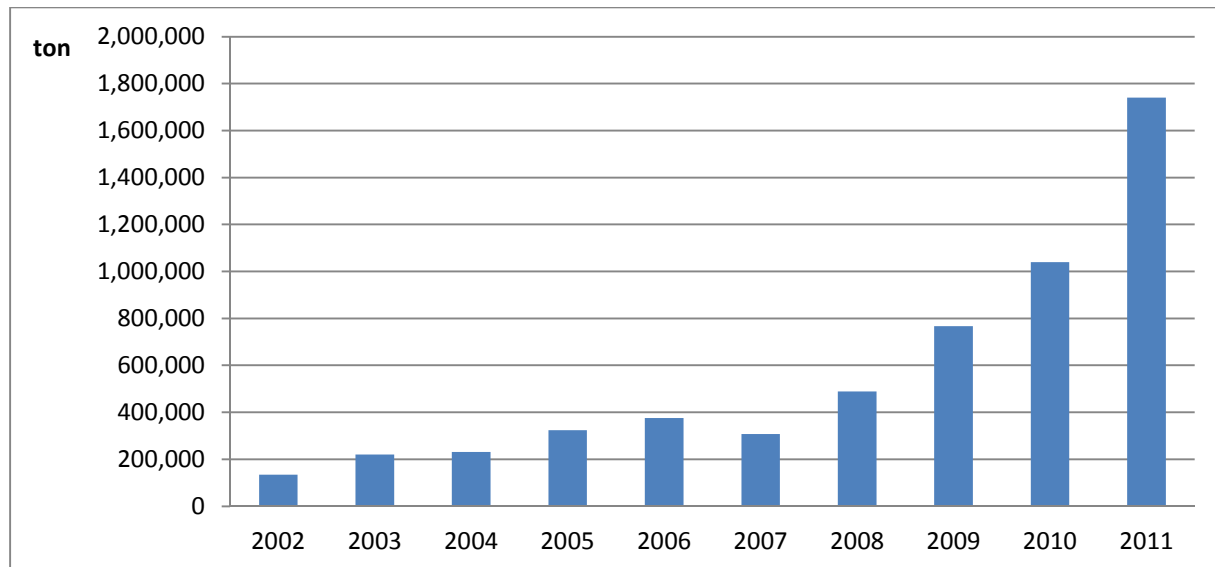
¹⁶ http://www.konkurransetilsynet.no/ImageVaultFiles/id_5710/cf_5/A2012-10_-_Elretur_AS_-_konkurranseloven_-_12_tred.PDF

¹⁷ http://www.konkurransetilsynet.no/iKnowBase/Content/395622/04_01_RETUR.PDF, an unofficial English language summary of the report is available at request.

¹⁸ http://www.regjeringen.no/pages/38416619/T-1531_web.pdf

¹⁹ More than 80 per cent of the exported waste in 2010 was sent to Sweden.

²⁰ <http://www.miljostatus.no/miljodata/Miljodata/?spraak=NO&dsID=AVIE&rID=BME>

Figure 2. Exported waste

Source: www.environment.no / Ministry of Environment

40. In the last few years there have been several significant developments affecting the markets for combustible waste and incineration in Norway. These include:

- A steady increase in total waste generation;
- Increased focus and incentivizing of district heating;
- The introduction of a ban on depositing degradable waste at landfills;
- The removal of the disposal tax on incineration;
- Increased demand from Swedish incinerators.

4.1.1 Total waste generation

41. Overall waste generation has increased by almost 40 per cent since 1995. In the same time landfilling has decreased by over 60 per cent. Some of the waste is incinerated without energy recovery, but most of what used to be landfilled is now recycled or incinerated with energy recovery.

4.1.2 District heating

42. Regulations allowing municipalities to require new building projects, to connect to district heating infrastructure is providing the market with the necessary increase in demand to induce investment. The current production is equivalent of 5 TWh annually²¹, and it is expected that this number will increase significantly over the coming years.²² As demand for combustible waste for energy recovery increases, and

²¹ <http://www.ssb.no/a/kortnavn/fjernvarme/tab-2012-11-27-01.html>

²² <http://www.regjeringen.no/nb/dep/md/dok/regpubl/stmeld/2011-2012/meld-st-21-2011-2012/7/3.html?id=682968>

prices incinerators offer consequently become more attractive, the flow of combustible waste might increasingly turn away from other forms of treatment such as material recovery.

4.1.3 Landfills

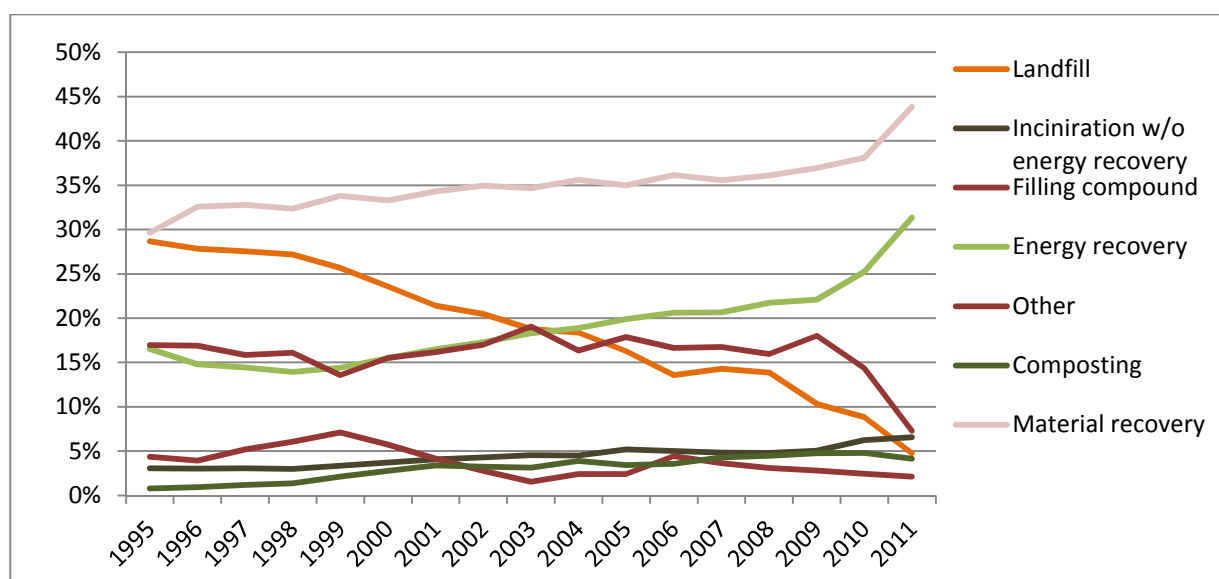
43. With the introduction of the landfill ban on degradable waste in 2009, a significant alternative disposal for combustible waste was removed from the market. This led to increased incineration both by Norwegian facilities and by export, mainly to Sweden.

44. In Norway there are currently 62 ordinary landfills, a handful for inert waste, and one for hazardous waste.²³ Most of the ordinary landfills are owned by inter-municipal companies, whilst the specialized landfills are mostly privately owned.

45. The volume of waste ending up in landfills has decreased significantly in the last few years due to regulatory changes aimed at increasing recycling or energy recovery by incineration of waste. Since July 2009 landfilling degradable waste is prohibited. In addition a disposal tax was removed on waste destined for incineration for energy recovery, incentivizing increasing volumes of waste to incinerators in Norway.

46. As a result of these changes the volume of waste deposited at landfills have fallen from 1 902 000 tons in 2009 to 820 000 tons in 2011. The volume is expected to continue to fall as special dispensations from the landfill ban end.

Figure 3. Non-hazardous waste by treatment



Source: www.environment.no

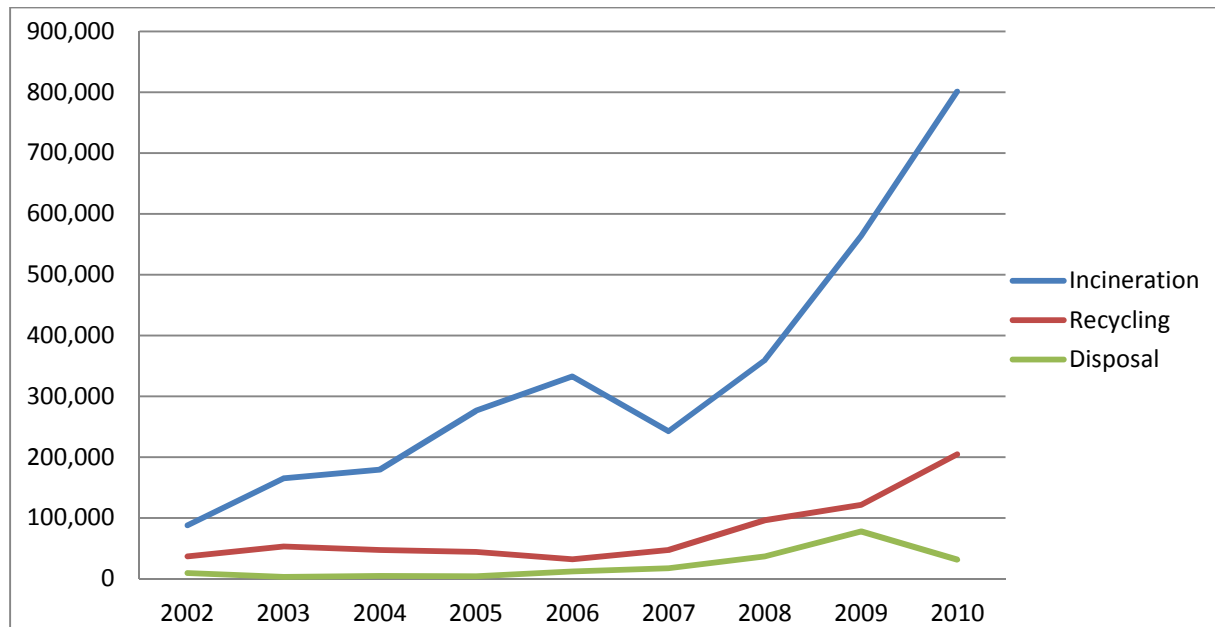
4.1.4 Taxation on incineration

47. A disposal tax on landfilling and incineration was introduced in 1999 in order to incentivize recycling. The disposal fee on incineration was altered in 2004 to reflect a more emissions oriented approach, and in 2010 the tax on incineration was removed entirely. The tax remains on non-degradable

²³ <http://www.avfallnorge.no/deponering1.cfm>

waste destined for landfills. The tax on incineration was removed partly as a response to a similar policy in Sweden in order to maintain a level playing field. The removal of the disposal tax on incineration in 2010 may have contributed to the increasing shift from material recovery to incineration. Some have expressed concerns over the environmental effect of increased incineration, at the expense of material recovery.

Figure 4. Exported waste by treatment (tons)



Source: www.environment.no

4.1.5 Increased demand from Sweden

48. Sweden has significantly higher incineration capacity, and consequently higher demand, for combustible waste. District heating in Sweden totals over 50 TWh²⁴ per year, in comparison with Norway's annual 5 TWh. Additionally, as a result of the ban on landfilling degradable waste, steady increase of total waste produced, and a lack of incineration capacity, Norway has recently experienced a surplus of combustible waste. A dip in overall waste generation due to the financial crisis led to a shortage of supply for Swedish incineration plants. This, in turn, led to increased demand for combustible waste from the Norwegian market, raising export volumes.

49. In general the Swedish incineration plants have a higher willingness to pay for combustible waste than their Norwegian counterparts. Consequently Swedish incinerators are able to offer lower tipping fees. Nevertheless, due to the significant transportation costs the Norwegian incinerators are still able to compete for combustible waste, even with higher tipping fees.²⁵

50. At the same time, while the Swedish incinerators win contracts for Norwegian combustible waste, their Norwegian counterparts look abroad to fill spare capacities. Imports have increased over the last few years, and particularly British waste is increasingly finding its way to Norwegian incinerators.

²⁴ <http://www.svenskfjarrvarme.se/Statistik--Pris/Fjarrvarme/Leveranser/>

²⁵ <http://www.miljodirektoratet.no/old/klif/publikasjoner/2983/ta2983.pdf>

Landfill tax in the UK is currently £ 72 per ton²⁶, making Norwegian incinerators offering tipping fees ranging from around NOK 400 (approx. £ 43) to around 700 (approx. £ 75) per ton a realistic alternative. However, the total volume of waste imported for energy recovery remains fairly low, and is only a minor share of total waste imports.

51. Material recovery and incineration remain alternatives in the waste treatment market. The cost of material recovery depends on prices for secondary raw materials. Material recovery's competitiveness is thus connected to fluctuating international raw materials prices.

4.2 Cross-subsidization

52. A recent report²⁷ produced for business associations representing private waste management companies indicates that tipping fees for waste originating from the legal monopolies on household waste are significantly higher than tipping fees for non-monopolized waste. In other words the fees monopoly waste collectors pay the incinerator plants far exceed the current market price on combustible waste. The report suggests three possible contributing factors:

- The allocation of costs of capital to the monopolized business;
- The value of combustible waste is a result of international demand, rather than based on costs of collecting locally. Particularly the demand from Swedish incinerators plays a significant part in pricing;
- Spare capacity after handling household waste allows incinerators to price at incremental cost.

53. Some private waste management companies claim that publicly owned incinerators, granted exclusive rights to household waste within the municipality owners area, are being constructed with excessive capacities. Thus, there is spare capacity beyond the monopolized waste. It is argued that the publicly owned incinerators, seeks to fill this capacity, by offering prices to the market, which only take incremental costs into account. The municipalities which have invested in incineration plants have to cover their costs of capital through waste fees levied on their inhabitants, in accordance with the Waste Regulations.

54. The claim is that the municipalities tendering their combustible waste management contracts, instead of investing in an incineration plant, are currently being offered prices at incremental costs. The implication is that waste fees in municipalities which chose to invest in incineration plants will be higher than those in municipalities which chose not to invest in incineration plants.

55. The result, the argument goes, is that the inhabitants of municipalities that have built incinerator plants are subsidizing the other municipalities through higher waste fees. In addition the added spare capacity, and the possibility of pricing at incremental cost, contributes to lowering the price of combustible waste, making material recovery increasingly unattractive as an alternative.

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http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent&propertyType=document&id=HMCE_CL_000509#P3_54

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<http://www.mef.no/ikbViewer/Content/109636/Rapport%20Avfallsh%C3%A5ndtering%20og%20kryssubsidiering.pdf>