

ENSURING THAT POLLUTERS PAY

The Netherlands

The revenue from environmentally relevant taxes in the Netherlands was above the EU average. Environmental taxes stood at 3.39% of GDP in 2019 (EU-27 average: 2.37 %). The largest portion of the environmental taxes were the energy taxes at 1.95% of GDP, also above the EU average of 1.84 %. Transport taxes represented 1.01% of GDP (EU average being 0.45%), taxes on pollution and resources represented 0.43% (the highest in the EU and 5 times higher than the EU average at 0.08%). In the same year, the environmental tax came to 8.51% of total revenues from taxes and social security contributions (also well above the EU average of 5.76%)¹.

Further options

A **NO_x** tax to improve air quality

In the past, emission trading schemes have existed for NO_x in the Netherlands. EU air quality standards for nitrogen dioxide were exceeded in two air quality zones (Amsterdam and Rotterdam) in 2017. A misguided regulation of NO_x emissions abatement in the Netherlands has resulted in court-ordered freeze of existing and planned economic activities as the country's highest administrative court found the regulation in violation of key provisions of the Habitats Directive.

The Netherlands might consider an NO_x tax in energy production. A Dutch study (CPB, 2019) showed that a tax of around €35/kg NO_x for large emitters will quickly

lead to a reduction of emissions to zero. The same study showed that a tax on NO_x will result in only marginal cost price increases for industrial sectors – the most profound in the fertilizer sector where cost price may increase by less than 1%. As many sectors have cheaper options to abate emissions, average cost price increases will be lower. They could be even lower if revenues would be recycled back to industry for subsidy programs to install technologies to abate emissions. Modelling shows that GDP would increase by 0.02% – 0.17% in 2030 (increase is higher when revenues are recycled). A very small net increase in employment was modelled.

An intensive agriculture tax

Reports to the European Commission on implementation of the nature directives show that the highest pressures on species are from agricultural intensification, diffuse water pollution and excess nitrogen input, all associated with NL's extremely high stocking densities. The pressure from agriculture could be addressed through an intensive agriculture tax. The results from

the modelling suggest that the intensive agriculture tax, without revenue recycling, would not have a significant macroeconomic impact. However, when the revenues are reinvested into the agriculture sector or recycled as income tax reductions, the measure could lead to very small net positive effects on GDP and no changes to employment.

Examples of economic instruments

CARBON TAX / CO₂ LEVY

In the Netherlands, a carbon tax was announced in the "Climate Agreement". The tax applies to industry, and is levied for emissions that would exceed the EU ETS benchmarks minus a predefined reduction path. The law has passed both houses of the national parliament and has entered into force on 1 January, 2021. It applies to all installations in the EU ETS plus waste incinerators and large emitters of non-CO₂ GHG, such as N₂O in as far they have not been opted in the EU ETS in the latest years. The imposed CO₂ tax is a baseline-and-credit system. Emissions above the baseline will be taxed.

To allow Dutch Industry some time do adapt to the levy, the levy will start at € 30/t CO₂ in the year 2021 and will increase each year by € 10.56 up to a rate of € 125/tCO₂ in 2030. The levy is formed as a CO₂ minimum price. Hence, the levy will be reduced with the EU ETS price of last year. Water users from the agricultural and commercial sectors are required to pay [metering fees](#) for all significant groundwater abstraction sources they operate. Metering fees are paid for meter installation (€765) and annual metering fees per groundwater source (€143), among others. Some exemptions on metering (and associated fees) can be granted.

What it does

Different variants of the CO₂-levy have been evaluated ex ante. Together with other policies, such as feed-in subsidy for CO₂-abatement (SDE++) and policies targeted at specific abatement technologies (e.g. hydrogen), the incentives that come from the levy may

be sufficient to reach the Dutch 2030 goal of 14,3 Mton CO₂-reduction in 2030², a reduction of 26% compared to the 2015 level of 55,1 Mton CO₂.

How it came about and stakeholder engagement

The instrument has been proposed as part of the National Climate Agreement. It is an agreement between many organisations and companies in the Netherlands to combat climate change. The government's central goal with the National Climate Agreement is to reduce greenhouse gas emissions in the Netherlands by 49% by 2030 compared to 1990 levels.

The process to draft the Climate Agreement has been chaired by the Dutch Government, but stakeholders have been actively approached to participate. The drafting was structured along five topics ("sectortafels"), one of which was industry. Participating parties were representatives of Industry, Labour unions, Environmental NGO's and local, regional and national government bodies³. Of these, notably the environmental NGOs fought for the CO₂-levy⁴. In a draft version of the Climate Agreement, the CO₂-levy was not included. Because of this, the environmental NGOs left the negotiation table⁵. An assessment of the impacts of the draft Climate Agreement by PBL and CPB showed this was insufficient to attain the abatement goal for industry. This, together with the pressure from the NGOs, led to a governmental announcement that a CO₂-levy would be introduced⁶.

DEPOSIT SYSTEM ON SMALL BOTTLES

In July 2021, a deposit on small plastic bottles will be introduced in the Netherlands. For large bottles (> 0,75 litre) and returnable beer bottles, a deposit system already exists, but smaller plastic bottles were exempt. Consumers will have to pay a fee of € 0.15, which is reimbursed when the bottle is returned through so called reverse vending machines or over the counter.

What it does

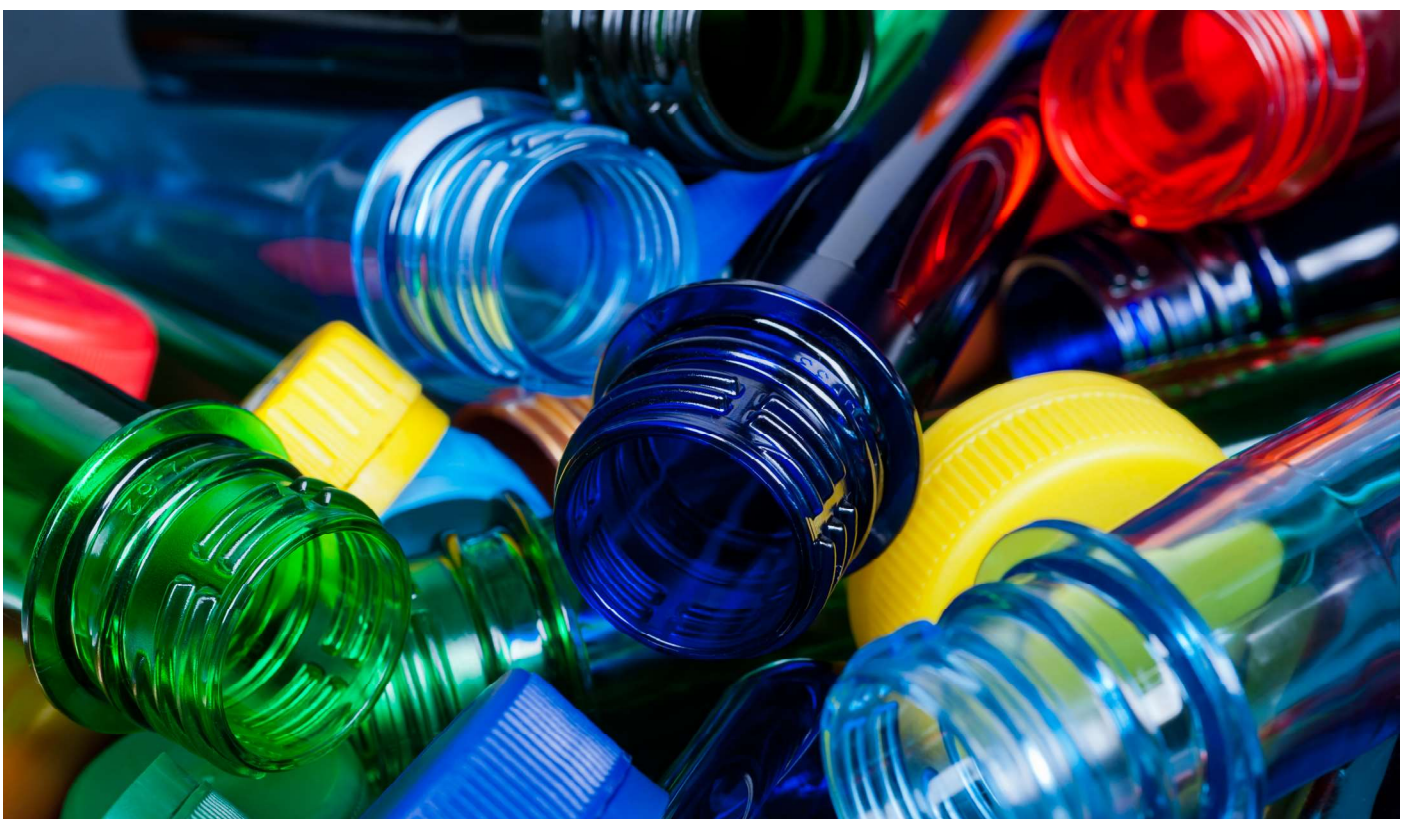
Introducing a deposit is expected to reduce the amount of plastic bottles in litter by 70% to 90% (CE Delft 2017)⁷. Consumers will have an incentive to bring back the bottles instead of littering. Furthermore, bottles still being littered may be picked up by scavengers and handed in. The reduction range emerges from physical counts in the USA in the 70s and 80s, estimates based on a 2001 questionnaire in the Netherlands, and recent analysis of the share of cans in litter in Denmark. In addition, introducing a deposit-refund scheme will lead to an expected increase in PET recycling of 6.6-7.6 Kton. In addition, the quality of the recycle will increase, as the collected bottles will not be polluted with other plastics.

How it came about and stakeholder engagement

The debate on deposit-refund schemes for plastic bottles has a long history in the Netherlands with strong debates on expanding the system with small bottles and cans, and discussions/developments to abolish the system for large bottles.

A major driver for expanding the system was the petition in 2017 from the artist, environmentalist and 'Plastic Soup Surfer' Merijn Tinga, which was presented to the Dutch House of Representatives. The petition, signed by more than 55,000 people, requested the ministry to reduce litter from small plastic bottles by 90% in the next three years. The petition was endorsed by Parliament and as a result, the ministry announced it would develop measures.

In 2018, an agreement between the State Secretary of Infrastructure and Water Management, the business community and the Association of Netherlands Municipalities VNG was made which aimed to achieve a 70-90% reduction of littering and a recycling rate of minimal 90%. If these targets would not be met, a deposit system would be introduced.



WASTE TAX

The Dutch Waste Tax (Afvalstoffenbelasting) aims to reduce the amount of landfilled or incinerated waste and to increase recycling rates⁸. As such, it taxes waste that is handed in at a waste disposal facility for landfilling or incineration. As of January 2019, the waste tax also includes waste that originates in the Netherlands and that is moved to a location outside the Netherlands for landfilling or incineration.⁹ The taxpayer is the owner of a waste disposal establishment.¹⁰

In 2015, the tax was set at € 13 per 1000 kg of waste. This was expected to generate a revenue of € 100 million per year. In 2019, the tax was raised to € 32.53, an increase of 150% compared to 2015. It is expected to generate a revenue of € 200 million per year.¹¹

The figure below illustrates the amount of processed waste and the generated revenues per year. The figure shows that the amount of landfilled waste has increased in recent years, whereas the amount of incinerated waste has decreased to 7.5 Mton. Digestion and composting of biowaste remains constant at 1.5 Mton¹². As such, the waste tax shows to have a positive effect on incineration, but does not reduce the number of landfill waste. Moreover, research found that landfilling and incineration remain financially attractive, compared to recycling.¹³

Between 2014-2018, the revenue from the waste tax came close to € 100 million; in 2019, the revenue was € 205 million, well above the expected level.

The tax was reintroduced in 2014 after it was abolished in 2012 to simplify the Dutch tax system. The former waste tax (Stortbelasting) only taxed landfill waste. This tax was found to be effective in reducing landfill waste as well as increasing the incineration and recycling rates.¹⁴

The waste tax was reintroduced both in order to stimulate reduction of residual waste and to generate more tax revenue. In the programme “From waste to resource” (Van Afval naar Grondstof) the government expressed the ambition to decrease landfilling and incineration to a maximum of 5 Mton (the amount of residual waste was 8.3 Mton in 2014).¹⁵ Moreover, the nation-wide Circular Economy programme aims to move towards a 100% circular economy in 2050. A sub-target of the programme is to reduce landfilled or incinerated waste by 50% in 2022 compared to the 2012 levels. The waste tax is seen as one of the instruments of the third Dutch National Waste Management plan (2017-2023) (Nederlands Afvalbeheerplan)¹⁶ to incentivise companies and municipalities to reach these targets.¹⁷

The reintroduction of the waste tax led to some criticism from experts and the waste sector, especially regarding the risk of increased exports of waste.¹⁸ Therefore, from January 2019, the waste tax also covers waste exports. Moreover, in the rapport “Towards an economy without waste (Naar een economie zonder afval) of April 2020, the government has indicated that there are several bottlenecks that hinder the effective execution of the circular economy programme. For one, prices do not

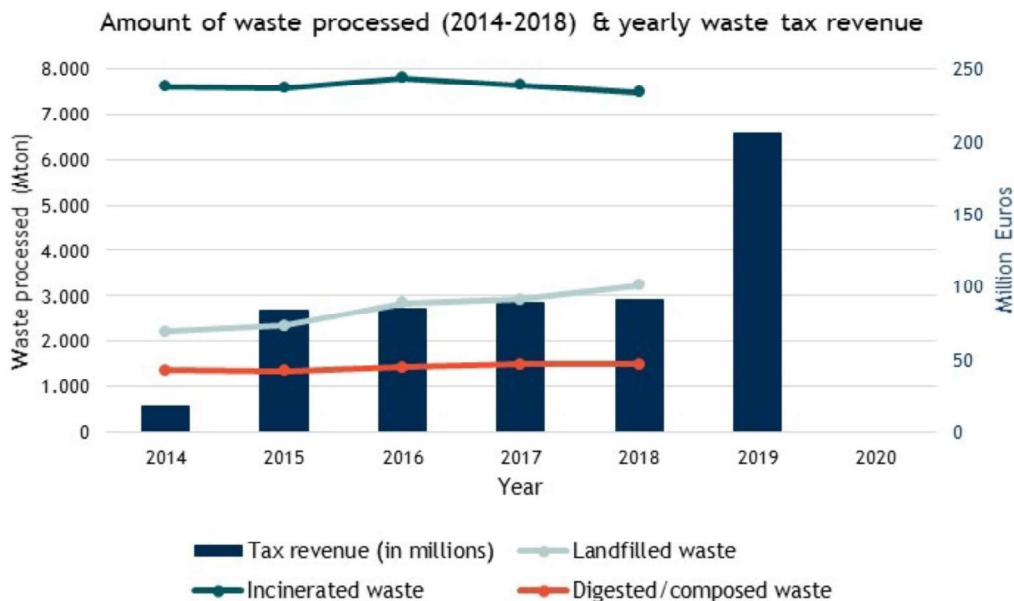


Figure 1 - Trends in waste processing and revenues for the years 2014-2020

reflect environmental damage.¹⁹ Further, the current cost of landfilling and incineration does not incentivise recycling. For these reasons, the rate of the waste tax was almost doubled in 2019.

However, several stakeholders such as the Association for waste companies (Vereniging afvalbedrijven) and MVO Nederland²⁰ indicate that only stronger pricing of landfilling and incineration will not be enough and that

other flanking measures are needed to move toward a more circular economy.²¹ The strong pricing has also consequences for municipalities and waste disposal stations which affects the price of the [waste collection levy](#) for households. In 2021, this levy will increase with an average of 7.3%.²²



Key stakeholders

Governmental institutions

The Ministry of Economic Affairs and Climate and Ministry of Finance are responsible for the design and implementation of the CO₂-levy.

The Ministry of Infrastructure and Water Management is responsible for waste policy, e.g. the deposit systems on small bottles. Together with the Ministry of Finance, it is responsible for the waste tax.

Ministry of Economic Affairs and Climate

<https://www.rijksoverheid.nl/ministeries/ministerie-van-economische-zaken-en-klimaat>

Ministry of Finance

<https://www.rijksoverheid.nl/ministeries/ministerie-van-financien>

Ministry of Infrastructure and Water Management

<https://www.rijksoverheid.nl/ministeries/ministerie-van-infrastructuur-en-waterstaat>

PBL Netherlands Environmental Assessment

Agency

<https://www.pbl.nl/en>

PBL Netherlands Environmental Assessment Agency is the national institute for strategic policy analysis in the field of the environment, nature and spatial planning.

Working group Export Levy for the Waste Tax

Consists of representatives of Association of waste companies (Vereniging Afvalbedrijven); Sector Association Recycling, breaking and sorting (Branchevereniging Recycling Breken en Sorteren); Ministry of Infrastructure and Water Management and Ministry of Finance.

Research

PBL Netherlands Environmental Assessment Agency

Website: <https://www.pbl.nl/en>

PBL Netherlands Environmental Assessment Agency is the national institute for strategic policy analysis in the field of the environment, nature and spatial planning.

They did research about the effects of the CO₂-levy.

Opties voor een afvalstoffenbelasting (Report on different policy options for the waste tax). https://www.pbl.nl/sites/default/files/downloads/PBL_2014_Opties-voor-een-afvalstoffenbelasting_1406_1.pdf

CPB Netherlands Bureau of Economic Policy Analysis

<https://www.cpb.nl/en/node>

CPB conduct economic scientific research to support decision-making by policymakers and politicians, e.g. on CO₂-levy and deposit-refund systems.

CE Delft

<https://www.cedelft.eu/>

CE Delft is an independent research and consultancy, with a strong focus on economic instruments, like the CO₂-levy and deposit-refund systems.

PWC

<https://www.pwc.nl/en.html>

PWC carried out three different studies for the Ministry of Economic Affairs and Climate about the CO₂-levy and the level playing field between Dutch companies and their international competitors.

DRIFT (Erasmus University, Rotterdam)

Roel van Raak, Charlie Spork, Sabine de Graaf (DRIFT, 2019) "Onderzoek 'Afvalprikkel'" <https://drift.eur.nl/app/uploads/2020/04/DRIFT-Rapport-Afvalprikkel.pdf>

Report on incentives for different waste management options

NGOs

Ex'Tax - Deltaplan Belastingen voor een Circulaire en Sociale Economie. February 1, 2021 <https://ex-tax.com/wp-content/uploads/2021/01/Extax-rapport-Deltaplan-Belastingen-voor-een-Circulaire-en-Sociale-Economie-def.pdf> (only in Dutch)

Milieudefensie

Website: <https://en.milieudefensie.nl/>

Environmental NGO focused on globalization, transport, climate and energy, nature, and agriculture and food.

Natuur & Milieu

Website: <https://www.natuurenmilieu.nl/english/>

Environmental NGO focused on strengthening collaboration between government, business, and civil society.

Greenpeace

Website: <https://www.greenpeace.org/nl/>

Environmental NGO with main focus on climate change and biodiversity.

Milieudefensie, Natuur & Milieu and Greenpeace

actively campaign for a low-carbon society and have produced a position paper on the CO₂ levy. They have also campaigned for the deposit-refund system for small bottles.

Stakeholders in the field of waste and circular economy

Association of waste companies (Vereniging Afvalbedrijven) <https://www.verenigingafvalbedrijven.nl/>

[MVO Nederland Business network organization focused on green and circular economy](https://www.mvo.nl/), generally positive about the increase in tax for waste

Publications - CO₂-levy

<https://milieudefensie.nl/actueel/co2-heffing-betaalt-de-consument>

https://milieudefensie.nl/actueel/laat-vervuilers-niet-wegkomen-met-een-slappe-co2-heffing?utm_source=actiemail&utm_medium=email&utm_content=button&utm_campaign=eerlijkehandel

<https://milieudefensie.nl/actueel/co2-heffing-zo-kunnen-we-de-kosten-van-klimaatverandering-eerlijk-delen>

<https://www.natuurenmilieu.nl/nieuwsberichten/co2-heffing-helpt-bedrijven-om-te-doen-wat-ze-beloven/>

<https://www.natuurenmilieu.nl/themas/energie/projecten-energie/het-klimaatakkoord/co2-heffing-voor-de-industrie/>

https://www.natuurenmilieu.nl/wp-content/uploads/2019/04/Explainer_Klimaattafel_Industrie_onderhandelingen_NatuurMilieu-gecomprimeerd.pdf

<https://www.volkskrant.nl/nieuws-achtergrond/milieubeweging-stapt-uit-klimaatonderhandeling-met-kabinet-uit-woede-over-co2-heffing~bcc4fcdd/>

<https://nos.nl/artikel/2275799-kabinet-minder-energiebelasting-voor-burgers-toch-co2-heffing-bedrijven.html>

<https://www.cpb.nl/sites/default/files/omnidownload/PB%20CO2-beprijzing%207%20juni%202019.pdf>

Publications - Deposit systems on small bottles

<https://nos.nl/artikel/2331649-statiegeld-op-kleine-flesjes-veel-consumenten-positief-industrie-ziet-op-tegen-kosten.html>

<https://www.consumentenbond.nl/nieuws/2018/meerderheid-consumenten-voor-uitbreiding-statiegeld-systeem>

<https://www.ce.nl/publicaties/1987/kosten-en-effecten-van-statiegeld-op-kleine-flesjes-en-blikjes>

<https://recyclingnetwerk.org/themas/statiegeld/>

<https://www.greenpeace.org/nl/natuur/360/tijd-voor-statiegeld-op-kleine-blikjes-en-flesjes/>

<https://www.greenpeace.org/nl/natuur/360/tijd-voor-statiegeld-op-kleine-blikjes-en-flesjes/>

<https://recyclingnetwerk.org/2018/10/05/de-lange-weg-naar-statiegeld-in-nederland-het-tijdspad/>

<https://www.nemokennislink.nl/publicaties/minder-zwerfafval-door-de-invoering-van-statiegeld-op-kleine-flesjes/>

<https://www.nrc.nl/nieuws/2018/03/05/voer-statiegeld-in-voor-pet-flessen-en-blikjes-a1594478>

¹ https://ec.europa.eu/eurostat/databrowser/view/env_ac_tax/default/table?lang=en

² <https://www.pbl.nl/nieuws/2019/effect-kabinetsvoorstel-co2-heffing-industrie>

³ The complete list is: FNV, Greenpeace, Interprovinciaal Overleg, Natuur & Milieu, Unie van Waterschappen, vertegenwoordiger industriecluster Chemelot, vertegenwoordiger industriecluster Noord NL, vertegenwoordiger industriecluster Noordzeekanaalgebied, vertegenwoordiger industriecluster Rotterdam/Moerdijk, vertegenwoordiger industriecluster Zeeland, vertegenwoordiger overheid, vertegenwoordiger werkgroep grote uitstoters, vertegenwoordiger werkgroep kleinere uitstoters en nieuwe groeimarkten, een vertegenwoordiger van het ministerie van Economische Zaken en Klimaat, and Vereniging Nederlandse Gemeenten.

⁴ https://milieudefensie.nl/actueel/laat-vervuilers-niet-wegkomen-met-een-slappe-co2-heffing?utm_source=actie-mail&utm_medium=email&utm_content=button&utm_campaign=eerlijkehandel

⁵ <https://www.volkskrant.nl/nieuws-achtergrond/milieubeweging-stapt-uit-klimaatonderhandeling-met-kabinet-uit-woede-over-co2-heffing~bcc4fcdd/>

⁶ <https://nos.nl/artikel/2275799-kabinet-minder-energiebelasting-voor-burgers-toch-co2-heffing-bedrijven.html>

⁷ CE Delft 2017: Kosten en effecten van statiegeld op kleine flesjes en blikjes. Geert Bergsma Ellen Schep Geert Warringa. Delft, augustus 2017

⁸ Rijksoverheid (n.d.) Milieubelasting – afvalstoffenbelasting. Available at: <https://www.rijksoverheid.nl/onderwerpen/milieubelastingen/afvalstoffenbelasting>

⁹ European Commission (n.d.). Taxes in Europe Database 3. – Indirect Taxes. Available at: https://ec.europa.eu/taxation_customs/tedb/taxDetails.html?id=874/1546297200#Generic_partTitle1

¹⁰ Or depending on the circumstance the party that is granted permission according to Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste to move waste outside the Netherlands.

¹¹ Vereniging afvalbedrijven (2018). Naar een waterdicht buitenland heffing. Available at: <https://www.verenigingafvalbedrijven.nl/nieuws/naar-een-waterdichte-buitenlandheffing>

¹² Rijkswaterstaat (2020). Afvalverwerking in Nederland, gegevens 2018

¹³ Raak, R., Spork, C. and de Graaf, S. (2019) Onderzoek Afvalprikkel. DRIFT (Erasmus Universiteit Rotterdam).

¹⁴ Ministerie van Infrastructuur en Milieu (2014). Landelijk afvalbeheerplan 2009-2021, naar een materiaalketenbeleid, Den Haag 3 december 2014

¹⁵ Bartelings et al. (2005). Effectiveness of landfill taxation, Vrije Universiteit Amsterdam 24 November 2005.

¹⁶ PBL (2014). Opties voor een afvalstoffenbelasting

¹⁷ ¹⁸ Ministerie van Infrastructuur en Water (2017). Derde Nederlands Afvalbeheerplan

¹⁹ PBL (2014). Opties voor een afvalstoffenbelasting. Note that it seems that the strong increase in price was not pushed by stakeholders (or at least not the stakeholders in the waste sector).

²⁰ Rijksoverheid (2020). Naar een economie zonder afval. Available at: <https://www.rijksfinancien.nl/bmh/bmh-11-naar-een-economie-zonder-afval.pdf>

²¹ <https://www.mvonderland.nl/nette-miljoenennota-mist-echte-slagkracht-voor-duurzame-economie/>

²² Vereniging Afvalbedrijven (2020). Standpunten afvalstoffenbelasting. Available at: <https://www.verenigingafvalbedrijven.nl/standpunten/afvalstoffenbelasting>

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