



## UvA-DARE (Digital Academic Repository)

### Organizing Waste Reduction in the Dutch Waste Sector

de Jong, P.T.

**Publication date**  
1999

[Link to publication](#)

#### **Citation for published version (APA):**

de Jong, P. T. (1999). *Organizing Waste Reduction in the Dutch Waste Sector*. [Thesis, fully internal, Milieukunde, Universiteit van Amsterdam].

#### **General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

#### **Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

## 4. REGULATION OF THE WASTE MARKET IN NEW JERSEY

### 4.1 Introduction

The main reason for studying the New Jersey waste market is due to its efforts to strictly regulate its waste market. New Jersey is a good example of a highly populated state that became aware of space limitations for waste disposal. New Jersey had tremendous problems in the seventies when it became apparent that its disposal capacity was insufficient for the amount of waste generated. Most solid waste was disposed of at privately owned landfills or dumps that were not constructed or operated with the inclusion of any environmental safeguards. As a result of pollution, landfills had to be closed. By the early 1980s, over 300 landfills that posed serious environmental hazards or had exhausted capacity, had closed. (State of New Jersey, 1993)

Pending completion of new facilities, arrangements with out-of-state disposal facilities had to be made. The crisis became especially complex when a number of states restricted the import of waste. "On several occasions, New Jersey waste was banned, without notice, from out-of-state facilities, resulting in serious disruptions of service and unhealthy conditions as waste collected in the streets." (State of New Jersey, 1993, p.2) By the late 1980s, the 'solid waste crisis' had become a national issue, and New Jersey was the forefront of both the problem as well as the solution.

New Jersey, therefore, had to solve serious capacity problems: first in the seventies, due to landfill closures, and then in the eighties due to restriction of out-of-state capacity. The state's interest in source reduction and recycling was triggered by mounting problems in solid waste management. New Jersey was the first state to devise a mandatory recycling program, which was adapted by the state legislature in 1986. (VROM, 1990)

The New Jersey government searched for solutions for the waste problem by increasing intervention from state government in the waste market, and by using regulatory measures in order to gain control over waste streams. Meanwhile a large volume of waste was being transported, legally or illegally. As the president of a transfer station discussing the problems of interstate shipment and flow control stated: "Money talks (and) shit walks."

In this chapter the structure of the waste sector in New Jersey will be described. The purpose is to view the situation with respect to waste reduction and to examine what can be learned from the New Jersey situation. The description of the New Jersey waste sector will contain five elements that appeared to be important in an earlier phase of the research project, namely:

separation or integration of functions in the waste market, conditions for transactions, the scale on which functions have been given form, the roles of public authorities and the responsibility for waste reduction.

In the following sections, first the legislative framework will be described briefly. Secondly, actors and transactions in the waste market will be explained. Thirdly, the way in which state government attempted to regulate the market will be described, as well as the kinds of measures they used in their endeavour to achieve waste reduction. Finally, in the conclusion the relationship between the structure of the waste market and waste reduction will be analyzed.

#### **4.2 Waste Law in New Jersey: Responsibilities and Tasks of Governmental Bodies**

In New Jersey solid waste collection, transportation and disposal are comprehensively regulated by state laws.

In 1970 a *Solid Waste Utility Control Act* (SWUCA) was introduced in New Jersey, and placed economical control of utilities under the Board of Public Utility (state level). The SWUCA regulates the solid waste industry as a traditional public utility. The fundamental objective of this 'regulator' is that: 'the rate base is the rate of return'. This statement means that the rate setting system sets tariffs to cover the collector's operating expenses plus a 'reasonable' rate of return of approximately 12.5% on invested capital. (State of New Jersey, 1989)

Another law, the *Solid Waste Management Act* (SWMA), placed environmental control under the Environmental Protection Agency at the federal level.

In the eighties state government wanted more intervention in the waste market. It was already part of the State's responsibility to approve any utility-sales to another utility. The *Assembly Bill 901* of 1975 was introduced to ensure the prevention of trust forming: the state government did not want a situation in which one utility has a dominant market share in its area. The assumption behind the policy of the state was that competition between collectors would result in decreasing prices for collection. On the other hand, they wanted to prevent the so-called 'bad actors' (organized crime) from entering the solid waste industry.

In 1991 the State government introduced a new act, the *Regulatory Reform Act*. Under this new act collection and transportation services were subject to a 'phased deregulation' of rates and charges. The Department of Environmental Protection & Energy (DEPE) sets 'rate bands' in which private competition is allowed to operate. The objective of this regulative instru-

ment is to prevent a monopoly and to create uniform tariffs for each waste generator that is served by the same collector.

In practice, collecting or transporting organizations have to take three steps before an increase or decrease in tariffs is accepted by the state government. They have to demonstrate: what dumping or incineration costs have to be paid; what investments for equipment is needed; and what service-fee for picking up waste is asked. When an organization has a state-approved-service-rate, changes in rates are allowed to a maximum of 29% of the original.<sup>1</sup>

### 4.3 The Waste Market in New Jersey: Participants and Transactions

#### 4.3.1 Waste management planning by governmental bodies

The SWMA sets up a *state* planning program. The DEPE adopts a State Plan, which includes objectives, standards and criteria for evaluating county plans. The SWMA requires 'the maximum practicable use of resource recovery procedures', which is defined to include reuse of energy or materials, recovery and recycling. In 1981 the Recycling Act, which was an amendment to the SWMA, created a framework for a voluntary recycling program to be established by the counties to provide for the recycling of 25% of the municipal waste stream. This act was then amended in 1987 to become the Mandatory Source Separation and Recycling Act. The 1993-2002 State Plan set a 60% recycling rate to be met by 1996. This rate concerns the total waste stream; methods to achieve the volume reductions are decided by the counties. There are three mandatory materials to be recycled, namely glass, aluminum and paper. Counties have to develop recycling activities for these materials; other materials may be chosen voluntarily. (State of New Jersey, 1993)

The 21 New Jersey *counties* are responsible for planning the collection, transport, and processing and disposal facilities on the basis of self-sufficiency. Every 20 years counties have to make Solid Waste Management Plans. Those plans are subject to state level (DEPE) supervision and plan approval. The counties are given primary responsibility to oversee plan implementation. Besides planning the required capacity, the counties are required to decide on sites for facilities and to select the technology for disposal. They are also authorized to finance and develop facilities and provide

---

<sup>1</sup> The state planned to evaluate the Regulatory Reform Act in 1996, to find out whether the existing situation was convenient. The evaluation resulted in the decision to phase out all regulations for collection and transport.

services, or allow private organizations to develop facilities after the county has chosen sites and technology.

The planning of disposal capacity is, therefore, a task of the 21 counties. In New Jersey, the state forced counties to cooperate to prevent the overcapacity of disposal facilities. Over the past few years the counties, also seen as '*waste districts*', are, therefore, cooperating on planning (State of New Jersey, 1993).

The 567 *municipalities* are the executors of policy plans. In populated areas, they have taken the responsibility for providing least-cost collection services to households, institutions and small enterprises. This is a task that has been extended since its inception. There is no national legislation in New Jersey that requires 'extended producers' responsibility'; on the contrary, 'consumers' responsibility' as a credo appears more apt. Whomever buys materials or products is responsible for them: when he comes to a point that he does not regard it as something useful anymore and considers it as waste, the responsibility remains. Municipalities are not obliged by law -as they are in the Netherlands- to provide a collection service that is the least costly, available for every household and environmentally sound. Nevertheless, municipalities often take such. They either hire private enterprises to provide waste collection services, or maintain their own equipment and their own employees as a division of their sanitary health service. In more rural, less densely populated areas, households, institutions and small enterprises are obliged to contract a collecting service themselves.

#### 4.3.2 *Waste Market*

There is no clear pattern of the provision of waste collection and processing. *Collection* services for households, small enterprises and institutions are provided in three basic modes:

- municipal provision;
- a contract between a municipality and a private collecting organization, and
- a contract between a private collector and the waste generator.

In 1989 there were 670 licensed collectors. (State of New Jersey, 1989). The ownership and operation of *recycling plants* are mostly in the hands of private companies.

Only 3 of the in total 37 *landfills* in New Jersey are owned and operated by municipalities; the remaining 34 are owned or operated by private companies.

The four *incineration plants* are owned by the counties. However, they are operated by private companies.

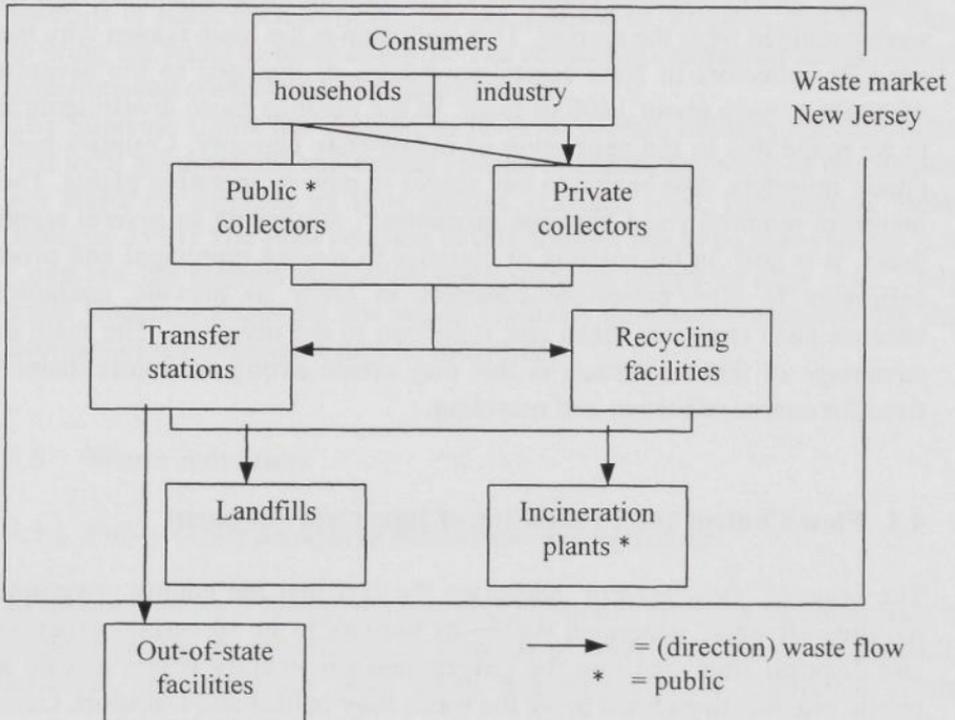
Most of the fifty *transfer stations* are privately owned and operated. They date from the period in which landfills had to be closed and the operating, processing and incineration capacity did not match demand. As a result, state government allowed transfer stations to ship waste to out-of-state-facilities. After capacity was extended in New Jersey, those organizations kept functioning as central points from which waste and recyclable materials were distributed to destinations within or outside the state.

In New Jersey, the functions in the waste market are vertically integrated. This phrase means that most of the time an organization that is providing a collecting, processing, incinerating, landfilling or transferring service, also provides other services. Most respondents agree that with the aim of achieving waste reduction, the integration of functions is not always effective.

### 4.3.3 Physical flow of waste

After the separation of economically attractive components, collectors transport the recyclables to processors or transfer stations. The waste, which means the residue after separation, is transported to transfer stations or to

Figure 4.1 Physical Flow of Waste



disposers. For both the collection and transport of waste county-permission is always needed. In that way, counties try to gain control over waste flows. In figure 4.1 the physical flow of waste between participants in the waste market is shown schematically.

#### 4.3.4 *Contracts*

The contracts between private or public collectors and incinerators in New Jersey vary. Some are only 1-year contracts, others last 5 years. Normally the contracts include incineration prices and contain agreements on flow control (to be explained in the following section). Most of the contracts are 'put-or-pay-contracts', which means that even when the contracting parties do not bring the agreed-upon tonnage, they still have to pay the full price. The amount of waste that will be brought annually and the price that has to be paid for disposal are fixed. Some of the respondents underline that these kinds of contracts are very much in conflict with initiatives like source reduction and recycling, because there is no financial incentive to reduce the waste stream that is going into a disposal plant.

The rationale behind these put-or-pay-contracts is in principle the same as the one behind county initiatives to gain control over the flow of waste streams. In the seventies, counties asked collectors for 'payments in advance' in order to raise the huge, required investments for new incineration plants. A lot of collectors could not come up with those payments, and they were excluded from the market. This exclusion is the main reason why there are 670 collectors in New Jersey nowadays, as opposed to the seventies, when there were about 1600 of them. In the eighties more investments had to be made due to the restriction of out-of-state capacity. Counties had to attract investors, like banks, to buy shares of new incineration plants. These investors required fixed 'revenue guarantees'. According to several respondents, it is still in the interest of counties to require municipal and private collectors to sign put-or-pay-contracts in order to provide guarantees, because such contracts mean risk reduction to the investors. The main disadvantage of these contracts is that they create strong economic disincentives for source reduction and recycling.

#### 4.4 **Flow Control and Prohibition of Interstate Shipment**

The issue of 'flow control' addresses the fact that the county government requires all waste generated within its borders to go to certain processing and disposal sites, and that the government can specify where private and public organizations must bring the waste they collect and transport. County

governments are obliged by law to estimate how much waste will be released within their own waste district, and then calculate the capacity needed in terms of facilities for incineration, landfilling and recycling. Counties must submit their solid waste management plans to the state for approval, and for gaining state permission to have facilities for disposal and recycling built. In order to finance these facilities, counties had to guarantee investors a certain supply of waste.

Flow control was developed initially as a planning tool. New Jersey was one of the first states in the USA that acquired experience with this subject. Flow control appeared to be an useful instrument for the needed guarantees. Incineration plants require the largest investments and therefore demand the most guarantees by investors. Through their permitting ability, counties can force public or private collectors, and transporting organizations to bring their waste to facilities within New Jersey counties. With the flow control ordinances, local governments invoked a principle which limits the handling of discards by other parties. The limiting of a non-franchised, free-enterprise waste handling system forms the nub of the legal problem (Powell, 1993b).

Some private collection companies have fought the issue of flow control and prohibition of interstate shipment with success in court. It is in their interest to bring recyclables and waste to the cheapest disposal facilities or to recycling facilities of their own choice, which are not always located in New Jersey. For example, some big private companies have built their own landfills in states such as South Dakota, Indiana or Virginia, and they want to bring the waste to those landfills. The collection companies do not accept governmental control over the flow of waste.

The Supreme Court has decided in favor of private industry, having ruled that local governments can neither restrict interstate shipment of recyclables nor waste for disposal by flow control. (Cohen, 1994; Greenhouse, 1994; Johnson, 1994) The final decision in this conflict has to be made by the U.S. Congress, the highest legislating body with the ability to alter laws. Only when Congress alters the law which regulates interstate commerce can the decision of the Supreme Court be overruled.

## **4.5 Waste reduction**

### ***4.5.1 Policy Goals on Source Reduction and Recycling***

In principle in New Jersey, the one who consumes products and materials is responsible for the processing or disposal of what is left over. In practice, however, municipalities have taken responsibility for municipal waste

voluntarily. They are indeed made responsible by law for facilitating the recycling of, at least, paper, glass and aluminum discarded by households, small enterprises and institutions. The state's interest has taken a step further compared to other states. The Current State Plan of New Jersey sets a 60% of total waste stream recycling rate. Rates were to be met by 1995 (State of New Jersey, 1994). There is no quantitative policy goal set on source reduction, although the necessity to stimulate source reduction is recognized and mentioned in the current Solid Waste Management Plan (State of New Jersey, 1993).

#### 4.5.2 *Waste registration*

According to figures expressed in The Solid Waste Management State Plan Update 1993-2002 (State of New Jersey, 1993), the total waste stream increased from 11.4 million tons in 1985 to 14.7 million tons in 1991. These figures include the stream of materials and products that is handled for recycling purposes. Recycling initiatives resulted in decreasing rates on the total waste stream. The figures below show that recycling percentage grew from 8% in 1985 to 52% in 1991. The figures also show that disposal at out-of-state-facilities has been decreasing since 1989. New Jersey is attempting to achieve self-sufficiency by 1999.

*Table 1* Solid waste generation, recycling and disposal statistics<sup>1)</sup>

<i>Year:</i>	85	86	87	88	89	90	91
Total solid waste stream x millions of tons <sup>2)</sup>	11.4	11.5	12.4	14.0	14.3	14.8	14.7
% recycling	8	10	15	39	43	46	52
% disposal in-state	85	83	74	33	31	32	30
% disposal out-of-state	7	7	11	28	26	22	18

1) included are municipal & vegetative waste and bulky & industrial waste

2) 1 ton= 907.2 kilograms

(Source: *State of New Jersey, 1993*)

In 1990 the total nonhazardous solid waste stream of New Jersey was 14.8 million tonnes. Of this total stream 54% was disposed of. Nearly 40% of this sub-stream went to facilities out-of-state, predominantly landfills in Pennsylvania. The remaining 60% stayed in the state of New Jersey itself: 28% of it went to in-state incineration plants and 72% was landfilled.

In comparison with the figures of 1985, waste generation has increased by 30%. However, a decrease was achieved in 1991, when the statewide generation rate fell to 14.7 million tons. The most likely explanation seems to be the increase in recycling: in 1985 only 8% was recycled, while in 1991 52% of waste generated was recycled. Figures from 1992 (provided by a representative of the State of New Jersey) show that the total waste stream decreased to 13.2 million tons. Nevertheless, the recycling rate fell to 47% (approximately 6.3 million tons were recycled).

#### 4.5.3 *Waste reduction incentives*

##### *Instrument of communication: waste audits*

One of the progressive measurements indicated in the Solid Waste Management State Plan 1993-2002 that would necessarily lead to source reduction is *waste auditing*. Businesses and institutions can be called upon to integrate source reduction and recycling practices into their daily operations, and to conduct waste audits and surveys to develop the most suitable management techniques. They can also be asked to develop procurement guidelines that encourage and support the purchase of recycled materials. (State of New Jersey, 1993) Some of the respondents were skeptical about this measure yielding many positive results. The negativity stems from businesses and institutions only thus far being asked to conduct waste audits and waste reduction plans on a voluntary basis, and because private collectors (as an intermediary between county government and waste generating entities) are asked to promote source reduction and the conducting of waste audits to their customers. Besides the fact that these collectors are asked to provide services that in the long term conflict with the main activity of their companies, these private companies are also not eager to provide this service, because they fear that some of their customers will not like a critical attitude and will hire the services of a competitor as a consequence.

In the short term, waste-minimizing activities through recycling and even through source reduction are in the interest of private haulers like BFI and Waste Management, as well as all smaller enterprises. For them waste minimizing activities are a way to make money, and it provides them with a good image. They can provide a full array of services by also participating in activities like recycling and source reduction. In the long term, however, source reduction especially is not in their interest. Source reduction will eventually reduce their turnover and therefore negatively affect their basic waste handling activities. As long as there is (too) little movement in the area of source reduction the private organizations do not see their basic activity being threatened.

*Transaction-based instruments: state recycling tax and annual recycling tonnage grants*

In 1993 tipping fee costs for disposal in New Jersey differed from an average of:

landfilling:	\$ 74 per ton waste, ranging from \$ 49 to \$116; <sup>2</sup>
incineration:	\$ 93 per ton waste, ranging from \$ 73 to \$122;
transfer stations:	\$111 per ton waste, ranging from \$102 to \$124.

(State of New Jersey, 1993)

Disposal tariffs contain taxes: the Solid Waste Services Tax (\$0.85 per ton in 1992) and the Resource Recovery Investment Tax (\$4 per ton in 1992). These taxes are both supporting a statewide fund. The Resource Recovery Investment Tax is available to counties in order to invest in new facilities.

Only landfill prices include another tax, namely the State Recycling Tax (\$1.50 per ton in 1988). The revenues of this tax goes to a third statewide fund. The content of the fund is then divided by the state every year: 7% is dedicated to the state for program planning; and 8% to counties for program planning, 10% for education programs, 35% for low-interest loans and research, and 40% to municipalities or counties for annual tonnage grants.

In order to stimulate recycling, these annual tonnage grants are based on the amount (in weight) of recycling that is done within municipalities. There is no recycling tax on the solid waste going to incineration facilities. As some respondents remarked, the decrease in landfilling activities (in favor of incinerating and composting activities) has unfortunately led to less money being collected by the recycling tax on landfilling. As a consequence, municipalities receive less money from this tax now than they would have received if they had recycled less and continued with landfilling as before. Another consequence of levying a recycling tax on landfilling is that municipalities that do not use landfilling, but only have incineration capacity, do not have to support the recycling fund. Ironically, those municipalities are able to achieve relatively high recycling rates while being subsidized by those municipalities that make use of landfills.

According to some respondents, this tonnage grant program promotes recycling at the expense of source reduction. Fishbein & Gelb (1992) also conclude that this system could lead local recycling coordinators to oppose source reduction efforts that would, if successful, reduce the grants by reducing the amounts of materials generated and recycled.

---

<sup>2</sup> 1 ton= 907.2 kilogram

#### 4.6 Conclusions: Structural Elements and Waste Reduction in New Jersey

New Jersey gives an example of the difficulties that have to be overcome when a state government has to deal with a waste crisis due to a shortfall in waste handling capacity within its own (state) borders. As a result, county authorities tried to attract investors in creating new capacity and state government-made policy on waste reduction. The New Jersey government tried to regulate the waste market as a way to deal with the capacity problem.

The wish to get control of the material flow within society was demonstrated by the initiative taken to limit the playing field for organized crime in the waste market, and to prevent the situation whereby trust-forming increases prices for collection and processing. Authorities tried to regulate the market by stipulating that waste collecting or transporting organizations were to bring their waste to specific sites (flow control ordinances), and by setting rate bands and requiring fee approval by state government (economic regulation).

The way the market is structured at present is the result of these impulses to get a grip on material flows, more than it is the outcome of a process in which waste reduction was the leading motive. However, for our study the relationship between the structure of the waste sector and waste reduction is important and will be analyzed in the following sections.

##### 4.6.1 *Separation/Integration of functions*

The functions in the waste market are not strictly divided. On the contrary, they are often vertically integrated: some organizations provide, for example, collection as both transporting and processing services. In general, respondents agreed that when waste reduction has to be achieved, the combination of the collection service with other functions in the waste market is not a favourable condition.

##### 4.6.2 *Conditions for transactions*

Besides the fact that it should limit the export of waste to out-of-state facilities, strict regulation of the market was also supposed to diminish the financial risks that investors in incineration capacity had taken. Counties, to protect their investments in these large-scale disposal installations, extorted put-or-pay contracts from collectors and other waste transporting organizations. These contracts are contrary to waste-reduction incentives, because there is no financial incentive to reduce the amount of waste delivered to

incineration plants. So, applying incineration techniques on a large scale can have an impeding effect on waste reduction. Put-or-pay contracts should therefore be avoided.

Much has been said already about the conditions for transactions. In principle the underlying philosophy of New Jersey policy is interesting, but as was concluded before, economic regulation and flow control ordinances need much enforcement. It also appears that the required legal grounds will be avoided in the future. Ultimately the New Jersey government has not succeeded in properly regulating the waste market. As noted before, the Supreme Court ruled that state governments cannot restrict interstate shipment by flow control. As a result of the experience with partial economic deregulation, a tendency towards a more competitive waste market can be expected. This conclusion was confirmed by the fact that in 1996 all economic regulation was phased out (DeFeo et al, 1997).

#### 4.6.3 *Roles of governmental bodies*

In New Jersey, the market functions of collection, processing and disposal of solid non-chemical waste are within the hands of private companies. The collection of urban household waste and the shareholdership of incineration plants are the domain of the local authorities. So their direct interest in the waste market is restricted. However, they do have a clear regulatory function: governmental bodies try to regulate the market by prohibiting interstate shipment of waste and by demanding flow control permits from collectors and transporters.

#### 4.6.4 *Scale*

In theory, the planning of waste management lies at the county level, and the state tries to become self-sufficient in capacity. However, the planning process does not succeed as a result of the domination of free competition. It is not yet clear whether the shift in scale from the state to the national level will result in a restrictive or stimulative effect on waste reduction.

#### 4.6.5 *Responsibility for waste reduction*

The responsibility for waste reduction is not borne by a specific organization in New Jersey, but stimulating waste reduction in general appears to be a task of governing authorities. Their original intention was to strictly regulate the market, but this was too difficult.

The lack of success of the waste reduction policy measures in New Jersey deserves some additional remarks. It is remarkable that quantitative

policy goals have only been formulated on recycling and not on source reduction. Furthermore, it is striking that only communicative incentives are given for source reduction, while economic instruments are created to stimulate recycling. Raising taxes on disposal and raising annual tonnage grants seems to work out positively in stimulating recycling, but it is a pity that the recycling tax is only levied on landfilling and not on incineration as well. A decrease in landfilling activities, as a direct consequence of increasing incineration and composting activities, results in a reduction of the amount of money raised by the landfill tax for recycling. The absence of grants to support the efforts made by municipalities to achieve source reduction looks like another omission in New Jersey's waste policy. The choice to make the government responsible for waste reduction obviously did not result in effective policy. Regulation, as it was practiced by the government, has in many ways been ineffective and also caused adverse effects.

#### 4.6.6 *Conclusions*

The New Jersey case does not only show one possible solution to overcome a waste crisis within a society, but also shows the difficulties in implementing the chosen solution.

First, the issues of 'flow control' and 'interstate shipment' are important, because they clearly indicate the conflicts between private and public interests. Under the pressure of the Supreme Court, the state government has to cease the prohibition of waste transports as an approach to control the flow of waste. This has been found unconstitutional because of interstate commerce provisions. There still is a slight possibility that congressional action may permit the states to limit interstate export options in the future, although most respondents do not expect that such a thing will happen.

Secondly, strict regulation of the waste market by [territorial?] jurisdiction requires strong enforcement. As long as differences in incineration and landfill fees make it worthwhile for private industries to transport waste to other counties, it will remain difficult to prevent them from doing it illegally. The same situation can be expected when differences in disposal fees between states exist or when there are differences in standards for disposal plants between states. This would suggest a need for tuning the conditions and legal requirements under which participants may operate in the waste market to a federal level. However, American states cannot be forced to cooperate in the formulation of common waste policy and in setting up legal requirements in the waste field.

A parallel with the European Community seems to arise. Currently, the waste management systems within European countries are still based on the principle of self-sufficiency. However, the trend toward internationalization

of markets for non-chemical, solid waste has begun and cannot be neglected anymore.

It seems as if the waste reduction policy in New Jersey has not had a significant effect thus far. Nevertheless, some of the policy instruments being used are of great interest. Although the situation would be better if the recycling tax was levied not only on landfilling but also on incineration, it did trigger recycling activities in practice. Waste auditing also seems very promising as an example for the Netherlands. It appears that better results can be expected when an organization with no vested interest in waste handling contacts households for the waste auditing work. Therefore, private collectors should be excluded from this task. Perhaps this would be a suitable task for a local public organization, under the condition that it would have no further involvement in disposal. In the case of such a clear separation of roles, governmental bodies would also be better fit to assume a regulating task. Perhaps it would be a good idea in the future to let flow control ordinances serve the interests of local authorities in waste reduction, and not in disposal, as it did in the past.