



Reducing the use of plastics

Publication in Regularity Audit Report 2018

2019



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Plastics are in widespread use – and indeed their use is on the rise. On a global scale, the volume of plastics in use around the world has multiplied by a factor of 20 during the past 50 years. Despite their versatility, the fact that a huge amount of fossil-based resources and energy is needed to produce them means that they are not environmentally friendly. Some plastics are either reused or recycled after use, others are thrown away with the household waste and others end their lives littering the natural environment. Although both national and EU targets have been formulated for reducing the use of plastics, these focus exclusively on the recycling of plastic packaging materials. No targets have been set for reducing the production and use of plastics in general. This means that Dutch government policy as it currently stands is aimed at a limited part of the plastics supply chain. Precise figures about this are not available. The Minister of Infrastructure and Water Management, the Association of Dutch Municipalities and the packaging industry have reached agreement on a set of joint recycling targets. These are set out in a framework agreement for 2013–2022, the aim of which is to ensure that 52% of plastic packaging is recycled by the year 2022.

Our audit of the Dutch government’s policy on reducing the use of plastics shows how the government is seeking to achieve the targets it has set in relation to the use of plastics. The Minister of Infrastructure and Water Management cannot achieve the targets without the assistance of other organisations. The Minister is seeking to achieve the targets by a process of coordination and encouragement, and is wary about using legislation in order to enforce compliance. This approach has proved to be an effective means of achieving the current target: with 50% of plastic packaging now being recycled, the government has already almost achieved its target of recycling 52% of plastic packaging in 2022.

However, since only packaging materials are recycled, plenty of potentially usable plastics still end up in incinerators. Public support for waste separation may ebb away if people realise that, out of all the plastic that they separate from other forms of waste, only the packaging is recycled, while the remainder is incinerated. Moreover, current government policy is geared exclusively towards recycling, and not towards prevention and reuse. The Plastics Pact NL signed in February 2019 by a large number of plastics manufacturers and users (as well as several civil-society organisations and research institutes), includes a



limited prevention policy on disposable plastics: as part of the plan for preventing new plastics from entering the chain, the aim is to achieve a 20% reduction in the use of single-use plastics. Participation in the pact is voluntary.

More drastic measures are required, however, in order to bring about a circular economy in which no new plastics are produced. These should include both recycling targets and targets for the prevention and reuse of plastics.

The volume of plastics

It is hard to measure the total volume of plastics produced around the world. A large proportion of the plastics produced are not disposed of straightaway, but remain 'in stock', i.e. continue to be used in products such as cars and dwellings for many years. An estimated 40% of the plastics in circulation in the Netherlands consists of packaging. Although some of this is reused or recycled, the remainder is either thrown away with household waste or ends up in the natural environment (in the sea, for example).

Figure 1 shows the scale of the plastic flows in the Netherlands: around 60% of plastics currently end up in incinerators and around 15% of the total volume of plastics (which includes packaging) is recycled.

Figure 1 shows that the Dutch economy still has a long way to go if it is to be fully circular by 2050. The figures given in Figure 1 are necessarily estimates, as no precise figures are available. No account has been taken of plastics imports and exports, which is why the percentages do not add up to 100%.



The use of plastics in the Netherlands: the road to a circular economy

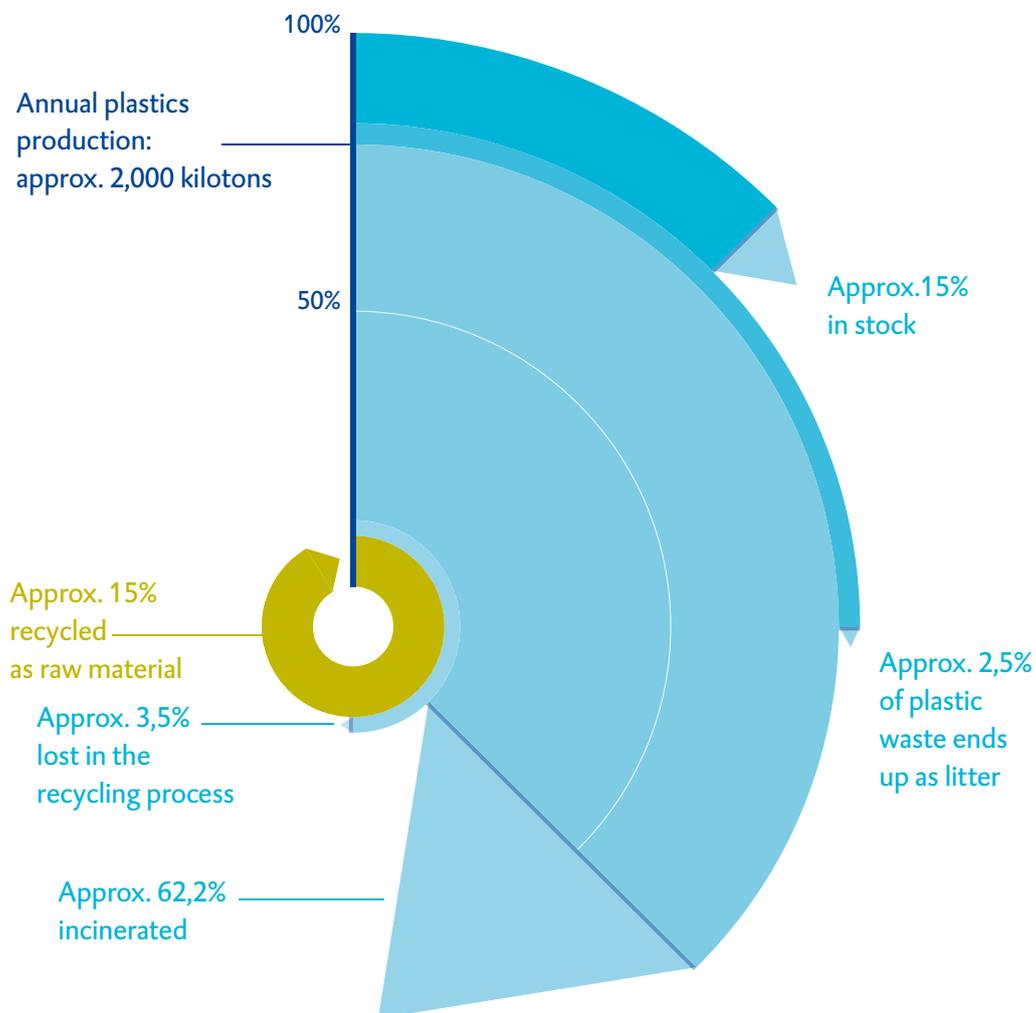


Figure 1 Plastics flows: a lagere proportion of plastics is incinerated and only a small proportion is recycled.
Source: Transitieagenda kunststoffen (Ministry of infrastructure and Water Management, 2018b).

Policy aimed primarily at recycling plastic packaging

The Minister of Infrastructure and Water Management is responsible for implementing the EU Waste Framework Directive in the Netherlands. The Directive has been transposed as Chapter 10 ('Waste substances') of the Dutch Environmental Management Act. Under the terms of the Act, the Minister is obliged to draw up a 'national waste management plan' once every six years, containing detailed measures that comply with both national and EU legislation (chapter 10, article 7, of the Environmental Management Act). Under the Act,



administrative authorities are obliged to supply the Minister with all such information and data as are required within reason in order to draw up a new national waste management plan. Both Dutch and EU legislation set out a clear order of priority in relation to waste management, i.e. a ‘waste hierarchy’, starting with prevention and moving on to reuse planning, recycling, and other efficient uses such as energy recovery and safe removal.

The Minister of Infrastructure and Water Management is responsible for setting the Dutch targets for recycling. The only target that has been set by the Minister is for plastic packaging, and this stated in 2017 that 47% of plastic packaging should be recycled. Given that 50% of plastic packaging was recycled in 2017, this target has been achieved. The objective laid down in the coalition agreement signed by the current government is for the Dutch economy to be fully circular by the year 2050. Although the government has met the targets set for the recycling of plastic packaging, a great deal of progress still needs to be made if the economy is to be fully circular in 2050. For example, the government has yet to formulate a policy for reducing the production of new (‘virgin’) plastics. Drastic measures need to be taken, in particular in relation to other forms of plastics apart from packaging.

The European Union has announced a number of concrete measures aimed at reducing the use of plastics. In 2013, the EU adopted a directive under which the member states were obliged to reduce the use of plastic bags. The Dutch government decided to implement this directive by banning free plastic bags. The European Commission is also in the process of formulating a ban on single-use plastics such as straws, cups and cutlery. The idea is for the ban to come into effect in 2021.

The Plastics Pact NL signed in February 2019 is geared towards single-use plastics. Its principal aim is to ensure that 70% of single-use plastic products and packaging materials are recycled, and that the use of single-use plastics is reduced by 20%. Participation in the pact is on a voluntary basis. No sanctions (financial or otherwise) are imposed on signatories who fail to meet the targets.

If we measure Dutch policy by the rungs on what is known as the ‘Lansink ladder’ (see Figure 2), it becomes clear that Dutch policy focuses on recycling and to a lesser degree on product reuse and prevention, i.e. the two uppermost rungs on the ladder. Although the Minister of Infrastructure and Water Management has acted to implement the EU measures (such as a ban on the use of plastic bags) and has indicated her intention of enforcing the forthcoming ban on single-use plastics, no targets have been set for the two uppermost rungs on the ladder.



The waste hierarchy: from environmentally friendly to environmentally damaging

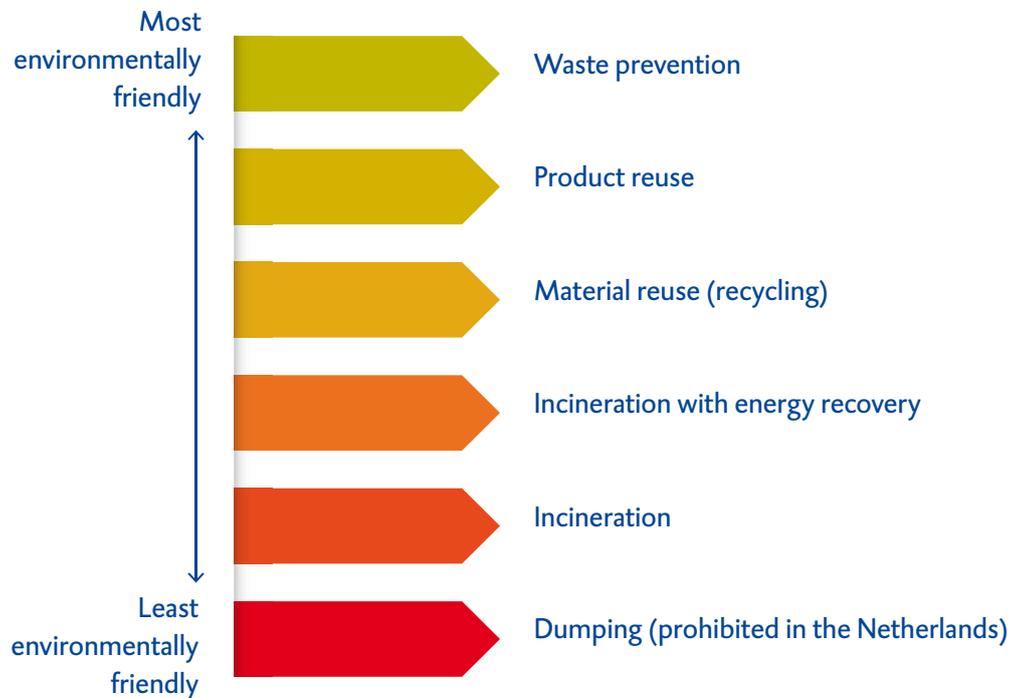


Figure 2 The waste hierarchy according to the Lansink ladder

The Minister is dependent on other organisations

The Minister of Infrastructure and Water Management is wary about using legislation to compel actors to meet the targets. This is reflected, for example, by the twin-track policy on small plastic bottles: the Minister reached an agreement with the plastics industry giving the latter two years (i.e. until 2021) in which to come up with a solution to the problem of plastic bottles, i.e. the large number of small plastic bottles ending up on landfill sites, in incinerators and littering the sea and the landscape. Under the twin-track policy on small plastic bottles, manufacturers are responsible until 2021 for meeting the recycling and reduction targets. This is the first track. The targets are for 90% of small plastic bottles to be recycled, and to reduce by between 70 and 90% the number of plastic bottles ending up as litter. If the targets are not met by 2021, the Minister of Infrastructure and Water Management will then introduce a statutory system of deposits on small plastic bottles. This is the second track of the policy.

The policy is implemented by non-governmental parties such as packaging manufacturers and local authorities. This means that the Minister of Infrastructure and Water Management is dependent on being given reliable reports so that she can to adjust her policy in good time. The annual reports produced by the Packaging Waste Fund show that the recycling targets are being met. An organisation called Nedvang monitors and records figures for the collection and recycling of packaging materials, and it is on these figures that the Packaging Waste Fund bases its annual reports. The Human Environment and Transport Inspectorate assesses and checks the Fund's monitoring reports and has indicated that it regards these as being reliable.

There is also something called the 'household waste benchmark', which is a joint product of the Royal Association for Refuse and Cleansing Management and a government programme called 'From Waste to Raw Material: Household Refuse'. However, not only is participation in the benchmark voluntary, participants even need to pay in order to take part. Some 180 local authorities have signed up to the benchmark, which they can use to see how their peers collect household waste and as a means of comparing their own performance with their peers'.

In their current form, the various reports do not enable the Minister of Infrastructure and Water Management to do anything other than simply assess whether the agreed recycling targets have been met. The information included in the reports is too limited to enable her to conclude whether the current policy is the most effective and whether it will enable the government to attainment its objective of creating a fully circular economy in 2050.

The current national waste management plan runs until the end of 2023. In order to prepare its successor, the Minister needs more information so that she can assess the efficiency of the government's current policy. Such information can help the Minister to decide whether the recycling targets need to be raised and whether they can be extended to include non-packaging. Moreover, the Minister is under a statutory obligation to base her policy on the waste hierarchy (see Figure 2) and to formulate targets for prevention and reuse in the same form, i.e. the uppermost rungs on the ladder. Preventing the production of new plastics does more to further a circular economy than does the recycling of plastics. The problem is that the latter is inevitably associated with a loss of value and material. The aim formulated in the Plastics Pact NL to achieve a 20% cut in the use of single-use plastics by the year 2025 is the first step in the right direction.



The Minister's dependence on other parties may create certain risks



Disclaimer: We are interested exclusively in responsibilities in relation to plastic packaging. Many of the organisations listed above have a wider remit.

Figure 3 Actors involved in plastic recycling and their control relationship with the Minister of Infrastructure and Water Management



Packaging industry pays for plastics policy

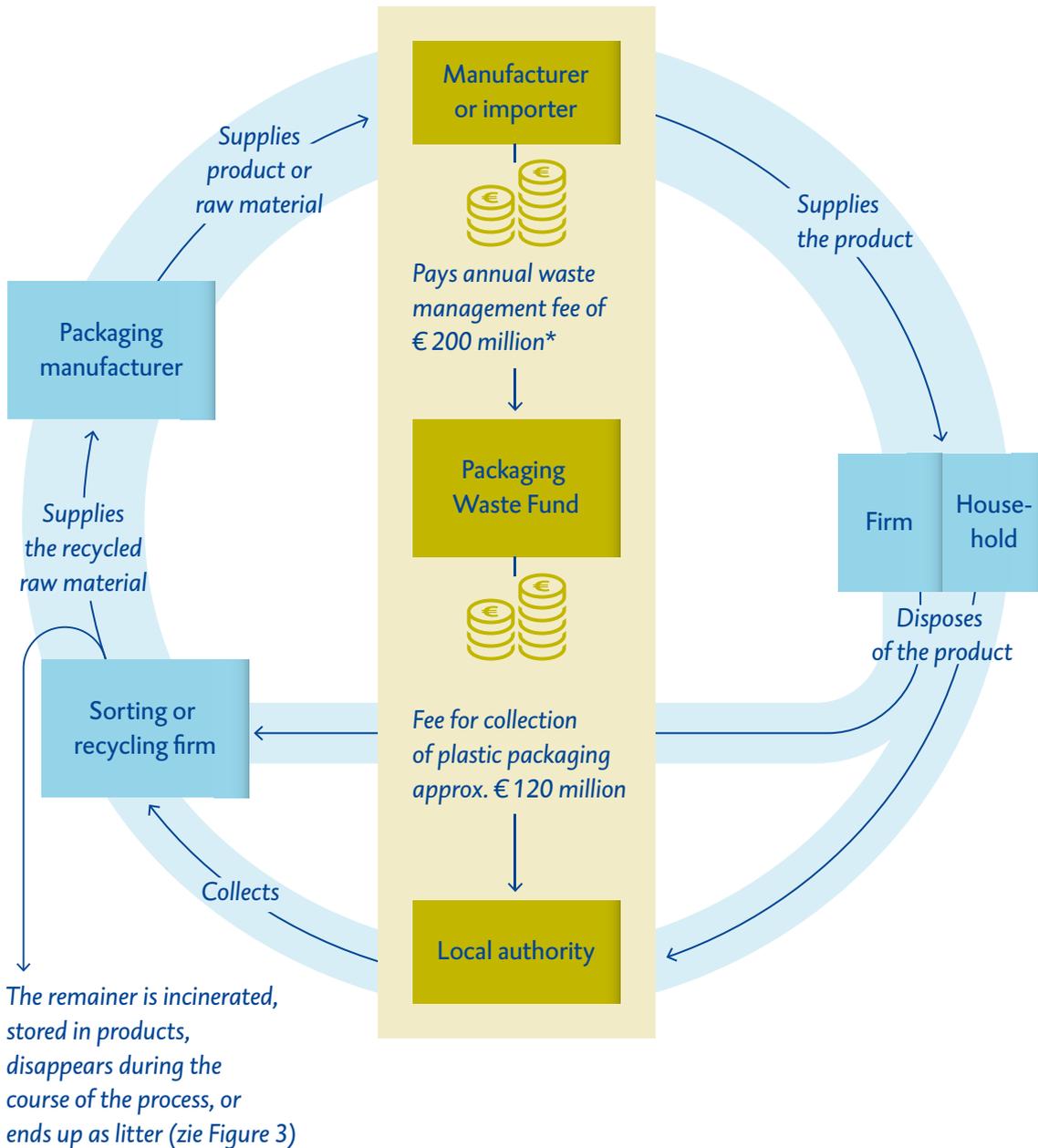
The packaging industry bears the bulk of the cost of the government's plastics policy. This is referred to as their 'manufacturer's responsibility'. An agreement has been reached with the packaging industry that, in accordance with 'the polluter pays' principle, the latter should pay the local authorities a fee to cover the cost of collecting and recycling plastic packaging, which stands at around €120 million per annum. The Ministry of Infrastructure and Water Management pays for occasional studies and campaigns such as the 'From Waste to Raw Material: Household Refuse' programme. This programme is implemented by the Directorate-General for Public Works and Water Management and is designed to provide local authorities with support and advice on the collection of waste. The programme has cost €1 million a year since its launch.

Under the 'climate envelope' in the coalition agreement, the Minister of Infrastructure and Water Management has set aside a lump sum of €10 million for promoting the reuse of plastics and consumer goods. The aim is for manufacturers to join forces with research institutes in recycling products and designing more sustainable products, and thus making the entire plastics chain sustainable.

The local authorities are responsible for the collection of waste. The packaging industry pays part of the cost of collecting and recycling plastic packaging.

Figure 4 is a diagrammatic representation of the collection and recycling of plastic packaging in the Netherlands; it also shows how the process is funded. The packaging industry has delegated collective responsibility for sustainability issues, i.e. collection, sorting and recycling, to a single organisation called the Packaging Waste Fund. The Fund represents the packaging industry in terms of its commitment to achieve the Dutch recycling targets, not just for plastic packaging, but also for paper, glass and metal.

Manufacturers pay for the costs of collecting and recycling plastic packaging



* The remaining € 80 million is spent on the recycling of paper, glass and metal, among other things.

Figure 4 The packaging industry pays part of the cost of recycling plastic packaging



Scope for greater ambition in terms of recycling

The Netherlands has met the EU and Dutch targets

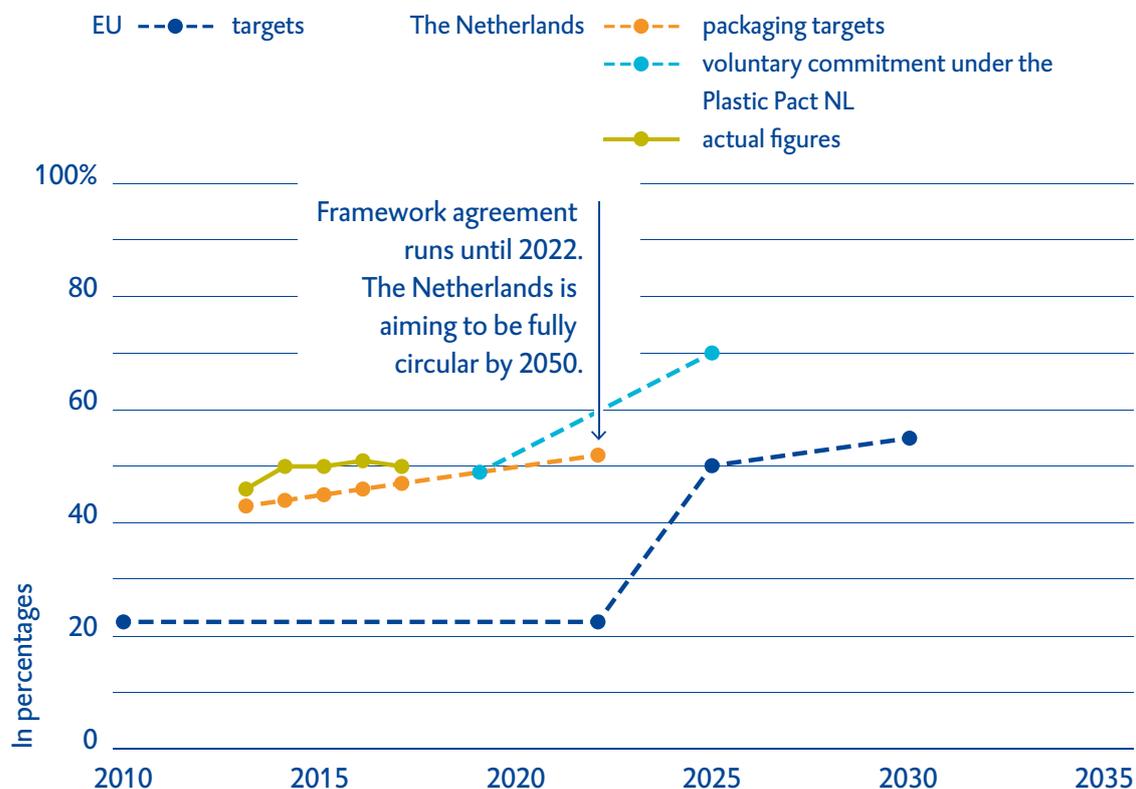


Figure 5 The Netherlands has met the EU and Dutch targets for the recycling of plastic packaging.
Source: Monitor verpakkingen (Packaging Waste Fund, 2018)

As is clear from Figure 5, the Netherlands has been successful in achieving the EU and Dutch targets for the recycling of plastic packaging. The Dutch targets are much more ambitious than the EU targets, and the Netherlands has already almost achieved the target of recycling 52% of plastic packaging by the year 2022 (the figure now stands at 50%). The Netherlands leads the field in Europe and is also on course to meet the national targets well on time.

However, any enthusiasm about these good results should be tempered by the government's failure to ascertain whether the recycling target set for 2022 represents the maximum attainable figure – and indeed whether it is the right figure in the light of the government's ambitious objective of achieving a fully circular economy in 2050. The results achieved to date would not appear to offer a sufficient basis for achieving a fully circular



economy in 2050. Nor have any plans been put in place for gradually raising the recycling targets. As a result, there may be a risk of not giving organisations sufficient incentives to further improve their record in the recycling of plastic packaging. It also makes it attractive only to recycle certain (valuable) types of plastic, such as PET, as this enables the targets to be met, and hence of continuing to incinerate low-value plastics.

Moreover, the ‘manufacturer’s responsibility’ referred to above applies solely to plastic packaging. In concrete terms, this means that all non-packaging that is easy to recycle and which is disposed of by consumers together with plastic packaging materials, is removed from the waste flow during the sorting process and subsequently incinerated. This may result in public support for waste separation ebbing away if people realise that, out of all the plastic that they separate from other forms of waste, only the packaging is recycled.

Recommendations

We have made the following recommendations to the Minister of Infrastructure and Water Management:

- Ascertain what information is needed in order to decide whether it would be possible to extend and/or raise the targets, and ask the relevant organisations to supply this information so that it can be used in drafting the next national waste management plan. Make use of your statutory powers to compel administrative authorities to supply you with information.
- Base your policy on the waste hierarchy as described in both Dutch and EU law and include in your policy aims a reduction in the use of plastics and the reuse of plastics in the same form. Although the Plastics Pact NL is a first step in the right direction, the voluntary nature of participation in the Pact means that participants cannot be compelled to achieve such a reduction.
- Evaluate the way in which the entire plastics chain is funded and how this works.
- Consider the possibility of extending the ‘manufacturer’s responsibility’. The present situation is that only plastic packaging is recycled, even though this accounts only for a small proportion of the total volume of plastics in circulation. As a result, a large quantity of potentially usable plastic is lost. Extending the ‘manufacturer’s responsibility’ could encourage the recycling of non-packaging materials. Moreover, public support for waste separation may ebb away if people realise that, out of all the plastic that they separate from other forms of waste, only the packaging is recycled, while the remainder is incinerated.



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- The ‘household waste benchmark’ offers an opportunity to plot a ‘waste map’ of the Netherlands. Make participation in this benchmark compulsory, so that all local authorities are required to sign up. This would allow a full picture to emerge of effective and efficient solutions and would also enable local authorities to learn from each other’s experiences. See also in this connection the plan referred to in our audit report entitled *Natuurcompensatie* (‘Compensation for damage to nature areas’, Netherlands Court of Audit, 2014b).

Information

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Design: Corps Ontwerpers
Photo:: Corbis/Hollandse Hoogte

The Hague, June 2019