

Effectiveness of collection and recovery of packaging waste

Do state activities contribute to the recovery of packaging waste?

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Summary of audit results

What did we audit?

The National Audit Office audited whether the state's activities support the collection and recovery of packaging waste so as to encourage packaging undertakings to recover as much packaging waste as possible and meet the target recovery indicators established in the European Union Directive on Packaging and Packaging Waste.

Why is it important for tax-payers?

Due to an increase in consumption the generation of packaging waste has doubled in the last decade: in 2008 approximately 215 000 tons of packaging waste was generated in Estonia. Although most of packaging waste should be recovered, packaging forms nearly half of the waste in the bins of Estonian households, and generally ends up in a landfill. In the worst case scenario, packaging waste ends up in the woods, causing littering, or is incinerated in the household, being harmful to health and the environment.

To reduce the use of natural resources and environmental pressure, packaging should be avoided or reduced and generated packaging waste should be collected separately and recovered.

In Estonia people can drop off their packaging waste at collection points for free, and in case of packaging concerning which a deposit has been established they can even recover their expenses. Thus, separate collection of packaging waste is economically beneficial.

Pursuant to European Union requirements the state must ensure the recovery of packaging waste within the scope of target recovery indicators. For instance, 70% of glass packaging waste must be recovered. First and foremost, packaging must be recycled (within the scope of target recovery indicators) and only the rest can be incinerated in waste incineration plants. Ensuring compliance with state target indicators is the responsibility of undertakings who are obliged to collect packaging waste at their own expense and ensure its recovery. If an undertaking fails to do so, it must pay excise duty on packaging.

What did we find and conclude on the basis of the audit?

According to the NAO the state has not succeeded in ensuring the full responsibility of packaging undertakings for the recovery of packaging waste placed on the market by them. This is mainly due to poor supervision over packaging undertakings, recovery organizations representing them and over users of recovered packaging waste. This has led to a situation where the state as a whole is not able to ensure recovery of packaging waste within the European Union target indicators while organizations representing packaging undertakings claim that they have

complied with the requirements of target indicators. According to the NAO, because of the failure to check the data on placing packaging on the market and recovery, nearly one billion kroons of excise duty on packaging may not have been recovered by the state in 2009. As people don't find separate collection of packaging waste convenient, a large portion of recoverable packaging waste ends up in landfills along with municipal waste. If the recovery target established by the European Union is not met, the state, not packaging undertakings shall be deemed responsible.

Main observations of the NAO:

- **Packaging register does not provide information on how many undertakings actually place packaging on the Estonian market. Calculations of the Ministry of the Environment show that compared to the amount declared to the packaging register by recovery organizations and packaging undertakings, almost twice the amount of packaging is placed on the market.** Undertakings are interested in making packaging amounts seem smaller than they really are because this will reduce the service charge they are paying to the recovery organisation. As organizations fail to comply with the requirement of auditing the undertakings' packaging data, the data in the packaging register has not been checked. If the data on placing on the market is inaccurate, the calculation of compliance with the recovery target indicators for packaging waste is inaccurate too, as the latter constitutes a percentage of the amount of packaging placed on the market.
- **Supervision does not cover packaging undertakings belonging to recovery organizations (ca 80–90%).** For these undertakings, neither the Environmental Inspectorate nor the Tax and Customs Board have checked the data on packaging waste from its generation to recovery, on the basis of source documents. This allows for a possibility that recovery of packaging waste shall comprise activities that actually included the recovery of different type of waste, or that the actual recovered amount was less than stated amount, which helps to fabricate compliance with target recovery indicators and avoid claims for excise duty. Waste delivered to an undertaking preparing the recovery of waste (i.e. undertakings engaging in transporting, sorting, pressing of waste) instead of the actual reusing undertaking are also deemed recovered.
- **According to the NAO, approximately one billion kroons of excise duty on packaging may not have been recovered from packaging undertakings by the state in 2009.** The NAO based its assessment on the Ministry of the Environment's calculation method for the generation and recovery of packaging waste as well as on the data of the waste reporting information system, and found that most target recovery indicators for packaging waste were not met in 2009. Therefore, excise duty must be paid on the outstanding amount. However, the aim of packaging waste collection system is not to generate income for the State Treasury but to collect as much waste as possible.
- **Activities of packaging recovery organizations are not in compliance with all accreditation requirements.** Once accredited,

the recovery organization cannot be penalized if it fails to fulfil its legal duties. For instance, the state cannot ensure that the organization's sufficient financial capacity and transparency of financial relations, or the compliance with legal requirements established for the packaging container network.

- **Many residents of Estonia are not aware of the fact that packaging waste can be disposed of for free.** A survey commissioned by the NAO revealed that 54% of Estonia's residents are not aware that they could drop packaging waste off for free. Although many residents claim to know how separate collection of packaging waste works and where to dispose of packaging waste, few of them separate packaging waste from municipal waste. This way, people first pay for packaging upon making a purchase at the shop, and then again when the undertaking responsible for waste transport empties the bin for municipal waste.
- **The system for collecting packaging waste by type is inconvenient and complicated for residents.** There are many places where packaging waste containers are located too far from people's homes, it is not possible to dispose of different types of packaging waste at once or dropping the waste into the container is inconvenient. Another confusing factor is that different types of waste collection (packaging containers of apartment associations, public packaging containers, packaging bag service) are used across Estonia or even within the same city, and the appearance and marking of packaging containers varies too. This because development of container network is not a priority for packaging recovery organizations as a certain amount of packaging is received directly from manufacturing or business enterprises or waste handlers. For this reason, recovery organizations do not make enough effort to make the container network more user-friendly. Neither state nor local government control can ensure the sufficiency and stability of the container network.

Main recommendations to the Minister of the Environment:

- Initiate the amendment of the Packaging Act so as to
 - more clearly regulate the principles of verifying the recovery of packaging waste;
 - provide clearer requirements for recovery organizations regarding the completion of the overview (reports) of their activities;
 - specify the requirements for the contents of packaging audit;
 - establish a term for the accreditation of recovery organisations;
 - specify the obligation of recovery organizations to inform the general public;
 - specify the marking of containers of different types of packaging waste.

- Ensure that the Environmental Inspectorate regularly inspect all recovery organisations, larger packaging undertakings as well as undertakings who have not joined recovery organizations in order to establish whether the abovementioned undertakings adhere to the requirements of the Packaging Act.

Main recommendations to the Minister of Finance:

- Initiate the amendment of the Packaging Excise Duty Act regarding the following:
 - establish an obligation to pay excise duty upon placing the packaging on the market and allow the state to reimburse the excise duty if the undertaking or recovery organization has verified recovery of packaging waste within the scope of exemption from excise duty on. Alternatively, contemplate the option of paying a certain amount of packaging excise duty upon placing the packaging on the market.
 - accordingly adjust packaging excise duty if undertakings who are required to report to the packaging register fail to submit the report by set deadline or submits a report that is not audited and does not conform to legal requirements.

Replies of the Ministers, Director Generals of the Tax and Customs Board and Environmental Inspectorate, and of the representatives of local government associations

Minister of the Environment concurs with most of the NAO's recommendations. The Ministry's 2010 work schedule includes the preparation of a draft to amend the Packaging Act, which shall address many problems identified in the course of the audit, including the issue of recovery certificates for packaging, auditing of data, establishing a specific term for the accreditation of recovery organizations, etc. the Minister of the Environment admits that data submitted to the packaging register and waste reporting information system on the generation of packaging waste is insufficient. Functioning of the packaging register shall be improved by development operations carried out in 2010 and 2011.

Minister of the Environment supports the NAO's recommendation to pay a certain amount of the excise duty is paid upon placing the packaging on the market. Therefore the Minister finds that the Tax and Customs Board should be the one carrying out most of the supervision over the placing on the market of packaging and packaging waste whereas the Environmental Inspectorate should be responsible for checking compliance with target recovery indicators. Minister of the Environment agrees that the Environmental Inspectorate's efficiency in the field of packaging waste must be improved.

When it comes to improving the collection of packaging waste from the residents, the Minister of the Environment sees the importance of cooperation between local governments (incl. their cooperation structures) and recovery organisations. One of the possible measures is to introduce to the local governments the option of linking the collection of

packaging waste to the organized transport of municipal waste and of collecting packaging waste in the place of their generation.

Minister of Finance concurs that excise duty on packaging as a measure to ensure packaging recycling is out of date and the system should be reorganised. This shall be done simultaneously with the improvement of the tax system's sustainability, planned in the development plan of the area of government for the period of 2011–2014. The Minister of Finance is also of the opinion that it is necessary to contemplate the establishment of a system where part of the excise duty is paid upon placing the packaging on the market.

Minister of Finance finds that in order to improve supervision over undertakings who are required to report to the packaging register, it is necessary to ensure the accuracy of data recorded in the packaging register as well as verify whether the register allows requests needed for supervisory operations.

Minister of Finance concurs that the division of rights and responsibilities upon checking compliance with the packaging recovery obligation should be reviewed in cooperation with the Minister of the Environment, and that cooperation between the Environmental Inspectorate and the Tax and Customs Board should be improved.

Deputy Director-General of the Tax and Customs Board concurs that state supervision over the collection and recovery of packaging placed on the market is fragmented, being divided between the Environmental Inspectorate, Tax and Customs Board and local governments. It is the duty of the Tax and Customs Board to carry out supervision, first and foremost, over the accuracy of calculation and payment of excise duty on packaging. Adhering to an agreement concluded between the Tax and Customs Board and the Environmental Inspectorate, the Tax and Customs Board is willing to perform its duties if the Environmental Inspectorate delivers relevant data.

Director-General of the Environmental Inspectorate is of the opinion that omissions in the Packaging Act hinder supervision. A separate supervisory group to improve packaging control shall be established by 2011, and instructions on carrying out packaging supervision have been prepared for said group. Cooperation with the Tax and Customs Board shall also be specified regarding reciprocal exchange of information, planning of work and on-site inspections.

Representatives of the Association of Estonian Cities and Association of Municipalities of Estonia agree with the conclusions and recommendations and consider the recommendations addressing the amendment of the Packaging Act especially relevant. Local government associations are of the opinion that supervision over recovery of packaging waste should be excluded from the duties of local governments.

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Overview of the field

Packaging waste generation and recovery

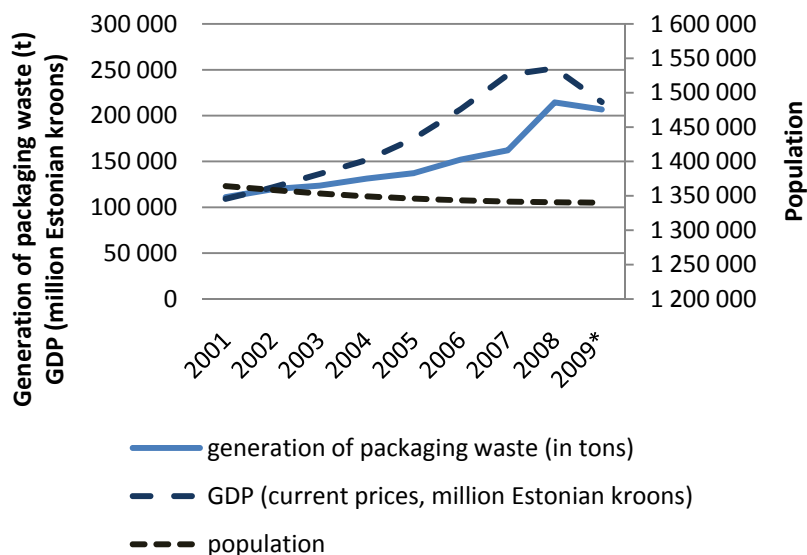
1. Abundance of goods and their packaging has led to a situation where residents as well as undertakings generate large amounts of packaging waste. Packaging waste forms 34% of the weight and up to 60% of the volume of mixed municipal waste of private households. This means that more than half of the bin is full of discarded packaging.

2. Collection of packaging waste is necessary to prevent dumping in woods, incineration in private households and landfilling. Waste incineration is harmful to health and the environment and instead of landfilling it is much more beneficial to manufacture new products or recover energy from valuable packaging materials. Moreover, separate collection of packaging helps reduce the volume of mixed municipal waste and thus also the amount of fee paid for waste transport as packaging can be disposed off for free.

Packaging waste generation

3. 214 470 tons of packaging waste was generated in Estonia in 2008. Compared to 2001, both total generation of packaging waste and generation per capita have doubled. Although it is one of the objectives of the European Union waste policy to separate the generation of packaging waste from economic expansion, it is yet to be achieved in Estonia (See Figure 1). By type, plastic, paper and cardboard packaging form the largest amount of waste, followed by glass, metal and wood (See Figure 2).

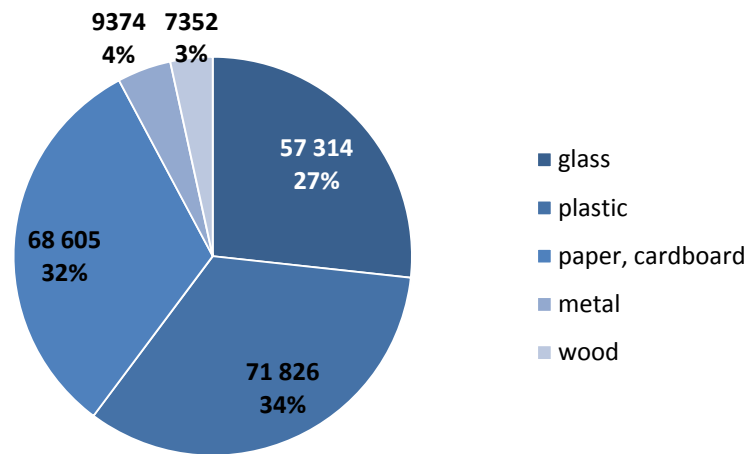
Figure 1. Packaging waste generation, gross domestic product and population



* NAO estimate on packaging waste generation.

Source: Environment Information Centre, Statistics Estonia

Figure 2. Packaging waste generation by type (2008), in tons



Source: Environment Information Centre

Waste hierarchy

Reuse – packaging is reused for their original purpose.

Recycling – waste materials are used in a production process for the original or other purpose, including organic recycling but excluding energy recovery.

Energy recovery – combustible packaging waste is used for generating energy through incineration with or without other waste or fuel but with recovery of the heat.

4. To reduce the environmental impact of waste it is necessary to prevent its generation or recover waste. The worst solution is landfill as this removes packaging from recycling (See Figure 3). This principle applies to all types of waste, including packaging waste. Means of waste recovery include **reuse**, **recycling as material** (these two combined are also referred to as waste recycling) and **recovery of energy**.

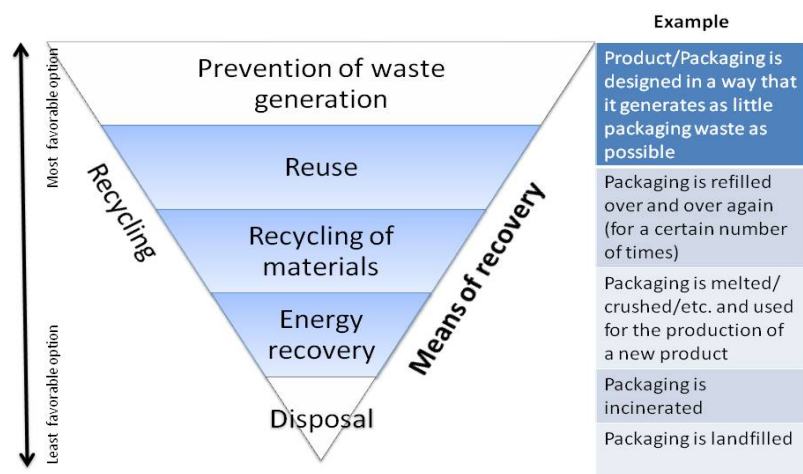
5. The European Union favours the reuse of waste and recycling as material and has established significant targets for these means. Incineration of packaging waste with the intention of generating energy is only a little better than disposal of waste. Possible incineration of municipal waste, including packaging waste, in waste incineration plants – a popular topic in Estonia over the past few years – does not contribute to waste recycling and thus, incineration of waste/generation of waste fuel is only accepted once the target recovery indicators have been met (See Table 1).

Figure 3. European Union waste hierarchy

Did you know that

Incineration of packaging (esp. plastic) creates toxic compounds (e.g. dioxins) that are harmful to human health. Thus, only authorized undertakings can incinerate packaging at high temperature with the intention of generating energy.

Incineration of waste (except for certain paper and wood) in private households is forbidden.



Source: European Union Waste Directive, National Audit Office

Target recovery indicators

6. The state must ensure the recovery of packaging waste and to this end, has established target recovery indicators for both total generation of waste and each packaging type separately. Up until 2008 the state was under an obligation to recover at least 50% of the total quantity of packaging waste per year, 25% of it as recycled waste. As of 1 January 2009, Estonia must recover at least 60% of the total quantity of packaging waste and different targets have been set for different materials (See Table 1). Only the amount of packaging waste exceeding the target recovery indicators can be used for recovering energy. It is always acceptable if recovered quantities exceed target indicators.

Table 1. Target recovery indicators for packaging waste (as of 1 January 2009)

Type of packaging waste	Total recovery, incl. recycling	... reprocessing as plastic
Glass	70%	70%	
Paper, cardboard	70%	60%	
Metal	60%	60%	
Plastic	55%	45%	22.5%
Wood	45%	20%	
Total weight	60%	55%	

Source: Packaging Act

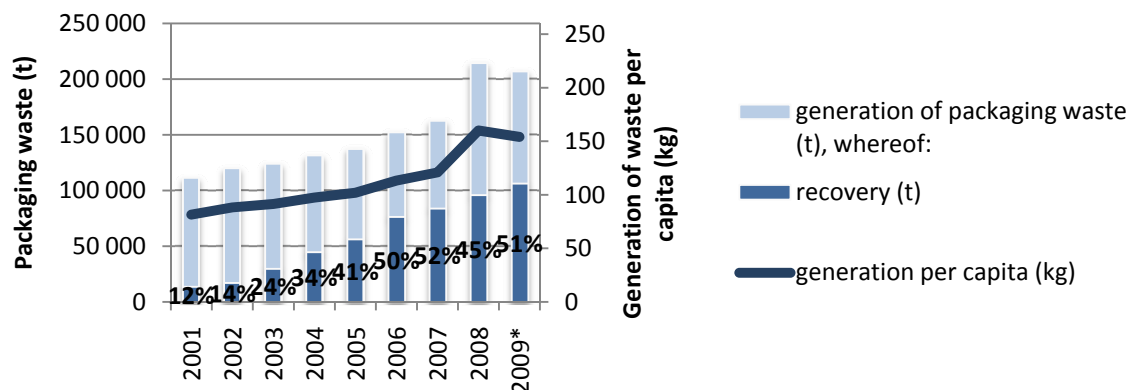
Did you know that

for instance, if an undertaking generates 100 tons of plastic waste, at least 45 tons of it must be recycled, i.e. reused or reprocessed. And 22.5 tons of that amount must be reprocessed as plastic.

Recovery

7. In 2008, 95 853 tons of packaging waste was recovered in Estonia, i.e. 44.7% of total generation. Percentage of packaging waste recovery from total generation of waste has increased over the years but in 2008 there was a 7% drop (See Figure 4). Decrease in recovery rate is due to the sudden increase in packaging waste (25%); increase in the quantity of plastic and glass packaging waste was especially significant (48% and 43%, respectively). The amount of recovered plastic and metal packaging waste is relatively small, 22% and 25%, respectively.

Figure 4. Packaging waste generation and recovery (2001–2009)



* NAO estimate on packaging waste generation.

Source: Ministry of the Environment

Producer responsibility principle

Packaging undertaking – entity who, within the framework of their economic and professional activities, engages in the packaging of goods, or who imports or sells packaged goods.

Excise duty on packaging

Recovery organisations

Producer responsibility and recovery organisations

8. Pursuant to the environmental policy principles of the European Union, collection and recovery of packaging waste is the responsibility of the producer. Producers must ensure that packaging resulting from manufactured, sold or imported by them shall be collected and recovered or landfilled. Costs related to said activities shall be incurred by the producer. The objective of producer responsibility principle is to encourage producers to develop their products in a way that would generate as little waste as possible.

9. Producers (i.e. producers, importers or sellers of packaged products) or **packaging undertakings** are required to accept back, free of charge, the packaging of goods placed on the market by them and do so as close to the place of generation or ensure the functioning of a nation-wide network and incur all costs related to collection and recovery.

10. The state applies excise duty on packaging so as to encourage producers to collect and recover their packaging. Excise duty must only be paid if the recovery of packaging waste does not meet the target indicators established by state (See Table 1). Small revenue from excise duty on packaging is good from the viewpoint of environmental protection as this indicates that packaging has been collected and recovered. In 2009, the State Treasury received 500 000 kroons in excise duty on packaging, which means that a certain number of undertakings prefers to pay excise duty instead of organizing recovery.¹

11. Undertakings have two options for meeting the requirements of producer responsibility and avoiding excise duty:

- Undertakings shall collect their own packaging waste and deliver it to the waste handler for recovery while ensuring the recovery of packaging waste at least within the established targets.
- Join a recovery organization (see Clause 12) and pay a service fee to said organization for the collection and recovery of the undertaking's packaging waste within required quantity.

12. For the collection of their packaging waste, packaging undertakings may found non-profit-seeking recovery organizations (hereinafter also RO). Recovery organization enters into a contract with packaging undertakings who shall transfer the following obligations to the recovery organisation:

- establishment of a nation-wide packaging waste collection network,
- collection of packaging waste, sorting by type (to this end, the recovery organization shall enter into a contract with waste transporters and handlers),

¹ Explanatory memorandum on the 2011 draft State Budget Act.

- recovery assurance (the recovery organization shall enter into a contract with waste processors and shall sell secondary raw material),
- payment of excise duty on packaging if recovery requirements are not met,
- notification of the general public and
- reporting to the state.

13. Packaging undertakings pay a fee to the recovery organization for the services provided to them. 2009 turnover of the four recovery organizations operating in Estonia was a total of 380 million kroons (259 million of which the turnover of Eesti Pandipakend). As it is in the interest of the packaging undertaking that the recovery organization fulfils its duties and functions as efficiently as possible (use of funds, contracts with service providers, etc.), it must carry out supervision over recovery organization's activities.

14. In Estonia, accreditation has been granted for one recovery organization engaging in [packaging subject to deposit](#) (Eesti Pandipakend) and three recovery organizations carry out collection and recovery of packaging not subject to deposit (see Table 2). Approximately 3000 packaging undertakings, i.e. 80–90% of all packaging undertakings operating in Estonia, have transferred their obligations to recovery organizations collecting packaging not subject to deposit². Depending on the nomenclature of products, an undertaking may be a member of a recovery organization dealing with packaging not subject to deposit and of Eesti Pandipakend, dealing with packaging subject to deposit. Other undertakings declare their data themselves or do not fulfil their obligation to collect and recover packaging waste. In this report, the National Audit Office focuses on the collection and recovery of packaging not subject to deposit.

Table 2. Recovery organisations engaging in collection and recovery of packaging

Name of RO	Users of RO services*	Of that, RO members/ shareholders	% of members/ shareholders from packaging placed on the market
Estonian PackCycling	2220	4	7%
Estonian Recovery Organisation	805	16	27%
Producer Responsibility Organisation	142	8	62%

* According to data on RO websites

Source: RO websites, packaging register

² Data available on recovery organisations' websites as at 24.9.2010.

Packaging deposit is a fee for one packaging, included in the price of packaged goods. Deposits shall be returned to consumers when they return the packaging to the place of sale or collection point.

Reporting and supervision

15. In Estonia, the system for collecting deposit packaging covers only the packaging of low-ethanol alcoholic beverages and non-alcoholic beverages. Collection of deposit packaging has significant advantages over the container collection system of mixed packaging: 80–90% of deposit packaging are returned (only 40–60% of mixed packaging), deposit packaging can be reused, collected packaging is clean and the material thus more valuable and its recovery more probable.

16. Records on the recovery of packaging placed on the market and packaging waste is maintained by the packaging undertaking who shall submit to the packaging register data on the previous calendar year by 30 June.³ If the undertaking has joined a recovery organisation and transferred its obligations to said organisation, the data shall be submitted to the packaging register by the recovery organisation. Packaging register is maintained by the Environment Information Centre under the supervision of the Ministry of the Environment.

17. Once a year, the Ministry of the Environment and the Environment Information Centre submit to the European Commission information on the amount of packaging placed on the market and whether established target recovery indicators have been met. As processing of statistical information is time-consuming, the deadline set by the European Commission for the submission of the final report is 1.5 years after the end of the financial year (i.e. 2008 data must be submitted no later than in the summer of 2010).

18. Supervision over collection, take-back and recovery of packaging is carried out by the Environmental Inspectorate, Tax and Customs Board, Consumer Protection Board and city and rural municipality governments.

Packaging waste collection and recovery system does not ensure compliance with target recovery indicators

The state must have an overview of the quantity of packaging placed on the market

Placing packaging on the market – making goods packaged in or imported to Estonia available for distribution or use in Estonia for the first time

The state does not have an overview of how much packaging is placed on the market and what is the actual recovery rate of packaging waste

19. To reduce the disposal of packaging waste and increase recovery the state has undertaken to recover a certain percent (see Table 1) of their **packaging placed on the market**. To find out the amount of packaging placed on the market must be identified. The state is responsible for the compliance with target recovery indicators but in reality waste is collected and recovered by packaging undertakings. This is why packaging undertakings or recovery organizations shall maintain records on placing on the market and shall submit related data to the packaging register.

³ Statutes of the state packaging register, § 12(1).

Packaging register is maintained with the aim of keeping records on packaging of goods placed on the market in Estonia, packaging waste generated in Estonia, reuse and recovery of packaging waste, and compliance with target indicators. Packaging register was established in 2005 and it is maintained by the Environment Information Centre.

Source: Statutes of the state packaging register

Packaging register does not provide all required information

20. **Packaging register** shall contain information on packaging undertakings and quantities concerning the placing on the market and recovery of packaging. Based on this data it is possible to assess whether packaging undertakings comply with target recovery indicators. To facilitate assessment of whether undertakings have organized collection and recovery of packaging or are required to pay excise duty on packaging, it should be possible to use the data in the packaging register for detailed (each undertaking separately) and aggregate requests (e.g. quantities of plastic packaging placed on the market by all undertakings in the course of one year).

21. To ensure accuracy and reliability of data, the Packaging Act establishes an obligation to carry out audits on data submitted to the packaging register by recovery organizations and undertakings.⁴

22. NAO analysis from June-July 2010 identified shortcomings in the packaging register concerning data on packaging placed on the market and recovered packaging. For example:

- Undertakings failed to submit reports on time or made changes to already submitted reports. Data submitted to the register was insufficient: for instance, data on recovery organizations and their members was not submitted on time.
- Packaging register did not have information on the persons providing recovery services to packaging undertakings or recovery organisations.
- Previous reporting forms requested information on the generation of packaging not placing on the market. However, data on packaging generation and placing on the market is not always equal. For instance, packaging of a product stored in a warehouse is viewed as generated packaging but not as packaging that has been placed on the market. This created confusion among packaging undertakings and is the reason behind the submission of different data.
- Packaging register did not allow aggregate requests that would give an overview of the quantities of packaging waste generated and recovered in total or by type of material.
- Data of packaging register and waste reporting information system was not always the same (e.g. the amount of packaging waste shown in the waste handler's report was smaller than that declared by the recovery organisation).

23. Even the employees of the packaging register were critical towards the data and as the register did not allow data processing, so-called own tables were used. Although said tables were mostly based on register data, the NAO analysis showed that this data was not fully compatible with the information available in the packaging register.

⁴ Packaging Act, § 24(6).

24. Due to abovementioned shortcomings the packaging register did not allow, up until 2009, accurate assessment of packaging undertakings' compliance with target recovery indicators. Supplements to the packaging register made in the first half of 2010 have eliminated several shortcomings. For instance, data on placing on the market and recovery can now be seen for each undertaking separately as well as for the entire recovery organization. However, this only applies to the data of 2009. Ongoing problems include absence of an option to perform aggregate requests (e.g. by type of material), failure to submit data in a timely manner, or the submission of no data, and non-compliance of data with those of the waste reporting information system. Thus, the register does not offer sufficient support for reporting and supervision activities, including collection of excise duty.

Gap in legislation enabled to avoid payment of excise duty

25. The option to change packaging reports created confusion upon collecting excise duty. Until 19 June 2010, data of the past five years could be changed in or added to the register (undertakings and quantities of packaging generation were added). As the data kept changing Kuna it was never clear what was the deadline after which target recovery indicators could be deemed fulfilled and when, in the case of failure to comply with said indicators excise duty on packaging could be requested from an undertaking or recovery organization.

26. Register data has mostly changed due to the fact that several undertakings who had not fulfilled the obligation to recover packaging waste for years and who were required, in the course of supervision by the Tax and Customs Board to pay excise duty on packaging, used the opportunity arising from the interpretation of the Packaging Excise Duty Act to join a recovery organization retroactively and thus avoid the payment of excise duty on packaging. Pursuant to the amendment to § 11¹₅, entered into force in the summer of 2010, undertakings can no longer join recovery organizations retroactively.

Data submitted to the packaging register is not audited

27. Although the Packaging Act establishes an obligation to audit data submitted to the packaging register, this has not been done. The packaging register does list the financial auditor who audits the undertaking's annual report but packaging data is not separately audited. The audit should cover the method the undertaking's maintaining records on placing packaging on the market, the actual amount of packaging placed on the market, the amount of recovered packaging and how these quantities have been verified. Accuracy of data should be checked by recovery organizations (concerning its members), packaging undertakings themselves and the state. So far, packaging undertakings have been trusted when it comes to data related to packaging placed on the market. However, this is accompanied by a risk of undertakings reducing the quantities; the bigger the amount of packaging placed on the market by an undertaking, the bigger the service charge it is required to pay to the recovery organisation. Even these recovery organizations who find that data submitted by undertakings concerning the placing on the market of packaging should be checked, have decided not to carry out audits as

⁵ Entered into force in 19.6.2010.

recovery organizations compete with each other for clients and wish to spend as little as possible. As the legislation does not address the auditing obligation in a specific manner and coercive measures are not applied upon failure to audit, the auditing requirement does not serve its purpose.

Recovery organisations' and state official data on packaging placed on the market differ by half

28. Unreliability of the packaging register is confirmed by the fact that data submitted by the state to the European Commission on the generation of packaging waste differs significantly from the data submitted to the packaging register by recovery organisations. By the end of 2009 approximately 3000 packaging undertakings, including all larger packaging undertakings, had joined recovery organizations (that makes ca 80–90% of all liable entities). Thus, the data declared by the state and recovery organizations should not differ significantly. However, in 2008 the quantities concerning placing on the market (i.e. generation) of packaging, declared by recovery organizations, formed only 55% of the data declared by the Ministry of the Environment (see Table 3).

Table 3. Data on the generation and recovery of packaging waste according to different sources (2008)

Data source	Generation of packaging waste (t)	Recovery of packaging waste (t)	Recovery (%)
Official report of the Ministry of the Environment to the European Commission	214 470.4	95 853.3	44.7
Data submitted by recovery organisations (packaging register, management reports)	117 688	67 508	57.3

Source: Ministry of the Environment, Environment Information Centre, ROs' management reports

29. Compared to 2007, generation of packaging waste increased by 25% in 2008 whereas recovery increased only by 13%. According to the Ministry of the Environment, this significant increase in the generation of packaging waste proves that input data of the applied calculation method⁶ has improved. This first and foremost thanks to a thorough nation-wide survey of the composition of mixed municipal waste⁷ carried out in 2008, which showed that mixed municipal waste includes an average of 34% of packaging waste. Previous calculations were based on single surveys carried out in larger cities (Tallinn, Tartu) the results of which were generalized to cover the entire country. Contrary to the data calculated by the state, the packaging quantities placed on the market and declared by recovery organizations have decreased in 2008, compared to 2007, and recovery has decreased too. Here it is relevant to mention that when calculating the quantities of generated packaging waste the state does not rely on the data submitted by recovery organizations but uses survey results and waste reporting information system that includes data from all persons subject to waste reporting, incl. waste handlers (see Appendix).

⁶ To assess the quantity of packaging placed on the market, the Ministry of the Environment uses an internationally recognized method (see Appendix).

⁷ Survey commissioned by the Ministry of the Environment. SEI-Tallinn. 2008. Analysis of the composition and quantities of municipal waste (incl. separate packaging waste and organic waste) produced in Estonia.

Contradiction – recovery organisations have met target recovery indicators but the state as a whole has not

30. According to the Ministry of the Environment, significant differences in the data on the recovery of packaging waste are due to the fact that in the reports submitted by recovery organizations the data concerning the placing on the market of packaging is much smaller than actual quantities and data on recovery is probably larger than actual quantities.

31. If the data on placing on the market is inaccurate, the calculation of compliance with the recovery target indicators for packaging waste is inaccurate too, as the latter constitutes a percentage of the amount of packaging placed on the market. Recovery organizations and packaging undertakings who have joined them have declared that 2008 saw the recovery of the required amount of waste. However, based on the waste reporting information system, this cannot be said concerning the state as a whole (see Table 3). According to the packaging register, in 2009 recovery organizations do not comply with target recovery indicators on certain types of packaging material. This situation is unacceptable as by enacting legislation the state has wished to establish a producer responsibility system for the collection and recovery of packaging, with recovery organizations as representatives of undertakings fulfil duties and obligations established by European Union legislation. According to the officials of the Ministry of the Environment, the amount of packaging landfilled in 2008 exceeded that of 2002. Thus, the implementation of producer responsibility system has failed to catch up with the significant increase in the generation of packaging waste and reduce the amount of landfilled packaging waste.

Supervision over the recovery of packaging waste is poor

32. Recovery organizations have to organize their activities so that the packaging waste placed on the market by their members and clients would be recovered within the established target indicators. If organizations do not succeed in this, they shall pay excise duty on packaging for the respective amount. For the accurate assessment of compliance with target recovery indicators it is necessary to have accurate data on the amount of packaging placed on the market and packaging waste recovered.

33. Pursuant to the producer responsibility principle, packaging undertakings and recovery organizations shall make traceable, on the basis of documentation, the movement of packaging flow from the moment packaging is placed on the market, collected, transported, sorted, reprocessed, etc. to the actual recovery (e.g. processing of a new product) or recovery of energy from packaging. On the basis of documentation, every party handling packaging waste shall also be able to prove the origin and recipient of waste.

34. As the final responsibility regarding compliance with collection and target recovery indicators for packaging waste, established by the European Union, lies with the state, the state shall carry out supervision to ensure that organisations really fulfil their duties. Accreditation of recovery organizations and state supervision shall ensure compliance with legislation of the activities of recovery organizations, and the accuracy of submitted data. Supervision over collection and recovery of packaging is carried out by Environmental Inspectorate (hereinafter also EI), Tax and Customs Board and local governments.

Environmental Inspectorate and Tax and Customs Board do not perform sufficient checks of data on placing packaging on the market and recovery of packaging waste

35. To verify compliance with target recovery indicators, data on placing on the market of packaging shall be checked on the basis of the source documents submitted by packaging undertakings. Based on the so-called recovery certificates, the data shall be compared to waste quantities collected by recovery organizations, delivered to waste transporters and then to waste handlers.

36. The audit revealed that neither the Environmental Inspectorate nor the Tax and Customs Board have done so. Instead of checking packaging flow, two thirds of the Environmental Inspectorate checks in the period of 2005–2009 dealt with shops who have not created options for accepting packaging waste from the consumer free of charge. The remaining one third was spent on checking packaging undertakings who have failed to submit their data to the packaging register.

37. In addition to this, the NAO analysis showed that in 2005–2009 both the Tax and Customs Board and the Environmental Inspectorate mostly performed checks of packaging undertakings who had not joined any recovery organisation. The number of such undertakings was quite high in the first years of the implementation of producer responsibility system but nowadays approximately 80–90% of undertakings, i.e. the largest contributors to placing packaging on the market, are excluded from checks in this manner. While the Tax and Customs Board has, in some cases and with the aim of calculating excise duty on packaging on the basis of import and customs documentation and weighting, identified packaging quantities placed on the market, the Environmental Inspectorate has dealt neither with quantities nor excise duty. For this reason, excise duty has not been recovered in cases where it was actually necessary: the NAO analysis revealed that of a total of 236 auditing cases carried out by the Environmental Inspectorate there were at least 54 cases when a packaging undertaking should have paid excise duty on packaging. These were undertakings who had ignored the requirement of packaging reporting whom a fine had been imposed by the Environmental Inspectorate. According to the Tax and Customs Board and the Environmental Inspectorate there were three reasons for not requesting excise duty on packaging: the Environmental Inspectorate had failed to forward information on infringement to the Tax and Customs Board, the latter thought the request for excise duty was too small to be requested from the undertaking, or the case was not processed because by retroactively joining a recovery organization the undertaking would have eventually been exempt from paying excise duty.

Recovery organisations do not comply with accreditation requirements

38. The NAO is of the opinion that in addition to poor supervision over packaging undertakings there are also problems with inspecting the activities of recovery organisations. The NAO audited the accreditation of recovery organizations and the inspection of their later activities as well as the organizations' economic indicators and came to a conclusion that the state is unable to assess whether recovery organizations comply with established requirements during the entire period of operation not just at the moment of accreditation. For instance, there are problems with ensuring recovery organizations' financial capacity during the entire period of their operation. Neither have all organizations established a nation-wide public container network. Financial problems can be spotted behind certain organisations' inaccurate financial behaviour and non-constitutional activities, too big short-term obligations exceeding assets

Did you know that

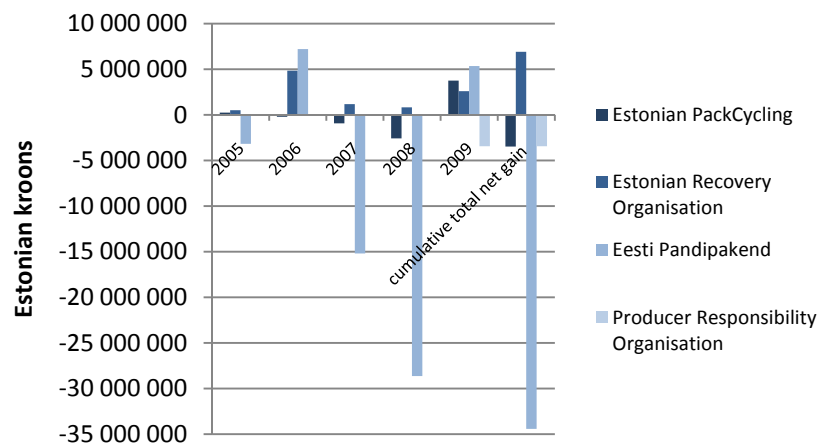
accredited recovery organization must adhere to the requirements of § 17 of the Packaging Act, i.e.

- In compliance with requirements ensure establishment of a nation-wide container network;
- Ensure recovery of collected packaging;
- Collect, on equal grounds, charge for its services from packaging undertakings;
- Ensure transparency of financial relations between members, partners or shareholders;
- Notify the general public and consumers of the procedure and requirements for returning packaging and packaging waste.

(potential problems with paying service providers) (see Figure 5 for cumulative net gain of recovery organisations).

39. Every year recovery organizations submit to the Ministry of the Environment an overview of the activities of the previous year. This document should supplement annual reports and data submitted to the packaging register, allow analysis of the efficiency of the activities of recovery organizations and contribute to supervision. However, the Ministry of the Environment does not assess whether recovery organizations comply with accreditation requirements and fulfil their duties after accreditation has been granted.

Figure 5. Profit-loss (2005–2009) and cumulative total net gain of recovery organisations (in kroons)



Source: annual reports of recovery organisations

40. Ministry of the Environment and Environmental Inspectorate have not used the opportunity to request more detailed data on the annual activities of recovery organisations. Pursuant to § 17(4)(10) of the Packaging Act, organizations have submitted an overview of their activities every year but these are very general and do not provide sufficient information to assess whether the organisation's activity adheres to the requirements and obligations laid down in the Packaging Act. For instance, the report inquires whether agreements have been concluded with the providers of recovery service but agreements cannot be linked to waste quantities. Data in management reports is often uneven (differing over years, reports cannot be compared to each other) and can differ from the data in other data sources (e.g. packaging register). In certain cases the Ministry of the Environment has requested the management reports to be specified but the Act does not establish requirements for the report's contents and the submission and quality of the report are actually not that relevant.

41. NAO analysis also revealed that the accreditation process has failed to guide the activities of recovery organisations. Firstly because accreditation requirements are general, subjective and do not allow assessment of the quality of future services: e.g. how much money would

be needed for operating⁸ or which financial plan or strategy for including the organization of packaging undertakings is accepted by the accreditation body. Secondly, nothing can stop an already accredited recovery organization from changing core principles of activities, contract partners, size of container network or requirements for the purchase of services shown in the application for accreditation. For example, by the time of the accreditation of a recovery organisation all members participating in the submission of the application for accreditation and basis for the financial guarantees of the organization's further activities, had left the organization. Preliminary agreements concluded with local governments, waste transporters and recovering entities and submitted upon accreditation do not guarantee later conclusion of contracts based on said agreements.

Division of duties of supervisory agencies is vague

42. According to the NAO, an important reason for the shortcomings in the collection of and supervision over packaging waste is that the Environmental Inspectorate and the Tax and Customs Board (TCB) have not succeeded in reaching an agreement on each party's responsibilities. For instance, the TCB expects the Environmental Inspectorate to carry out full checks on recovery organizations and their member undertakings and that the TCB shall request the payment of excise duty only from undertakings not belonging to recovery organizations. Environmental Inspectorate, on the other hand, would like the TCB to check all the packaging placed on the market and related financial data as the Inspectorate lacks employees with skills to carry out financial control. However, the TCB only engages in the issues of tax collection. Because of this confusion, some requirements established by the Packaging Act for recovery organizations remain unaudited (e.g. investment of profit, transparency of the financial relations between partners, expenditure on notification of obligations related to packaging waste).

43. As in the producer responsibility system waste quantities between undertakings and the recovery organization are only moved "on paper", the Environmental Inspectorate needs inspectors who know how to analyse financial indicators to carry out efficient supervision over the recovery of packaging. Efficiency of competence has improved over the past few years, e.g. the Environmental Inspectorate has commissioned a packaging supervision manual. However, recovery organisations' annual reports have still not been analysed, including requests for explanations on loss, loans, lack of shareholders' equity or reasons for the acquisition of fixed assets. The Environmental Inspectorate also claims that checking data on the placing on the market of packaging is too complicated and time-consuming with the number of current employees.

Did you know that

For the collection and recovery of one ton of plastic packaging waste, an undertaking shall pay 6400 kroons to the recovery organisation.

If an undertaking fails to recover one ton of plastic packaging waste, it shall pay excise duty on packaging of 40 000 kroons.

44. Efficiency of supervision over the collection and recovery of packaging waste is reduced by the fact that the Environmental Inspectorate's control activities are largely based on submitted complaints, or data related to packaging waste is checked in the course of checking the undertakings' other environmental permits. The TCB, however, carries out supervision on the basis of risk, relying on how large

⁸ Prerequisite for accreditation, established in § 17 (2)(4) of the Packaging Act.

If they fail to meet requirements, recovery organizations cannot be penalized

The state does not always know who actually recovers packaging waste

Did you know that

Estonia's largest packaging reprocessors are O-I Production (glass), Plastitehase Inc. (plastic), Rāpina Paper Mill (paper and cardboard).

are the sums that can potentially remain unrecovered by the state. Environmental Inspectorate's supervision activities exclude many larger packaging undertakings and undertakings regarding the data of which the registrar is having doubts.

45. Lack of efficient sanctions and poor control of the activities of recovery organization are the reasons that enable recovery organization to ignore accreditation requirements or requirements of § 17(4) of the Packaging Act. As excise duty on packaging can only be applied in the case of non-compliance with target indicators, basically the only coercive measure to be implemented is the invalidation of accreditation. However, because of its strictness this measure is not justified in the case of all infringements. So if, for instance, the recovery organization refuses to submit additional documents or fails to ensure equal access to services to all undertakings or does not purchase a service related to packaging waste handling based on competition, the only sanctions used are consultations and reminders.

46. The NAO is of the opinion that in addition to shortcomings in state supervision over compliance with target recovery indicators there is a problem with the issue that waste whose recovery has not been sufficiently verified is deemed recovered. The European Court of Justice has issued an interpretation for the Packaging Directive⁹, according to which packaging waste can only be deemed recovered (and recovery certificate issued) by an undertaking who produces secondary raw material from the packaging waste with the intention of producing new products. In Estonia, however, recovery certificates are mostly issued by waste treatment facilities who engage in the collection, transport, sorting and pressing of packaging waste¹⁰, or in a similar activity, which is a preparatory activity not recovery itself.

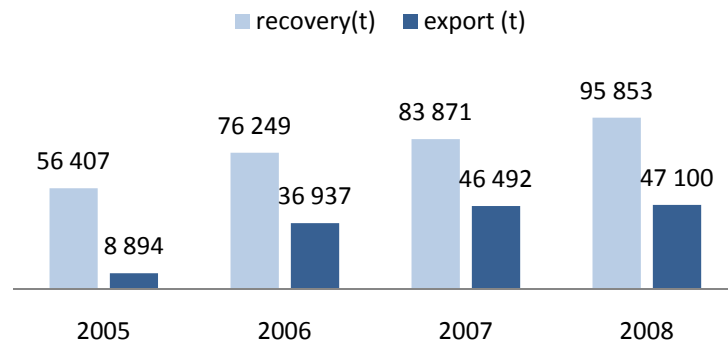
47. In management reports submitted to the Ministry of the Environment, recovery organizations also name both waste transporting and sorting entities as recovering entities. Only a small number of packaging waste reaches the Estonian undertakings actually engaging in recovery (recycling): approximately 50% of recovered packaging waste is reprocessed in other countries (in 2008, 47 100 tons of waste marked with packaging waste code was exported, see Figure 6). Waste reporting automatically considers exported packaging waste as recycled waste. To verify such recovery, exporting (waste handling) undertakings have to be able to issue a relevant confirmation upon request. Until 2009 only the name of target state but not the name of recovering entity was entered next to exported waste quantities in the waste information system and this further complicated checking the actual recovery of such waste. It is likely that exported packaging is recovered although in many cases it is unknown who actually recovers waste and how. Checking whether the waste reaches its actual recovering entity

⁹ Ruling C-444/00 of the Court of Justice and European Commission decision 2005/270/EC, establishing database system formats pursuant to Directive 94/62/EC of the European Parliament and Council of Europe on packaging and packaging waste.

¹⁰ In the list of waste recovery and disposal activities, such activities shall be marked with code R13 or R13s, indicating collection of waste for processing or sorting of mixed waste for processing.

could be complicated and time-consuming but it is important from the viewpoint of implementing producer control and thus the actual meaning of the producer responsibility principle. To improve supervision, cooperation with other states should be considered.

Figure 6. Recovery of packaging waste (tons) and export (2005–2008)



Source: Environment Information Centre

48. Causes for the shortcomings in the verification of packaging waste recovery lie in the complicated process (particularly in regard to waste recycling): waste can be transferred from undertaking to undertaking starting from the moment of generation and collection of waste to the moment of processing new secondary raw material. It is convenient for recovery organizations and undertakings to present the document verifying the delivery of waste as the recovery certificate and not follow the further movement of waste. There have been cases where recovery organizations cooperate with waste transporting and sorting entities who refuse to reveal the names of contractual partners actually carrying out recovery of waste as this would allegedly contribute to the loss of competitive advantage. As the packaging undertakings who have joined recovery organizations do not check the activities of organizations, the full burden of carrying out supervision over recovery shall lie on the Environmental Inspectorate who cannot cover everything due to the lack of inspectors in this field. Most packaging waste is exported to the European Union countries or transported outside European Union which further complicates the monitoring of this chain. As checking the waste recovery chain is also a problem in many other European Union countries, a recovery certificate issued by an undertaking confirming the delivery of waste to the final recovering entity is often accepted.

Packaging undertakings do not take the consequences for the failure to meet state target recovery indicators

49. In the light of the abovementioned problems it is relevant that from an economic viewpoint it is more beneficial for packaging undertakings to declare small quantities of packaging placed on the market as this reduces the amount paid to the recovery organization for the collection and recovery of packaging. As the requirement to audit data on placing of market has not been put into practice and there is tight competition among three organizations engaging in collecting and recovering packaging not subject to deposit as to the recruitment of new members, the organizations do not wish to interfere with the undertakings' packaging reporting. As a result, as long as the state fails to check the data submitted by recovery organizations and identify infringements, it is easy for the partners on the market to declare data on the placing on the market and recovery of packaging in the quantity that would make them

exempt from the payment of excise duty. Undertakings are thus free from responsibility as they have transferred their obligations to recovery organisations. Organizations in turn claim to be complying with target recovery indicators. At the same time the amount of packaging waste generated according to the date of the state waste statistics is nearly 50% more than the amount declared by the organisations (see Table 2) which is why recovery targets established by the European Union are not met. Due to poor supervision, however, it is not possible to require the recovery organizations and their clients to pay excise duty on packaging.

Poor supervision costs a billion kroons

50. The aim of packaging waste collection system is not to generate income for the State Treasury from excise duty on packaging but to collect and recover as much waste as possible. However, if target indicators are not met, undertakings are required to pay excise duty on packaging. The NAO made an approximate calculation of the amount of excise duty on packaging that should have been paid in 2009.

51. Based on the calculation method used by the Ministry of the Environment and 2009 data of state waste reporting information system, the NAO concluded that the recovery of all packaging materials (except for wood) was below the target in 2009. Excise duty on packaging was calculated considering the outstanding amount: according to the approximate calculations of the NAO, in 2009 packaging undertakings should have paid ca 1 billion kroons in excise duty on packaging (see Table 4).¹¹

Table 4. Outstanding excise duty on packaging in 2009

Approximate calculation on 2009 generation and recovery of packaging waste and outstanding excise duty (2009 data of the waste reporting information system, Environment Information Centre's calculation method)							
	Paper and cardboard	Plastic	Wood	Metal	Glass	Total packaging ¹²	Total outstanding excise duty
Generation (t)	63 849	69 243	4673	9451	59 523	206 740	
Recovery (t)	43 969	18 486	5648	4022	33 828	105 953	
Target recovery indicator 2009 (%)	70	55	45	60	70	60	
Actual recovery (%)	69	27	121 ¹³	43	57	51	
Difference in target recovery indicator and actual recovery (%)	1	28	-76	17	13	9	
Difference in target recovery indicator and actual recovery (t)	726	19 597		1649	7838	18 091	
Excise duty rate (kr/kg)	20	40	20	40	10		
Outstanding excise duty (kr)¹⁴	12 769 800	775 521 600	0	64 266 800	77 379 900		929 938 100

¹¹. Official 2009 data on packaging waste is made available to the European Commission in the spring of 2011. See Appendix for the calculation method for the NAO assessment.

¹² Excise duty rate is only applied by type of material, not to the total quantity of packaging.

¹³ Recovery during a calendar year may exceed 100% if waste generated in the previous years is recovered.

¹⁴ Outstanding excise duty = difference in target recovery indicator and actual recovery (t) * excise duty rate (kr/kg) * 1000.

Producer responsibility principle has not been fully implemented

52. All in all, the NAO is of the opinion that producer responsibility system has not been fully implemented in Estonia as it is limited to the transfer of producers' obligations and charging for that. This does not include actual responsibility. Shortcomings in supervision have a negative impact on both the reliability of data on packaging waste and the functioning of producer responsibility system as a whole. As the activities of recovery organizations are not transparent enough, the state is not sure whether investments in the maintenance of a public container park and notification of residents comply with legal requirements. The economic indicators of several recovery organizations are poor but the state is not able to request supplementary securities for future collection and recovery of packaging waste in the required manner. All in all, the state is responsible for the failure to comply with European Union obligations.

53. Recommendations of the NAO to the Minister of the Environment:

- Initiate the amendment of the Packaging Act so as to:
 - In order to more clearly regulate the principles of packaging waste recovery verification, specify in the Act the recovery entities authorized to issue recovery certificates as well as the form of recovery certificate and requirements for documents verifying recovery. Prevent the situation where recovery is verified by preparatory activities (collection, transport, sorting). Inform packaging undertakings and recovery organizations of the fact that if possible, recovery must be verified with documents till the end of the recovery chain.
 - Improve wording of requirements for the contents of management overviews (reports) of recovery organizations so that these would complement each other not double the data of annual reports and data submitted to the packaging register. For instance, in the overview the organizations should give the following information: contracts concluded with larger service providers and quantities of packaging waste delivered to them; explanations on loss, loans or financial trouble; separate information on packaging containers and the quantity of packaging waste collected directly from undertakings. Likewise, establish a coercive measure for when a report is submitted that does not comply with requirements. This would enable better supervision and analysis of the efficiency of recovery organisations.
 - Specify the requirements for the contents of packaging audit so that it would be clear which data's accuracy is confirmed by the auditor (first and foremost, the audit should cover the amount of packaging of different materials placed on the market, the method used for calculating this data and the verification of waste recovery).
 - To improve control over the activities of recovery organisations, establish a term for their accreditation. Also establish the composition of responsibility in the responsibility chapter of the

Packaging Act and a coercive measure for when the organization fails to comply with requirements of §17 of the Act.

- Supplement the packaging register so that it would be possible to carry out detailed and aggregate requests. Consider the need for supervision and consult supervisory agencies.
- Ensure that the Environmental Inspectorate has a sufficient number of inspectors with required knowledge in order to check whether recovery organizations are in compliance with accreditation requirements and duties listed in § 17(4) of the Packaging Act, whether data on placing the packaging on the market is accurate. Likewise, check the movement of packaging waste from the moment it is placed on the market to the recovery by waste handler. To ensure successful supervision over documentation and audit results, improve the competence of checking and analysis of source documents and financial data.
- Ensure that the Environmental Inspectorate regularly check all recovery organizations, larger packaging undertakings and undertakings who have not joined any recovery organization for the compliance with the requirements of the Packaging Act. Create opportunities for the Environmental Inspectorate's cooperation with European Union packaging waste handling supervisory agencies in order to gather information for checking the actual recovery of exported packaging waste.

Reply of the Minister of the Environment regarding the initiation of amendment of the Packaging Act: The Ministry's 2010 work schedule includes the preparation of a draft to amend the Packaging Act (hereinafter referred to as PA). The working draft shall regulate in a clearer and more specific manner the verification of packaging waste and shall determine who is authorized to issue recovery certificates as well as the data listed on the certificate. Experience has shown that a significant amount of packaging waste recovery is and shall be carried out (partially for economic reasons) outside Estonia and outside the EU, particularly in Asia. Based on this it is not reasonable to try to identify undertakings completing the recycling, i.e. it is not reasonable to consider recycling to be verified only on the basis of a confirmation of the undertaking completing the recycling (i.e. undertaking processing a new product from waste). In case of export from the EU it is especially reasonable to limit verification to internationally required documentation on waste transport while in the EU it should be possible to verify recycling through a specific undertaking. Such solution is supported the treatment of the so-called issue of cessation of waste, based on the new EU waste directive. In the coming years this shall be used for determining criteria for the cessation of waste for several relevant types of waste suitable for recycling (incl. packaging materials such as metal, paper and cardboard, etc.).

Specification of requirements for the management reports of recovery organizations is definitely necessary. Here, other amendments ensuring substantial control of packaging undertakings over the collection and use of funds of recovery organizations are very important. Recovery organizations operate on the basis of the expanded producer responsibility principle, which is one of the core principles of the EU

waste policy, according to which the state shall not determine the charges for return and recovery, shall not collect said charges and shall not carry out detailed control over their use. This should be done by those paying said charges, i.e. ca 3000 packaging undertakings in Estonia. Poor substantial control of packaging undertakings is the source for the problems so far mentioned in this audit report; thus, by strengthening substantial control of packaging undertakings over recovery organizations and moving closer to the actual conception of producer responsibility, continuous strict substantial control over recovery organizations shall not be necessary.

Amendments related to the packaging audit constitute a more problematic issue. Here, specifications are necessary and requirements for the competence of packaging auditor and procedure for verifying the auditors' qualifications are in need of a broader debate. It is obvious that these audits should focus on improving and auditing the quality of the calculation of packaging quantities placed on the market.

The objective of the packaging audit is to ensure the accuracy of data submitted on types and weight of packaging placed on the market as well as on recovered packaging waste. There is another option for improving the accuracy of data. Clause 54 of the audit report includes a recommendation to the Minister of Finance to consider an alternative option to pay a certain amount of excise duty on packaging upon placing the packaging on the market. We are of the opinion that it is reasonable to establish the obligation to pay excise duty on packaging of X% regarding the packaging placed on the market. Similar proposition was made in the course of economic tax reform discussions in 2006–2007. This solution would facilitate monitoring of the packaging quantities placed on the market by packaging undertakings as these should be declared to the TCB whose duty it is to check the accuracy of submitted data.

We shall definitely consider the proposition to establish specific terms for the accreditation of recovery organizations. Here we can refer to similarities with the hazardous waste handling licences specified in the Waste Act, which in 1992–2007 were licences without any legal term, but following the proposal of the NAO in its 2006 audit “Handling of hazardous waste in intermediate depositories and garbage dumps”, specific terms were established for hazardous waste handling licences.

Replies of the Minister of the Environment regarding other recommendations: Development of the packaging register was carried out in 2010 and by now it is possible to carry out aggregate requests on the data from the register. Development continues in 2011.

To check compliance with the requirements of the Packaging Act, the Environmental Inspectorate has commissioned a manual that was introduced in a seminar held on 8.11.2010. The issue of the efficiency of the Environmental Inspectorate in carrying out packaging checks is important and solutions must be found for improving the efficiency with the help of current funds.

As stated in the previous reply, the issue of improving the efficiency of the Environmental Inspectorate in carrying out packaging checks is very important. The experience of other EU Member States is that 3–5% of the total number of packaging undertakings is audited by state supervisory

agencies and/or by specialized auditors cooperating with said agencies. In Estonia, the respective percentage of the total number of packaging undertakings would amount to ca 90–150 undertakings. It is likely that in the light of current obscurities the auditing level should be increased.

The Environmental Inspectorate is party to IMPEL, network of EU environmental supervision agencies, which was basically established to ensure cooperation, including interaction between such agencies. Thus, the Environmental Inspectorate has opportunities for cooperation with other EU agencies carrying out supervision over packaging waste handling.

54. Recommendations of the NAO to the Minister of Finance:

- To improve the monitoring of supervisory agencies of data on the packaging placed on the market and encourage recovery organizations to perform more thorough checks on the data of packaging undertakings, initiate the amendment of the Packaging Act regarding the following:
 - Establish an obligation to pay excise duty upon placing the packaging on the market and allow the state to reimburse the excise duty if the undertaking or recovery organization has verified recovery of packaging waste within the required scope. Alternatively, contemplate the option of paying a certain amount of excise duty on packaging upon placing the packaging on the market.
 - Apply excise duty on packaging every time if an undertaking subject to submit data to the packaging register fails to submit the report in a timely manner, or submits a report that has not been audited and does not comply with legal requirements.

Replies of the Minister of Finance: Generally, excise duty is not reimbursed as payment of excise duty is related to the admission to the market of the goods, in this case packaging, subject to excise duty. It would be possible to change the mechanism of placing excise duty on packaging on the market but then it would be packaging tax. Packaging tax paid at the moment of placing goods on the market enables to determine in a specific manner the packaging quantity placed on the market. In this case, the date of submitting the report of the packaging undertaking to the recovery organization could serve as the moment for placing the packaging on the market. Verification of packaging recovery, however, is much more complicated. Final aggregate report on recovery is completed 1.5 years after the packaging was placed on the market. 2009 packaging recovery report shall be completed by 30 June 2011. From the viewpoint of the undertaking it would be a burden to pay excise duty in advance for a certain period for all packaging placed on the market and only after verification of recovery get the funds back after a lot of time has passed. However, if the Packaging Act is not amended it shall still be relatively easy to declare smaller quantities of packaging and falsify documents certifying recovery.

This is why we would rather contemplate the establishment of a system where part of the excise duty is paid upon placing the packaging on the market. According to the current logic of exemption from excise duty, the

liability to pay excise duty arises if target recovery indicators are not met within the scope of outstanding quantities. We could consider the establishment of a system where in certain circumstances part of the excise duty is paid upon placing the packaging on the market and the rest functions similarly to the current model. 60% of the total weight of packaging waste must be recovered. Most of the packaging is neither recovered nor taxed. The abovementioned model where part of the excise duty is paid upon placing the packaging on the market and for the rest, the tax liability depends on the compliance with recovery obligation is applied in many EU countries. The abovementioned means would help fulfil most of the fiscal objective of excise duty on packaging.

Tax should not be seen as punishment for doing or not doing something. Excise duty is not a punishment either but an obligation arising in the case of failure to comply with recovery obligation. Pursuant to § 32 of the Packaging Act, violation of the procedure for keeping records on and submission of information concerning packaging and packaging waste or submission of incorrect information is punishable by a fine of up to 50 000 kroons. Pursuant to § 12(2) of the Packaging Excise Duty Act, in the case of incorrect calculation, tax evasion or late payment of excise duty, the tax authority for state taxes shall apply sanctions and charge the prescribed in the Taxation Act. Pursuant to § 153¹ (1) of the Taxation Act, failure to submit information to a tax authority or submission of false information or violation of the obligation to withhold which results in the amount of tax payable being less than the amount of tax to be paid pursuant to an Act concerning a tax or the amount to be refunded, compensated for or set off being greater than the amount to be refunded, compensated for or set off pursuant to an Act is punishable by a fine of up to 300 fine units. Pursuant to § 153¹ (2) of the Taxation Act, the same act, if committed by a legal person, is punishable by a fine of up to 200,000 kroons. Basically it is possible to consider increasing this term of punishment.

In order to examine the report of each undertaking subject to reporting and its reporting deadline, data in the packaging register must be reliable and it should be possible to carry out necessary requests.

55. Recommendation of the NAO to the Minister of the Environment and Minister of Finance: Determine clearly the division of duties among supervisory agencies upon carrying out supervision over excise duty on. Ensure the recovery of excise duty on packaging in all cases where the Environmental Inspectorate has identified violation of the Packaging Act, accompanied by an obligation to pay excise duty.

Reply of the Minister of the Environment: We are of the opinion that supervision over packaging and packaging waste and their placing on the market should mostly be carried out by the TCB. As already mentioned, this is related to whether the proposition to establish a system where part of the excise duty is paid upon placing the packaging on the market finds support, which shall therefore ensure TCB supervision. Supervision over target recovery indicators for packaging and packaging waste should be carried out by the Environmental Inspectorate as this is a topic specifically related to waste handling where it is important to have knowledge of the field of waste handling as a whole (classification of packaging, identification of packaging waste among the waste of same material, terms related to recovery, etc.).

Reply of the Minister of Finance: Tax and Customs Board (TCB) addressed this topic in its reply in the letter forwarded to the National Audit Office on 9.11.2010.

Ministry of the Environment is the ministry governing the field of packaging and the Environmental Inspectorate in its area of government has a leading role in the supervision over waste handling. The EI shall submit control results to the TCB by the 15th of the following calendar quarter. The TCB is responsible for checking the accuracy of calculating excise duty as well as compliance of payments with set deadlines and in the case of inaccurate calculation of excise duty, evading payment or late payments, apply sanctions established in the Taxation Act. Tax authority is responsible for establishing excise duty. As the current supervision system has failed to ensure the functioning of effective packaging recycling, we agree that the division of rights and responsibilities upon compliance with target packaging recovery indicators should be reviewed in cooperation with the Ministry of the Environment and cooperation between the EI and the TCB should be improved.

Packaging waste collection system is not user-friendly

Residents' awareness of collecting packaging waste by type should be better and their devotion greater

56. Firstly, sorting packaging from municipal waste and its separate disposal is encouraged by as convenient organization as possible, secondly, by specific and easily accessible instructions and thirdly, by financial benefit. Recovery organizations and packaging undertakings should, in cooperation with local governments, notify residents in an easily accessible and regular manner of which packaging waste should be separated from municipal waste, of the location of collection points, of different containers and of the benefits of separate collection. As people tend to first look for information from local sources of information, it is relevant that local governments and recovery organizations work together in this.

57. The obligation to collect packaging by type has been applied for five years and recovery organisations assure in their management reports that in the last two years they have spent the 1% of their annual turnover, as required by law, on the notification of residents¹⁵. In spite of this, the results of the opinion poll among residents, commissioned by the NAO, show that 54% of the population is not aware of the fact that packaging can be returned free of charge. Residents of Tallinn and people whose mother tongue is not Estonian were less aware than others. People living in rural areas are the most informed on this topic. Additional information was required mostly on the topic of the means and places for returning packaging waste (15–20% of respondents; 30% of residents of larger cities, except for Tallinn, required information on the location of packaging containers).

The option to return packaging free of charge is not well-known

Did you know that

In 2005–2009 recovery organisations spent six million kroons on notification activities.

¹⁵ Respective requirement in the Packaging Act entered into force in 2008.

Did you know that

- 51% of residents think that information on packaging waste should be included in the local newspaper;
- 41% on a public information board of a shop or settlement;
- 34% from the local government;
- 5% on the website of a recovery organisation.

The amount of sorted packaging waste is too small

Did you know that

For instance, residents of a six storey building with two stair halls in Lasnamäe who do not sort packaging waste, pay **EEK 4104 per month and EEK 49 248 per year for the transport of municipal waste.**

Assuming that 34% of municipal waste is made up by packaging (that can be returned free of charge) and that paper packaging is disposed of in a paper container, the same building could save **EEK 828 per month and EEK 9940 per year when it comes to waste transport.**

Different collection systems of packaging waste create confusion

58. The NAO interviewed 110 local governments on the subject of notification activities. Most local governments claim to provide information on the obligation to collect packaging waste by type at least once a year. Information is mostly provided in local government's newspaper (86 local governments), several local governments have drawn up separate information leaflets. Almost two thirds of interviewed local governments (66) people are also notified via website but only 41% of respondents had included an explanation on how to sort packaging waste or where to look for instruction. The websites of a little over half of the interviewed local governments (58) provide information on the location of packaging containers. For instance, websites on the topic of waste of Väga Narva and Tallinn (see <http://jaatmed.narva.ee/> and www.tallinn.ee/prygihunt) are very thorough and informative. According to the NAO, the information on the sorting of packaging waste listed on the websites of several smaller rural municipalities is also easily accessible and clear (e.g. websites of Jõelähtme, Audru, Kuusalu and Kohila Rural Municipality).

59. In spite of the notification activities of recovery organizations and local governments and the opportunity to return packaging free of charge, the opinion poll revealed that the amount of sorted packaging waste (except for deposit packaging) is small. Although ca 75% of the residents of Estonia claim to know which packaging should be collected by type and where containers are located, and one third say there are no obstacles to collecting by type, composite cardboard (mostly packaging of juice or other beverages) is sorted by only 20% and plastic by 35% of residents. Representatives of other nations than Estonia pay less attention on sorting the waste than Estonians. Additionally, both waste transporters and recovery organizations say that large amounts of municipal waste are still dumped in packaging containers.

60. The biggest incentive for collecting packaging waste by type is the economic advantage (66% of respondents). This is especially clear in packaging subject to deposit: 70% (83% in the country) of respondents return beverage bottles to the tare collection machine. A large percentage of municipal waste generated in a private household is made up by packaging so if packaging waste is returned free of charge, this should allow to order a smaller container for municipal waste or empty it less frequently. According to the calculations of the NAO, separate collection of packaging waste in regions where waste transport is expensive due to the absence of organised waste transport, allows to significantly reduce the amount paid for mixed municipal waste. However, only 40% of residents of rural areas and 25% of people living in apartment buildings consider this option of paying less for the transport of municipal waste thanks to sorting an incentive. Quite a large number of residents (37%), incl. nearly half the residents in Tallinn, collect packaging by type to protect the environment.

61. The NAO is of the opinion that more than half the residents of Estonia may not be aware of the establishment of a nation-wide network for the collection of packaging waste that is free of charge and equally accessible for everyone, as means of collection differ depending on the region and recovery organisation. For instance, in Tallinn there are following options:

- Residents of 184 buildings can dispose of all types of packaging in the containers located next to their building and intended for the use of only the residents of the building in question,
- In the regions of single household dwellings people can order packaging bags to be delivered at their home free of charge, and
- The rest should return their packaging to public packaging containers whereas in some regions they are required to separate glass and paper/cardboard, and in others they can drop these materials in the container for mixed packaging.

Did you know that

An observant citizen has proposed to the Ministry of the Environment to number packaging containers and mark them with telephone numbers so that it would be possible to inform relevant persons of a full container or other problems.

Did you know that

The following is considered to hinder the collection of packaging waste by type:

- Different waste must be taken to different places – 18%,
- It is unclear what type waste should be taken where – 18%,
- Containers are too far from home – 13%,
- Sorting is complicated – 10%.

Source: NAO survey

62. Over the years, recovery organizations have changed the appearance of their containers and this creates further confusion. Due to the absence of clear state guidelines the cooperation between local governments and recovery organisations is insufficient and this has caused the collection network to become uneven. Containers of different shape, colour and markings confuse people. For example, many containers do not have a marking indicating that it is a public packaging container. The collection system of deposit packaging, however, has been organized in a similar manner all over Estonia and this is a lot clearer to people.

63. Low activity of city residents, especially residents of apartment buildings, in separate collection of packaging is related to the fact that unless all or most of the building's residents start collecting packaging by type, the amount of mixed municipal waste will not decrease enough so that it would allow to pay less for the transport of municipal waste. Likewise, instructions for collecting packaging by type emphasise that only clean, i.e. washed packaging can be dropped in the packaging container while unwashed packaging should be dumped in municipal waste. Thus, sorting of packaging waste is inconvenient and there is no clear material benefit.

64. According to the NAO, the following circumstances contribute to dumping packaging among mixed municipal waste: in case of packaging not subject to deposit the economic advantage of sorting is not always clear enough; people do not know exactly how many separate bins they should have at home, what to put in these bins and where are the nearest containers. Such waste collection, however, is paid for by consumers not packaging undertakings. Confusion increases incineration of waste which is harmful to health and the environment: nearly 50% of residents of single family dwellings and small apartment buildings responding to the NAO opinion poll incinerate waste.

Collection network is not organised expediently and does not encourage people to collect packaging waste by type

65. Packaging waste forms nearly half of everyday municipal waste. To encourage their separate collection it is important to ensure that it would be easy to dispose of packaging waste in the vicinity of the place of generation and that its separation from municipal waste would be beneficial. According to the producer responsibility principle packaging undertakings shall incur all costs arising from the collection and handling of waste and invest part of their profits in the development of a nationwide collection network.

66. Cooperation between local governments and recovery organizations has an important role in establishing a user-friendly collection network. Among other things they have to agree on the number of containers in the local government as well as their location. Organized transport of municipal waste by local governments helps reduce the amount of municipal waste dumped in packaging waste containers. In this case, residents are required to own a municipal waste container and their desire to drop their waste in wrong places decreases. It is the responsibility of the local government to ensure, in cooperation with the state, the accessibility and stability of container network: location of container, its appearance and means of collection should not be change too often.

Packaging container network is not homogeneous

67. The NAO is of the opinion that the packaging container network needs improving. Ca 30% of residents responding to the poll claimed that they have to take packaging too far (1 km or more). Distance from the container was not a problem for the rest of the 70% but as already mentioned in Clause 59, many of them do not sort their packaging waste anyway. For instance, in Kadriorg urban region in Tallinn there are only two public packaging containers, both located in border regions. There are problems with the entire Central Tallinn as it is apparently difficult for the local government to find a suitable location for public packaging containers. 15% of local governments interviewed by the NAO think that the number of containers is too small. There are cases where the organizations have removed dozens of containers from local governments without providing any explanation.

There are too few containers for different types of waste

Did you know that

Pursuant to the Waste Act, paper and cardboard shall also be separated from municipal waste at the point of generation.

For this reason there is usually a separate container for paper and cardboard next to the container for mixed municipal waste. There should be separate public containers for paper and cardboard **packaging and said containers shall be installed by the recovery organisation.**

68. As a result of a joint project between Estonia and Austria, preceding the introduction of packaging waste collection system it was concluded that the collection and recovery system for packaging waste is the most efficient if paper/cardboard, glass and other (metal, plastic) are collected separately. In this case the material is clean enough and easier to be recovered. At the moment most packaging in Estonia are collected into mixed packaging containers. Although packaging reporting shows that the amount of generated paper and cardboard waste is the largest, the number of containers meant for them is very small compared to the number of containers for mixed packaging. It is not reasonable to put paper and cardboard packaging into containers for mixed packaging as paper gets wet and dirty and as such the material cannot be separated and recovered. Also, the openings in containers for mixed packaging are generally of a size that does not accommodate large packaging (e.g. pressed cardboard box). For example, in Tallinn there are only 24 containers for paper and cardboard packaging installed by recovery organizations; in several rural municipalities there are none.¹⁶

¹⁶ Information on the recovery organisations' websites as at September 2010.



Packaging containers of similar appearance are easily recognisable in the City of Vilnius.



Packaging has to be thrown in one by one into these containers for mixed packaging with small openings.

Photos: NAO, Estonian Union for Cities

Did you know that

Pursuant to § 17¹(1) of the Packaging Act, the density of packaging containers shall be as follows:

- In a densely populated area of more than 1000 residents per km², at least one collection point within a 500 m radius from the undertaking generating waste;
- In a densely populated area of more than 500 residents per km², at least one collection point within a 1000 m radius;
- In an area with less than 500 residents per km² collection points shall be located in settlements in local government territory with at least one collection point per 500 residents.

Local governments cannot ensure collection by type

69. In most local governments, the number of containers for glass packaging is also very small or nonexistent. For example, Estonian PackCycling and Estonian Recovery Organisation have installed 227 containers for glass packaging in Tallinn while they have installed no containers for glass packaging in Hiiu, Valga, Järva and Võru County, and only one in both Viljandi and Lääne County. Unlike paper and cardboard packaging, glass can be separated from mixed packaging but different practices applied in different counties are very confusing for residents.

70. Collection of packaging waste by type is made inconvenient by the fact that despite the obligation established in the Packaging Act¹⁷, it is generally not possible to dispose of all types of packaging at the same place. Therefore, law-abiding citizens have to walk to visit several locations with different bags of packaging. Only those people have an advantage near whose building Producer Responsibility Organisation has installed a packaging container for the needs of this specific building or apartment association.

71. Although 72% of residents claim to know which waste to dump in which packaging containers and declined the offer of additional information, both recovery organizations and waste handling entities say that it is an ongoing problem that a lot of municipal waste is dumped in packaging containers. This is the reason for containers with small opening that are so inconvenient; a bag full of municipal waste will not fit through there. Due to a large proportion of municipal waste or dumping waste next to the container many packaging containers have been removed in the City of Tallinn.

72. Several regional differences in the packaging container network are related to the recovery organisations' attempt to reduce their expenses. For instance, collection in plastic bag is significantly cheaper than regular maintenance of the container as plastic bags are provided only if the person requests it. However, the opinion poll conducted by the NAO shows that the plastic bag service is used by only ca 10% of single family dwellings. Also, the appearance of containers has changed due to their replacement, or containers for paper and cardboard have been turned into mixed packaging containers. In this case the probability of recovery of waste in the container is significantly lower.

73. Although pursuant to the Packaging Act, local governments and recovery organizations should agree on the locations of collection points, minimum number and volume of containers as well as their emptying intervals, many local governments are not successful in implementing their terms. This despite the option provided to local governments by the Waste Act to establish specific terms in waste management rules for the containers' type, material, location, etc. Waste management rules analysed by the NAO tended to repeat the text of the Act in terms of packaging waste; only a quarter of the rules listed the minimum number of collection points and less than half listed the location. The

¹⁷ Packaging Act, § 17¹ (3).



Because of heavy snow in the winter of 2010 access to many containers was complicated.

Photo by: National Audit Office

Recovery organisations are not interested in developing the container network

abovementioned shortcomings reduce the local governments' opportunity to negotiate with the organisation. As a result, recovery organizations operate without contracts in many local governments: of 110 interviewed local governments, one organization had concluded contracts with only 41 local governments and two organizations with ca 80.¹⁸ Even if contracts exist, their wording tends to be general. In addition to that, local governments cannot check compliance with requirements established by themselves in waste handling rules or contracts and according to many local governments interviewed by the NAO, recovery organisations provide them with a list of terms and tell them to take it or leave it. There are no contracts in Tallinn either as recovery organizations do not wish to comply with the requirement to keep the surroundings of container clean, established in the waste handling rules of Tallinn.

74. If, on the one hand, local governments do not know how to put pressure on organizations installing packaging containers, then on the other hand, they fail to monitor the activities of residents. Despite the obligation to separate packaging by type, established in the Packaging Act and waste handling rules of most local governments, supervisory officials of local governments (or waste handling entities collaborating with them) do not monitor whether packaging has been separated from municipal waste. For example, in Flanders, Belgium, waste transporting entities perform random checks of whether plastic bags intended for different types of waste do indeed contain properly sorted waste, and the proportion of collection of waste by type is high in this region.

75. State supervision and the abovementioned accreditation requirement of recovery organizations have failed to encourage the number of collection points. For accreditation, existing organizations have submitted general consents of local governments regarding the collection of packaging on their territory. After accreditation, however, local governments must enable the organization to operate in its territory even if the latter fails to meet the terms set by the local government. For instance, the activity plan of an organization that was considered as basis for accreditation stated that 2252 packaging containers shall be installed by 1 May 2005 and from there on their number shall be gradually increased. However, the 2005 annual report shows that 1900 were installed only by the end of the year and this did not cover all local governments. All local governments were finally covered by October 2006 (total of 2202). In July 2010 the organisation's website stated that the number of remaining containers was 1776. As target recovery indicators are largely met with the help of clean packaging waste collected from commercial undertakings and directly from manufacturing undertakings as well as by the opportunity to purchase recovery certificates from waste handlers, there is no need for the organizations to increase the quantity of waste collected in packaging containers. This is especially noticeable in the scarcity of paper and cardboard containers. In general, packaging recovery organizations collect the exact amount of packaging needed for the exemption from excise duty. At the same time producer responsibility system should ensure the collection and recovery

¹⁸ As at May 2010.

Did you know that

There are 28 containers for mixed packaging in Nõmme with 38 100 people living there on ca 29 km² at the beginning of 2010.

Lasnamäe has also containers for mixed packaging and the number of its residents is thrice the size of that of Nõmme (115 000) on 27 km².



The people of Vormsi can dispose of their packaging waste in waste collection booths.

Photo by: National Audit Office

Did you know that

recovery organisations (not local governments) shall incur the following costs related to packaging containers:

- rent and installation;
- emptying;
- transport of packaging waste to the recovering entity.

of packaging waste in as large amount as possible, i.e. not only within the scope of the target indicator.

76. It is not easy for the state and local governments to monitor compliance with the requirement of the density of the container park as the Packaging Act links the number of location points to population concentration and the criteria for establishing that is not clear. For example, the population concentration of Lasnamäe and Nõmme differs significantly; yet it has not had an impact on the number of packaging containers. The need to specify the definition in the Packaging Act has also been mentioned by the Chancellor of Justice.

77. To find a solution for the problem of the lack of containers, many local governments have decided to fund the instalment of packaging containers either fully or partially from the local government budget, thus alleviating the obligation of packaging undertakings to spend funds on improving the separate collection of packaging waste. The opinion poll carried out by the NAO revealed that many local governments have fully financed the purchase of containers. Some local governments, however, pay 10–70% or even 100% for the emptying of containers (esp. paper and cardboard) even though the packaging waste collection system was already paid for by undertakings who joined the recovery organisations.

78. According to the NAO the abovementioned problems are the underlying cause for why only a third of the residents of Estonia separate packaging waste (with the exception of deposit packaging). Introduction of the separation habit takes time. Therefore, if known containers are removed or disposal of waste is inconvenient, it is likely that people will stop separating packaging waste. Instead of running to and fro between different collection points it is easier to dump plastic and glass among municipal waste and paper and cardboard in the container of organized waste transport. However, in this case the maintenance of the container is the responsibility of the consumer not packaging undertaking and the latter sees no motivation for reorganizing packaging in a manner encouraging recovery. A lot of packaging ends up in landfills with mixed municipal waste and shall not be recovered. In the worst case the waste is incinerated.

79. In a situation where packaging undertakings are required to pay only for the collection and recovery of packaging they have placed on the market, the handling of the rest of ca 100 000 tons is indirectly paid for by consumers because, as mentioned in the previous chapter, the amount of generated packaging waste is actually almost double the declared amount.

80. Recommendations of the NAO to the Minister of the Environment: Initiate the amendment of the Packaging Act regarding the following:

- Specification of the obligation of recovery organizations to inform the residents: relevant topics, intervals of providing information, which channels to use.
- Specify how to mark containers for different types of packaging waste. Establish a requirement for the provision of a description at the collection points of packaging waste describing the sorting

of packaging, the person responsible for the container and a contact number to be called in case of problems.

- Specify §17¹(1) of the Packaging Act regulating the density of packaging containers in different areas in Estonia. Coercive measures should also be added to the Packaging Act, to be implemented if recovery organisations fail to establish a container network of required density.

Reply of the Minister of the Environment: Recommendation is taken into account upon drawing up the draft amendment of the Packaging Act and §17(9), establishing the informing of the public and consumers of the procedure and requirements for the return of packaging and packaging waste, shall be specified.

We are of the opinion that establishment of the marking of packaging containers and as well as requirements must be carried out mostly in the cooperation of local governments and recovery organisations. Requirements for packaging containers shall be laid down in the agreement between the local government and the recovery organisation pursuant to the requirements established in the local government's waste management rules. However, current practice has shown that when local governments separately have not been able to be equal partners for recovery organisations and the agreement between local government and the recovery organisation stipulated in the Packaging Act has not been concluded, or the local government fails to act in the interest of the residents of this area. Options to improve the position of local government first and foremost include specialized cooperation structures directed at the overall organization of waste handling, also listed as a solution in the NAO 2008 audit report on waste transport. Practical examples have been given. Compared to other regions in Estonia, organization of the collection of packaging is much better in the area of Central Estonia Waste Management Centre.

Regarding the issue of marking packaging containers it is also relevant that § 17¹ of the Packaging Act includes an option to replace, by consent of the local government, public packaging containers with collection in the place of generation, which is quite common means for packaging waste collection in many EU countries. Other containers and their marking must take into consideration the scope and requirements of the implementation of this solution. We concur that an comprehensive instructions describing and giving advice on local government activities are relevant for the organization of collection of packaging waste. Similar material is currently being drawn up by local governments in the course of implementation of organized waste transport.

We concur that specification of § 17¹(1) of the Packaging Act might improve the density of the packaging container network but we are of the opinion that specification of legal requirements is not enough to guarantee the desired result. Debates are currently held regarding the term "settlement", regarding which it is definitely necessary to increase the power of decision of the local government.

One measure for improving current situation is to further describe the option to link the collection of packaging waste to the organized transport of municipal waste on the basis of the Packaging Act, as several local

governments (Narva and Viljandi) have already expressed a wish to do so. In the invitation to participate in transport competition documents (as of 2011 in the form of public procurement) the local government can specify the requirements for the organization of packaging waste. In general, this would be collection in the place of generation in the model of organized waste transport, regarding which the provisions of the Packaging Act on the density of containers would not be relevant. Linking organized waste transport and collection of packaging waste calls for a solution for the physical transfer of packaging waste collected by one transporting entity and/or division of costs among several recovery organizations.

81. Recommendations of the NAO to the Association of Estonian Cities and Association of Municipalities of Estonia:

- Encourage and supervise cooperation of neighbouring local governments in establishing collection networks for packaging waste. Local governments could jointly develop requirements for the appearance, size and marking of containers. Cooperation would ensure local governments' better position in concluding contracts with recovery organisations and more homogeneous container network would make the issue of collecting packaging waste by type clearer for residents.
- Encourage and cooperation of local governments in carrying out supervision over the requirements of the Packaging Act and organise relevant trainings, if necessary. Local governments should check whether packaging containers are properly located and marked, whether they are emptied in a sufficient interval and whether residents collect packaging waste by type.
- Encourage local governments to upload on their websites relevant links or information on the fact that sorting of packaging waste is compulsory, including tips on how to sort properly and where to find nearest packaging containers.

Reply of the Association of Estonian Cities: We consider cooperation between local governments, particularly exchange of good practices, experience and information necessary and possible. Development of cooperation and information network is one of the priorities of the Association of Estonian Cities.

Establishing requirements for the appearance, size and marking of containers as well as developing common minimum requirements requires from recovery organisations the compulsory conclusion of a contract with the local government (upon the amendment of the Packaging Act). At the moment there are cases where recovery organisations may start operating or have started to operate on the local government's administrative territory without concluding a contract with the local government and ignoring the requirements of local government's waste plan and waste management rules, moving containers randomly and reducing their number. If requirements are not met, local governments should have the opportunity to implement coercive measures.

We concur that a more homogeneous container park and stable network of container locations would make the issue of collecting packaging waste by type clearer for residents.

We consider it important to seek means and options for organizing a training and in-service training on the topic of supervision for the supervisory officials of local governments. To save time and funds in the public sector it would be reasonable if the Ministry of the Environment and the Environmental Inspectorate included in their trainings officials engaging in local government supervision.

We shall draw our member's attention to the good examples regarding the exchange of information related to the compliance with the Packaging Act and making said information available for the public.

Reply of the Association of Municipalities of Estonia: We consider cooperation between local governments in different fields relevant from the viewpoint of common interests and mutual interest and will try to improve the implementation of best practices by exchanging information, experience, etc.

However, taking into consideration the observations listed in the draft report on the functioning of the collection and recovery system of packaging waste as well as recommendations to amend the Packaging Act, we state that more intensive cooperation between local governments may not give expected results within the current legal framework. We find that, first and foremost, regulations in legislation should ensure the interest of recovery organizations in the collection of packaging waste and in agreements with local governments.

/Signed digitally/

Tarmo Olgo
Audit Director, Performance Audit Department

Recommendations of the NAO and replies of the Ministry of the Environment, Environmental Inspectorate, Ministry of Finance, Tax and Customs Board, Association of Estonian Cities and Association of Municipalities of Estonia

The NAO issued many recommendations on the basis of the audit. In November and December 2010, Ministers, Directors General and representatives of local governments sent their replies to the NAO recommendations.

General comments on the audit report

Minister of the Environment: Additional explanation on Table 4 "Outstanding excise duty on packaging in 2009, approximate calculation 2009", given in Clause 51 of the audit report, regarding the generation and recovery of packaging waste and outstanding excise duty in 2009. Appendix to the report gives an overview of the method of generation and recovery of packaging waste.

Ministry of the Environment cannot concur with the amount of outstanding excise duty presented in the audit report as we do not have primary data for the calculation that would allow assessing the accuracy of generation quantities of packaging waste by type of material shown in the tables. Accurate amount of outstanding excise duty should not be calculated on the basis of data received by indirect method (quantity of eliminated packaging waste calculated on the basis of the composition of packaging waste relying on the studies of the total quantity of mixed waste and existing mixed waste, to which the recovered packaging waste shown in reporting has been added. Data of the waste reporting information system has not been gathered with the aim of assessing the volume of excise duty on packaging. This data only allows providing an approximate assessment. Let us explain this by an example of plastic packaging where the generation quantity of plastic packaging of the waste reporting information system, serving as a basis for the calculation of excise duty given in Table 4, is 69 343 tons, including 22 689 tons of plastic placed on the market and declared in the packaging register as well as 46 654 tons declared in the waste reporting information system (codes 15 and partly 20). When calculating the amount of excise duty, there is a significant inaccuracy regarding the 46 654 tons declared in the waste reporting information system as this includes plastic packaging waste that are not covered by the excise duty, e.g. imported raw material packaging. However, we must admit that the calculation table presented in the audit report reveals serious shortcomings in the data on placing the packaging on the market and generation of packaging waste, submitted by packaging undertakings and recovery organisations as well as waste handling entities. It is obvious that the data submitted to the packaging register and waste reporting is inaccurate. Packaging undertakings and recovery organizations as their representatives are responsible for ensuring the accuracy of data and, which implies a serious violation by the business sector upon meeting the requirements and submission of data.

Initial calculations of the Environment Information Centre of the Ministry of the Environment on the 2009 generation of packaging waste differ from the figures given in the audit report. Proportion of the generation of packaging of different types, based on the data in Table 4, differ from the figure shown in the audit report by +1% to -2% and the proportion of recovery, based on the data in Table 4, differ by +15% to -23%, which is very significant when calculating the amount of outstanding excise duty.

Thus, such calculations in their current state when drawing up the 2009 packaging reporting can serve as a basis for the argument that it is an important issue that must be dealt with amending legislation and improved supervision, not for calculating specific amounts of excise duty.

Minister of Finance: We hereby submit the opinions of the Ministry of Finance on the draft audit report "Effectiveness of collection and recovery of packaging waste".

All in all, we concur that in its current state excise duty on packaging as a measure to ensure recycling of packaging is out of date.

To improve the tax system's sustainability, we have included organization of packaging recycling through more transparent taxation in the development plan of the area of government for the period of 2011–2014. The aim is to develop the current packaging taxation system in a way that would contribute to more efficient organization of packaging recycling and would help fulfil the fiscal objective in a certain scope.

Organisation the system of packaging recycling and accrual of excise duty on packaging is likely to be positively influenced by an amendment to § 11¹⁹ of the Packaging Act, entered into force on 19.6.2010, according to which packaging undertakings can no longer join recovery organizations retroactively.

We cannot fully concur with the method of calculating the outstanding excise duty on packaging for 2009. The European Commission recognizes a method that uses the data of both the packaging register and waste reporting information system. The method used in the draft audit report only applies the data of waste reporting information system.

Director General of the Environmental Inspectorate: We cannot fully concur with the statement on first page of the report that "According to the NAO the state has not succeeded in ensuring the full responsibility of packaging undertakings for the recovery of packaging waste placed on the market by them. This is mainly due to poor supervision over packaging undertakings, recovery organizations representing them and over users of recovered packaging waste." We think that one of the causes for that is the

¹⁹ Entered into force in 19.6.2010.

fact that the Packaging Act is not regulated. The Packaging Act does not establish specific requirements for monitoring recovery organisations, the contents and issue of recovery certificates and auditing of packaging reports.

The audit report does not specify the fact given on page 15 that the amount of packaging landfilled in 2008 exceeded that of 2002. If we were to use the "principle of conservation of mass", then the amount not recovered should be landfilled. Landfilled amounts, however, have not increased by such an amount. According to published statistics, the amount of waste landfilled in 2008 has decreased, compared to 2007. How much of this waste was made up by packaging waste, is unclear due to missing source data.

The final weight of packaging waste can also be influenced by the fact that disposed packaging waste are wet and dirty and thus of a bigger relative density.

It is doubtful if the amount of packaging placed on the market and recovered during one year can only be identified on the basis of the waste reporting information system. Current supervisory activities have often revealed that waste reporting in the waste reporting information system is inaccurate. Undertakings submitting the report often forward the data identified by us and then corrected to the waste reporting information system. They claim it was a typing error. As waste reports are not subject to auditing the risk remains that data in the waste reporting information system and undertaking's own reporting are not compatible.

Knowledge of waste handling entities on the classification of waste is poor. Waste codes are changed even after the waste generating entity has transferred the waste to the waste handling entity with a code based on generation. In the waste reporting information system, several waste movements are still one-sided.

Checks of entities handling hazardous waste have also revealed that, for instance, empty packaging of household chemicals (paints, varnishes used at home, etc.) is accepted as hazardous waste. Waste code is determined on the basis of the residue of hazardous waste in the packaging or based on what it used to contain. Later, packaging shall be bought up as metal packaging.

Based on the above there is a possibility that instead of being landfilled packaging waste has been recovered but data on this has not reached state registers, or the packaging has been recovered using a different waste code.

We agree with the part of the audit report that mentions poor supervision over exported and imported packaging waste. Even this year we have found out about significant amounts of packaging previously illegally moving to and from Estonia.

Clause 36 of the audit report contains a statement that instead of checking packaging flow, two thirds of the Environmental Inspectorate checks in the period of 2005–2009 dealt with shops and one third was spent on checking packaging undertakings who have failed to submit their data to the packaging register.

Initially, this approach was justified. Otherwise the introduction of the packaging system would not have been successful.

Wording of Clause 36 of the audit report implies that the Environmental Inspectorate has not been dealing with quantities placed on the market and, in turn, with excise duty. Excise duty is the responsibility of the TCB. As of 2008 the Environmental Inspectorate has regularly submitted data on the TCB on the violation of the Packaging Act.

A separate supervisory group to improve packaging control shall be established by 2011 to prepare, conduct and process larger checks. In-service training is planned for the members of this group. We have met with the TCB and discussed future cooperation regarding reciprocal exchange of information, planning of work and on-site inspections.

This year we received funding for a project that analysed from our point of view the functioning of the Packaging Act, related shortcomings and tried to find necessary solutions. In the course of the same project, instructions were drawn up for inspectors to help them carry out packaging supervision in a more efficient manner.

Deputy Director General of the Tax and Customs Board in the capacity of Director General: Due to the nature of the Packaging Act, the Ministry of the Environment governs the field of packaging and the Environmental Inspectorate in its area of government has a leading role in the supervision over waste handling. Pursuant to the Packaging Act, supervision is carried out over undertakings who engage in producing, packaging and importing packaging as well as over the activities of undertakings engaging in selling and accepting packaging, waste handling entities and recovery organisations. Pursuant to § 26(4) of the Packaging Act, the EI shall submit control results to the TCB by the 15th of the following calendar quarter.

Pursuant to § 12(1) and (2) of the Packaging Excise Duty Act, the TCB is responsible for checking the accuracy of calculating excise duty as well as compliance of payments with set deadlines and in the case of inaccurate calculation of excise duty, evading payment or late payments, apply interests and sanctions established in the Taxation Act.

State supervision is fragmented, being divided between the Environmental Inspectorate, Tax and Customs Board and local governments and today the division of duties is unclear. To verify compliance with target recovery indicators, data on placing on the market of packaging shall be checked on the basis of the source documents submitted by packaging undertakings. The data shall be compared to waste quantities collected by recovery organizations, delivered to waste transporters and then to waste handlers. Tax authority must do the same in order to determine excise duty on packaging. Here, supervision activities overlap. A cooperation agreement has been concluded between the TCB and the EI and we have met with the EI to discuss, among other things, the division of supervision activities. Determination of excise duty is the responsibility of the tax authority and we are therefore willing to perform our duties when the EI submits data to us.

Additional information:

Up to now the TCB has based the risk assessment of its selection of object on the data of the packaging register, among other things, assuming that the recorded data is accurate. Packaging register is maintained by the Environment Information Centre under the supervision of the Ministry of the Environment. To ensure accuracy and reliability of data, the Packaging Act establishes an obligation to carry out audits on data submitted to the packaging register by recovery organizations and packaging undertakings. The NAO audit also pointed out that today the packaging register is not reliable.

In 2009 the EI submitted data on 22 audits. Upon selecting the audited object and planning resources the tax authority relied on the risks whereas both the probability of pertinence and estimated audit results were relevant. Up until the summer of 2010, the Packaging Excise Duty Act and its interpretation by the Supreme Court allowed packaging undertakings to join a recovery organization retroactively and thus avoid the payment of excise duty on packaging. Immediately after the amendment had entered into force the tax authority began analysing the packaging market. The analysis was completed in the last week of

October and it assessed the packaging undertakings that have not joined any recovery organisations.

The TCB is of the opinion that considering the unreliability of the data of the packaging register and shortcomings in legislation, we have fulfilled our duties in the best way possible.

Executive Director of the Association of Estonian Cities: Association of Estonian Cities (AEC) has examined the draft audit report "Effectiveness of collection and recovery of packaging waste" and shall submit its comments and opinions.

1. We concur with the NAO's opinion that the activities of packaging recovery organizations is not in compliance with all accreditation requirements and that the system of collecting packaging waste by type is inconvenient and complicated for residents. The AEC agrees with the NAO that it is necessary to initiate the amendment of the Packaging Act regarding at least all aspects mentioned by the NAO (draft report, p. 2).
2. We concur with the following opinion of the NAO in Clause 41 of the overview of the field: "Preliminary agreements concluded with local governments, waste transporters and recovering entities and submitted upon accreditation do not guarantee later conclusion of contracts based on said agreements."
3. The AEC supports the NAO's opinion that in case of the amendment of the Packaging Act, establishment of competence regarding supervision over collection, handling and recovery of packaging waste needs legal clarity and legal certainty. Likewise, we would like to note that in our opinion the obligations of local governments regarding supervision over the compliance with the Packaging Act pursuant to the regulation entered into force on 31.5.2008 (§ 26(5) of the Packaging Act) are unacceptably large (acceptance, collection and recovery) in comparison with the duties of other supervisory agencies. Local government is not the accreditation body or permit issuer in these packaging processes so it cannot be a supervisory agency in all parts of the process either. We are of the opinion that supervision over the recovery of packaging waste should not be the responsibility of the local government. We think that competence of local government in supervision over packaging issues should and could include checking of compliance with the regulations established by local government legislation (waste plan, waste management rules) and with the terms of contracts already concluded or to be concluded with recovery organizations (conclusion of contract should be compulsory for recovery organizations before beginning to operate in the local government's administrative territory).
4. We concur with the NAO that sorting packaging from municipal waste and its separate disposal is encouraged, firstly, by as convenient organization as possible, secondly, by specific and easily accessible instructions and thirdly, by financial benefit, or rather the possibility of reducing expenditure on waste services. Municipal waste collection system, complying with current regulations, does not allow separating a waste handling entity actively sorting packaging and using the network of collection by type from the waste handling entity who does not sort packaging and does not use the network of collection by type. Service charge for the container or bag of municipal waste that does not contain packages should be significantly smaller than the charge for containers and bags of municipal waste that do contain packages and/or an option should be established to use the waste transport service less frequently. We are of the opinion that this should be applied everywhere, in areas with organised waste transport and of unorganised municipal waste transport.

The Association of Estonian Cities and the Association of Municipalities of Estonia are members of a working group for budget negotiations and with the representatives of the Ministry of the Environment (chair of working group is Minister of the Environment Jaanus Tamkivi) we have addressed the topic of the Packaging Act, including the insufficiency of accreditation requirements, issues of supervision over compliance with the law, scope of local government obligations and efficiency of supervision, including the Environmental Inspectorate in our discussion. We have also addressed the problems arising from the work of accredited recovery organizations from the viewpoint of both local governments and the services provided to the residents. To improve this situation we have raised the question of expanding producer responsibility to printing products on paper and have submitted this proposal to the Ministry of the Environment.

For the negotiations between the government committee and the delegation of Local Government Associations Co-Operation Assembly the proposals made by the Assembly, opinions of the government committee in this matter, reached agreements and dissenting opinions of the parties are annually recorded in the interim protocol and final protocol of the negotiations.

Relevant environmental topics and environmental law issues are always addressed in the annual great event "Linnade ja valdade päevad" (Days of Cities and Rural Municipalities).

Executive Director of the Association of Municipalities of Estonia: We have made the following observations on the draft audit report.

In general we concur with the observations and conclusions of the NAO on the collection and recovery systems of packaging waste.

In relation to supervision over the collection and recovery of packaging we find it relevant to note that § 26(5) of the Packaging Act, determining the scope of local governments' supervisory competence, should also be amended. We think that this duty is too broad and that supervision over the recovery of packaging and packaging waste should not be the responsibility of local governments.

Recommendations of the NAO	Replies of Ministers, Directors General and representatives of local government associations
<p>Improving packaging reporting and supervision</p> <p>53. Recommendations to the Minister of the Environment:</p> <ul style="list-style-type: none"> ■ Initiate the amendment of the Packaging Act so as to: ■ In order to more clearly regulate the 	<p>Reply of the Minister of the Environment regarding the initiation of amendment of the Packaging Act: The Ministry's 2010 work schedule includes the preparation of a draft to amend the Packaging Act (hereinafter referred to as PA). The working draft shall regulate in a clearer and more specific manner the verification of packaging waste and shall determine who is authorized to issue recovery certificates as well as the data listed on the</p>

Recommendations of the NAO	Replies of Ministers, Directors General and representatives of local government associations
<p>principles of packaging waste recovery verification, specify in the Act the recovery entities authorized to issue recovery certificates as well as the form of recovery certificate and requirements for documents verifying recovery. Prevent the situation where recovery is verified by preparatory activities (collection, transport, sorting). Inform packaging undertakings and recovery organizations of the fact that if possible, recovery must be verified with documents till the end of the recovery chain.</p> <ul style="list-style-type: none"> ■ Improve wording of requirements for the contents of management overviews (reports) of recovery organizations so that these would complement each other not double the data of annual reports and data submitted to the packaging register. For instance, in the overview the organizations should give the following information: contracts concluded with larger service providers and quantities of packaging waste delivered to them; explanations on loss, loans or financial trouble; separate information on packaging containers and the quantity of packaging waste collected directly from undertakings. Likewise, establish a coercive measure for when a report is submitted that does not comply with requirements. This would enable better supervision and analysis of the efficiency of recovery organisations. ■ Specify the requirements for the contents of packaging audit so that it would be clear which data's accuracy is confirmed by the auditor (first and foremost, the audit should cover the amount of packaging of different materials placed on the market, the method used for calculating this data and the verification of waste recovery). ■ To improve control over the activities of recovery organisations, establish a term for their accreditation. Also establish the composition of responsibility in the responsibility chapter of the Packaging Act and a coercive measure for when the organization fails to comply with requirements of §17 of the Act. ■ Supplement the packaging register so that it would be possible to carry out detailed and aggregate requests. Consider the need for supervision and consult supervisory agencies. ■ Ensure that the Environmental Inspectorate has a sufficient number of inspectors with required knowledge in order to check whether recovery organizations are in compliance with accreditation requirements and duties listed in § 17(4) of the Packaging Act, whether data on placing the packaging on the market is accurate. Likewise, check the movement of packaging waste from the moment it is placed on the market to the recovery by waste handler. To ensure successful supervision over documentation and audit results, improve the competence of checking and analysis of source documents 	<p>certificate. Experience has shown that a significant amount of packaging waste recovery is and shall be carried out (partially for economic reasons) outside Estonia and outside the EU, particularly in Asia. Based on this it is not reasonable to try to identify undertakings completing the recycling, i.e. it is not reasonable to consider recycling to be verified only on the basis of a confirmation of the undertaking completing the recycling (i.e. undertaking processing a new product from waste). In case of export from the EU it is especially reasonable to limit verification to internationally required documentation on waste transport while in the EU it should be possible to verify recycling through a specific undertaking. Such solution is supported the treatment of the so-called issue of cessation of waste, based on the new EU waste directive. In the coming years this shall be used for determining criteria for the cessation of waste for several relevant types of waste suitable for recycling (incl. packaging materials such as metal, paper and cardboard, etc.</p> <p>Specification of requirements for the management reports of recovery organizations is definitely necessary. Here, other amendments ensuring substantial control of packaging undertakings over the collection and use of funds of recovery organizations are very important. Recovery organizations operate on the basis of the expanded producer responsibility principle, which is one of the core principles of the EU waste policy, according to which the state shall not determine the charges for return and recovery, shall not collect said charges and shall not carry out detailed control over their use. This should be done by those paying said charges, i.e. ca 3000 packaging undertakings in Estonia. Poor substantial control of packaging undertakings is the source for the problems so far mentioned in this audit report; thus, by strengthening substantial control of packaging undertakings over recovery organizations and moving closer to the actual conception of producer responsibility, continuous strict substantial control over recovery organizations shall not be necessary.</p> <p>Amendments related to the packaging audit constitute a more problematic issue. Here, specifications are necessary and requirements for the competence of packaging auditor and procedure for verifying the auditors' qualifications are in need of a broader debate. It is obvious that these audits should focus on improving and auditing the quality of the calculation of packaging quantities placed on the market.</p> <p>The objective of the packaging audit is to ensure the accuracy of data submitted on types and weight of packaging placed on the market as well as on recovered packaging waste. There is another option for improving the accuracy of data. Clause 54 of the audit report includes a recommendation to the Minister of Finance to consider an alternative option to pay a certain amount of excise duty on packaging upon placing the packaging on the market. We are of the opinion that it is reasonable to establish the obligation to pay excise duty on packaging of X% regarding the packaging placed on the market. Similar proposition was made in the course of economic tax reform discussions in 2006–2007. This solution would facilitate monitoring of the packaging quantities placed on the market by packaging undertakings as these should be declared to the TCB whose duty it is to check the accuracy of submitted data.</p> <p>We shall definitely consider the proposition to establish specific terms for the accreditation of recovery organizations. Here we can refer to similarities with the hazardous waste handling licences specified in the Waste Act, which in 1992–2007 were licences without any legal term, but following the proposal of the NAO in its 2006 audit "Handling of hazardous waste in intermediate depositories and garbage dumps", specific terms were established for hazardous waste handling licences.</p> <p>Replies of the Minister of the Environment regarding other recommendations: Development of the packaging register was carried out in 2010 and by now it is possible to carry out aggregate requests on the data from the register. Development continues in 2011.</p> <p>To check compliance with the requirements of the Packaging Act, the Environmental Inspectorate has commissioned a manual that was introduced in a seminar held on 8.11.2010. The issue of the efficiency of the Environmental Inspectorate in carrying out packaging checks is important and solutions must be found for improving the efficiency with the help of current funds.</p>

Recommendations of the NAO	Replies of Ministers, Directors General and representatives of local government associations
<p>and financial data.</p> <ul style="list-style-type: none"> ■ Ensure that the Environmental Inspectorate regularly check all recovery organizations, larger packaging undertakings and undertakings who have not joined any recovery organization for the compliance with the requirements of the Packaging Act. Create opportunities for the Environmental Inspectorate's cooperation with European Union packaging waste handling supervisory agencies in order to gather information for checking the actual recovery of exported packaging waste. <p>(Clauses 19–52)</p>	<p>As stated in the previous reply, the issue of improving the efficiency of the Environmental Inspectorate in carrying out packaging checks is very important. The experience of other EU Member States is that 3–5% of the total number of packaging undertakings is audited by state supervisory agencies and/or by specialized auditors cooperating with said agencies. In Estonia, the respective percentage of the total number of packaging undertakings would amount to ca 90–150 undertakings. It is likely that in the light of current obscurities the auditing level should be increased.</p> <p>The Environmental Inspectorate is party to IMPEL, network of EU environmental supervision agencies, which was basically established to ensure cooperation, including interaction between such agencies. Thus, the Environmental Inspectorate has opportunities for cooperation with other EU agencies carrying out supervision over packaging waste handling.</p>
<p>Ensuring accuracy of data on placing packaging on the market</p> <p>54. Recommendations to the Minister of Finance:</p> <ul style="list-style-type: none"> ■ To improve the monitoring of supervisory agencies of data on the packaging placed on the market and encourage recovery organizations to perform more thorough checks on the data of packaging undertakings, initiate the amendment of the Packaging Act regarding the following: ■ Establish an obligation to pay excise duty upon placing the packaging on the market and allow the state to reimburse the excise duty if the undertaking or recovery organization has verified recovery of packaging waste within the required scope. Alternatively, contemplate the option of paying a certain amount of excise duty on packaging upon placing the packaging on the market. ■ Apply excise duty on packaging every time if an undertaking subject to submit data to the packaging register fails to submit the report in a timely manner, or submits a report that has not been audited and does not comply with legal requirements. <p>(Clauses 19–52)</p>	<p>Replies of the Minister of Finance: Generally, excise duty is not reimbursed as payment of excise duty is related to the admission to the market of the goods, in this case packaging, subject to excise duty. It would be possible to change the mechanism of placing excise duty on packaging on the market but then it would be packaging tax. Packaging tax paid at the moment of placing goods on the market enables to determine in a specific manner the packaging quantity placed on the market. In this case, the date of submitting the report of the packaging undertaking to the recovery organization could serve as the moment for placing the packaging on the market. Verification of packaging recovery, however, is much more complicated. Final aggregate report on recovery is completed 1.5 years after the packaging was placed on the market. 2009 packaging recovery report shall be completed by 30 June 2011. From the viewpoint of the undertaking it would be a burden to pay excise duty in advance for a certain period for all packaging placed on the market and only after verification of recovery get the funds back after a lot of time has passed. However, if the Packaging Act is not amended it shall still be relatively easy to declare smaller quantities of packaging and falsify documents certifying recovery.</p> <p>This is why we would rather contemplate the establishment of a system where part of the excise duty is paid upon placing the packaging on the market. According to the current logic of exemption from excise duty, the liability to pay excise duty arises if target recovery indicators are not met within the scope of outstanding quantities. We could consider the establishment of a system where in certain circumstances part of the excise duty is paid upon placing the packaging on the market and the rest functions similarly to the current model. 60% of the total weight of packaging waste must be recovered. Most of the packaging is neither recovered nor taxed. The abovementioned model where part of the excise duty is paid upon placing the packaging on the market and for the rest, the tax liability depends on the compliance with recovery obligation is applied in many EU countries. The abovementioned means would help fulfil most of the fiscal objective of excise duty on packaging.</p> <p>Tax should not be seen as punishment for doing or not doing something. Excise duty is not a punishment either but an obligation arising in the case of failure to comply with recovery obligation. Pursuant to § 32 of the Packaging Act, violation of the procedure for keeping records on and submission of information concerning packaging and packaging waste or submission of incorrect information is punishable by a fine of up to 50 000 kroons. Pursuant to § 12(2) of the Packaging Excise Duty Act, in the case of incorrect calculation, tax evasion or late payment of excise duty, the tax authority for state taxes shall apply sanctions and charge the prescribed in the Taxation Act. Pursuant to § 153¹ (1) of the Taxation Act, failure to submit information to a tax authority or submission of false information or violation of the obligation to withhold which results in the amount of tax payable being less than the amount of tax to be paid pursuant to an Act concerning a tax or the amount to be refunded, compensated for or set off being greater than the amount to be refunded, compensated for or set off pursuant to an Act is punishable by a fine of up to 300 fine units. Pursuant to § 153¹ (2) of the Taxation Act, the same act, if committed by a legal person, is punishable by a fine of up to 200,000 kroons. Basically it is possible to consider increasing this term of punishment.</p>

Recommendations of the NAO	Replies of Ministers, Directors General and representatives of local government associations
	In order to examine the report of each undertaking subject to reporting and its reporting deadline, data in the packaging register must be reliable and it should be possible to carry out necessary requests.
<p>Clearer specification of supervisory activities over placing packaging on the market and its recovery</p> <p>55. Recommendations to the Minister of the Environment and the Minister of Finance: Determine clearly the division of duties among supervisory agencies upon carrying out supervision over excise duty on. Ensure the recovery of excise duty on packaging in all cases where the Environmental Inspectorate has identified violation of the Packaging Act, accompanied by an obligation to pay excise duty.</p> <p>(Clauses 35–37; 42–44; 50–52)</p>	<p>Reply of the Minister of the Environment: We are of the opinion that supervision over packaging and packaging waste and their placing on the market should mostly be carried out by the TCB. As already mentioned, this is related to whether the proposition to establish a system where part of the excise duty is paid upon placing the packaging on the market finds support, which shall therefore ensure TCB supervision. Supervision over target recovery indicators for packaging and packaging waste should be carried out by the Environmental Inspectorate as this is a topic specifically related to waste handling where it is important to have knowledge of the field of waste handling as a whole (classification of packaging, identification of packaging waste among the waste of same material, terms related to recovery, etc.</p> <p>Reply of the Minister of Finance: Tax and Customs Board (TCB) addressed this topic in its reply in the letter forwarded to the National Audit Office on 9.11.2010.</p> <p>Ministry of the Environment is the ministry governing the field of packaging and the Environmental Inspectorate in its area of government has a leading role in the supervision over waste handling. The EI shall submit control results to the TCB by the 15th of the following calendar quarter. The TCB is responsible for checking the accuracy of calculating excise duty as well as compliance of payments with set deadlines and in the case of inaccurate calculation of excise duty, evading payment or late payments, apply sanctions established in the Taxation Act. Tax authority is responsible for establishing excise duty. As the current supervision system has failed to ensure the functioning of effective packaging recycling, we agree that the division of rights and responsibilities upon compliance with target packaging recovery indicators should be reviewed in cooperation with the Ministry of the Environment and cooperation between the EI and the TCB should be improved.</p>
<p>Encouraging collection of packaging waste among residents</p> <p>80. Recommendations to the Minister of the Environment: Initiate the amendment of the Packaging Act regarding the following:</p> <ul style="list-style-type: none"> ■ Specification of the obligation of recovery organizations to inform the residents: relevant topics, intervals of providing information, which channels to use. ■ Specify how to mark containers for different types of packaging waste. Establish a requirement for the provision of a description at the collection points of packaging waste describing the sorting of packaging, the person responsible for the container and a contact number to be called in case of problems. ■ Specify §17¹(1) of the Packaging Act regulating the density of packaging containers in different areas in Estonia. Coercive measures should also be added to the Packaging Act, to be implemented if recovery organisations fail to establish a container network of required density. <p>(Clauses 56–79)</p>	<p>Reply of the Minister of the Environment: Recommendation is taken into account upon drawing up the draft amendment of the Packaging Act and §17(9), establishing the informing of the public and consumers of the procedure and requirements for the return of packaging and packaging waste, shall be specified.</p> <p>We are of the opinion that establishment of the marking of packaging containers and as well as requirements must be carried out mostly in the cooperation of local governments and recovery organisations. Requirements for packaging containers shall be laid down in the agreement between the local government and the recovery organisation pursuant to the requirements established in the local government's waste management rules. However, current practice has shown that when local governments separately have not been able to be equal partners for recovery organisations and the agreement between local government and the recovery organisation stipulated in the Packaging Act has not been concluded, or the local government fails to act in the interest of the residents of this area. Options to improve the position of local government first and foremost include specialized cooperation structures directed at the overall organization of waste handling, also listed as a solution in the NAO 2008 audit report on waste transport. Practical examples have been given. Compared to other regions in Estonia, organization of the collection of packaging is much better in the area of Central Estonia Waste Management Centre.</p> <p>Regarding the issue of marking packaging containers it is also relevant that § 17¹ of the Packaging Act includes an option to replace, by consent of the local government, public packaging containers with collection in the place of generation, which is quite common means for packaging waste collection in many EU countries. Other containers and their marking must take into consideration the scope and requirements of the implementation of this solution. We concur that an comprehensive instructions describing and giving advice on local government activities are relevant for the organization of</p>

Recommendations of the NAO	Replies of Ministers, Directors General and representatives of local government associations
	<p>collection of packaging waste. Similar material is currently being drawn up by local governments in the course of implementation of organized waste transport.</p> <p>We concur that specification of § 17¹(1) of the Packaging Act might improve the density of the packaging container network but we are of the opinion that specification of legal requirements is not enough to guarantee the desired result. Debates are currently held regarding the term “settlement”, regarding which it is definitely necessary to increase the power of decision of the local government.</p> <p>One measure for improving current situation is to further describe the option to link the collection of packaging waste to the organized transport of municipal waste on the basis of the Packaging Act, as several local governments (Narva and Viljandi) have already expressed a wish to do so. In the invitation to participate in transport competition documents (as of 2011 in the form of public procurement) the local government can specify the requirements for the organization of packaging waste. In general, this would be collection in the place of generation in the model of organized waste transport, regarding which the provisions of the Packaging Act on the density of containers would not be relevant. Linking organized waste transport and collection of packaging waste calls for a solution for the physical transfer of packaging waste collected by one transporting entity and/or division of costs among several recovery organizations.</p>
<p>Local governments' role in the organisation of the collection of packaging waste</p> <p>81. Recommendations of the NAO to the Association of Estonian Cities and Association of Municipalities of Estonia:</p> <ul style="list-style-type: none"> ▪ Encourage and supervise cooperation of neighbouring local governments in establishing collection networks for packaging waste. Local governments could jointly develop requirements for the appearance, size and marking of containers. Cooperation would ensure local governments' better position in concluding contracts with recovery organisations and more homogeneous container network would make the issue of collecting packaging waste by type clearer for residents. ▪ Encourage and cooperation of local governments in carrying out supervision over the requirements of the Packaging Act and organise relevant trainings, if necessary. Local governments should check whether packaging containers are properly located and marked, whether they are emptied in a sufficient interval and whether residents collect packaging waste by type. ▪ Encourage local governments to upload on their websites relevant links or information on the fact that sorting of packaging waste is compulsory, including tips on how to sort properly and where to find nearest packaging containers. <p>(Clauses 56–79)</p>	<p>Reply of the Association of Estonian Cities: We consider cooperation between local governments, particularly exchange of good practices, experience and information necessary and possible. Development of cooperation and information network is one of the priorities of the Association of Estonian Cities.</p> <p>Establishing requirements for the appearance, size and marking of containers as well as developing common minimum requirements requires from recovery organisations the compulsory conclusion of a contract with the local government (upon the amendment of the Packaging Act). At the moment there are cases where recovery organisations may start operating or have started to operate on the local government's administrative territory without concluding a contract with the local government and ignoring the requirements of local government's waste plan and waste management rules, moving containers randomly and reducing their number. If requirements are not met, local governments should have the opportunity to implement coercive measures.</p> <p>We concur that a more homogeneous container park and stable network of container locations would make the issue of collecting packaging waste by type clearer for residents.</p> <p>We consider it important to seek means and options for organizing a training and in-service training on the topic of supervision for the supervisory officials of local governments. To save time and funds in the public sector it would be reasonable if the Ministry of the Environment and the Environmental Inspectorate included in their trainings officials engaging in local government supervision.</p> <p>We shall draw our member's attention to the good examples regarding the exchange of information related to the compliance with the Packaging Act and making said information available for the public.</p> <p>Reply of the Association of Municipalities of Estonia: We consider cooperation between local governments in different fields relevant from the viewpoint of common interests and mutual interest and will try to improve the implementation of best practices by exchanging information, experience, etc.</p> <p>However, taking into consideration the observations listed in the draft report on the functioning of the collection and recovery system of packaging waste as well as recommendations to amend the Packaging Act, we state that more intensive cooperation between local governments may not give expected results within the current legal framework. We find that, first and foremost, regulations in legislation should ensure the interest of recovery organizations in the collection of packaging waste and in agreements with local governments.</p>

Characterization of audit

Objective of audit

The objective of the audit was to assess whether the state's activities support the collection and recovery of packaging waste so as to meet the target recovery indicators established in the European Union Packaging Directive and ensure the recovery of as much packaging waste as possible.

Assessment criteria

Upon giving its assessment the National Audit Office proceeded from the following criteria:

1. It is relatively easy to dispose of packaging waste and it has financial benefits.
2. Waste producers have been notified of the obligation of collecting packaging by type as well as of the means and options for fulfilling said obligation.
3. The state shall ensure the sustainable activities of producer responsibility organizations organizing the collection and recovery of packaging waste.
4. The state possesses reliable and verified information on the amount of packaging waste generated in Estonia and on the amount of recovered waste.
5. The state can ensure compliance with the target recovery indicators established in the EU Packaging Directive.

Scope and method of audit

The audit analysed whether the activities of the Ministry of the Environment ensure sufficient collection and recovery of packaging waste. The audit analysed the activities of Environmental Inspectorate and the Tax and Customs Board upon carrying out supervision over packaging undertakings, packaging recovery organizations and packaging waste handlers and applying excise duty on packaging.

The audit focused on two main issues:

1. Does the recovery of packaging waste meet the requirements of the European Union target indicators?
2. Can the organisation of packaging waste collection ensure separate collection of packaging and municipal waste?

The audit covered the period of 2005–2009 as both the system of collecting packaging waste by type and the packaging register were functioning by then. This audit did not cover the system of accepting beverage packaging subject to deposit, implemented as of May 2005, as this type of packaging is returned in abundance (nearly 90%), data regarding the placing on the market of packaging is clearly traceable and compared to the field of packaging waste not subject to deposit, there are less problems here.

The audit assessed the reliability of register data regarding the collection and recovery of packaging waste, state control over the activities of packaging undertakings and packaging waste recovery organizations as well as functioning of the systems established for collecting packaging waste from residents.

The following activities were carried out in order to answer the main questions of the audit:

- Analysis of legislation concerning packaging and packaging waste as well as of surveys and projects commissioned by the European Commission and the Ministry of the Environment of Estonia.
- Interviews were conducted with and explanations requested from the following persons:
 - o Peeter Eek, Ministry of the Environment, Head of Waste Department,
 - o Helle Haljak, Ministry of the Environment, Adviser in Waste Department,
 - o Marika Siht, Ministry of the Environment, Waste Department Senior Specialist,
 - o Merike Liiver, Environment Information Centre, Head of Waste Department,
 - o Sten Virak, Environment Information Centre, Waste Department, Packaging Register Specialist,
 - o Andres Maask, Environment Information Centre, Waste Department, Senior Specialist on Register of Products of Concern,
 - o Rene Rajasalu, Environmental Inspectorate, Chief Inspector in Environmental Protection Department,
 - o Tiia Kaar, Environmental Inspectorate, Head of Northern Department,
 - o Tarmo Tehva, Environmental Inspectorate, Senior Inspector/Adviser in the Northern Department,
 - o Moonika Aunapuu, Environmental Board, Chief Specialist on waste in Environmental Department,
 - o Triin Väljataga, Environmental Investment Centre, Project Coordinator,
 - o Egon Veermäe, Tax and Customs Board, Head of Audit Department,
 - o Hille Reinhold, Tax and Customs Board, Chief Specialist in Indirect Taxes and Excise Division,
 - o Kirill Zõkov, Tax and Customs Board, Chief Controller in Audit Department,
 - o Juhan Põldroos, Estonian Competition Authority, Head of Supervisory Department,
 - o Katrin Tasa, Estonian Competition Authority, Adviser in Competition Division,
 - o Eda Grüner, Statistics Estonia, Chief Statistician in Environment and Sustainable Development Statistics Service,
 - o Harri Moora, SEI-Tallinn, Management of Environment, Program Manager,
 - o Oskar Kilk, Head of OÜ Pakendiaudit,
 - o Anti Tammeoks, Estonian PackCycling, Production and Logistics Manager,
 - o Aivo Kangus, Estonian PackCycling, Chairman of the Management Board,
 - o Andres Siplane, Estonian PackCycling, Service Manager,
 - o Ahto Hunt, Estonian Recovery Organisation, Chief Executive,
 - o Kristiina Dreimann, Producer Responsibility Organization, Member of the Management Board,
 - o Rauno Peeter Raal, Eesti Pandipakend LLC, Chief Executive,
 - o Kaupo Karba, Eesti Pandipakend LLC, IT and Financial Manager,
 - o Agu Rimmelg, AS Ragn-Sells, Business Manager,
 - o Bruno Tammaru, AS Veolia, Environmental Services, Waste Handling and Sales Director,
 - o Marian Tuul, AS Veolia, Environmental Services, Quality Manager,
 - o Irja Alakivi, Association of Estonian Cities, consultant.

- 30 packaging undertakings with an obligation to ensure collection and recovery of their packaging were interviewed. Expert sampling included ten undertaking with larger packaging quantities and 20 undertakings from different sectors. National Audit Office's online survey environment was used to this end.
- 110 local governments were interviewed and asked to present contracts concluded with recovery organisations. The sample was based on local governments who supposedly have a waste plant in their territory. Additionally, a smaller expert sampling (30) was created whose documentation was analysed more thoroughly.
- An opinion poll among the residents of Estonia was carried out in cooperation with an expert (sample of 1000 people).
- Tax and Customs Board was asked to present all cases of infringement proceedings related to excise duty on packaging in the period of 2005–2009. Expert sampling included the analysis of 20 undertakings and examination of their documentation.
- Environmental Inspectorate was asked to present all cases of infringement proceedings related to excise duty on packaging in the period of 2005–2009. Expert sampling included the analysis of 20 undertakings and examination of their documentation.
- The following information was analysed:
 - waste reporting information system and data of both the old and new packaging register,
 - contracts concluded between local governments and recovery organisations,
 - websites of local governments (regarding the availability of information on packaging waste),
 - annual reports of four recovery organizations and management reports submitted to the Ministry of the Environment,
 - infringement proceedings conducted by the Tax and Customs Board,
 - infringement proceedings conducted by the Environmental Inspectorate.
- Data concerning the generation and recovery of packaging waste was calculated, using the method applied by the Environment Information Centre in 2008.

Time of completion of audit:

Audit activities were carried out from February to June 2010.

Audit team:

The audit team consisted of Tuuli Rasso (Audit Manager), Airi Andresson (Senior Auditor) and Viire Viss (Auditor).

Contact information

Additional information on the audit is available from the Communication Service of the National Audit Office,
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An electronic copy (pdf) of the audit report is available on the NAO's website www.riigikontroll.ee.

Summary of the audit report is also available in English.

The audit report has been registered in the documentation system of the National Audit Office under No. 2-1.7/10/70005/42.

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Previous NAO audits conducted in the field of waste

12.7.2006– “Handling of hazardous waste at intermediate depositories and garbage dumps”

22.7.2008 – overview “Situation of waste management in rural municipalities and cities”

All audit reports are available on the NAO website www.riigikontroll.ee

Appendix: Method of calculating the generation and recovery of packaging waste

Drawing up a report on the generation and recovery of packaging waste to be submitted to the European Commission, the state uses a method accepted by the European Commission and applied by all Member States. Calculation of the generation of packaging waste (= placing on the market) is carried out using the “principle of conservation of mass” which assumes that the amount of waste collected, recovered and landfilled in one year is equal to the amount of packaging placed on the market over the same period.

Source data is mainly drawn from the waste reporting information system (not from the packaging register) that is accordingly updated and adjusted on the basis of developed methods and study results (SEI-Tallinn 2008. “Analysis of the composition and quantities of municipal waste (incl. separate packaging waste and organic waste) produced in Estonia“) and data received from waste handlers. Studies show that paper and cardboard waste (code: 20 01 01) include 30% of packaging and this amount has been added to the packaging waste marked in reporting with code 15. Collected mixed municipal waste (code: 20 03 01) includes 34% of packaging waste and this amount shall also be added to packaging waste generation figures. For instance, 354 904 tons of mixed municipal waste was collected in 2008, i.e. they include approximately 120 667 tons of packaging waste. This amount shall be added to the total packaging generation figure.

To calculate the recovery of packaging waste packaging waste with a code indicating recovery activities and shall be added to packaging waste market as unspecified handling and exported packaging waste (automatically deemed recoverable).