

Changing the rules of the game

Impact and feasibility of policy and regulatory measures on the prevention and reduction of food waste

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Introduction

Background

It is estimated that two million tonnes of food are wasted in the Netherlands every year. This happens at many points in the food supply chain, from the farm to the supermarket and all the links (transport, auction, food production industry) in between. Consumers also throw away an average of 34.3 kg of food per person on an annual basis¹. Worldwide, greenhouse gas emissions related to food waste amount to roughly 6.7% of total emissions (3.3 Gt of 49 +/- 4.5 Gt of CO2 eq./year²). Less food waste contributes to the achievement of climate targets and contributes to sufficient healthy and nutritious food for a growing world population. Combatting food waste is a priority of the current Dutch cabinet.³ To this end, the Minister works closely with the Stichting Samen Tegen Voedselverspilling (Food Waste Free United, STV) in which now nearly 100 different parties have joined forces to work towards preventing and reducing food waste.4

The Taskforce Circular Economy in Food was launched on 26 January 2017 during the National Food Summit. The core group consists of high-level representatives from businesses throughout the food supply chain and the supply industry, operating from their offices in the Netherlands, supplemented by representatives from the government, societal organisations, and research institutes. All partners in the Task Force are making a visible contribution to the realisation of SDG12.3: reducing food waste by 50% per capita compared to 2015. On 20 March 2018, the Task Force launched its joint agenda called "Samen tegen voedselverspilling" (together against food waste) and was converted into the independent Stichting Samen tegen Voedselverspilling (Food Waste Free United, STV). Based on its involvement in STV, the Ministry of Agriculture, Nature and Food Quality (LNV) has allocated resources to Wageningen Food & Biobased Research (WFBR) from the existing Kennisimpuls Voedselagenda within the "Food Waste" cluster in order to flesh out the agenda. This agenda consists of 4 action lines. This report concerns Action Line 4: Changing the rules, with the aim of having rules for entrepreneurs in 2030 that make it appealing, if not necessary, for businesses to minimise food waste and maximise the value of residual waste streams. The objective is formulated as follows: "Gradually, we come across obstructive rules, legislation, and regulations or missing instruments. We initiate and promote legislation and instruments that contribute to the development of the circular economy".

The aim of the underlying project is to identify, advise on, and remove obstacles, barriers, and obstructions to the prevention of food waste. The short-term goal is to identify, advise on, and actively advocate for the removal of obstacles, barriers, and obstructions at selected hotspots in legislation, regulations, and trading practices. This report reflects the process that has been going on since spring 2019 with a view to drawing up a top 10 of priority measures to guide STV's activities within Action Line 4. The STV action lines are of direct relevance to the National Strategy from the Ministry of Agriculture, Nature and Food Quality for preventing food waste.

 $^{^{1}}$ Voedingscentrum, 2019. Syntheserapport Voedselverspilling bij huishoudens in Nederland in 2019. Available at: https://www.voedingscentrum.nl/Assets/Uploads/voedingscentrum/Documents/Professionals/Pers/Persmappen/Verspilling %202019/Syntheserapport%20Voedselverspilling%20in%20Nederlandse%20huishoudens%202019%20-%20Voedingscentrum.pdf

² On the basis of a combination of sources: GHG impact food waste from FAO, 2011. Food wastage footprint – impacts on natural resources. Available at: http://www.fao.org/3/i3347e/i3347e.pdf en IPCCC - 5AR (2014). Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf

Parliamentary Paper (*Kamerstuk*) 31 532, no. 193. Available at: https://zoek.officielebekendmakingen.nl/kst-31532-193.html

⁴ Parliamentary Paper (*Kamerbrief*) on food waste in the Netherlands 2020, 1 September 2020. https://www.rijksoverheid.nl/documenten/kamerstukken/2020/08/31/kamerbrief-over-voedselverspilling-in-nederland-2020

Defining the objective and approach for priority measures

The process of selection and prioritisation began in 2019, with the aim of enabling STV to create a top 10 in the summer of 2020 with the most promising opportunities for changing the rules. Important criteria in this respect include the extent of impact and the feasibility of changing policy, legislation, and regulations. A clear division of roles for STV and WFBR was established in the process.

In this process, WFBR was responsible for:

- reviewing scientific literature and legislative texts;
- organising the consultation of stakeholders through a survey and through workshops involving the business community and a High Level Expert Group that was created, and analysing and processing the results;
- developing a selection approach, in which various proposed measures can be assessed for impact and feasibility via the "prio-plots";
- coordinating policy analyses with the responsible ministries;
- publishing a report explaining the selection process prior to drawing up the top 10 by STV (this report).

In this process, STV was responsible for:

- involving and engaging STV stakeholders to participate in the consultation;
- co-organising and organising the consultation process (survey and workshops). In addition to the workshops, STV co-organised talks with those responsible in the Ministry of Agriculture, Nature and Food Quality (LNV), the Ministry of Health, Welfare and Sport (VWS), the Ministry of Transport, Public Works and Water Management (I&W), and the Food Preservation Alliance
- organising the internal final selection process for the selected top 10 measures⁵.
- communicating about the top 10 and organising the implementation process from September 2020.

The following steps have been taken in chronological order:

- Spring 2019: literature review of relevant policy, legislation, and regulations with direct and indirect influence on the creation and/or prevention of food waste in the food supply chain. Drawing up 19 sheets within 6 policy themes. The sheets are the result of an analysis of previous research and the relevant legislative texts and policy documents (see also references).
- Summer 2019: a broad, open consultation using questionnaires among STV supporters and the broader, involved business community, and branch organisations.
- Autumn 2019: updating the sheets, which includes the results of the literature review and the consultation thus far.
- Winter 2019-2020: consulting the relevant ministries on the accuracy of the sheets and their relevance for collaboration between various policy areas. This concerns the ministries of LNV, VWS (including NVWA), and I&W.
- January-April 2020: the organisation and implementation of three consultation meetings:
 - 6 February 2020: in collaboration with the Ministries of LNV and AVV, with approximately 40 representatives from a broad spectrum of stakeholders
 - 9 April 2020: with approx. 7 representatives from the AVV sustainability project group
 - 17 April 2020: with approx. 5 representatives from the High Level Expert Group
- April-July 2020: drafting the "prio-plots", substantiating the feasibility and impact
- August 2020: drawing up the final selection of the top 10 by STV
- September 2020: publishing the WFBR report, adoption of the top 10 by the STV Executive Committee, drawing up the implementation strategy and approach for the top 10 measures.

 $^{^{5}}$ The final top 10 has been determined by and is under the responsibility of the STV. For this reason, the top 10 is not part of this report. The top 10 was published in the Parliamentary Paper (Kamerbrief) on food waste in the Netherlands -2020, in which the Minister informs the House of Representatives.

https://www.rijksoverheid.nl/documenten/kamerstukken/2020/08/31/kamerbrief-over-voedselverspilling-in-nederland-2020

Reading guide for the sections in this report

- 1. Sheets: the summaries of the results of the scientific review, explained in 19 "sheets" grouped into six themes, explaining the relevant legislation and regulations, as well as the link with the creation and/or prevention of food waste.
- 2. Consultation: the description of the process and outcomes of the consultation with stakeholders (written surveys + workshops).
- 3. Prio-plots: the description of the reasoning underlying the feasibility and impact of possible measures, based around 32 measures arranged within the six themes selected during the consultations.
- 4. Top 10: description of the selection of 10 priority measures by STV and arguments for this selection.

Section 1: Legislation and regulations sheets

Introduction

Preventing and reducing food waste is increasingly seen as an important and influential way of reducing the environmental impact of the food system and achieving a sustainable, resilient, and circular food system that contributes to global food and nutrition security. It is relatively new as a policy area. It is only since 2010, with the publication of the first European benchmark with data on food waste for the then 27 member states, that the urgency and scale of the problem has become clear (Monier et al., 2010⁶). In addition to the driving forces inside and outside the food supply chain, legislation and regulations are important points of reference in the framework of measures and activities that can be done to prevent food waste (Wunder et al., 2018⁷).

Objective of the literature review

The objective of the literature review of relevant legislations and regulations concerning the creation and prevention of food waste is to arrive at an up-to-date state of affairs, for both Dutch and European legislation and regulations.

Sources of literature review used

The starting point was the WUR report published in 2011 "Reducing food waste - Obstacles experienced in legislation and regulations" (Waarts et al., 2011)8". This report inventoried what legislative obstacles can be overcome to reduce food waste and reuse residual streams. The main findings draw attention to 2 areas:

- 1) The provision of food information regulation: Incorrect labels, best-by dates that are too short and differ too much for the same type of product, and a lack of clarity about what is permitted after the best-by date has passed: these all lead to food waste. Because of product liability, businesses remove food from the shelves when it is not necessary to do so. The government can stimulate chain parties to reach agreements about the expiration dates for non-perishable products and products with an extremely long shelf life. It can also research the possibility of abolishing the expiration date for non-perishable products if the production date is indicated.
- 2) The two-hour guarantee (part of the hygiene codes which make up the EU Hygiene Package) results in waste in the catering industry. Extending that period through exemptions would directly result in less food being thrown away.

The legislation and regulations mentioned in relation to food waste in this report include:

- European marketing standards
- Contamination of food
- Import control
- Phytosanitary policy
- **Novel Foods**

Cooling and freezing meat

- Hygiene rules and product liability
- The provision of food information

⁶ V. Monier, S. Mudgal, V. Escalon, C. O'Connor, T. Gibon, G. Anderson, H. Montoux (2010). Final Report –Preparatory Study on Food Waste Across EU 27; European Commission [DG ENV -Directorate C]. BIO Intelligence Service, Paris. https://ec.europa.eu/environment/eussd/pdf/bio_foodwaste_report.pdf

⁷ Wunder, S., K. McFarland, M. Hirschnitz-Garbers, J. Parfitt, K. Luyckx, D. Jarosz, L. Youhanan, Å. Stenmarck, F. Colin, S. Burgos, M. Gheoldus, A. Charles Cummins, P. Mahon and E. van Herpen (2018). Food waste prevention and valorisation: relevant EU policy areas. REFRESH D3.3 Review of EU policy areas with relevant impact on food waste prevention and valorisation: 127 pp.

⁸ Waarts, Y., M. M. Eppink, E. B. Oosterkamp, S. Hiller, A. A. van der Sluis and A. J. M. Timmermans (2011). Reducing food waste - Obstacles experienced in legislation and regulations. Rapport 2011-043. The Hague, LEI: 134 pp. See e-depot WUR publications: http://edepot.wur.nl/185437

- Norms and quotas in fisheries
- The use of animal by-products
- Contamination in food (standards for contaminants and maximum residue limits, and import controls)

Since then, analyses of relevant legislation and regulations in relation to waste have been carried out within two European projects FP7 FUSIONS9 and Horizon 2020 REFRESH10, with the REFRESH study building on the results of FUSIONS (Vittuari et al., 2015¹¹, Wunder et al., 2018⁷). Because the scope of European legislation and regulations is extensive, a selection has been made on the basis of assumptions about the greatest impact on the origin and prevention of food waste, key areas that are in line with the focus areas of REFRESH (consumers, voluntary consortium agreements with the business community, valorisation of residual and by-products), and those policy areas in which there is a dynamic for determining new policy (and therefore possibilities for making changes), legislation, and quidelines. Because REFRESH does not focus on food donations, these are not considered here.

The legislation and regulations mentioned by REFRESH in relation to food waste include:

- Waste and resource policies
- Food safety and hygiene legislation (including the special case of surplus food use for animal feed)
- Agricultural policy (common agricultural policy: CAP)
- Fisheries policy (common fisheries policy: CFP)
- Unfair Trading Practices (UTP)
- Bioenergy

The role that voluntary consortium agreements can play in the creation of successful policy programmes will be clarified as well. Another important element is how consumer behaviour can be adjusted, such as through packaging information (e.g. date labelling) and informative campaigns as well as campaigns for raising awareness aimed at consumers and the business community.

REFRESH observes that there is a broad scope in terms of relevant policy areas and that, as a result, policy, legislation, and regulations are complex and fragmented. There is a lack of coherent food policy in the European Union (EU) and its member states, leading to potential profit-loss trade-offs between different policy objectives. One example is the "struggle" between promoting bioenergy on the one hand and encouraging the use of surplus food for animal feed on the other. It also creates unnecessary obstacles in terms of preventative activities and missed opportunities to make full use of the policy. REFRESH proposes the "Food Use Hierarchy" as a guiding principle in the process of achieving better attuned policy objectives, strategies, and ultimately legislation and regulations. This inverted pyramid emphasises the need to preserve food for human consumption for as long as possible. The classification aims to ensure effective use of raw materials before they are recycled, reused, or disposed of (see figure 1).

www.eu-fusions.org

www.eu-refresh.org

¹¹ Vittuari, M., A. Politano, S. Gaiani, M. Canali and M. Elander (2015). Review of EU legislation and policies with implications on food waste. Final Report. Bologna: 54 pp.

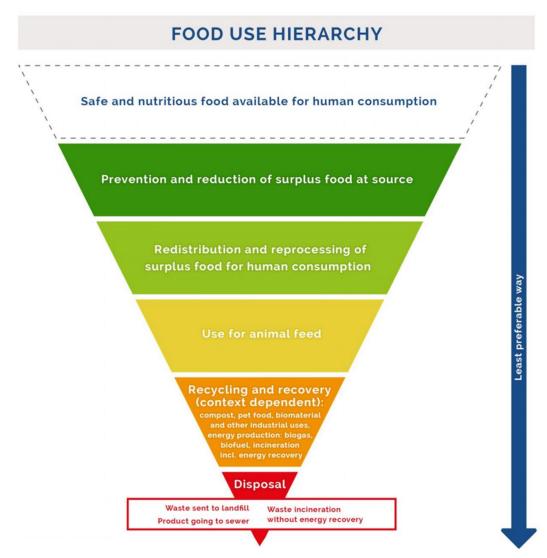


Figure 1: Food Use Hierarchy in relation to REFRESH (Wunder et al., 2018)

Results of the literature study

Based on the analysis of the available literature, the project team made a classification into six themes and 19 specific legislation and regulations.

The six themes are:

- 1. Interpretation and measurement of food loss and food waste
- 2. (EU) policy on agriculture and fisheries
- 3. Health and safety regulations, including animal feed and potential contaminants
- 4. Trade practices and standards, including cosmetic aspects, product liability, VAT, and unfair trading practices
- 5. Waste legislation
- 6. Information on packaging

19 sheets have been drawn up explaining the content of the specific legislation and regulations, and their relevance for the creation and/or prevention of food waste. These sheets are used during the consultations with stakeholders (see Section 2).

An overview of the sheets can be displayed as follows:

Theme	Title	Sheet name and number	
Theme 1	Interpretation and measurement	1. Measurement of food waste	
	of food loss and food waste		
Theme 2	(EU) policy on agriculture and	2. Common fisheries policy (CFP)	
	fisheries	3. Common Agricultural Policy (CAP)	
Theme 3	Health and safety requirements	4. Contamination of food with pesticide residues	
		5. Contamination of food with contaminants	

		6. Microbiological criteria for food	
		7. Cooling and freezing of meat	
		8. Inspection of products of animal origin intended for	
		human consumption	
		9. Allowing novel foods	
		10. Phytosanitary policy	
Theme 4	Trade practices and standards	11. Import inspections	
		12. Product liability	
		13. European marketing standards	
		14. VAT regarding donations	
		15. Unfair trading practices	
Theme 5	Waste legislation	16. Using food no longer intended for human	
		consumption as animal feed	
		17. The use of animal by-products in animal feed	
		18. Waste	
Theme 6	Information on packaging	19. Provision of food information to consumers	

Theme 1: Measurement of food waste

Sheet 1: Measurement of food waste

Commission Delegated Decision (EU) 2019/1597 as regards a common methodology and minimum quality requirements for the uniform measurement of levels of food waste. Supplementing Directive 2008/98/EC of the European Parliament and of the amended Directive 2018/851 on Waste. Commission Implementing Decision (EU) 2019/2000 laying down a format for reporting of data on food waste and for submission of the quality check report.

What is this EU decision about?

The European Union wants to introduce a common methodology and minimum quality requirements for the measurement of levels of food waste at each stage of the food supply chain. It presents waste codes, an approach to thoroughly measuring the levels and type of food waste and a more concise measurement method. In the European research project FUSIONS a supporting "Food Waste Quantification Manual" has been developed. The EU countries have mutually agreed to report on the reference year 2020 in 2022. This decision establishes the proposed methodology. The definition of food waste is included for the first time in the amended directive from 2018. The delegated decision and the implementing decision deals with the way food waste is measured, the scope of food waste, and the reporting on national data about food waste.

Why do we need a regulation to measure food waste?

Establishing a reference framework with regard to the levels of food waste provides starting points for the development and evaluation of policy and business measures. A European definition of food waste has only been in place since 2018, and in 2019 agreements were made on how to report at national member state level. Coordinating this measurement method and the reporting will help to better measure and evaluate progress and the comparability of the results achieved. The method of measurement is still very fragmented and varied at the moment. This makes it difficult to compare the levels of food wasted in the various member states, branches, and chains. As a result, it is insufficiently known where and how much food is wasted, and it is difficult to assess the effects of measures. As a result, it is currently difficult for governments and branch organisations to take targeted measures against food waste and to evaluate existing policy.

Theme 2: (EU) policy on agriculture and fisheries

Sheet 2: Common fisheries policy (CFP)

Regulation (EU) No 1380/2013 on the Common Fisheries Policy.

What does this regulation mean?

This regulation prevents the release of caught fish and requires that fishermen land all fish they have caught. The regulations establish minimum landing sizes for some fish species, with the aim of protecting juveniles of marine organisms. After sorting, fish are released if they are too small or if the quota — which the European Union sets annually by species — for the species in question has been reached. However, it is unclear to what extent these released fish survive after being thrown back into the sea.

Why does this regulation lead to food waste?

When quotas are set, the proportion of target species in the catch of mixed fisheries is not taken into account. Fishing boats are often not yet able to prevent undersized or otherwise unwanted catches. One of the reasons for this is that the government has restricted the use of a number of selective fishing methods. Landed non-target species also have a small market and as such, are ultimately not consumed by humans. Quantitative data on the extent of this waste is not known. The fisheries policy has not yet been evaluated in terms of effectiveness and impact on the occurrence of food waste.

Sheet 3: Common Agricultural Policy (CAP)

The legal basis for the European Common Agricultural Policy (CAP) has been established in the Treaty on the Functioning of the European Union. In particular, there are four relevant decisions:

- Regulation (EU) No 1307/2013 establishing rules for direct payments to farmers under support schemes of the CAP.
- Regulation (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products.
- Regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development.
- Regulation (EU) No 1306/2013 on the financing, management, and monitoring of the common agricultural policy.

What is this EU regulation about?

The starting point of the CAP is to ensure that enough food is grown in a sustainable way. The policy must also ensure that consumers can buy agricultural products at reasonable prices and that farmers have a decent income. The current agricultural policy (2014-2020) focuses on income support for farmers, market regulation, and rural development measures.

The policy for 2021-2027 is currently under discussion. The European Commission has proposed to reduce the CAP budget by around 5%, partly because of Brexit. Income support will be reduced to a maximum of one tonne per farm as well, so that smaller farms and young farmers will benefit more (proportionately) and the distribution of the money will be fairer. Smaller companies will also be given extra protection against large market players, such as supermarket chains and production companies. Member states will have more say in shaping their national agricultural policies from 2021 onwards. They will also be given more responsibility, for example when it comes to achieving the EU's climate targets.

Why tackle food waste through the CAP?

The CAP is the basis for all food production in the EU and currently focuses on increasing production and supporting incomes in the primary sector. Overproduction that occurs cannot always be absorbed by the market, but these (pre-)harvest losses are not covered by waste legislation or policy against food waste. Partly because of this, there is often a lack of information about the quantity of residual streams from this chain link. Member states will have more say in shaping their national agricultural policies from 2021 onwards. This offers the Netherlands the opportunity to immediately translate new insights from scientific research and pilot studies into practice. Some examples are encouraging businesses to self-monitor and the development of legislation and instruments to speed up the transition to a circular economy.

Theme 3: Health and safety regulations

Sheet 4: Contamination of food with pesticide residues

Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and animal feed of plant and animal origin and amending Council Directive 91/414/EEC.

What does this regulation mean?

This regulation indicates how much residue of pesticides can be in or on food and animal feed of plant and animal origin: the maximum residue level (MRL) MRLs are set in such a way that even if people consume a lot of a product, they do not ingest too much of a harmful substance. The rules of Good Agricultural Practice are taken into account when establishing the MRLs.

Why does this regulation lead to food waste?

A number of MRL standards are stricter than necessary to safeguard public health. On these grounds, batches of food that do not comply with the MRL — but are in principle safe for public health — are rejected. Measurement methods are also becoming increasingly sensitive. As a result, certain zerotolerance substances are increasingly being rejected (e.g. fipronil). Adjusting standards is a lengthy process that requires scientific evidence. Quantitative data on the extent of this waste is not known.

Sheet 5: Contamination of food with contaminants

Commission Regulation (EC) No 1881/2006 (derived from the General Food Law) setting maximum levels for certain contaminants in foodstuffs.

What does this regulation mean?

This regulation indicates how much of a contaminant — such as leftover packaging material, but also a fungal toxin like aflatoxin — may be present in or on food and animal feed: the maximum residue limit (MRL). MRLs are set in such a way that even if people consume a lot of a product, they do not ingest too much of a harmful substance. Zero tolerance applies to some contaminants: none of these must be present per billion (ppb) in the product to be consumed, otherwise the product will be destroyed.

Why does this regulation lead to food waste?

With new measurement methods, the detection of more than "0" is becoming increasingly easier, resulting in more and more food not being approved. If contaminants are found in a batch, the whole batch is destroyed or sent back. Adjusting standards is a lengthy process that requires scientific evidence. Quantitative data on the extent of this waste is not known.

Sheet 6: Microbiological criteria for food

Commission Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs.

What does this regulation mean?

This regulation establishes microbiological criteria for the presence of certain micro-organisms in food and special hygiene rules to be complied with by manufacturers and retailers in order to ensure food safety for consumers.

Why does this regulation lead to food waste?

If samples of products do not meet the microbial criteria, they are not approved for human consumption. Although it is theoretically possible to remove specific batches or individual products from sale, much more is often removed from the shelves than is strictly necessary as a precaution. Maintaining consumer confidence is often the primary motivation here. Adjusting standards is a lengthy process that requires scientific evidence. Quantitative data on the extent of this waste is not known.

Sheet 7: Cooling and freezing meat

Regulation (EC) No 853/2004 (part of the Hygiene package) laying down specific hygiene rules for food of animal origin.

What does this regulation mean?

This regulation lays down specific hygiene rules for food of animal origin, requiring for example that you measure the "core temperature" — the inside — of meat to determine whether it is being stored at the correct temperature. In the case of frozen meat, this core temperature must be minus 18 degrees Celsius or lower, and in the case of chilled meat it must be less than 15 degrees Celsius.

Why does this regulation lead to food waste?

It is not the core temperature, but the external temperature — the temperature on the surface of the meat — that is crucial for food safety. After all, this is where most micro-organisms are found. According to the law, meat must be cooled to the required core temperature prior to transport. This increases the required storage time. As a result, the Netherlands sets stricter requirements for the maximum temperature of chilled and frozen meat than other countries in and outside the EU. Foreign consignments of meat are frequently rejected: they lose value (e.g. because they can only be processed in a bio-digester) or are even completely destroyed. Quantitative data on the extent of this waste is not known.

Sheet 8: Inspection of products of animal origin intended for human consumption

Regulation (EC) No 854/2004 (part of the Hygiene package) laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption.

What does this regulation mean?

These rules prescribe how quality control of products of animal origin intended for human consumption should be organised. It is part of the European Hygiene Package, which includes several regulations. The aim is to prevent microbiological and/or chemical contamination. In addition to the Hygiene Package, the basic regulations and standards are also reflected in all kinds of public and private agreements, rules, and accepted implementation policy. Large businesses have HACCP-based food safety systems in place. Branch organisations translate the procedures for smaller companies into Hygiene Codes, which may be used after approval by the Minister. However, these codes are not intended as legislation, but can be audited for certification purposes.

Why does this regulation lead to food waste?

Stricter requirements than those required by law can be added to the hygiene codes, which can lead to products being rejected sooner and products being removed from the food supply chain. Quantitative data on the extent of this waste is not known.

Sheet 9: Allowing Novel Foods

Regulation (EU) 2015/2283 on novel foods.

What does this regulation mean?

Under this regulation, businesses wishing to introduce novel foods and novel ingredients (which were not on the market before 15 May 1997) must go through a European authorisation procedure. They must scientifically substantiate that their product is safe, using scientific studies and risk analysis. If a product or ingredient is already on the market in a country outside Europe (traditional food), a shortened authorisation procedure will suffice.

Why does this regulation lead to food waste?

For many products and ingredients, the authorisation procedure can take up to several years. It is therefore not appealing to many businesses to submit a request. As a result, many potentially valuable food sources are not being fully utilised at present. One example is protein extracts from residual waste streams from the feed and food industry. It may also be the case that applications outside Europe have already been accepted, but are not (yet) permitted in Europe itself. Quantitative data on the extent of this waste is not known.

Sheet 10: Phytosanitary policy

Council Directive 2000/29/EC on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community.

What does this regulation mean?

This system protects plants and plant products against invasive organisms. These are organisms that do not occur naturally in the Netherlands, but may end up here through trade or other means. This directive establishes the conditions for the cultivation and treatment of plants and plant products when they are imported into the European Union. It identifies which species are subject to an import ban, regulates the document requirement, and imposes requirements on their production within the European Union.

Why does this regulation lead to food waste?

Batches infected with a disease or pest shall be destroyed or sent back entirely. For example, take a batch of potatoes infected with ring rot, imported from North America. When sent back to the country of origin, spoilage often occurs, making the consignment unfit for human consumption. It seems that the Netherlands applies stricter standards than other European countries. Quantitative data on the extent of this waste is not known.

Theme 4: Trade practices and standards

Sheet 11: Import inspections

Regulation (EC) No 882/2004 as regards the increased level of official controls on imports of certain feed and food of non-animal origin.

What does this regulation mean?

The aim of this regulation is to ensure uniform quality control of animal feed and foodstuffs such as fruit, vegetables, grains, and seeds upon entry into the European Union.

Why does this regulation lead to food waste?

Companies indicate that it sometimes takes up to three days before they are allowed to import their product into Europe. This is to the detriment of the shelf life of fresh fruit and vegetables. The Netherlands only has a few sites for the inspection of imported products. As a result, trucks often have to make detours with their cargo, and the cargo is opened more frequently. This also increases spoilage. The Netherlands also inspects imports more strictly than other countries, which leads to additional waste. Quantitative data on the extent of this waste is not known.

Sheet 12: Product liability

Council Directive 85/374/EEC concerning liability for defective products.

What does this regulation mean?

Until the product is delivered to the consumer, producers, retailers, and caterers are responsible for any damage caused by a defect in a product they have supplied. This can be anything from a batch arriving spoilt at the supermarket to consumers falling ill after eating a product. Directive 85/374/EEC deals specifically with food safety, whereas the Warenwet (commodities act) describes product liability in general.

Why does this regulation lead to food waste?

Claims for damages and recalls cost time and money and damage a manufacturer's image. Businesses try to prevent them as much as possible. For example, they prefer to put an expiry date that is too short on the packaging as a precaution rather than the date by which the product actually lasts. They also prefer not to give away food that is left over or out of date to employees, the Food Bank, or the Salvation Army. Retailers will often not re-label expired products. As a result, a great deal of good food is wasted unnecessarily. Quantitative data on the extent of this waste is not known.

Sheet 13: European marketing standards

Commission Implementing Regulation (EU) No 543/2011 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 in respect of the fruit and vegetables and processed fruit and vegetables sectors.

What do these regulations mean?

Fruit and vegetables must meet certain standards that quarantee freshness and safety. These standards are established in general European marketing standards. They are also assessed on the basis of their appearance, through specific marketing standards which are also established at European level. These standards deal with characteristics such as size, shape, uniformity, and smoothness. In 2009, they were abolished for 25 types of fruit and vegetables, but for 11 types apples, citrus fruit, kiwifruit, lettuces and endive, peaches and nectarines, pears, strawberries, sweet peppers, table grapes, tomatoes, and bananas — the specific marketing standards still exist. They are aimed at dividing them into different quality classes. Private parties can also impose additional quality requirements on suppliers that exceed the standard.

Why does this regulation lead to food waste?

There are no specific indications that the legal marketing standards lead directly to waste. However, class 2 products are not, or scarcely, offered directly to the consumer and must therefore find another way to the market. Products that do not comply with the (specific) marketing standards may not be marketed as fresh produce in the supply chain unless the retailer offers them with an appropriate label.

Retail and other processing and sales channels can influence the market through private marketing standards, such as by stopping orders in the short term, causing waste because suppliers cannot find a new customer in time. On the other hand, market parties can also temporarily relax private standards, such as the products that remained small in the summer of 2018. Quantitative data on the extent of this waste is not known.

Sheet 14: VAT regarding donations

Council Directive 2006/112/EC on the common system of value added tax.

What does this regulation mean?

Value added tax (VAT) is a turnover tax levied on the supply of a product or service. Purchasers subject to VAT can obtain a refund of the amount paid at the time of purchase via the tax authorities. VAT is calculated on the basis of the purchase price at the time of donation, taking into account the quality of the goods at that time. VAT is regulated at EU level by the VAT Directive, which must be translated into national law. VAT legislation applied in EU member states can sometimes have an impact on food donation, as it is seen as an obstacle to the transfer of food surpluses between donors, food banks, and other charities. Member states may, when adopting the rules for goods given away free of charge (under Articles 16 and 74 of the VAT Directive), encourage the donation of surplus food for charitable purposes.

Why does this regulation lead to food waste?

It is not always clear to businesses and retailers in countries with VAT requirements for donated food: is food close to its expiration date taxable or tax-free? That is why they often take the safe side and send residual batches to a waste processing facility instead of the food bank. The batches then end up as animal feed, in the compost heap, etc. In certain member states, little or no VAT is levied when food is donated to food banks, as the national authorities consider that, in accordance with Article 74 of the VAT Directive and as translated into national law, the value of the donated food with a minimum shelf life or use-by date approaching expiry is low or zero. Other EU member states, on the other hand, assume that the price of a product ready to be donated should be equated with the purchase price of the product in ordinary commercial transactions, and that VAT should therefore also be calculated on the basis of the commercial price. This reasoning has negative consequences for food donation. In the Netherlands, donations to food banks are tax deductible if entered as an expense, gift, or sponsorship expense in kind. Voedselbanken Nederland has drawn up an information bulletin on taxation for companies and food banks. Quantitative data on the extent of this waste is not known.

Sheet 15: Unfair trading practices

Directive (EU) 2019/633 on unfair trading practices in business-to-business relationships in the agricultural and food supply chain.

What does this regulation mean?

This Directive establishes a minimum list of prohibited unfair trading practices in relations between customers and suppliers in the agricultural and food supply chain, minimum rules for the enforcement of those prohibitions, and arrangements for coordination between enforcement authorities. The aim is to combat practices which are very different from good trading behaviour, which are contrary to good faith and fair treatment, and which are unilaterally imposed by one trading partner on another trading partner. It includes payment and cancellation deadlines, unilateral changes to supply conditions, irrelevant payments, payments for losses occurring after transfer to the customer, withholding written confirmation of a supply contract, wrongful use of business secrets, (threat of) commercial retaliation, compensation for complaint investigation in the absence of negligence, or fault on the part of suppliers.

Why does this situation lead to food waste?

Unfair trading practices continue to occur in the European Union. There has recently been a European directive which identifies a number of unfair trading practices and discusses measures that can be taken against them. There is also a competition law that deals with power and anti-competitive practices. Each member state is encouraged to take measures as it sees fit. Distorted relationships of power in the chain lead to overproduction and a supply that is larger than necessary. The result is food waste. Tackling this problem can prevent breakdowns in the chain and contributes to higher yield for suppliers. Quantitative data on the extent of this waste is not known.

Theme 5: Waste legislation

Sheet 16: Using food no longer intended for human consumption as animal feed

Communication Notice 2018/C/133/02 on Guidelines for the feed use of food no longer intended for human consumption.

What does this regulation mean?

As part of the European Commission's action plan to reduce food waste, one of the initiatives is to valorise the nutrients of food which is, for commercial reasons or due to problems of manufacturing or certain defects, no longer intended for human consumption, through its safe use in animal nutrition, without compromising animal and public health. It is important to do this without endangering animal and public health. The use of this kind of food as animal feed avoids that these materials are composted, transformed in biogas, or disposed of by incineration or landfilling. There is no formal requirement for member states to do so. The purpose of these guidelines is to facilitate the use of certain foodstuffs no longer intended for human consumption, with and without products of animal origin, as animal feed. The guidelines should support national and local competent authorities and food supply chain operators in the application of relevant Union legislation. The scope of these guidelines covers products derived from food production (supplied by food producers), and food placed on the market packaged or unpackaged (supplied by food wholesalers and retailers). Catering waste and leftovers do not fall within the scope.

Why does this situation lead to food waste?

Businesses feel restricted or even obstructed when they want to use food (no longer intended for human consumption) as animal feed. For example, it is difficult for them to comply with animal feed legislation because they are subject to different requirements than food. Moreover, these businesses are then classified as food and animal feed companies, which results in them being subject to all kinds of additional audits. There is also a great deal of uncertainty about the rules for registration, which vary from one-member state to another. Furthermore, in many member states, businesses are obliged to participate in private certification schemes. All this ensures that many food batches that would be good as animal feed end up in low-value applications such as compost or biogas. Quantitative data on the extent of this waste is not known.

Sheet 17: The use of animal by-products in animal feed

Regulation (EC) No 999/2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies.

What does this regulation mean?

The use of residual waste streams from animals can pose a threat to human and animal health. That is why the use of animal by-products has been restricted, by various regulations, including Regulation EC 999/2001. It contains all kinds of requirements for the use of animal by-products. For example, businesses working with feed materials of animal origin (fishmeal, blood products, etc.) are sometimes obliged to register or apply for approval. The same applies to farms that work with organic fertilisers and soil improvers with animal proteins in them. The aim of the scheme is to prevent "crosscontamination" of animal proteins from and to ruminants, thereby preventing the transmission of lifethreatening prion diseases such as scrapie and BSE.

Why does this regulation lead to food waste?

If an animal product is present in a residual waste stream, the whole residual waste stream is covered by the legislation on animal by-products. This hinders the use of animal tissue proteins, catering waste, and food waste in animal feed. Valuable animal by-products are now often incinerated, composted, or converted into biogas.

Sheet 18: Waste

Directive 2008/98/EC on waste. Directive (EU) 2018/851 amending Directive 2008/98/EC on waste.

What does this regulation mean?

This directive establishes measures to protect the environment and human health. This is done by preventing or reducing the negative effects of the production and management of waste. The directive should also lead to better and more efficient use of resources in general. The amended directive from 2018 includes the definition of food waste, which was previously missing. This amended version states that member states should take measures to promote the prevention and reduction of food waste as set out in the Agenda 2030 for Sustainable Development adopted by the United Nations General Assembly on 25 September 2015 and, in particular, the objective of reducing the amount of food waste by 50% per capita worldwide at the retail and consumer levels by 2030 and reducing food waste throughout the production and supply chain, including post-harvest losses. Member states should aim to achieve a 30% reduction by 2025 and a 50% reduction by 2030. Member states should include campaigns for raising awareness in their waste prevention programmes, measure progress in reducing food losses according to a common methodology, provide incentives for collection and safe redistribution of unsold food products at all stages of the supply chain, and better inform consumers about the meaning of best-by dates. The directive also contains provisions on all other waste streams, including packaging, bio-waste, and by-products.

Why does this regulation lead to food waste?

Regulations concerning packaging, bio-waste, and by-products, as well as "ceased to be waste" status (including the disposal principle and responsibilities), fermentation, non-food applications, etc. are covered by this directive. This creates fragmentation and a sub-optimal result due to mutually hindering policy ambitions (e.g. bio-energy, packaging targets, and waste).

Theme 6: Information on packaging

Sheet 19: Provision of food information to consumers

Regulation (EU) No 1169/2011 on the provision of food information to consumers.

What does this regulation include?

A good label provides consumers with correct and clear information about the nutritional value, composition, and quality of a product. For example, does the product contain any allergens? What is the shelf life of the product? The European Labelling Directive, which is largely reflected in the Warenwetbesluit Etikettering van Levensmiddele (commodities decree on the labelling of food), is intended to prevent consumers from being misled. The regulation makes a distinction between the best-by date and the latest date for consumption (use-by date). If the best-by date has passed a product is often still perfectly suitable for consumption and can still be sold. For a number of products, the seller may even extend the best-by date, subject to certain conditions. This shifts the responsibility to the seller.

Why does this regulation lead to food waste?

Research shows that a large proportion of consumers do not know the difference between the best-by date and latest date for consumption, and sometimes throw away products unnecessarily quickly. Sometimes manufacturers also put a date on products for which this is not legally necessary, such as products with a very long shelf life and low risk of deterioration like sugar and salt.

Section 2: Consultation

The aim of this consultation was to identify the most important bottlenecks within legislation and regulations and private agreements, their relationship with the creation and/or prevention of food waste and losses throughout the food system in the Netherlands, and to identify priorities in solution directions. The consultation took place in three ways:

- 1. written consultation via online questionnaires
- 2. consultation with ministries through feedback on sheets and interviews
- 3. workshops with stakeholders

Written consultation

In summer 2019 a broad, open, written consultation took place using questionnaires among some STV members and the broader, involved business community, and branch organisations. This invitation was distributed to the stakeholders (members) of STV, via calls on social media channels of STV, WFBR, and LNV, and by sharing it on NoWasteNetwork.nl¹² and sending it to network contacts. In the consultation they were asked about the obstacles they experience in practice in reducing waste, which in their view is (partly) caused by legal obstacles or private rules. They were also asked to identify possible solutions, prioritise obstacles, and suggest what role STV could play in solving them. See Appendix 1 for the invitation and full questionnaire. Thirty responses were collected through this written consultation. The results have been incorporated into an analysis document that enhances the sheets with regard to bottlenecks and possible measures. This analysis was the basis for the consultation that took place afterwards.

Consultation with Ministries

The updated sheets were shared with relevant policy departments and departments, including I&W and VWS/NVWA, via the Ministry of Agriculture, Nature, and Food Quality's contact person. Feedback has been collected on specific legislation and has been incorporated into an update to the sheets used as a background information document for the three workshops that took place in January - April 2020. Representatives of the STV also held discussions with people working at the relevant ministries to consider the possibility of removing obstacles arising from specific policy and/or legislation and to identify the relevance for collaboration between the various policy fields. These introductory talks were also the prelude to the further development of measures and activities within the context of Action Line 4 of the STV after the identification of the top 10 priorities.

Workshops

Three workshops were organised between January and April 2020:

1. 6 February 2020

WFBR, STV, LNV, and AVV organised this meeting in The Hague, attended by some 40 representatives from a broad range of stakeholders. The aim was to discuss which bottlenecks are experienced by the chain regarding legislation and regulations and/or private agreements, and what could be changed, renewed, or abolished in order to achieve a 50% reduction of food waste in the Netherlands by 2030.

2. 9 April 2020

WFBR, STV and AVV organised this online meeting (due to the COVID-19 measures), with approx. 7 representatives from the AVV's project group on sustainability. The aim of the workshop was to

https://nowastenetwork.nl/2019/09/06/oproep-inventarisatie-wettelijke-private-belemmeringen-bij-het-tegengaan-vanvoedselverspilling/

continue the discussion on the basis of the insights gained from the sheets and the obstacles and measures identified thus far in the consultations. This involved discussing arguments concerning the impact and feasibility of possible measures (substantiation of prioritisation), which will serve as input for the selection of the final top 10 of priorities in May 2020. This discussion was based on a preselection of measures by theme. The pre-selection was prepared by WFBR on the basis of the analysis of the results of the workshop on 6 February and contains a summary of the possible measures mentioned, and how they fit in with the 19 relevant legislations and regulations from the sheets. See Appendix 2 for the long list of selected measures. Possible implementation steps were also discussed, as well as the coordination of activities between STV and AVV members.

3. 17 April 2020

WFBR and STV organised this online meeting, with five representatives of the High Level Expert Group participating on their own behalf. This High Level Expert Group consisted of Anniek Mauser (Unilever), Robert van Gorcom (WFSR), Bernd van der Meulen (Food Law Institute), Christianne Bruschke (Ministry of Agriculture, Nature, and Food Quality), and Alain Cracau (Rabobank). Commentary on the further developed pre-selection of possible measures, as discussed in the session with AVV on 9 April 2020, was left by the members of the High Level Expert Group on impact and feasibility, from the perspective of the independent expertise of the participants.

The development (minutes) of the consultations with the AVV and High Level Expert Group were then shared with the participants of the workshop of 17 April, to which they provided feedback. This input was then further analysed by WFBR and incorporated in a document in which the pre-selection measures as discussed in the workshops with AVV and the High Level Expert Group were provided with arguments concerning impact and feasibility (see Section 3).

Section 3: Feasibility and the impact of measures: Prio-plots

Following the analysis of the consultations and sheet updates, WFBR has developed an approach for justifying the pre-selection of measures in terms of feasibility and impact. A set of criteria has been created for this purpose:

1. Feasibility of the measure

- Clearly described goal
- Duration of the implementation of the measure
- Required investment in terms of expenses
- Required effort
- Support
- Implementation

2: Impact of the measure in relation to the creation and reduction of food waste

- The number of stakeholders and their involvement (number of stakeholders in the chain)
- The direct effect on the reduction of food waste
- Reduction of the food waste volume
- Multiple Key Performance Indicators (KPIs)

The criteria can be assessed on a 3-point scale, to which a score has been added. The tables below explain the meaning per score level, per criterion.

Table 1: Feasibility

Table 1: Teasibility			
Criteria	POOR = 0 pts	AVERAGE = 0.5 pts	GOOD = 1 pts
The target is clear.	The objective of the measure is not clear.	The objective of the action is not yet 100% clear, but there is an idea.	It is clear what the purpose of the action is.
Duration	>5 years	>1 year, but <5 years	<1 year
Investment	A lot of investment is needed to get started and maintain the action.	A lot of investment is needed to start up action, but once it is in place the investment is low every year.	Little investment is needed to get started and maintain the action.
Effort	A lot of effort is needed to get started and maintain the action.	A lot of effort is needed to start up action, but once it is in place the effort is low every year.	Little effort is needed to get started and maintain the action.
Support	Many stakeholders oppose the idea.	Most stakeholders are in favour, but not yet everyone.	There is sufficient support. Lobbying is no longer necessary
Implementation	It is not clear how this action should be structured.	It is not yet clear how this action should be structured, but there are some ideas.	It is clear how this action should be achieved.

Table 2: Impact

Criteria	POOR = 0 pts	AVERAGE = 0.5 pts	GOOD = 1 pts
Number of stakeholders involved	This action is only useful for a single stakeholder in the chain.	This action affects a large part of the stakeholders, but the entire chain is not included yet.	This action affects almost all stakeholders, and the entire chain is included.
Impact	This action has no impact on the reduction of food waste.	This action only has an indirect impact on the reduction of food waste.	This action has a direct impact on the reduction of food waste.
Volume reduction	This action does not reduce the volume of food waste = 0%.	This action reduces the volume of food waste by <1% and <25%.	This action substantially reduces the volume of food wasted by >25%.
Multiple KPIs	Only the volume of food waste is taken into account in this action = 0 or 1.	In addition to the volume, 1 other KPI is taken into account in this action = 2	In addition to the volume, multiple KPI is taken into account in this action > 2

Multiple KPIs cover indicators such as environmental, economic, or social impact that are taken into account in the measure. Food waste is primarily measured in terms of volume, but related impact areas reinforce the impact that a given action can have.

The scores are then added up and displayed in a prio-plot. Figure 2 shows an example of what this looks like.

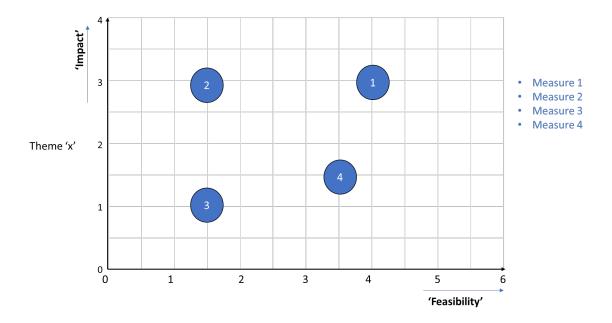


Figure 2: Example of a prio-plot

The following chapters present the prio-plots per theme and explain the score per measure. Finally, a total overview of the pre-selection of measures has been compiled in a single figure and an overview table.

On the basis of the written consultation and the first workshop in February, a list of 32 measures was identified, divided into the six themes. During this first part of the consultation, these measures were identified by various stakeholders as being "important" for reducing food waste. However, consensus on these measures was not sought during the consultation, and therefore it does not reflect the priorities of different stakeholders. The order of the measures is arbitrary. The pre-selection of measures is specified below. The colour code refers to the theme in question and is used to distinguish between measures from different themes in the prio-plots.

Overview of the measures

Theme 1: Interpretation and measurement of food loss and food waste (blue)

- 1 Aligning the Dutch definition of food waste with that of the EU
- 2 Coordinating the monitoring method within the EU

- 3 Preparing and publishing a food waste benchmark based on sector-aggregated information
- 4 Intensifying the promotion of self-reporting, but not making it mandatory through legislation

Theme 2: (EU) policy on agriculture and fisheries (orange)

- 1 General: Focusing policies on production that just meets demand, removing all incentives for overproduction, and coordinating legislation between EU member states
- 2 Ensuring a level playing field for sustainability requirements for domestic and imported products
- 3 Providing financial incentives to prevent the destruction of unsold products whose minimum auction price has not been reached
- 4 Fisheries: Encouraging innovation, e.g. fishing techniques to prevent bycatch and encourage farmed fish (not based on feed from wild catch)
- 5 Fisheries: Evaluating the EU policy ban on discards

Theme 3: Health and safety legislation and policy (yellow)

- 1 Coordinating the interpretation and clarity of legislation, regulations and standards, including enforcement
- 2 Recalibrating the system for assessing and reassessing standards based on scientific insights and available technologies
- 3 Separating pet feed standards from food/livestock feed standards
- 4 Deploying targeted tracking and tracing technologies and adapting regulations to enable rejection at the product or batch level

Theme 4: Trade practices and standards (green)

- 1 Chain relationships: Making chain links jointly responsible for raw material losses and solutions, e.g. through new private agreements and adjustments to supply contracts
- 2 Chain relationships: Voluntary sharing of data on loss and waste between chain parties
- 3 Best-by date and product liability: Requiring transparency for the substantiation of the best-by date determination by producers
- 4 Best-by date and product liability: improving the clarity of regulations and liability regarding relabelling
- 5 Renewing private marketing standards in agreements between chain links.
- 6 Changing legal marketing standards
- 7 Import controls: Aligning controls and enforcement between EU member states
- 8 Import inspections: Making greater use of customs and inspections and/or using "fast tracking" for perishable products
- 9 Removing obstacles regarding VAT obligations on donating food to food banks

Theme 5: Waste legislation and animal feed (grey)

- 1 Stimulating the adaptation of European legislation on animal feed (e.g. Feedban) in order to enable the use of residual waste streams and by-products with possible traces of animal products or by-products from the animal feed chain (continuation of STV priority 2018-2019).
- 2 Developing an overarching vision and coordinating this based on integrated policy (NL and EU) regarding the relationship between packaging, packaging waste, and food waste.
- 3 Financial incentives to encourage valorisation of organic residual waste streams (reduction of waste, prevention of low-grade use of organic waste in industry, e.g. pricing of raw materials, emission rights).
- 4 Coordinating legislation and enforcement of animal feed legislation

Theme 6: Information on packaging (purple)

- 1 Setting up campaigns on expiry date aimed at consumers
- 2 Adopting a uniform approach to avoid unnecessarily short best-by dates for products
- 3 Extending the best-by date exemptions list (Appendix X)
- 4 Making adjustments to ingredient declarations flexible
- 5 Revising portion-size information and storage advice
- 6 Using smart sensor technology for flexible expiry date labelling (pilot STV: Plus/Keep-IT)

Theme 1: Interpretation and measurement of food loss and food waste

Measure 1.1: Aligning the Dutch definition of food waste with that of the EU

Feasibility:

Clear target: The target is very clear. At present, the Netherlands uses a different definition than the EU one. This definition to be used has been established in the new EU legislation (2018).

Results: GOOD

<u>Duration:</u> Can be achieved in the short term because no additional action is needed from the EU <1 year. Results: GOOD

Investment: Little investment is needed; the framework for the European definition has already been established in legislation. Once established, this is not expected to change in the short term.

Results: GOOD

Effort: This measure concerns communication and a decision being made, which require relatively little effort. However, efforts are needed to ensure sufficient clarity at the chain/sector level for the interpretation of the definition. Once established, this action does not need to be adapted or implemented annually, unless considered necessary on the basis of practical objections.

Results: GOOD

Support: The consultation showed that this measure is supported by the majority of stakeholders. A number of stakeholders would like to see changes to the definition, but agree that it should be coordinated between the Netherlands and the EU. Results: GOOD

Implementation: It is clear how this action should be achieved. Results: GOOD

TOTAL 6.0 pts

Impact:

Number of stakeholders involved: This action has an impact on all stakeholders involved throughout the chain. Results: GOOD

Influence: This action has a direct and indirect impact on the reduction of food waste. Discussing the definition and detailing this for various chains, products, and processes contributes to raising awareness among stakeholders. A clear definition ensures that more businesses are able to monitor losses, which in time will result in a reduction of food waste. Results: GOOD

Reduction of volume: Aligning the definition with the EU does not have an impact on food waste, but monitoring the losses indirectly results in the reduction of food waste. Results: POOR

Multiple KPIs: This action only affects the volume and the different destinations. The EU definition is expressed only in quantitative volume/mass information. Results: POOR

Measure 1.2: Coordinating the monitoring method within the EU

Feasibility:

Clear target: Coordination with the EU is considered important by stakeholders in order to obtain a high degree of comparability with a sufficient degree of reliability in monitoring data (quality/representativeness). This provides an EU-wide benchmark. However, how this is to be achieved and what that agreement is to look like is not entirely clear. This involves coordination on monitoring methods and comparability. As such, the purpose of the action is not yet entirely clear.

Results: AVERAGE

<u>Duration:</u> It takes a long time (+5 years) to coordinate monitoring methods between EU countries, and to obtain comparable levels of detail at the chain/sector level. This is in line with expectations, given the origin of the monitoring obligation as included in EU legislation (about 9 years in total). The results of the first measurements will not be requested until 2022. From 2020 onwards, consultations on this matter between EU countries will have to be further intensified (including within the EU FLW platform). Results: POOR

Investment: A large investment is needed to get started. A different approach is needed for different sectors, and it needs to be properly coordinated. However, once a coordinated measurement method has been established, the annual investment is small, depending on the measurement method chosen. Self-reporting is expected to be the cheapest method and composition analyses of actual waste streams the most expensive. Results: AVERAGE

Effort: It requires a great deal of effort to get started. A different approach is needed for different sectors, and it needs to be properly coordinated. However, once a coordinated measurement method has been established, little effort is required annually if the methods remain the same.

Results: AVERAGE

Support: There is a high level of support among stakeholders, because the need for alignment has been recognised. However, carrying out self-reporting and sharing data requires more urgency.

Results: GOOD

Implementation: The framework of the measure is clear, but the level of detail required is not yet entirely clear, and it must be done in coordination with the other EU countries. Results: AVERAGE

TOTAL 3.0 pts

Impact:

Number of stakeholders involved: This action has an impact on almost all stakeholders working in all sectors. Results: GOOD

Influence: This action only has an indirect impact on the reduction of food waste. A clear, coordinated measuring method ensures that more businesses are able to monitor losses in the same way, which in time will result in a reduction of food waste. Results: AVERAGE

Reduction of volume: Coordinating the measuring method with the EU does not have an impact on food waste, but monitoring the losses will result in the reduction of food waste. The result is indirect, and should be accompanied by information-based measure selection and evaluation of impact/volume reduction. However, this monitoring step can make an important contribution to the readiness for action and impact of measures based on this numerical information.

Results: AVERAGE

Multiple KPIs: For the time being, EU monitoring is focused only on quantitative volume/mass information and does not include other KPIs. It is possible to translate to other KPIs on the basis of these data, but this is not within reach yet. It will not be possible to make this translation sufficiently precise on the basis of national statistical information, which requires detailed information at the chain, product, and process level. Results: POOR

Measure 1.3: Preparing and publishing a food waste benchmark based on sectoraggregated information

Feasibility:

<u>Clear target</u>: The objective of the measure is clear. With a benchmark per sector, other companies can compare themselves to the sector average, and the Netherlands is able to monitor progress at a higher level of detail with regard to reduction targets set at the national and European levels.

Results: GOOD

<u>Duration:</u> In 2022, member states will have to provide national statistics to the EU for the 2020 reference year. The ambition to describe the Dutch data at the sector level has been expressed. Efforts to this end are already being made by STV, but they need to be intensified. At the moment, only data on the retail sector is available. Results: AVERAGE

Investment: Until the reporting mechanism at the sector level has been realised within the Netherlands, the expected level of investment is high. Coordination with the parties involved is very important, and the cooperation of individual businesses must be encouraged. Although the first steps have been successful, the vast majority of actual data collection has yet to be initiated. It is expected that it will cost reasonably little to maintain this afterwards. Results: AVERAGE

Effort: A great deal of effort is required in the first year. After that, obtaining the right data will require reasonable effort as well. Results: POOR

Support: There is sufficient support as long as businesses can join on a voluntary basis and agreements are clear. Results: GOOD

Implementation: The working method is clear: the benchmark of the retail sector can be used as an example. The commitment and urgency for participation from other sectors still requires a great deal of attention. Results: GOOD

TOTAL 4.0 pts

Impact:

Number of stakeholders involved: Provided that the benchmark of all sectors is openly accessible, all stakeholders throughout the chain can benefit, which creates good support and a win-win situation for the parties involved. Results: GOOD

Influence: This action only has an indirect impact on the reduction of food waste. Businesses can measure themselves against this benchmark and strive for higher targets. They still have to take action themselves to actually reduce food waste. Results: AVERAGE

Reduction of volume: The result is indirect, and should be accompanied by information-based measure selection and evaluation of impact/volume reduction. However, this monitoring step can make an important contribution to the readiness for action and impact of measures based on this numerical information. Results: AVERAGE

Multiple KPIs: Only the volume of food waste is taken into account in this action. It is possible to translate to other KPIs on the basis of these data, but this is not within reach yet. Results: POOR

Measure 1.4: Intensifying the promotion of self-reporting, but not making it mandatory through legislation

Feasibility:

<u>Clear target:</u> The objective is clear: for many stakeholders, the voluntary nature of self-reporting and sharing data on food waste is an advantage. However, member states are obliged to deliver data to the EU. This paves the way for the introduction of compulsory delivery in the event of too little cooperation from the business community. Results: GOOD

<u>Duration</u>: At present, self-reporting is already voluntary and it requires little time to keep it that way. However, the proportion of self-reporting businesses in the Netherlands is still very low at the moment. The only source of information available to make reliable statements at the sector level is the retail sector. The timeframe for achieving this long. Results: GOOD

Investment: At the moment it is already voluntary, so this action to keep it that way does not result in an additional investment. Intensifying efforts to encourage more businesses to self-report requires relatively high levels of investment. Results: AVERAGE

Effort: The effort needed to keep self-reporting on a voluntary basis is average.

Results: AVERAGE

Support: There is no unanimous support regarding the desirability or undesirability of mandatory selfreporting. That is why voluntary participation and its promotion are currently the most feasible.

Results: AVERAGE

Implementation: It is clear how this action is to be achieved: by mobilising enough businesses to provide data on a voluntary basis. Results: GOOD

TOTAL 4.5 pts

Impact:

Number of stakeholders involved: The cooperation from the branch organisations is good at the moment and the involvement is high. However, the number of self-reporting businesses is currently limited. Results: AVERAGE

Influence: This action has an indirect impact on the reduction of food waste by providing businesses/sectors with a better understanding of where and how much food is wasted. Self-reporting is an important first step in defining, implementing, and evaluating effective measures.

Results: AVERAGE

Reduction of volume: The result is indirect, and should be accompanied by information-based measure selection and evaluation of impact/volume reduction. However, this monitoring and benchmarking step can make an important contribution to the readiness for action and impact of measures based on this numerical information. Results: AVERAGE

Multiple KPIs: Only the volume of food waste is taken into account in this action. It is possible to translate to other KPIs on the basis of these data, but this is not within reach yet. Results: POOR

TOTAL 1.5 pts

Prio-plot theme 1

The combined scores of theme 1 result in the following overview:

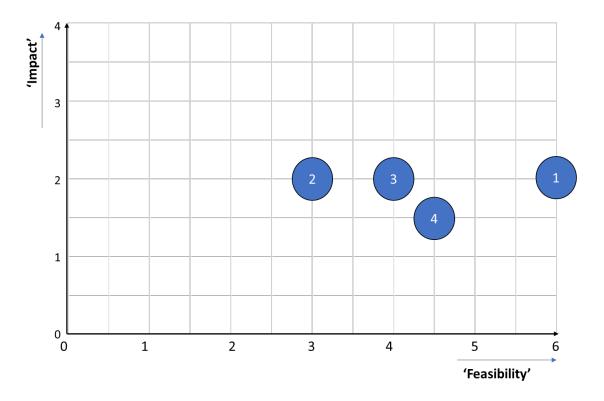


Figure 3: Prio-plot theme 1

Overview of the measures of theme 1: Interpretation and measurement of food loss and food waste

- 1. Aligning the Dutch definition of food waste with that of the EU
- 2. Coordinating the monitoring method within the EU
- 3. Preparing and publishing a food waste benchmark based on sector-aggregated information
- 4. Intensifying the promotion of self-reporting, but not making it mandatory through legislation

Theme 2: (EU) policy on agriculture and fisheries

Measure 2.1: CAP should focus on production that meets demand exactly, removing all incentives for overproduction, and coordinating legislation between EU member states

Feasibility:

Clear target: The objective of the measure is clear. However, the precise wording and the necessary changes still need to be specified. Results: GOOD

<u>Duration:</u> This is a long-term measure. It also requires a different way of thinking about the role of agriculture within the food and organic raw materials system. Changing European legislation, and coordinating and creating support for it with the other EU member states, is a time-consuming and intensive process as well. Results: POOR

<u>Investment:</u> In the first few years in particular, the investment will be great. Changes will happen in small steps, not immediately. Once this action is in place, the annual investment will be small.

Results: AVERAGE

Effort: In the first few years in particular, the investment will be great. Changes will happen in small steps, not immediately. Once this action has been initiated, it is still important to retain this new way of thinking within policy, and to allow it to extend to related policy instruments and domains.

Results: POOR

Support: Some lobbying power is still needed to implement this action. Most stakeholders will agree, but not all of them are ready, especially not at the European level. Results: AVERAGE

Implementation: It is not yet clear how this action should be structured. It will have to be done in small steps. The timeline has not been defined for this yet. Results: POOR

TOTAL 2.0 pts

Impact:

Number of stakeholders involved: This action has an impact on nearly all stakeholders throughout the chain. Primary production in particular will be directly affected, but all buyers will also be involved.

Results: GOOD

Influence: This action only has a direct impact on the reduction of food waste. Overproduction will be reduced. Results: GOOD

Reduction of volume: This action substantially reduces the volume of food waste (>25%), because overproduction in conjunction with the low absorption capacity of peaks in the market affects the origin of food waste. Results: GOOD

Multiple KPIs: In addition to reducing food waste, this action includes other KPIs such as economic and environmental factors. Results: GOOD

Measure 2.2: Ensuring a level playing field for sustainability requirements for domestic and imported products

Feasibility:

Clear target: The objective of the measure is clear. In some cases the sustainability requirements in the Netherlands are stricter than in other countries, although the Netherlands does import these products. Results: GOOD

<u>Duration:</u> It is expected that this action will take longer to implement, especially for products imported from other EU countries. This is already covered by existing EU legislation, which would need to be amended. This is a lengthy process. Results: POOR

Investment: The investment needed to initiate the action is great. The investment will also continue at all times, because new, potentially stricter, sustainability requirements will continue to develop, both inside and outside the Netherlands. Results: POOR

Effort: The effort needed to initiate the action is great. These efforts will also always be necessary, because new, potentially stricter, sustainability requirements will develop, both inside and outside the Netherlands. Results: POOR

Support: Within the Netherlands, the level of support is high. However, this is an action that should largely take place on an EU scale. This requires extensive lobbying. Results: AVERAGE

Implementation: It is not yet clear exactly how this action should be structured; per sector, chain link, or overarching. Results: AVERAGE

TOTAL 2.0 pts

Impact:

Number of stakeholders involved: This action affects a significant number of stakeholders and the entire chain is included. For the primary sector, "unfair" competition will disappear, and the other links in the chain will no longer be able to buy "unsustainable", cheaper products. Results: GOOD

Influence: This action indirectly affects the reduction of food waste, but is more focused on unfair competition. Influence also seems to be mainly aimed at preventing waste outside the EU (exporting countries). If products that generate a relatively high level of food waste in the country of origin are not allowed in the supply chain, there is also less waste overall. Results: POOR

Reduction of volume: It is difficult to determine to what extent this action directly or indirectly reduces the volume of food. It does contribute to increasing sustainable supply in the Netherlands.

Results: POOR

Multiple KPIs: Both the economic and the social aspects are taken into account in this action.

Results: AVERAGE

TOTAL 1.5 pts

Measure 2.3: Providing financial incentives to prevent the destruction of unsold products whose minimum auction price has not been reached

Feasibility:

Clear target: Within the current system, the easiest/most economical solution is to eliminate/remove over-production/surplus from the market. Removing this incentive offers a clear objective.

Results: GOOD

<u>Duration:</u> The action depends on the EU, so change could only be achieved in the long term. However, steps can be taken earlier in the national context (within 1-5 years). Results: AVERAGE

Investment: The initial change to this incentive requires investment: depending on the type of incentive applied (surcharges, tax measures, etc. in order for the most sustainable option not to be the most expensive option), it must be permanently invested in by either the public or the private sector. Results: AVERAGE

Effort: The way of thinking must change and this must be reflected in the policy. This requires a great deal of effort to set up, but not in the long term. Results: AVERAGE

Support: Most stakeholders will be in favour of the idea of trying to set the value of products as highly as possible (instead of opting for the "low auction price option"). However, this incentive is not great enough in the current context, so the action to strengthen the financial incentive is also needed to make the necessary investments. It seems that the necessary effort must primarily come from the public sector. Results: AVERAGE

Implementation: It is not yet clear how the action should be structured, which financial instrument should be used, and what form it should take. This includes both relatively simple measures as well as fining the destruction of products whose minimum auction price has not been reached (on a volume basis), but also more wide-ranging measures aimed at changing the way of thinking around the valorisation possibilities and the establishment of a more circular food system. Results: POOR

TOTAL 3.0 pts

Impact:

Number of stakeholders involved: This action will mainly affect stakeholders in primary production and, where appropriate, trading parties in specific contractual relationships. In relative terms, they have the most involvement with surpluses that have a short shelf life. Results: AVERAGE

Influence: The action has a direct impact on the reduction of food waste, provided that current residual waste streams can be valorised to a level that does not fall within the definition of food waste. This relies on the available absorption capacity in the market. Results: AVERAGE

Reduction of volume: This action partially reduces the volume of food waste. However, it will not yet be possible for everything to be valued at a level that does not fall within the definition of food waste due to processing capacity and the financial appeal of the options. There is also insufficient data on the current eliminated volumes of products whose minimum auction price has not been reached and how much this affects national food wastage. Results: AVERAGE

Multiple KPIs: Only the volume of food waste is taken into account in this action. It is possible to translate to other KPIs on the basis of these data, but this is not within reach yet. Results: POOR

TOTAL 1.5 pts

Measure 2.4: Fisheries: Encouraging innovation, e.g. fishing techniques to prevent bycatch and encourage farmed fish (not based on feed from wild catch)

Feasibility:

Clear target: Wild catch result in bycatches of fish species for which there is no or almost no market (unknown/unpopular). Innovation in the form of new fishing techniques or increased use of farmed fish prevents certain fish species from being caught unnecessarily. Results: GOOD

<u>Duration:</u> a new fishing technique has already been introduced from the Netherlands; pulse fishing. However, this technique is the subject of a great deal of discussion and resistance within the EU. Other techniques will follow and will have to be tested. The expected duration of implementation is 1-5 years. Results: AVERAGE

Investment: The required investment is great in order to devise and implement new innovations. Subsequently, new, better techniques will always be discovered that have to go through the same process. Results: AVERAGE

Effort: The effort is only great for a new technique to be introduced, because it has to be tested and approved. Results: AVERAGE

Support: Support within the Netherlands for the application of innovative fishing techniques is very high within the fisheries sector. Pulse fishing has already been introduced. However, many other EU Member States are opposed to this. In the Netherlands the level of support is high; in the EU, new techniques are often subject to criticism. Results: AVERAGE

Implementation: Within the Netherlands there is ample experience with stimulating innovative techniques. How exactly this measure is to be implemented is not yet clear and needs to be further defined. Results: AVERAGE

TOTAL 2.5 pts

Impact:

Number of stakeholders involved: This action has a particular impact on stakeholders in the fisheries sector. Results: AVERAGE

Influence: This action has a direct impact on the reduction of food waste, based on the interpretation that bycatch/unsold fish is included. However, the primary sector is currently outside the scope of the official EU framework. Results: GOOD

Reduction of volume: This action reduces the volume of food waste. However, the amount depends on the current bycatch and what of it is actually not used. There is little information on this.

Results: AVERAGE

Multiple KPIs: In addition to food waste, environmental aspects are also taken into account, such as in the form of the preservation of undersea biodiversity. Results: AVERAGE

Measure 2.5: Fisheries: Evaluating the EU policy ban on discards

Feasibility:

Clear target: The EU currently requires that caught fish are landed. This means that it is forbidden to throw fish back into the sea after they have been caught. This policy needs to be evaluated in terms of its effectiveness, and its impact on the generation of waste/residual waste streams. Results: GOOD

<u>Duration:</u> Evaluating the current EU policy takes time and has its own planning. Research should be carried out to test the impact of the policy. No evaluation is currently planned at the EU level for the next 1-2 years. Results: POOR

Investment: Evaluation of policy calls for research into the current state of affairs. These studies cost money. The policy then still needs to be adapted in order to improve its impact. Once the research is completed, the annual investment is low. Results: AVERAGE

Effort: Evaluation of policy calls for research into the current state of affairs. These studies cost money. The policy then still needs to be adapted in order to improve its impact. Once the research has been completed, the annual effort will probably be low. Results: AVERAGE

Support: Within the Netherlands, the level of support is high. However, a decision must be taken at the EU level. This still requires lobbying. Results: AVERAGE

<u>Implementation:</u> It is clear which sub-activities need to take place in order to achieve this action.

Results: GOOD

TOTAL 3.5 pts

Impact:

Number of stakeholders involved: This action has an impact on a large number of stakeholders in the fisheries sector. Results: AVERAGE

Influence: This action is likely to have an indirect impact on the amount of food waste. Compulsory landing is likely to result in some of the fish species not making it to a destination and becoming food waste. However, the survival rate after discarding was also debatable, but this does not fall under the definition of food waste (= before the "harvest"). Results: AVERAGE

Reduction of volume: If compulsory landing leads to food being wasted on land, the evaluation of EU policy will lead to less food being wasted. Results: AVERAGE

Multiple KPIs: In addition to food waste, environmental aspects are also taken into account in the form of biodiversity and the underwater protein balance. Results: GOOD

Prio-plot theme 2

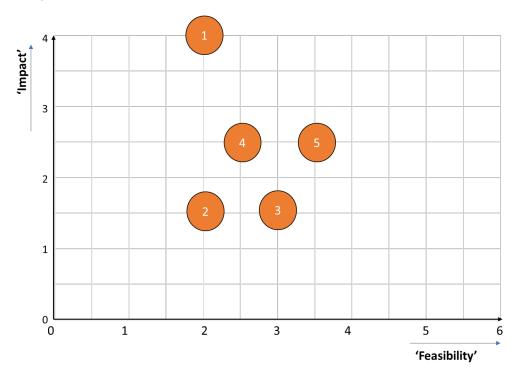


Figure 4: Prio-plot theme 2

Overview of the measures of theme 2: (EU) policy on agriculture and fisheries

- 1. CAP should focus on production that meets demand exactly, removing all incentives for overproduction, and coordinating legislation between EU member states
- 2. Ensuring a level playing field for sustainability requirements for domestic and imported products
- 3. Providing financial incentives to prevent the destruction of unsold products whose minimum auction price has not been reached
- 4. Fisheries: Encouraging innovation, e.g. fishing techniques to prevent bycatch and encourage farmed fish (not based on feed from wild catch)
- 5. Fisheries: Evaluating the EU policy ban on discards

Theme 3: Health and safety legislation and policy

Measure 3.1: Coordinating the interpretation and clarity of legislation, regulations and standards, including enforcement

Feasibility:

Clear target: No more "arbitrariness" and ambiguity between countries and between businesses about the interpretation and reason for approval/no approval. Results: GOOD

<u>Duration:</u> For businesses in the Netherlands this can be achieved in the short term (<1 year), but within EU Member States this process needs more time. Results: AVERAGE

Investment: Coordination at the European level costs money. Over time, the annual investment will be low. Results: AVERAGE

Effort: The effort mainly involves communication, i.e. it is relatively low. Results: GOOD

Support: There is a high level of support among Dutch stakeholders. Clarity and unequivocal enforcement is generally appreciated. However, in the case of coordination between different EU member states, this support cannot be regarded as unanimous beforehand. Consequences for coordination can be both positive and negative for stakeholders in the member states.

Results: AVERAGE

Implementation: It is clear how this action should be achieved. Results: GOOD

TOTAL 4.5 pts

Impact:

Number of stakeholders involved: This action has an impact on nearly all stakeholders throughout the chain. Results: GOOD

Influence: This action only has an indirect impact on the reduction of food waste. Differences in interpretation may result in businesses being unable to use certain batches. Results: AVERAGE

Reduction of volume: It is not clear to what extent this action contributes to reducing waste. However, if large batches of products are retained instead of destroyed as a result of enforcement, this action has great potential. Results: AVERAGE

Multiple KPIs: This action can reinforce an improved level playing field in the EU, but no other KPIs are involved outside this context. Results: POOR

Measure 3.2: Recalibrating the system for assessing and reassessing standards based on scientific insights and available technologies

Feasibility:

<u>Clear target:</u> The aim is clear, which is to prevent standards becoming obsolete and products being rejected when, as a result of new scientific knowledge and available technologies, this is no longer necessary. Results: GOOD

<u>Duration:</u> The standard is very detailed in nature, with many individual cases. As a result, recalibration takes time (>1-5 years). **Results: AVERAGE**

<u>Investment:</u> The investment required at the European level is very high. An annual investment is also needed to continue testing the standards. Results: POOR

Effort: Current working methods and regulations need to be changed in order to initiate the action. Subsequently, the standards must also be re-evaluated every few years. Results: POOR

Support: The level of support among stakeholders is high. Results: GOOD

<u>Implementation:</u> It is not yet entirely clear how this action should be implemented, but there are some ideas already. For example, retaining a zero-tolerance policy seems outdated on the basis of progressive insights, and many recalls are not initiated solely on the basis of public health considerations. Results: AVERAGE

TOTAL 3.0 pts

Impact:

Number of stakeholders involved: This action has an impact on nearly all stakeholders throughout the chain. Results: GOOD

Influence: This action only has an indirect impact on the reduction of food waste. The recalibration of the system itself has no influence. However, if a deviation is made from the zero-tolerance policy, the number of products that are rejected will be lower. Results: AVERAGE

Reduction of volume: Potential reductions are only one indirect consequence of this measure, and the extent to which this action contributes to a significant reduction is not yet sufficiently known.

Results: POOR

Multiple KPIs: This action takes the public health and environmental impact KPIs into account.

Results: AVERAGE

Measure 3.3: Separating pet feed standards from food/livestock feed standards

Feasibility:

Clear target: When a product in the food supply chain is not approved due to a food-safety-related standard being exceeded, it should also not be used as a pet feed. However, this pet feed destination does not raise any objections for the human food system. Of course, the health of the animal being given the food must not be endangered. Results: GOOD

<u>Duration:</u> Setting up new pet feed standards requires additional research into safety. The process of changing EU legislation must also be initiated. This is a long process. Results: POOR

<u>Investment:</u> The investment required to initiate it is great, but once completed it will be minimal. **Results: AVERAGE**

Effort: This involves research, communication, and willingness to adapt the rules. Setting it up takes some time, but once it is in place, little effort is required annually. Results: AVERAGE

Support: Not all stakeholders are in favour of the idea yet, because of the basic principle of using the same standards for livestock and pet feed. Results: AVERAGE

<u>Implementation:</u> There is a chance that the raw material labelled as suitable for pet feed will still be used as a raw material for the food supply chain. When changing pet feed standards, this needs to be looked at carefully and it is important to set up a proper assurance process. Results: AVERAGE

TOTAL 3.0 pts

Impact:

Number of stakeholders involved: This action affects all stakeholders dealing with rejected batches, which covers a large part of the chain. Results: GOOD

Influence: This action has a direct impact on the reduction of food waste provided that rejected batches are suitable as pet feed. Results: GOOD

Reduction of volume: This action probably reduces the amount of food waste by 1-25%.

Results: GOOD

Multiple KPIs: In addition to volume reduction, an economic KPI is also included. Results: AVERAGE

TOTAL 3.5 pts

Measure 3.4: Deploying targeted tracking and tracing technologies and adapting regulations to enable rejection at the product or batch level

Feasibility:

Clear target: The objective is clear: by using tracking and tracing technology, it becomes feasible that not entire batches are rejected in the event of deviating values, but that more selective individual products or batches can be rejected. Results: GOOD

<u>Duration:</u> This action requires a combination of technology and adaptation of regulations so that products can be rejected at the individual product or batch level (>1-5 years). Results: AVERAGE

<u>Investment:</u> The initial level of investment required to implement this measure is high. Once this action has been taken, the annual investment is low. Results: AVERAGE

Effort: The initial level of effort required to implement this measure is high. Once this action has been taken, the annual effort is low. Results: AVERAGE

Support: The level of support among stakeholders is high. The fewer rejections there are, the better.

Results: GOOD

<u>Implementation</u>: It is not yet entirely clear how this action should be structured. In any case, technology must be made available in order to be able to carry out tracking and tracing in a more targeted way. The relevant legislation must then be adapted. Results: AVERAGE

TOTAL 4.0 pts

Impact:

Number of stakeholders involved: This action has an influence on nearly all stakeholders throughout the chain. Results: GOOD

Influence: This action has a direct impact on reducing food waste, because in the event of excessively high values, the whole batch does not have to be destroyed. Results: GOOD

Reduction of volume: This action is expected to reduce the volume by 1-25%. However, more insight needs to be gained into the current level of rejection and the potential reduction in waste that could result from the targeted removal of unsuitable batches or parts of batches. Results: AVERAGE

Multiple KPIs: This action also has an economic KPI due to a reduction in rejections and in waste costs. Results: AVERAGE

Prio-plot theme 3

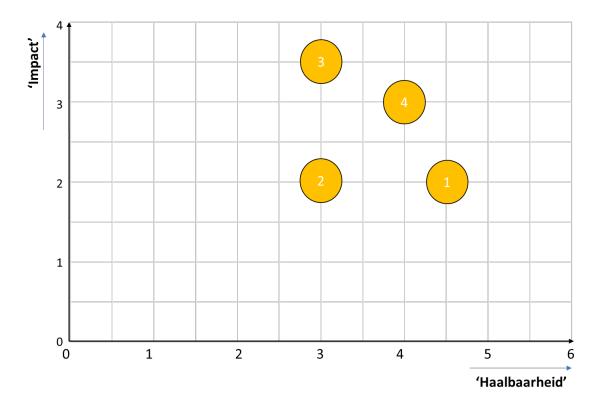


Figure 5: Prio-plot theme 3

Overview of the measures of theme 3: Health & Safety legislation and policy

- 1. Coordinating the interpretation and clarity of legislation, regulations and standards, including enforcement
- 2. Recalibrating the system for assessing and reassessing standards based on scientific insights and available technologies
- 3. Separating pet feed standards from food/livestock feed standards
- 4. Deploying targeted tracking and tracing technologies and adapting regulations to enable rejection at the product or batch level

Theme 4: Trade practices and standards

Measure 4.1: Chain relationships: Making chain links jointly responsible for raw material losses and solutions, e.g. through new private agreements and adjustments to supply contracts

Feasibility:

Clear target: The objective of the measure is clear. For example, in bread production, it is standard to order and deliver too much product. Currently, what remains is often returned to the producer. Another area of application is, "tendering and sustainable catering purchasing criteria".

Results: GOOD

<u>Duration:</u> This has not been established by law and must be done by the chain links. It is also a continuous process of fine-tuning. Not every party will be able to adapt at the same speed.

Results: AVERAGE

Investment: The current contracts and agreements between the parties must be reviewed and decisions must be made on a new design. The investment is expected to be minimal in terms of money to set it up. Results: GOOD

Effort: The effort required from businesses is substantial. They need to meet again and contracts and private agreements need to be reviewed. It will then be a continuous process of fine-tuning.

Results: AVERAGE

Support: There is a lot of support for it, but it is not necessarily easy to achieve. Implementing this measure is up to the business community and can only be encouraged by the government.

Implementation: Adjusting the agreements and changing chain relations is a matter of customisation appropriate to the parties involved. For this reason, attention needs to be paid to the precise details.

Results: AVERAGE

TOTAL 4.0 pts

Impact:

Number of stakeholders involved: Scale levels vary depending on the product and type of agreements.

Results: AVERAGE

Influence: This action has both a direct and indirect impact on the creation of food waste, because supply and demand can be better matched. As a result, production, processing, and sales can be achieved more optimally. Results: GOOD

Reduction of volume: Due to the current insights into overproduction/residue waste streams, this action is expected to lead to a significant reduction in food waste. Results: GOOD

Multiple KPIs: This action covers the socio-economic dimension in addition to the volume KPI.

Results: AVERAGE

Measure 4.2: Chain relationships: Voluntary sharing of data on loss and waste between chain parties

Feasibility:

Clear target: By implementing this action, the chain relations become clear, which is something that not all chain parties are keen on (e.g. commercial information). The indirect aim of this is to bring about a change in chain relationships. Results: GOOD

<u>Duration:</u> The voluntary sharing of data on losses has thus far taken time to accomplish. This information remains sensitive and confidential for many companies. It requires time to change this.

Results: POOR

Investment: The investment is mainly in the development of suitable measurement methods for individual companies and ways of sharing this information. Consequently, the initial investment is great. Once this is established, the annual costs are low. Results: AVERAGE

Effort: It takes some effort to set it up and make decisions about data sharing. But once it is decided and clear, little effort is required annually. Results: AVERAGE

Support: Although the usefulness is hardly disputed, the perceived need and commitment is not yet widespread throughout the chain. Results: POOR

Implementation: The exact manner of implementation requires customisation and cannot yet be precisely anticipated. It is also heavily dependent on the voluntary collaboration of the parties involved. Results: POOR

TOTAL 2.0 pts

Impact:

Number of stakeholders involved: The scope is in principle the whole chain and all stakeholders, but the scale on which it is established may vary. Those who participate do enjoy immediate benefits.

Results: AVERAGE

Influence: This action only has an indirect impact on the reduction of food waste. Sharing information offers opportunities to introduce more targeted cross-chain measures and improves insight into the impact and progress. Results: AVERAGE

Reduction of volume: The impact of this action is indirect, but it can contribute to the development of more effective and efficient measures. Results: AVERAGE

Multiple KPIs: It depends on how the data is published, but in principle only volumes are involved. Volume information can in principle be translated into economic and environmental KPIs.

Results: POOR

TOTAL 1.5 pts

Measure 4.3: Best-by date and product liability: Compulsory transparency for substantiating the best-by date determination by producers

Feasibility:

Clear target: It is clear what the purpose of the action is. At the moment it is not transparent how the best-by date is determined, and unnecessarily short best-by dates can lead to waste. However, it is not very clear to what extent this is happening and what the direct contribution is to waste.

Results: AVERAGE

<u>Duration:</u> Through changes in national legislation, this process could take about 6–18 months.

Results: AVERAGE

Investment: The costs of setting up the processes for manufacturers are high. The investment for a newly developed product is expected to be relatively low. Results: POOR

Effort: The introduction of new legislation takes time, as does the organisation of the processes for manufacturers. With every newly developed product, this process has to be redesigned.

Results: AVERAGE

Support: This obligation creates an additional administrative burden from an industry perspective, which the industry, in turn, does not consider desirable. It is not clear what the direct impact on preventing waste is either. Results: POOR

Implementation: It is partly clear how this action should be achieved. It is clear what is needed, but not yet how it should take shape. Results: AVERAGE

TOTAL 2.0 pts

Impact:

Number of stakeholders involved: This action primarily affects those parties who have to implement this obligation. However, the effect echoes further down the chain because of the increased transparency. Results: AVERAGE

Influence: This action only has an indirect impact on the reduction of food waste. It does provide more opportunities for better management of the shelf life in the chain. Results: AVERAGE

Reduction of volume: It is not clear what reduction in food waste it will effect at this time.

Results: POOR

Multiple KPIs: No other KPIs are included. Results: POOR

Measure 4.4: Best-by date and product liability: improving the clarity of regulations and liability regarding re-labelling

Feasibility:

Clear target: The objective of the measure is clear. The regulations on product liability, as well as the possibilities and consequences of re-labelling products after the best-by date, should be more clearly explained and communicated. Results: GOOD

<u>Duration:</u> This action is mainly communication oriented. It is therefore expected that this can be achieved in the short term (< 1 year). **Results: GOOD**

Investment: The investment required is relatively low because it mainly pertains to communicationoriented activities. It primarily concerns time investment. Results: GOOD

Effort: The effort required is relatively low. It concerns communication activities towards the business community. Results: GOOD

Support: There is a high level of support. Stakeholders are in favour of greater clarity.

Results: GOOD

Implementation: It is clear how this action should be achieved. This involves making matters clearer and raising awareness; it has nothing to do with reform. Results: GOOD

TOTAL 6 pts

Impact:

Number of stakeholders involved: If this action is implemented, it will have an impact on a large number of the stakeholders in the chain. Results: GOOD

Influence: This action has both a direct and indirect impact on reducing food waste: re-labelling can prevent food from being taken out of the chain too soon. Results: GOOD

Reduction of volume: Re-labelling is unpopular in the current situation, and it is difficult to estimate whether this will actually increase if clarification is provided (i.e. whether ambiguity is the real reason it does not/rarely happens at the moment). It is also necessary to gain insight into the potential reduction in waste that this can achieve. Results: AVERAGE

Multiple KPIs: This action does not include other KPIs. Results: POOR

Measure 4.5: Renewing private marketing standards in agreements between chain links

Feasibility:

Clear target: Private marketing standards may lead to the products not being approved or accepted if they do not meet customer requirements in addition to the legal marketing standards, for example, due to their size or colour (cosmetic aspects). This involves making these agreements more flexible so that alternative markets can be created, or for making cosmetic requirements less stringent.

Results: GOOD

<u>Duration:</u> Parties need to work together to change private marketing standards. This takes time, but can be achieved in a relatively short period of time. Results: AVERAGE

Investment: The level of investment required is relatively low. Results: GOOD

Effort: The level of effort required will be quite high in the beginning, in order to fine-tune the new agreements. As more products and experiences are gained within more contract relationships, less effort is required and it becomes a standard part of the chain relationships. Results: AVERAGE

Support: Support is not yet guaranteed among all stakeholders, because chain relationships, quality perception, and service concepts also need to be overhauled. Results: AVERAGE

Implementation: It is clear how this action should be handled. Results: GOOD

TOTAL 4.5 pts

Impact:

Number of stakeholders involved: The number of stakeholders involved is high and can be found throughout the chain. The relationship between suppliers and retail is particularly obvious with this measure. Results: GOOD

Influence: This action only has a direct impact on the reduction of food waste. In principle, another market is already being sought for these products, but it may not always be found in time. The same applies to products that do not meet the requirements due to certain weather conditions.

Results: GOOD

Reduction of volume: This action reduces the volume that is wasted; an important condition is the timely adaptation of private standards and promptly finding alternative markets if applicable.

Results: GOOD

Multiple KPIs: In addition to volume, there is an economic and social motivation in the form of fair

trade. Results: GOOD

Measure 4.6: Changing legal marketing standards

Feasibility:

Clear target: European legal marketing standards include quality requirements with which the product must comply and describe class criteria for different products. This has consequences for the market to which they are being sent to and is mainly economic in nature. However, it is not clear how marketing standards are to be adapted. The call for removing these standards is great, but it is uncertain whether this will have a direct impact on the prevention of food waste, because parties are also allowed to make private agreements on this. Results: AVERAGE

<u>Duration:</u> Changing European legislation is a lengthy process. The subject has been on the agenda for some time, which could help to speed things up, provided there is sufficient support among the EU member states. Results: AVERAGE

<u>Investment:</u> To introduce changes to marketing standards, the investment required is relatively low.

Results: AVERAGE

Effort: The effort needed to adapt marketing standards is fairly high because of the lobbying that has to take place regarding changes to EU legislation. Results: AVERAGE

Support: There seems to be enough support within the Netherlands, but it is not sufficiently known what this is like in other EU member states and whether there is enough urgency and priority given to it. Results: AVERAGE

Implementation: It is not entirely clear how the action is to be achieved. Results: AVERAGE

TOTAL 3.0 pts

Impact:

Number of stakeholders involved: This action has an impact on a large number of stakeholders in the primary sector (export), trade, manufacturing, and retail. **Results: GOOD**

Influence: This action has no direct impact on the reduction of food waste. In principle, the lower classes are not thrown out, but only end up in a lower economic class for which there is also a market. The direct relationship between legal marketing standards and food waste has not yet been demonstrated. These are mainly market-economy decisions regarding private marketing standards.

Results: POOR

Reduction of volume: It is uncertain how much this action will actually contribute to avoiding food waste. Results: POOR

Multiple KPIs: Essentially, the volume of food waste is not included, only the economic aspect.

Results: POOR TOTAL 1.0 pts

Measure 4.7: Import inspections: Aligning controls and enforcement between EU member states

Feasibility:

Clear target: The aim is to have the same requirements in all countries, such as to avoid that a batch is not approved in the Netherlands but approved in Belgium. The aim is to create a more level playing field and contribute to increasing fair trade between EU member states. Results: GOOD

<u>Duration:</u> Adapting the practical implementation in all EU member states cannot be achieved in the short term. Results: POOR

<u>Investment:</u> The launch of the coordination project is intensive and, after the initial investment, annual costs remain necessary for control and enforcement. Results: POOR

Effort: A high level of effort is required in the first few years, and this coordination must also be safeguarded each year by means of inspection. Results: POOR

 $\underline{\text{Support:}} \ \text{Coordination in the EU is not necessarily beneficial to all Dutch stakeholders, and as a result}$ support is divided. Results: POOR

Implementation: It is clear how this action should be achieved. Results: GOOD

TOTAL 2.0 pts

Impact:

Number of stakeholders involved: This action affects all parties involved in import/export in the chain. **Results: AVERAGE**

Influence: This action only has an indirect impact on reducing food waste because alternative markets are available. The direct relationship cannot be unambiguously defined. Results: POOR

Reduction of volume: This action only indirectly reduces food waste, and it is not certain to what extent it will contribute to this reduction. Results: POOR

Multiple KPIs: This action also has an impact on socio-economic KPIs. Results: AVERAGE

Measure 4.8: Import inspections: Making greater use of customs and inspections and/or using "fast tracking" for perishable products

Feasibility:

<u>Clear target:</u> The greater commitment and "fast tracking" speeds up the procedure for import inspections, so that short shelf-life products do not have to wait as long. This has a positive impact on remaining shelf life. Results: GOOD

<u>Duration:</u> Making greater use of customs and inspections can, in principle, be achieved in the short term. For example, COVID-19 measures have shown that "fast tracking" can be introduced quickly.

Results: GOOD

Investment: Increased use of customs costs more money every year, because it requires more staff. **Results: POOR**

Effort: A great deal of effort is needed to increase the involvement of customs and inspections, but once this is in place, the effort will not increase. Results: AVERAGE

Support: Greater involvement of customs or "fast tracking" will, in principle, gain a great deal of support, provided that the costs for the stakeholders do not increase. Results: GOOD

Implementation: It is clear how this action should be achieved. Results: GOOD

TOTAL 4.5 pts

Impact:

Number of stakeholders involved: This action affects all parties involved in import/export in the chain.

Results: AVERAGE

Influence: This action has a direct impact on reducing food waste because the products have a longer shelf life upon arrival. However, this longer shelf life must reach the end user in order to actually lead to less waste. Furthermore, shelf life is not the only factor contributing to reducing waste.

Results: AVERAGE

Reduction of volume: It is as yet unknown what the potential benefits of this action will be in terms of reducing waste. Results: AVERAGE

Multiple KPIs: This action only affects volume. Results: POOR

TOTAL 1.5 pts

Measure 4.9: Removing obstacles regarding VAT obligations on donating food to food banks

Feasibility:

Clear target: At the moment, the Netherlands has capped VAT exemptions under a number of conditions and donations. Removing obstacles would make it even easier to donate or give food. However, it does not appear from the field that there are any specific obstacles surrounding the VAT obligation with regard to the quantity and availability of food to be donated. Results: AVERAGE

<u>Duration:</u> The implementation of the necessary legislative changes can be done in a relatively short period of time and depends on the process of the actors involved. Results: AVERAGE

Investment: The investment is low, because it mainly concerns changes to the legislation and its interpretation. Results: GOOD

Effort: The level of effort required to implement this in the first year will be high. The annual effort is low. Results: AVERAGE

Support: There is enough support to keep tariffs and procedures with regard to donating or giving food to food banks low and simple. Results: GOOD

Implementation: It is not yet entirely clear how the action should be organised and what exactly needs to be changed. Results: AVERAGE

TOTAL 4.0 pts

Impact:

Number of stakeholders involved: This action has an impact on all stakeholders throughout the chain who donate food or want to donate it. Results: GOOD

Influence: This action has a direct impact on reducing food waste, as more food is likely to be preserved for human consumption. However, it is not known whether this action will actually result in more donations, as this is not specifically perceived as an obstacle by Dutch stakeholders.

Results: AVERAGE

Reduction of volume: As donations increase, food waste is immediately reduced. However, it is not clear to what extent this action contributes to further increasing this number of donations.

Results: AVERAGE

Multiple KPIs: Food donations involve clear socio-economic KPIs and an economic incentive is included. Results: GOOD

Prio-plot theme 4



Figure 6: Prio-plot theme 4

Overview of the measures of theme 4: Trade practices and standards

- 1. Chain relationships: Making chain links jointly responsible for raw material losses and solutions, e.g. through new private agreements and adjustments to supply contracts
- Chain relationships: Voluntary sharing of data on loss and waste between chain parties
- 3. Best-by date and product liability: Requiring transparency for the substantiation of the bestby date determination by producers
- 4. Best-by date and product liability: improving the clarity of regulations and liability regarding re-labelling
- 5. Renewing private marketing standards in agreements between chain links.
- 6. Changing legal marketing standards
- 7. Import inspections: Aligning controls and enforcement between EU member states
- 8. Import inspections: Making greater use of customs and inspections and/or using "fast tracking" for perishable products
- 9. Removing obstacles regarding VAT obligations on donating food to food banks

Theme 5: Waste legislation and animal feed

Measure 5.1: Stimulating the adaptation of European legislation on animal feed (e.g. Feed Ban) in order to enable the use of residual streams and by-products with possible traces of animal products or by-products from the animal feed chain (continuation of STV priority 2018-2019)

Feasibility:

<u>Clear target:</u> The target is to be able to use residual waste streams with possible traces of animal products (swill) in animal feed when strict safety requirements are met. This allows more residual waste streams from the food supply chain (including swill) to be transformed into animal feed.

Results: GOOD

<u>Duration:</u> Additional scientific research is needed to provide a sufficient basis for legislative change and to address political, industrial, and societal concerns before swill can be safely used for animal feed (e.g. through eco-feed applications). Successful examples can be found outside the EU, which can be translated into the European context. It is expected that the process of changing EU regulations will take a long time. Results: POOR

Investment: A lot of investment is needed to initiate the action because of the additional research, but also to start the processes for implementation. Once the regulations have been amended and the investment to adapt the process is complete, further annual costs are expected to be low.

Results: AVERAGE

Effort: A high level of effort will be needed in the first year, because both additional research and efforts to adapt EU legislation are required. Once these have been completed, little effort is required annually. Results: AVERAGE

Support: There is a great deal of support for increasing the value of this current residual waste stream, although politicians and the business community are concerned about potential negative consequences for animal and human health. Results: GOOD

Implementation: It is clear how this action should be achieved. Additional research needs to be initiated and political support for the necessary EU legislative changes needs to be found at the same time. Results: GOOD

TOTAL 4.0 pts

Impact:

Number of stakeholders involved: This action affects most of the chain involving animal products (from the primary sector to the consumer). Results: GOOD

Influence: This action has a direct impact on the reduction of food waste, because a larger proportion of current residual waste streams can be valorised as animal feed. Results: GOOD

Reduction of volume: The exact volumes are not yet known, but there are estimates available of the proportion of residual waste streams that can be valorised as well. Within the EU this estimate is around 7-14 Mt (source: REFRESH). Results: GOOD

Multiple KPIs: This action affects the volume of food waste and also has an impact on the environment and economy. Results: GOOD

Measure 5.2: Developing an overarching vision and coordinating this based on integrated policy (NL and EU) regarding the relationship between packaging, packaging waste, and food waste

Feasibility:

Clear target: At the moment, there is a clash between policy ambitions to reduce the amount of packaging (all types of material, and plastics in particular) and reducing food waste; there is still insufficient knowledge and awareness of the role between packaging and waste. The issue is about increasing the effectiveness of packaging that optimally preserves the product while at the same time improving the ability to recycle it (impact on raw material consumption in a broad sense).

Results: GOOD

<u>Duration:</u> It is expected that coordinating an integrated policy within the Netherlands and the EU will take time. The subject is put on the agenda of various member states (including the Netherlands). The new Farm to Fork strategy contributes to a more integrated perspective, but needs to be further developed. Results: POOR

Investment: Additional research, as well as an investment in the European process, is needed.

Results: AVERAGE

Effort: The effort needed to initiate this action is large. A lot of consultation in the early years is required. Once the overarching vision has been established, little effort is required annually.

Results: AVERAGE

Support: There is enough support in the Netherlands, and European member states must also work together to create an overarching vision. Results: AVERAGE

Implementation: It is clear how this action should be achieved. Results: GOOD

TOTAL 3.5 pts

Impact:

Number of stakeholders involved: This action has an impact on nearly all stakeholders throughout the chain as packaging is used throughout the chain. Results: GOOD

Influence: This action is likely to have a direct impact on food waste. Results: AVERAGE

Reduction of volume: It is not known to what extent this action contributes to reducing food waste.

Results: POOR

<u>Multiple KPIs:</u> In this action, both volume and environmental aspects are taken into account.

Results: AVERAGE

Measure 5.3: Financial incentives to encourage valorisation of organic residual streams (reduction of waste, prevention of low-grade use of organic waste in industry, e.g. pricing of raw materials, emission rights)

Feasibility:

Clear target: The target is clear: to reduce the volume of organic residual waste streams and to stimulate recycling by means of additional financial instruments. Results: GOOD

<u>Duration</u>: The consultation and actual introduction of financial instruments takes time. This change to the rules has to be well considered because of its coordination with the current waste policy. The necessary coordination is expected to take more than a year. Results: AVERAGE

<u>Investment:</u> The initial investment required is large, because several scenarios for the various possible instruments need to be calculated in terms of efficiency and effectiveness. Results: AVERAGE

Effort: The initial effort required is great, because coordination between several policy areas and with involved stakeholders has to be achieved, both in the Netherlands and in the EU. Results: AVERAGE

Support: Most stakeholders are in favour of the action, because a financial incentive can help enormously, but there will be stakeholders who will mainly experience negative consequences (e.g. increasing costs, or increasing administrative burden). Results: AVERAGE

<u>Implementation</u>: It is not yet entirely clear exactly how this action is to be structured.

Results: AVERAGE

TOTAL 3.5 pts

Impact:

Number of stakeholders involved: This action has an impact on nearly all stakeholders throughout the chain. Results: GOOD

Influence: This action only has a direct impact on the reduction of food waste. If financial incentives are used, there will be a greater motivation to look for alternatives. **Results: GOOD**

Reduction of volume: This action substantially reduces the volume of food waste in the long term. An increasing number of businesses will be looking for new solutions that can then be widely adopted.

Results: GOOD

Multiple KPIs: Both volume and environmental and economic impact are taken into account.

Results: GOOD TOTAL 4.0 pts

Measure 5.4: Coordinating legislation and enforcement of animal feed legislation

Feasibility:

Clear target: At the moment, lack of clarity about the interpretation of animal feed legislation leads to a difference of opinion between the enforcer and the business, or within businesses and sectors.

Results: GOOD

<u>Duration</u>: The time required to realise this action can be short, but depends on the fine-tuning processes regarding the interpretation and implementation of enforcement. The interpretation of the legislation needs to be described more precisely, <no verb> in differences of opinion.

Results: AVERAGE

Investment: The level of investment required is relatively low. Results: GOOD

Effort: The effort required is high in the first year in order to achieve further alignment the interpretation from the enforcement point of view. Results: AVERAGE

Support: Most stakeholders would like clarity and not unexpected consequences due to a different interpretation of enforcement. However, a broader interpretation of the legislation can also be beneficial for companies. Results: AVERAGE

<u>Implementation:</u> It is not yet clear how this action should be structured. **Results: POOR**

TOTAL 3.5 pts

Impact:

Number of stakeholders involved: This action has a particular impact on the food production industry and on animal feed production. Results: AVERAGE

Influence: This action only has an indirect impact on the reduction of food waste. Differences in interpretation may result in businesses being unable to use certain batches. Results: AVERAGE

Reduction of volume: It is not yet clear to what extent this action can contribute to the reduction of food waste. However, the potential impact amounts to thousands of tonnes. Results: AVERAGE

Multiple KPIs: This action also concerns environmental and economic impact. Results: GOOD

Prio-plot theme 5

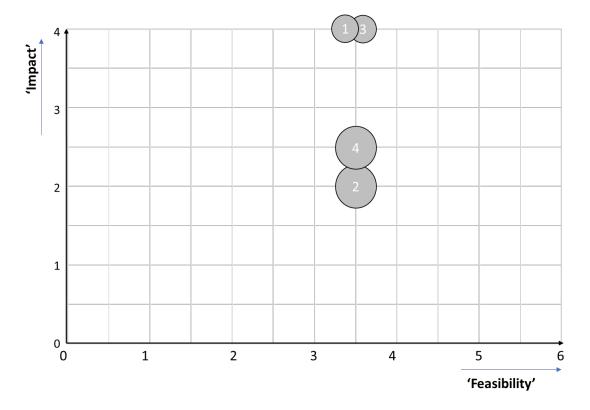


Figure 7: Prio-plot theme 5

Overview of the measures of theme 5: Waste legislation and animal feed

- 1. Stimulating adaptation of European legislation on animal feed (e.g. Feedban) in order to enable the use of residual streams and by-products with possible traces of animal products or by-products from the animal feed chain (continuation of STV priority 2018-2019).
- 2. Developing an overarching vision and coordinating this based on integrated policy (NL and EU) regarding the relationship between packaging, packaging waste, and food waste.
- 3. Financial incentives to encourage valorisation of organic residual streams (reduction of waste, prevention of low-grade use of organic waste in industry, e.g. pricing of raw materials, emission rights).
- 4. Coordinating legislation and enforcement of animal feed legislation

Theme 6: Information on packaging

Measure 6.1: Setting up campaigns on expiry date aimed at consumers

Feasibility:

Clear target: The objective of the action is clearly described, and addresses the issue of clarifying the different expiry dates (best by, use by) to consumers, informing them about the difference and how to use them in a good way to avoid waste. Results: GOOD

<u>Duration:</u> This involves setting up a campaign aimed at consumers (<1 year). **Results: GOOD**

Investment: The investment required to set up a campaign is average and a fixed amount for the effort is required. Results: AVERAGE

Effort: The effort required to launch a campaign is average because of the consultation process between different stakeholders and experts in the field of campaigns and consumer behavioural influencing. Results: AVERAGE

Support: There is enough support to launch a campaign about the expiry date and to encourage consumers to use-by products before the expiry date instead of advising them to throw them away once it has expired. Results: GOOD

Implementation: The process for launching campaigns is well known. Results: GOOD

TOTAL 5.0 pts

Impact:

Number of stakeholders involved: This action is mainly aimed at consumers, but also covers the packaging industry and outlets: these are partly responsible for determining best-by or use-by dates, and must meet the requirements of clarity and traceability as laid down in EU legislation.

Results: AVERAGE

Influence: This action only has an indirect impact on the reduction of food waste in the consumer's home. The campaign itself does not directly reduce the volume, an actual change in consumer behaviour is required. Results: AVERAGE

Reduction of volume: This action can reduce the volume of food waste by 1-25%. Results: AVERAGE

Multiple KPIs: In principle, only the volume is included as KPI. Results: POOR

TOTAL 1.5 pts

Measure 6.2: Adopting a uniform approach to avoid unnecessarily short best-by dates for products

Feasibility:

Clear target: Currently the best-by date on products is sometimes deliberately kept short, based on quality perception and product liability. The aim of this action is to substantiate the printed best-by date so that unnecessarily short expiry dates are not used. Results: GOOD

Duration: This action can be realised in the short term. Results: GOOD

Investment: The initial investment to examine which products this applies to, and to what degree the date can be extended, is average. Once it has been adapted, the annual investment is low.

Results: AVERAGE

Effort: The effort required to realise this action is relatively high initially, and requires research and coordination. Once it has been adapted, little effort is required annually. Results: AVERAGE

Support: Most stakeholders are in favour of this alignment with the aim of avoiding unnecessarily short expiry dates. This may result in fewer products needing to be thrown away unnecessarily. However, the extent of the underlying problem is not clear, and it is not expected to occur on a large scale. Results: AVERAGE

Implementation: It is not yet clear in detail how exactly this action should be implemented. The subject is part of the Greendeal "Over de datum" (about the date) and is on the agenda of the stakeholders involved. Results: AVERAGE

TOTAL 4.0 pts

Impact:

Number of stakeholders involved: This action has an impact on a large number of stakeholders in the processing industry, retail, and on the consumer. Results: GOOD

Influence: This action only has an indirect impact on the reduction of food waste. Results: POOR

Reduction of volume: This action can partly reduce the volume of food waste by giving products a longer best-by date, but actual reduction depends heavily on other factors as well. It is also not entirely clear what volume of products have an unnecessarily short best-by date. Results: AVERAGE

Multiple KPIs: Only the volume of food waste is taken into account. Results: POOR

TOTAL 1.5 pts

Measure 6.3: Extending the best-by date exemptions list (Appendix X: Codex Alimentarius)

Feasibility:

Clear target: The list of products that do not require a best-by date should be extended to include additional products. In this way, products whose quality remains good for a very long time are prevented from being thrown away unnecessarily by consumers when the best-by date passes or is close. Results: GOOD

<u>Duration:</u> This extension depends on changes to legislation at European level, and can take a long time. Results: POOR

Investment: Additional research is needed in order to have sufficient scientific basis to ensure that the extension of Appendix X does not lead to unintended safety risks. The required investment is considerable, given the number of products that would be eligible. Results: AVERAGE

Effort: The effort required to extend this list is high initially, but low every year once it has been completed. Results: AVERAGE

Support: Support is high in the Netherlands, but that is not the case in the European member states. However, it is large enough in other member states too. The products in question generally have a long shelf life of several years. Results: AVERAGE

Implementation: This list has already been extended to include a number of products. As such, this is a repetition of previous activities. Results: GOOD

TOTAL 3.5 pts

Impact:

Number of stakeholders involved: This action is relevant for multiple chain links, including out-ofhome media and consumers. Results: AVERAGE

Influence: This action only has an indirect impact on the generation of waste, because there are several reasons for throwing food out and because it is not certain that the removal of the best-by date will reduce this. Previous WFBR research indicated that the omission of a best-by date also creates uncertainty among consumers about the quality and safety of a product 13. The type of product eligible for the omission of a date indication very likely does not belong to those categories in which a great deal is wasted. Results: POOR

Reduction of volume: These are a very small number of products, which are not being thrown out much at the moment. In addition to the indirect impact on food being thrown out, the volume of food waste will not be significantly reduced Result: POOR

Multiple KPIs: This action does not include other KPIs. Results: POOR

TOTAL 0.5 pts

 $^{^{13}\} https://www.wur.nl/nl/Onderzoek-Resultaten/Onderzoeksprojecten-LNV/Expertisegebieden/kennisonline/THT-TGT-NUMBERGER (NUMBERGER) and the support of the properties of$ Terminologie-Consument.htm

Measure 6.4: Making adjustments to ingredient declarations flexible

Feasibility:

Clear target: This action refers to the legislation indicating that the ingredient declaration must correspond exactly to the content. As a result food that has been modified to have a different flavour/composition cannot be sold (including good, perfectly healthy food). This declaration of ingredients also makes it difficult to process certain residual waste streams and retain them for human consumption. Results: GOOD

<u>Duration:</u> This action can only take place when changes to EU legislation are made. The process of adapting these can take several years. Results: AVERAGE

Investment: The investment is low and will remain low annually. Results: GOOD

Effort: The effort required to implement this action is low and will also be low annually.

Results: GOOD

Support: The level of support for this action is not very high because the ingredient declaration prevents consumers from being misled. Results: POOR

Implementation: It is not yet clear exactly how this action should be organised, whether at the product level or a higher level. Results: POOR

TOTAL 3.5 pts

Impact:

Number of stakeholders involved: This action mainly affects the packaging industry.

Results: AVERAGE

Influence: This action has a direct impact on the reduction of food waste. Despite the fact that, at present, products for which the declaration of ingredients is incorrect can still be donated to food banks after certain conditions have been met, this does not apply to all products nor to the valorisation of residual waste streams. However, it is not well known what volume is wasted on the basis of the ingredient declaration. Results: AVERAGE

Reduction of volume: It is not well known to what extent this action contributes to reducing food waste. It is not expected to have a big impact. Results: POOR

Multiple KPIs: This action mainly involves an economic KPI, as the product cannot be sold.

Results: POOR TOTAL 1.0 pts

Measure 6.5: Revising portion-size information and storage advice

Feasibility:

Clear target: The target of this action is that labels should be provided with unambiguous portion-size information and storage advice. This will help consumers to better adjust quantities and give the products a longer shelf life. Results: GOOD

<u>Duration</u>: This action requires coordination within the chain on which method of labelling will be used. Depending on how fast this process takes place, it can be implemented in the short or medium term (1-2 years). Results: AVERAGE

Investment: The investment is average initially because the quantity of products to be adapted is large, but after implementation it will involve low costs annually. Results: GOOD

Effort: The effort required to realise this action is initially average because of the coordination process and the organisation of the action with the packaging industry involved. Results: AVERAGE

Support: The expectation is that there will be a high level of support for the implementation of this action. Results: GOOD

Implementation: It is clear how this action should be achieved. Communication and tightening the rules on labelling. Results: GOOD

TOTAL 5.0 pts

Impact:

Number of stakeholders involved: This action affects a large part of the chain stakeholders, who use date information. In particular, the packaging industry and consumers will experience the action directly. Results: AVERAGE

Influence: This action only has a direct impact on the reduction of food waste. If the storage advice is followed, a product can be stored for longer and better, but throwing food out is also influenced by other factors. Results: POOR

Reduction of volume: It is difficult to estimate impact of this action on the reduction in the amount of food wasted, as its impact is mainly indirect. Results: POOR

Multiple KPIs: This action does not include other KPIs. Results: POOR

TOTAL 0.5 pts

Measure 6.6: Using smart sensor technology for flexible expiry date labelling (pilot STV: Plus/Keep-IT)

Feasibility:

Clear target: The aim of this action is to give products a more flexible best-by date, so that products do not simply have to be thrown out because the date has passed, but only have to be thrown out when the product is no longer good. Results: GOOD

<u>Duration:</u> The first step is to research smart sensor technologies, then it has to be included in the legislation, which is a long process. Results: POOR

<u>Investment:</u> The investment is high in the first year because of the research to be carried out. Once the action has been implemented, there will no longer be any annual investment. Results: AVERAGE

Effort: The effort is high in the first year because of the research to be carried out. Once the action has been implemented, there will no longer be any annual effort. Results: AVERAGE

Support: There is enough support among stakeholders to implement this action. Results: GOOD

Implementation: It is clear how this action should be achieved. Smart sensor technologies need to be studied and then included in the legislation. This technology is already being used in Norway.

Results: GOOD

TOTAL 4.0 pts

Impact:

Number of stakeholders involved: This action has an influence on nearly all stakeholders in a part of the chain. The retail sector, out-of-home media, and consumers are the main beneficiaries of this action. Results: AVERAGE

Influence: This action has a direct impact on reducing food waste, because products do not have to be thrown away as quickly. Results: GOOD

Reduction of volume: It is expected that this action will have a huge impact on the amount of food waste, because products may be sold and consumed for longer. Results: GOOD

Multiple KPIs: Only the volume of food waste is taken into account in this action. Results: POOR

TOTAL 2.5 pts

Prio-plot theme 6

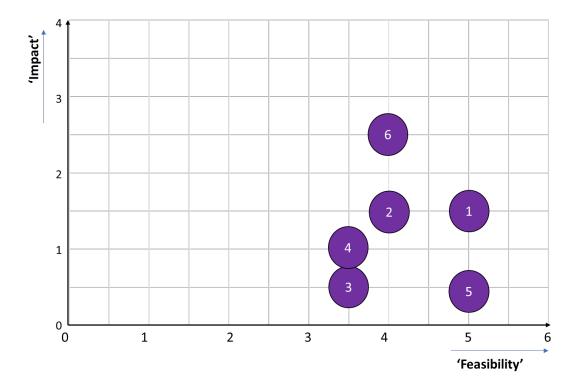


Figure 8: Prio-plot theme 6

Overview of the measures of theme 6: Information on packaging

- 1. Setting up campaigns on expiry date aimed at consumers
- 2. Adopting a uniform approach to avoid unnecessarily short best-by dates for products
- 3. Extending the best-by date exemptions list (Appendix X: Codex Alimentarius)
- 4. Making adjustments to ingredient declarations flexible
- 5. Revising portion-size information and storage advice
- 6. Using smart sensor technology for flexible expiry date labelling (pilot STV: Plus/Keep-IT)

Total overview of the pre-selection measures prio-plots

The figure below is a combination of the prio-plots of all measures from the six themes.

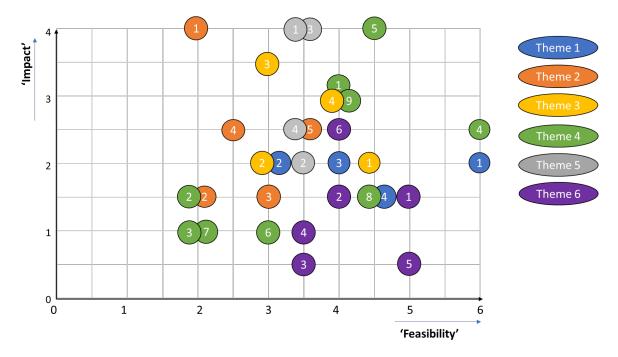


Figure 9: Total overview of the prio-plots

Overview of the measures

Theme 1: Interpretation and measurement of food loss and food waste (blue)

- 1 Aligning the Dutch definition of food waste with that of the EU
- 2 Aligning the monitoring method within the EU
- 3 Preparing and publishing a benchmark food waste based on sector aggregated information
- 4 Intensifying the promotion of self-reporting, but not making it mandatory through legislation

Theme 2: (EU) policy on agriculture and fisheries (orange)

- 1 General: Focusing policies on production that just meets demand, removing all incentives for overproduction, and aligning legislation between EU member states
- 2 Ensuring a level playing field for sustainability requirements for domestic and imported products
- 3 Providing financial incentives to prevent "underselling" of unsold products
- 4 Fisheries: Encouraging innovation, e.g. fishing techniques to prevent bycatch and encourage farmed fish (not based on feed from wild catch)
- 5 Fisheries: Evaluating the EU policy ban on discards

Theme 3: Health & Safety legislation and policy (yellow)

- 1 Aligning the interpretation and clarity of legislation, regulations and standards, including enforcement
- 2 Recalibrating the system for assessing and reassessing standards based on scientific insights and available technologies
- 3 Separating pet feed standards from food/livestock feed standards
- 4 Deploying targeted tracking and tracing technologies and adapting regulations to enable rejection at product or batch level

Theme 4: Trade practices and standards (green)

- 1 Chain relationships: Making chain links jointly responsible for raw material losses and solutions, e.g. through new private agreements and adjustments to supply contracts
- 2 Chain relationships: Voluntary sharing of data on loss and waste between chain parties
- 3 Best-by date and product liability: Requiring transparency for substantiation of the best-by date determination by producers

- 4 Best-by date and product liability: improving the clarity of regulations and liability regarding relabelling
- 5 Renewing private marketing standards in agreements between chain links.
- 6 Changing legal marketing standards
- 7 Import inspections: Aligning controls and enforcement between EU member states
- 8 Import inspections: Making greater use of customs and inspections and/or using "fast tracking" for perishable products
- 9 Removing obstacles regarding VAT obligations on donating food to food banks

Theme 5: Waste legislation and animal feed (grey)

- 1 Stimulating adaptation of European legislation on animal feed (e.g. Feedban) in order to enable the use of residual streams and by-products with possible traces of animal products or by-products from the animal feed chain (continuation of STV priority 2018-2019).
- 2 Developing an overarching vision and coordinating this based on integrated policy (the Netherlands and EU) regarding the relationship between packaging, packaging waste, and food
- 3 Financial incentives to encourage valorisation of organic residual waste streams (reduction of waste, prevention of low-grade use of organic waste in industry, e.g. pricing of raw materials, emission rights).
- 4 Coordinating legislation and enforcement of animal feed legislation

Theme 6: Information on packaging (purple)

- 1 Setting up campaigns on expiry date aimed at consumers
- 2 Adopting a uniform approach to avoid unnecessarily short best-by dates for products
- 3 Extending the best-by date exemptions list (Appendix X: Codex Alimentarius)
- 4 Making adjustments to ingredient declarations flexible
- 5 Revising portion-size information and storage advice
- 6 Using smart sensor technology for flexible expiry date labelling (pilot STV: Plus/Keep-IT)

Section 4: Grounds for the argumentation of the selection of the top 10 by STV

With this report, WFBR provides an overview of the process underlying the creation of the top 10 priority measures of the STV foundation. The selection of this top 10 was done by the STV in August and September 2020 and was announced in the Parliamentary Paper (Kamerbrief) on food waste in the Netherlands 2020¹⁴ by the Minister of Agriculture, Nature and Food Quality on 1 September 2020. The final top 10 has been determined by and is under the responsibility of the STV. The score of the pre-selection measures is open to interpretation and mainly reflects the findings of the previous process. The score does not reflect a ranking either.

In July 2020, WFBR delivered the internal working document about the argumentation for the prioritisation of pre-selection measures from policy, legislation, and regulations in which an overview was included of 32 possible actions that fit within line of action 4 of the STV, and their estimated impact and feasibility, based on the literature review, broad consultation, and feedback from LNV, VWS, I&W, AVV, and the High Level Expert Group (HLEG). On the basis of this document (reproduced in part in this report), STV selected a top 10 and submitted it to LNV, AVV, and HLEG for feedback. This was then incorporated into the preliminary top 10 of priority actions:

- 1. Aligning the Dutch definition of food waste with that of the EU, whereby the animal feed destination is not considered to be food waste.
- 2. CAP should focus on production that meets demand exactly, removing all incentives for overproduction, and coordinating legislation between EU member states.
- Providing financial incentives to prevent the destruction of products whose minimum auction price has not been reached.
- 4. Separating pet feed standards from food/livestock feed standards, so that food scraps can be used in animal feed (subject to the conditions relating to animal health).
- 5. Deploying targeted tracking and tracing technologies and adapting regulations to enable rejection at the product or batch level instead of entire batches being rejected in the event of deviating values.
- 6. Stimulating the adaptation of European legislation on animal feed (e.g. Feed ban) in order to enable the use of residual waste streams and by-products with possible traces of animal products or by-products from the animal feed chain.
- 7. Developing an overarching vision and coordinating an integrated policy (NL and EU) for the relationship between packaging, packaging waste, and food waste so that packaging retains the product optimally while at the same time contributing to good recyclability.
- 8. Using financial incentives to encourage valorisation of organic residual waste streams (reduction of waste, prevention of low-grade use of organic waste in industry, e.g. pricing of raw materials, emission rights).
- 9. Clarifying the expiry dates (best-by, use-by) for consumers and businesses.
- Including the use of smart sensor technology for flexible expiry date labelling in legislation.

In addition to the priorities mentioned, the STV would like to indicate that a number of actions will continue to receive attention from the STV because they fit in with the current agenda and lines of action. These are:

1. Aligning the interpretation, unambiguity, and enforcement of normative legislation and regulations, particularly with regard to food safety and marketing standards. The aim of this action is not to amend or remove the relevant legislation, but to fine-tune its details and application in consultation between ministries, competent government agencies, and chain parties.

¹⁴ https://www.rijksoverheid.nl/documenten/kamerstukken/2020/08/31/kamerbrief-over-voedselverspilling-in-nederland-2020

- 2. Intensify the promotion of self-reporting of food waste by the business community, but not make it compulsory through legislation (appropriate for Line of Action 1).
- Preparing and publishing a benchmark on food waste based on sector aggregated information (appropriate for Line of Action 1).
- 4. Chain relationships: Making chain links jointly responsible for raw material losses and solutions, e.g. through new private agreements and adjustments to supply contracts. This includes actions on procurement and sustainable procurement criteria for catering (matching the 2018-2019 hotspot "cosmetic aspects in specific marketing standards").

Below is a visual representation of the top 10 in the format of the prio-plots used:

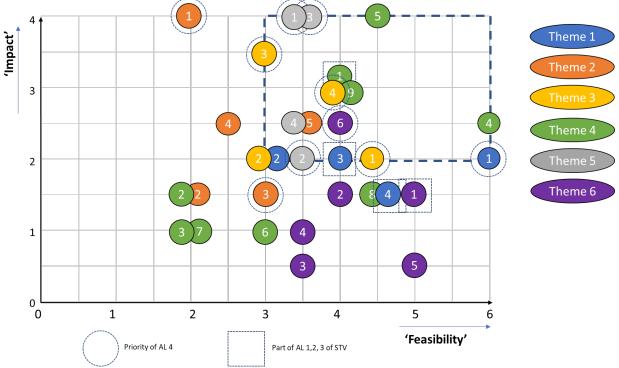


Figure 10: Selection of top 10 priorities by STV

The upper-right quadrant represents measures with high feasibility and high impact. However, the top 10 priority measures of the STV include measures that did not receive this high score and high score measures that are not in the top 10 of the STV. The circled measures are included in the selection of top 10 priorities. The measures with a selection square are included in existing lines of action of the STV (and are not part of the top 10).

Considerations by STV

In determining the proposed priorities by STV, two different considerations have to be taken into account:

- 1. Four issues are directly linked to the work in the various lines of action which is why they have been identified by STV as core issues/policy points and form part of lines of action 1, 2, and 3. (green 1, blue 3, blue 4, and purple 1)
- 2. On the basis of STV's policy and ambitions, a number of estimates made in the report based on the system used can be assessed differently (see also below). In a number of cases, a different priority has been used from this point of view.

Within the high impact and high feasibility quadrant are five measures that are not included in the top 10 of priority measures:

Measure 4.5: Private marketing standards

This issue can only be solved in conjunction with the Chain Relations action (Green 1). These standards are part of agreements between supplier and buyer. Discussing the way in which customers and suppliers make agreements about raw material loss and waste is a key issue for STV. How do parties in the chain arrive at a different way of acting, in which the loss of raw materials plays an explicit role in commercial relationships? Private marketing standards can only be changed within new forms of chain collaboration and not through a process of general rules or government regulations.

Measure 4.1: Chain relationships

Core objective of STV; see also above under "Private marketing standards line of action 2".

Measure 4.9: VAT on donating to food banks

From a European/EU member state perspective, this issue is often perceived as a hindrance. However, in the collaboration with food banks in the Netherlands and donors, this appears to play much less of a role for the Netherlands. Among other things, this is caused by a different operational model for redistribution. If something is not an urgent problem at the moment, resources and people should not be focused on it.

Measure 4.4: Clarifying best-by liability

From a STV point of view, most manufacturers (FBOs responsible for the original date labelling on packaging) are aware of the fact that traders may and can change the best-by date on their products. It is difficult to influence this. We believe that the effort required to achieve this is disproportionate to any possible outcome.

Measure 2.5: Fisheries

STV does not yet have sufficient support in this sector to engage in effective lobbying.

Measure 5.4: Coordinating feed legislation and enforcement

This issue will be part of the selected priority "Coordinating the interpretation and clarity of legislation, regulations and standards".

Measure 1.2: Coordinating monitoring methods

From a STV point of view, e.g. via Line of Action 1, work is being done to stimulate self-reporting and customisation; a blueprint with standardised methods of monitoring is considered undesirable. The comparability and fine-tuning of information/data on food waste will be aligned through the definition.

Within the high impact and high feasibility quadrant are two measures that are included in the top 10 of priority measures:

Measure 2.1: Changing the CAP

STV recognises that this is a long-term issue, but regards it as essential to achieving a more sustainable food system, without waste, in the long term. That is why STV included this point in the top 10. If the CAP fundamentally takes account of the prevention and reduction of raw material losses, major steps can be taken. STV will keep stressing this issue.

Measure 2.3: Providing financial incentives to prevent "underselling" of unsold products There are still too many perverse, often economic, incentives to continue producing without a market in the fresh produce chains. This is an important point of principle for STV and should be emphasised in all government policy statements.

From September 2020, STV, with support from WFBR, will draw up an implementation plan for the elaboration of the measures in practice under Line of Action 4, in consultation and collaboration with the parties involved.

ANNEX 1: Uitnodiging en vragenlijst schriftelijke consultatie

IN DUTCH ONLY

OPROEP INVENTARISATIE WETTELIJKE & PRIVATE BELEMMERINGEN BIJ TEGENGAAN **VOEDSELVERSPILLING**

Stichting Samen tegen Voedselverspilling inventariseert welke wet- en regelgeving en private afspraken het tegengaan van voedselverspilling belemmeren. Hiervoor organiseren wij een uitvraag middels een **Open consultatie** voor alle stakeholders in de voedsel, diervoeder en 'biobased' keten. Wij nodigen u van harte uit om deel te nemen. De uitvoering van deze consultatie wordt ondersteund door Wageningen UR.

Doel van deze consultatie is het in kaart brengen van de belangrijkste knelpunten binnen weten regelgeving en private afspraken, hun relatie met het ontstaan en/of voorkomen van voedselverspilling en -verliezen in het hele voedselsysteem in Nederland, en het inventariseren van prioriteiten in oplossingsrichtingen.

Waar zijn we naar op zoek?

Naar de belemmerende regels, wetgeving, private spelregels, of waar deze mist volgens

Alle antwoorden worden gebundeld, gestructureerd per sector en onderwerp en geanalyseerd om zo goed mogelijk de prioriteiten en mogelijkheden op te stellen. Dit bepaalt de mede **de** uitvoeringsagenda van de STV voor 2019-2021 om samen met de overheid belemmeringen weg te nemen. Na de zomer zullen een aantal bijeenkomsten worden gehouden om op participatieve basis een top 10 samen te stellen en de belangrijkste hotspots gezamenlijk aan te pakken.

Graag ontvangen wij jullie input door het beantwoorden van de vragen in het bijgevoegde document. Hierbij is ook ruimte voor het eventueel toevoegen van voor jullie belangrijke opmerkingen rondom spelregels. Het resultaat kun je per e-mail sturen naar hilke@samentegenvoedselverspilling.nl. Ook voor eventuele vragen kun je hier terecht.

Een andere mogelijkheid is om jullie input via het online formulier door te geven. Volg dan deze link.

Graag ontvangen wij jullie input binnen 3 weken na ontvangst van deze uitnodiging. Ook het doorsturen naar collega-bedrijven of andere relevante contacten uit jullie netwerk wordt zeer op prijs gesteld.

Hartelijk dank!

Namens de Stichting Samen Tegen Voedselverspilling

We vragen om een aantal gegevens om jullie input goed te kunnen verwerken. Deze informatie wordt alleen gebruikt voor het uitvoeren van de activiteiten binnen de 4 actielijnen van de Stichting Samen tegen Voedselverspilling. Uw persoonlijke gegevens worden niet met derden gedeeld en worden op een beveiligde server van STV partner Wageningen UR opgeslagen.

Open consultatie "Spelregels veranderen" 2019

Gelieve op te sturen binnen 3 weken na ontvangst naar hilke@samentegenvoedselverspilling.nl

Achtergrondgegevens

Naam organisatie	
Naam contactpersoon	
Emailadres contactpersoon	

	e organisatie (graag aankruisen wa elijk)	at van	toepassing is, meerdere antwoorden
	FBO (Food Business Operator)		Primaire sector (akker-, tuinbouw en visserij)
	Branchevereniging / koepelorganisatie		Levensmiddelenindustrie / verwerkende industrie
	Maatschappelijke / charitatieve organisatie		Groothandel
	Kennisinstelling		Transport
	MKB-bedrijf		Retail (incl. speciaalzaken)
	Grootbedrijf		Foodservices / catering
	Internationaal opererend bedrijf		Restaurant
			Hotel
			Diervoeder
			Afvalverwerking (incl. bio-vergisting, compostering en verbranding)
			Verpakkingen producent
Ove	eria. nl.:		

Let op, hierna maken we onderscheid tussen wet- en regelgeving, en private afspraken.

Met wet- en regelgeving wordt de relevante Nederlandse en/of Europese wet- en regelgeving bedoeld die van invloed (kunnen) zijn op het ontstaan, of op het voorkomen van verspilling. We verstaan hieronder ook beleidsprogramma's en afspraken.

Private afspraken zijn afspraken die bedrijven/organisaties onderling met elkaar maken over het organiseren van ketens en voedsel- en/of reststromen. Deze kunnen geformaliseerd zijn (bijvoorbeeld in een convenant of contract), maar kunnen ook gaan over ongeschreven 'regels'.

Een voorbeeld van wetgeving is de Europese etiketteringsverplichting voor levensmiddelen, waarin de THT- of TGT aanduidingen worden omschreven. Er zijn ook afspraken die niet in wetten zijn vastgelegd, maar wel invloed uitoefenen op het voedselsysteem, Denk daarbij bijvoorbeeld aan het Klimaatakkoord, de Visie op Kringlooplandbouw, en de Duurzame Ontwikkelingsdoelstellingen van de Verenigde Naties waaraan ook de EU en Nederland zich hebben gecommitteerd.

Private afspraken zijn bijvoorbeeld de agenda van de Stichting Samen tegen Voedselverspilling en cosmetische markt-eisen voor versproducten.

Welke bel	emmeringen bij het terugdringen van voedselverspilling, en die
eroorzaakt	worden door wet- of regelgeving, ervaart jullie organisatie?
	loed hebben deze belemmeringen, veroorzaakt door wet- en op het ontstaan en/of het voorkomen van voedselverspilling/-de keten?
	specifieke wet- en regelgeving gaat het? (Vermeld hier bij voorke
o gedetaillee dnummer)	d mogelijk het betreffende Nederlandse/Europese wetboek, artikel en
1. 14/24 -::::	almana ivillia da 2 halamaviikata halamamavimman (hatamata)
_	olgens jullie de 3 belangrijkste belemmeringen (hotspots) door wet- en regelgeving, die met prioriteit zouden moeten
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eroorzaakt	door wet- en regelgeving, die met prioriteit zouden moeten
eroorzaakt	door wet- en regelgeving, die met prioriteit zouden moeten
veroorzaakt	door wet- en regelgeving, die met prioriteit zouden moeten
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veroorzaakt vorden aang 6: Wat zou e codat deze h	door wet- en regelgeving, die met prioriteit zouden moeten epakt? Waarom deze?
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veroorzaakt worden aang 5: Wat zou e zodat deze h waarom gebe 5: Welke we net voorkom	door wet- en regelgeving, die met prioriteit zouden moeten gepakt? Waarom deze? r moeten veranderen aan de bestaande wet- en regelgeving otspots kunnen worden aangepakt? (Wat is daarvoor nodig en urt het (nog) niet?)

Private Afspraken 7: Welke belemmeringen bij het terugdringen van voedselverspilling, en die veroorzaakt worden door private afspraken, ervaart jullie organisatie? 8: Welke invloed hebben deze belemmeringen veroorzaakt door private afspraken, op het ontstaan en/of het voorkomen van voedselverspilling/verliezen in de keten? 9: Om welke specifieke private afspraken gaat het?* *U kunt als u wilt ook documentatie die ingaat op deze private afspraken sturen naar hilke@samentegenvoedselverspilling.nl, of hierboven een verwijzing opnemen naar de betreffende website 10: Wat zijn volgens jullie de 3 belangrijkste belemmeringen (hotspots), veroorzaakt door private afspraken, die met prioriteit zouden moeten worden aangepakt? Waarom deze? 11: Wat zou er moeten veranderen om deze belemmeringen veroorzaakt door private afspraken weg te nemen? (Wat is daarvoor nodig en waarom gebeurt het (nog) niet?) 12: Welke aanvullende private afspraken zouden er gemaakt kunnen worden die zouden kunnen helpen in het tegengaan van voedselverspilling? (Wie moeten deelnemen aan deze afspraken, wat moet er worden vastgelegd?)

Prioriteiten en impact

13. Wat is jullie eigen Top 3 van Hotspots, die ook voor de Stichting STV van belang zijn om met voorrang aan te pakken? Welke impact verwachten jullie hiermee te behalen? (o.a. omvang afname verspilling, milieu-impact, economische impact, sociale impact)

	Beschrijving Hotspot	Beschrijving Impact
1.		
2.		
3.		

Aanvullende opmerkingen

14. Wij raden aan bij het veranderen van Spelregels dat de Stichting Same tegen Voedselverspilling				

ANNEX 2: Longlist mogelijke knelpunten en maatregelen spelregels voedselverspilling

IN DUTCH ONLY

Thema 1: Meten van Voedselverspilling

1. Meten van voedselverspilling

- Uniforme meetwijze: Een uniforme meetwijze ontbreekt. Handvatten om op een juiste manier de data te achterhalen worden niet gegeven en het is onduidelijk op welk moment in de keten moet worden gemeten. Er was onenigheid of bedrijven wel of niet verplicht moet worden om data aan te leveren, maar een uniforme maatstaf werd wel ondersteund. Andere mogelijke oplossingen die werden gegeven waren het concreet maken van een meetmethodologie per sector, en de afvalverwerkingssector erbij betrekken.
- Benchmarking: Toegevoegd dat er een verplichte uitwisseling en benchmarking moet plaatsvinden voor alle food bedrijven, zodat ze van elkaar kunnen leren. Dit kan ook door bedrijven te verplichten hun afvalgegevens (anoniem) te openbaren, of zwakke rapportages te belasten. Tegenstrijdigheid is dat benchmarking en openbaren data concurrentiegevoelig zijn. Daarnaast kan verplichting van openbaren data fraude in de hand werken.
- Evaluatie: Toegevoegd dat bij bedrijven de motivatie ontbreekt om data te delen, omdat ze er niets voor terug krijgen. Toegevoegde oplossing was dat de data gereed moet worden gemaakt voor communicatie/marketing doelen. Ook werd benoemd om voedselverspilling te belasten, of juist het verminderen van voedselverspilling te belonen.
- Ontbreken overige KPI's: Het meenemen van andere KPI's zoals CO2 werd ondersteund en bediscussieerd. Voorstanders benoemden dat er een eerlijkere afweging kan worden gemaakt door CO2 en water verbruik mee te nemen en dat Nederland moet laten zien dat er beter gemeten kan worden. Ook zou er meer focus moeten worden gelegd op producten met een hoge CO2 impact of water footprint. Om dit te kunnen doen moet de methodologie concreet en uniform zijn. Tegenstanders gaven aan dat Nederland eerst gewoon moet beginnen met alleen volume, dat is al moeilijk genoeg. Daarnaast is het moeilijk is om CO2 data te verkrijgen en is de huidige methode om CO2 impact te kwantificeren omstreden is. Ook werd aangegeven dat bijvoorbeeld dieren in staat zijn om reststromen om te zetten in hoogwaardig
- Definitie: Tijdens de bijeenkomt werd toegevoegd dat Nederland qua definitie iets anders wil dan de EU. Verder was er onenigheid over wat wel en wat juist niet meegenomen moet worden in deze definitie, zoals: Alles stromen anders dan humane voeding rekenen als voedselverspilling, diervoeding en pet food niet rekenen tot voedselverspilling, gedwongen verliezen niet rekenen tot voedselverspilling, en hergebruik van dierlijk eiwitten in voedsel juist waarderen als voedselbesparing. Als oplossing zou er geen eigen NEDERLAND-definitie moeten zijn, maar dat alle lidstaten de EU-definitie moeten volgen. Daarnaast werd aangegeven dat de definitie duidelijk moet zijn en dat de Ladder van Moerman gebruikt moet worden voor het aangeven van de reststromen. Het streven moet zijn naar een hogeren trede op de Ladder van Moerman. Uiteindelijk vormt de definitie de basis voor meten, en de basis moet op orde zijn.
- Beeldvorming: De beeldvorming van de sectoren is vertekend indien alleen het volume wordt weergegeven per ketenschakel. Belangrijk om de data in het juiste perspectief te zetten (in % van totale volume) en de huidige bestemming weer te geven, want grote sectoren kunnen een klein % hebben, maar een grote omvang. Ook zou de data per productgroep verzameld moeten worden. Indien de data per productgroep zowel in volume als in percentage wordt verzameld, kan een vergelijking worden gemaakt tussen sectoren.
- Codering: Bij deze oplossing werd aangevuld dat een reststromen lijst moet worden toegevoegd waarbij geen 'tenminste houdbaar tot' (THT) of 'tenminste goed tot' (TGT) datum nodig is. Daarnaast werd genoemd dat de crude fiber protein (CFP) moet worden toegevoegd op de labels van producten. Als laatste werd benoemd dat het net zoals het IBM-foodtrust principe zou kunnen werken.

Thema 2: Landbouw & Visserij

2. Visserijbeleid/ Common Fisheries Policy

1. Technische oplossingen

- Meer innovatie toestaan in vistechnieken om bijvangst te voorkomen
- Betere vistechnieken implementeren zodat selectiever gevist kan worden. Politiek niet laten leiden door emotie
- Frozen fish promoten
- Stimuleren van delen van best practices: beloon bedrijven die maatregelen nemen zodat ook binnen de primaire sector als toeleverancier voedselverliezen worden tegengegaan.
- Stimuleren van kweekvis (die niet op voer vanuit wildvangst is gebaseerd) om zo problematiek van discards en doelsoorten te verminderen
- Stimuleren van artificial meat and fish, waarbij de milieudruk van het product omlaag gaat ten opzichte van dierlijke eiwitten.
- 2. **Evaluatie discards** ban beleid, met betrekken van alle stakeholders

3. Communicatie & samenwerking

- Interviews boeren en vissers laten meedenken over oplossingen
- Betere communicatie overheid richting Sector over innovaties en veranderingen
- Beprijzen van alle vangst incl. discards (inclusief maken van momenteel geëxternaliseerde kosten), daarbij ook gebruik makend van de Ladder van Moerman
- 5. Opnemen van bijvangst/discard vereisten in certificering van duurzame vis

3. Gemeenschappelijk landbouwbeleid

1. Verplichte monitoring

- Meten, in kaart brengen wat food waste hoeveelheid is
- Waste beter inzichtelijk maken, wat is het onderscheid tussen vermijdbare en onvermijdelijke
- Opstellen van duidelijk omschreven wettelijke definitie voor voedselverliezen in de primaire sector
- Uitdrukken wat er verloren gaat voor humane consumptie en wat er nu met deze (rest)stromen gebeurt
- Niet alleen kilo's, maar kiezen voor vastleggen van impact door middel van een integrale benadering/meting, o.a. CO₂, biodiversiteit, voedselvoorziening
- 'Foodtrust'-achtige verplichting door gehele keten
- Het ook altijd voedsel blijven noemen (en geen reststromen...)

2. Technische oplossingen

- Stimuleren van innovatie in akkerbouw en landbouw
- Stimuleren van delen van best practices: beloon bedrijven die maatregelen nemen zodat ook binnen de primaire sector als toeleverancier voedselverliezen worden tegengegaan.
- Stimuleringsbeleid afstemmen op Ladder van Moerman
- Ontwikkelen van een financieel fonds voor Smart Farming (waarbinnen aandacht wordt besteed aan innovatieve technieken en samenwerkingsvormen om verliezen te verminderen
- Stimuleren van verticale farming als teelttechniek van de toekomst
- Stimuleren van artificial meat and fish, waarbij de milieudruk van het product omlaaggaat ten opzichte van dierlijke eiwitten

3. Herbestemmen van reststromen

- Hulp voor nieuwe toetreders die met restroom verwaarden een nieuw product introduceren
- Markt creëren voor minder 'populaire' vis/niet-gangbare soorten, o.a. via voorlichting consument
- Gesloten markten creëren waarbij er nauwkeuring gestuurd wordt op het matchen van vraag & aanbod: Dedicated supply chains
- Wettelijk verbod op 'doordraaien' van onverkocht product (ook bij veilingen)

4. Overheids'bemoeienis':

- Level playing field voor binnenlandse productie en import-vereisten rondom duurzaamheid en verspilling
- (Meer) protectionisme. Bevorderen van binnenlandse duurzame productie door blokkades te maken voor niet-duurzame productie van import
- Minder overheid bemoeienis met de landbouwsector

5. Wetgeving leesbaar schrijven of uitleggen, met daarin een duidelijk omschreven wettelijke definitie voor voedselverliezen in de primaire sector.

6. Handhaving verbeteren

- a. Opstellen van uniforme interpretatie
- b. Consistentie in handhaving
- Daarnaast stimuleren dat auditoren niet alleen op een 'blauwe' manier naar interpretatie kijken, maar ook voeling hebben met context en 'geest van de wet'

7. Communicatie & samenwerking

- Interviews boeren en vissers laten meedenken over oplossingen
- Betere communicatie overheid richting Sector over innovaties en veranderingen
- De sector laten aanschuiven in het keten-brede overleg en samenwerking ten aanzien van verspilling (de sector aan tafel krijgen). Achterhalen wat de bekendheid binnen de sector rondom verspilling en duurzame ketens is, en welke rol zij hierbij kunnen spelen. Als aanvliegroute kan o.a. biodiversiteit worden genomen.

Thema 3: Veiligheid en gezondheid

4. Verontreiniging levensmiddelen met residuen van bestrijdingsmiddelen

Striktheid MRL neemt alleen maar toe omdat meettechnologie steeds beter wordt en er dus steeds vaker 'iets' gemeten wordt! (0-tolerantie)

5. Verontreiniging levensmiddelen met contaminanten

- De vraag is of deze nultolerantie wel gemeten/wetenschappelijk vastgesteld wordt. De indruk heerst dat emotie hier een belangrijke rol speelt. De vraag is dus of het debat wel 'goed' gevoerd wordt, dat wil zeggen gestoeld op feiten en wetenschap. Bij het ontbreken van een norm gaat men nu automatisch over op een nultolerantie. Maar waarom? Vooral als er nog niemand ziek van is geworden?
- Toegevoegd dat soms hele partijen worden afgekeurd om de prijs bewust hoog te houden.

6. Microbiologische criteria van levensmiddelen

Bij een recall procedure bij vlees de hele partij moet worden afgekeurd en het track & trace systeem kan geen individuele batches kan beoordelen.

7. Koelen en invriezen van vlees

Geen toevoegingen

8. Controle van voor menselijke consumptie bestemde producten van dierlijke

- Hygiënecode branche strenger dan vereist? Juist niet:
 - a. Is juist niet zo, de code zoekt juist de grens op binnen de wettelijke kaders;
 - Regels voor hygiënecode worden steeds strikter waardoor het voor een brancheorganisaties steeds moeilijker wordt om een eigen code vast te leggen.

9. Toelating novel foods

Geen toevoegingen

10. Fytosanitair beleid

Geen toevoegingen

Samenvatting oplossingen thema 3

	Oplossingscategorie	Wat	Wie	Niveau
	Ketensamenwerking	Teken een convenant om voedselverspilling tegen te gaan	STV	NL
	Uniformiteit in wet- en regelgeving in Nederland en de Europese Unie	Standaardisatie Europese normen en regelgeving	Wetgevers en politiek	EU en NL
Uniforme wet- en regelgeving		Aansluiten bij EU- standaardisatie voor gekoeld/bevroren vlees	NVWA/ Ministeries	NL
	Uniformiteit in interpretatie en uitleg van wet- en regelgeving bij uitvoerings- /handhavingsinstanties	Geen eigen of beleidsinterpretatie door controleurs. Uniformiteit bij handhavers volgens een heldere richtlijn en goede afstemming en communicatie tussen handhavers/ controleurs	NVWA	NL
Unifor		Geen ruimte voor eigen of verschillende interpretaties tussen EU en Nederland voor wat betreft wet- en regelgeving. Ook geen verschillen tussen de lidstaten	Wetgevers en politiek	EU en NL
Meetmethodieken	Specifieker/nauwkeuriger meten en controleren	Meten op individueel product niveau (Stock Keeping Unit) in plaats van op batch niveau of de hele partij. Technologie zou dit mogelijk kunnen maken	Technologie leveranciers	EU en NL
Normeringen	Regelmatig beoordelen van wet- en regelgeving en gestelde normen. Nu worden normen alleen (her)beoordeeld wanneer de Europese Commissie de EFSA daar opdracht toe geeft. En dit doen ze alleen na een voedselveiligheidscrisis.	Beoordeel structureel en grijp bij de beoordeling terug op de vaag wat destijds het doel van de wet- en regelgeving was. En is dat nog steeds het geval Beoordeel niet alleen vanuit het negatieve (zoals nu na voedselveiligheidscrisis) maar ook vanuit het positieve bijvoorbeeld bij nieuwe wetenschappelijke inzichten, nieuwe technologieën en technieken. Bijvoorbeeld nieuwere bewaar technologieën waardoor de verplichte koeling volgens de warenwet niet meer hoeft.	Wetgever	EU en NL

Wetenschappelijke onderbouwing van normeringen (bijvoorbeeld bij MRL)	De basis moet de wetenschappelijke onderbouwing zijn van de normering (gezondheid, etc.) en NIET de beschikbare analysetechniek.	Wetenschap stelt de kritische grenzen vast. Politiek bepaald de norm op basis van de wetenschap	EU en NL
	Specifiek de nultolerantie: Waarom is die op nul gezet? De reden kan niet zijn omdat de techniek een bepaalde aanwezigheid wel/niet kan meten (daar lijkt het nu wel eens op)		
	Facts & figures: Echter cijfers in relatie tot voedselveiligheid		
	Tijdige communicatie tussen wetgever en EU-NL (Risico is de emotie)		
	Bij toelatingsprocedure tijdige en adequate communicatie tussen wetgever en de Europese Commissie. Niet pas als alles rond is communiceren en daarmee de EP voor een voldongen feit zetten. Dan neemt de emotie het bij het nemen van beslissingen vaak over		
Maak normeringen niet (of minder) binair: nu is het goed- of afkeur bij 1 bepaalde norm	Normering is nu 'ja of nee'. Dit zou een schaal tussen '0 en 1' kunnen zijn bijvoorbeeld afhankelijk van de specifieke product-keten relatie.	Wetgever	EU en NL
	Nieuwe technologieën Whole genome sequencing (W&S) maken norm- schalen wellicht mogelijk. De overheid zou dit moeten versnellen & stimuleren		
Maak de normstelling multi- criteria gebaseerd en dus niet alleen voedselveiligheid	Normstelling breder meten dan alleen voedselveiligheid Brede en gewogen afweging van issues (bijvoorbeeld voedselveiligheid, voedselverspilling, duurzaamheid,, etc.)	Wetgever	EU en NL
	Komen tot integrale afweging diverse aspecten (NL/EU)		
Diversifieer voedselveiligheidsnormen voor gebruik als food of feed	Wanneer in de food-keten een product wordt afgekeurd door overschrijding van een voedselveiligheid gerelateerde norm mag het ook niet al diervoeder beschikbaar komen. Zeker wanneer het bijvoorbeeld naar de petfood gaat (dus niet terug in de food-keten) zou dit wel moeten kunnen	Wetgever	EU en NL

en regelgeving	Uitleg + duidelijkheid + hoe te handelen	Duidelijkheid over relatie van de maximale temperatuur van gekoelde/bevroren producten. En met name voor vlees. Heldere uitleg over de relatie tussen temperatuur en voedselveiligheid, temperatuur en houdbaarheid	STV/NVWA, Leg de relatie uit Uitvoeringsinstantie	Lokaal
Helderheid wet- en regelgeving		Goede educatie, en uitleg over normen, regels en de effecten van afwijkingen op deze norm en hoe te handelen bij geconstateerde afwijkingen	Uitvoeringsinstantie	Lokaal
		Helderheid geven over steekproef omvang en wanneer er sprake is van goed-/afkeur		
	Sensortechnologie	(2 uurs norm) Smart sensor op buffetten tegen 'na 2 uur weggooien'	Fabrikanten en wetgever	EU en NL
ennis		Smart sensor om te laten zien welke producten het meest vers zijn, die ook gevarenzone kan laten zien		
Nieuwe technologieën en kennis		Smart sensors gebruiken en temperatuur & houdbaarheid actief te meten in plaats van vaste TT-datum		
euwe techno	Snellere acceptatie van Best Practices uit andere (niet EU) landen	Beschikbaarheid data op globale schaal vergroten voor gebruik voor risico inschatting	Wetgever en politiek	EU
Z		Ook in bepaalde branches regels vernemen? uit andere branches		
		Voortborduren op innovaties buiten EU die daar al toegelaten is		

Aanvullende argumenten maatregelen

Waarom	Hoe	Effect
Harmonisatie en eenduidige wet- en	Dit is een no regret maatregel/ no brainer. Europese wet- en regelgeving en	Geen 'willekeur' en onduidelijkheid meer
regelgeving en normeringen	normeringen moet in alle lidstaten gelijk zijn en hetzelfde geïnterpreteerd worden.	tussen landen en tussen bedrijven over interpretatie en reden van wel/geen
	Specifiek voor de NVWA: Goede instructies voor de NVWA & heldere interne	afkeur
	communicatie en afstemming over het 'lezen van de wet- en regelgeving)	
Systeem van herbeoordeling wet- en regelgeving en normeringen	Op Europees niveau moeten wet- en regelgeving en de normeringen regelmatig beoordeeld worden en niet alleen in het geval van een (voedselveiligheid)crisis waarbij e.e.a. aangescherpt wordt. Juist ook vanuit nieuwe inzichten mogelijk 'verslappen' van regels	Voorkomen dat normen achterhaald zijn en product wordt afgekeurd terwijl dat als gevolg van nieuwe inzichten en technologieën niet meer nodig is

	Moet een continu proces zijn (benchmark) gebaseerd op nieuwe wetenschappelijke inzichten en technologieën (voortschrijdend inzicht) met de vraag waarom de wet, regels en normen zijn zoals nu zijn en of dit nog wel geldig is	
Verschillende normering voor gebruik als food of feed	Wanneer in de food-keten een product wordt afgekeurd door overschrijding van een voedselveiligheid gerelateerde norm mag het ook niet al diervoeder beschikbaar komen. Zeker wanneer het bijvoorbeeld naar de petfood gaat (dus niet terug in de food-keten) zou dit wel moeten kunnen	Voorkomen dat voor de petfood geschikte reststromen toch vernietigd moeten worden
Normeringen gebaseerd op wetenschap	De wetenschap bepaald de norm gebaseerd op de laatste wetenschappelijke gezondheidsinzichten. De politiek stelt de norm uiteindelijk vast waarbij ze bijvoorbeeld niet meer dan 5% of 10% mogen afwijken (naar boven en naar onder) van de door de wetenschap aangegeven norm	Voorkomen dat de 'emotie' de norm bepaald en daarmee -is de veronderstelling- vaak strikter is dan objectief gezien noodzakelijk
Tracking & Tracing op gericht product te kunnen 'vernietigen'	Combinatie van technologie en aanpassing van de regelgeving zodat er op individueel product of batch niveau producten afgekeurd kunnen worden.	Voorkomen dat complete partijen onterecht worden vernietigd

Thema 4: Handelsregels en normen

11. Import controles

Importcontroles: Mogelijk verslechterd de situatie door de Brexit. Een mogelijke oplossingen die werden benoemd zijn het invoeren van fasttrack procedures voor bederfelijke producten, meer personeel inzetten bij douane en inspectie, versoepelen van controles en harmoniseren van de procedures in Europa.

12. Productaansprakelijkheid

Er moet meer transparantie komen in de ruimte tussen geëtiketteerde THT-datum en werkelijke THT-datum. Ook moet er meer duidelijkheid komen over herlabelen.

13. Europese handelsnormen

Importeisen en klassen

- Pas regelgeving aan voor hoe om te gaan met producten in klasse 3.
- Laat de schoolfruitregeling ook gelden voor producten buiten klasse 1.
- Schaf handelsnormen voor het uiterlijk van producten af en leg de focus op vers, veilig en
- Sta toe dat producten uit klasse 3 verkocht of gedoneerd worden als versproduct. Andere regels voor de omgang met klasse 3 producten is dus nodig volgens de stakeholder uit de handel- en distributiesector.

Aanvullende kwaliteitseisen

- Versoepel de aanvullende kwaliteitseisen van supermarkten en zorginstellingen, aldus een maatschappelijke organisatie.
- Maak documenten met aanvullende kwaliteitsnormen van retailers voor groente en fruit openbaar, als vertrekpunt voor discussie over dit onderwerp, vindt een stakeholder uit de industrie/maatschappelijke organisatie.
- Maak afspraken over hoe ver retailers en inkooporganisaties kunnen gaan met aanvullende kwaliteitsnormen voor het uiterlijk van groente en fruit. Een gezamenijk plan om de consument te informeren over de eisen kan hierbij helpen. Zo zetten alle retailers op hetzelfde moment stappen, waardoor een eventueel concurrentienadeel wordt weggenomen. Het mooiste zou zijn als de aanvullende cosmetische eisen helemaal worden afgeschaft. De consument kan wennen aan groente en fruit dat er net even wat anders uit ziet en telers kunnen gemakkelijker hun hele oogst verkopen, aldus dezelfde stakeholder uit de industrie/maatschappelijke organisatie.
- Verbeter de samenwerking in de keten. Nu komen aanvullende eisen weleens tot stand zonder overleg met de teler. Vooral bij producten uit de volle grond kunnen deze eisen sterk afwijken in vorm en formaat waardoor de teler veel risico loopt.
- Beschouw producten als runder- en varkenseiwit niet als 'etiket-vervuiling'. Dit draagt bij aan een positieve productbeleving.
- Schaf niet-circulaire eisen als 'vegetarische' varkens en kippen af.
- Zorg voor betere inzet van co-producten van de vleesindustrie in de vleessector zelf. Ook de verschillende aanpakken voor het gebruik van vleesrestproducten werden genoemd door de stakeholder uit de industrie/afvalverwerking.

14. BTW inzake donatie

In Nederland lijkt er in tegenstelling tot andere EU landen geen groot issue te zijn rondom de BTW-plicht inzake donatie.

15. Oneerlijke handelspraktijken

- Sorteer reststromen al in een eerder stadium, aldus de stakeholder uit de out-of-home sector. In een later stadium scheiden is op dit moment te kostbaar. Verzamel de verschillende stromen gecentreerd, bijvoorbeeld per bedrijventerrein. Zo kan correct gesorteerd swill naar een goede verwerker voor diervoeding of naar de voedingsmiddelenindustrie voor menselijke
- Creëer een goed verdienmodel voor hoogwaardige verwerking, aldus diezelfde stakeholder.
- Maak meer afspraken over vraag en aanbod, aldus de stakeholder uit de handel- en distributiesector.
- Leg bij het maken van afspraken meer nadruk op voordelen voor beide kanten, en minder op boeteclausules, aldus diezelfde stakeholder.
- Pas ook leveringsafspraken aan, benadrukte diezelfde stakeholder.
- Accepteer out-of-stock, verander organisatie intern, en transparant maken verspilling in de keten en de impact van machtsverhoudingen.

Samenvatting: oplossingen thema 4

- 1. Importcontroles duren lang, Nederland strenger dan andere landen
 - a. Mogelijk verslechtering door Brexit?

- b. Gebrek aan personeel douane etc.
- c. Geen Europese harmonisering
- d. Gebrekkige organisatie van het "Dataspoor"

Oplossingen:

- Fasttrack procedures voor bederfelijke producten, risicogericht
- Harmoniseren procedures in geheel Europa (worden nu gebruikt als verkapt protectionisme)
- Meer personeel douane, inspectie NVWA en milieudiensten
- Versoepelen, maar niet in vis
- Delen data

2. Productaansprakelijkheid leidt tot kortere THT/TGT dan nodig, niet-doneren or herlabelen

- Verplichting onderbouwing THT (2)
- Check, waar gaat fout (wie zegt jij bent aansprakelijk? NVWA of rechterlijke macht. Buffers moeten transparant worden, d.w.z. grote ruimte tussen geëtiketteerde THT en werkelijke THT die producent neemt transparant maken
- Duidelijkheid over regels herlabelen.
- Ketenpartijen zelf aanspreken (Europese koepels) voor duidelijke en transparante afspraken.
- THT is 'veilig gemiddelde' → zonder data blijft het systeem dom

3. Handelsnormen: Onduidelijk wettelijk vs. privaat

- Maak afspraken over handelsnormen transparant
- Afschaffen handelsnormen

4. Onduidelijk: BTW plicht gedoneerd voedsel

- Geen groot issue in Nederland
- Geen Franse toestanden (wettelijke verplichting doneren aan Voedselbanken)

5. Scheve ketenverhoudingen kunnen leiden tot overproductie en verspilling

- Out of stock vs verspilling. Extra produceren om aan contract te voldoen, leidt tot niet verkochte producten.
- Verspilling is cost of doing business, gevolg van machtsverhoudingen

Oplossingen:

- Op = op, dus accepteer out-of-stock!
- Maak Sales managers fabrikanten en Category managers supermarkten gezameNederlandijk verantwoordelijk voor verspilling per schakel in de keten. Baseer bonussen niet alleen op volume en marge, maar ook op verspilling
- Bespreekbaar maken! Harde ketengesprekken
- Maak CEO en Verantwoordelijke inkoop verantwoordelijk voor verspilling
- Beter delen van data over verspilling in de keten
- Aanpassen van contractvormen en boeteclausules
- Inzichtelijk maken impact machtsverhoudingen
- Maak CO2 een performance-KPI
- Beter meten/betere data
- Convenanten/codes of conduct

Opmerkingen:

- VWS Stimuleren om bij interpretatie voor wetgeving ook aan voorkomen voedselverspilling te
- Data ontbreken in het de voedselketen en worden te weinig gedeeld.

Thema 5: Afvalstoffenwetgeving

16. Levensmiddelen die niet langer bestemd zijn voor menselijke consumptie gebruiken als diervoeder

- Combi veevoer en levensmiddelen: Imago is een belangrijke afweging voor levensmiddelenbedrijven, omdat levering aan feedbedrijf wordt gezien als negatief/risico.
- Onzekerheid of onduidelijkheid over de interpretatie van de wetgeving leidt tot verschil van inzicht tussen handhavers en bedrijven, of binnen bedrijven en sectors. Daarnaast ontbreekt de prioriteit om voorliggende zaken rond het verschil in interpretatie scherp te krijgen bij de handhavende autoriteit (NVWA). Ook wordt benoemd dat Nederland strikter is dan omliggende landen. Als oplossing wordt benoemd dat de NVWA direct aan moet sluiten bij netwerken en bijeenkomsten, in plaats van dat de overdracht via het ministerie gaat. Op deze manier kan een eenduidige interpretatie van wetten worden geïndiceerd.

17. Gebruik van dierlijke bijproducten in diervoeder

Een mogelijke aanpak:

- Pas de feed ban aan (Verordening 999/2001): denk bijvoorbeeld aan het toelaten van beenderfosfaten voor herkauwers en het afschaffen van de beperkingen voor het gebruik van (bloed)plasma-eiwitten van niet- herkauwers voor kalveren. Dergelijke regels zijn eerder al afgeschaft voor vismeel, volgens een stakeholder uit de industrie/afvalverwerking.
- Laat een onafhankelijke aantonen dat inzet van reststromen voor diervoeder of mest veilig kan zijn, en welke borgingsprocedures er nodig zijn, aldus een stakeholder afkomstig uit de out-of-home sector.
- Creëer gecontroleerde mogelijkheden voor hergebruik van swill met hoge hergebruikimpact, waarbij extra scheiding, inzameling en distributie niet nodig is. Swill is na bijvoorbeeld een hittebehandeling goed te verwerken in diervoeders.
- Scheid dierlijke en onvermijdbare resten van groente- en fruitafval. Zo is de plantaardige swill te verwerken in diervoeding en kan de rest van het materiaal gecomposteerd worden. Dit zorgt al voor een afname van 85% van het totale swill-afval. Het is zaak de belangrijkste leveranciers van swill uit te dagen om het materiaal te sorteren, scheiden en meten, bijvoorbeeld door de verwerkingskosten eerlijk te verdelen over alle ketenpartners. Maak grote verwerkers bovendien enthousiast voor maximalisatie van hun verdienmodel met de huidige swill-stroom en het zoeken van nieuwe voedseltoepassingen.
- Recente aanpassingen in Verordening 999/2001 hebben al een kleine bijdrage geleverd aan een beter gebruik van (dierlijke) bijproducten. Het gaat hierbij om:

Verordening (EU) Nr. 1292/2005 Verordening (EU) Nr. 56/2013 Verordening (EU) Nr. 2015/728 Verordening (EU) Nr. 2015/1162 Verordening (EU) Nr. 2016/1396 Verordening (EU) Nr. 2017/893 Verordening (EU) Nr. 2018/969 [29]

Vanuit de rijksoverheid moet er een heldere leidraad komen over de afvalstatus en diervoeder waardigheid. Ook werd benoemd dat de afvalstatus van reststromen afgeschaft kan worden door in eerste instantie alles als product te zien. Verder werd geopperd om nieuwe grondstoffen te introduceren die te gebruiken zijn voor feed. Er zijn al signalen dat er ruimte komt in de wetgeving voor dierlijke resten/bijproducten (PAP) als feed voor insecten te gebruiken.

Thema 5: Afval en biomassa

18. Afvalstoffen

Oplossingen Fiches:

- Scheiden van dierlijke & GF-fracties, waardoor hogere verwaarding van beide fracties mogelijk
- Integraal beleid rondom gebruik grondstoffen en optimaliseren afval management
- Innovatie en consumentenvoorlichting rondom verpakkingen en duurzaamheid
- Belast grondstoffen zwaarder dan arbeid
- Landelijke eenduidig beleid voor afvalscheiding en verwerking
- Verbeter samenwerking tussen gemeenten m.b.t. inzameling plastic zodat meer mogelijkheden ontstaan voor hergebruik in 'food grade' verpakkingen → circulaire economie
- Sluit NVWA direct aan bij netwerken, en niet alleen via ministerie VWS
- SDE+ subsidie niet voor food/feed grade producten omzetting tot energie
- Etikettering transparantie reststromen voor hergebruik
- Zoveel mogelijk met statiegeld werken. Verplichten!
- Afkomen van afvalstatus. Alles als product zien, tenzij
- Investeringen in alternatieve verpakkingen die wel in circulair system passen
- Heldere leidraad vanuit rijksoverheid over afvalstatus en diervoeder waardigheid
- Een overkoepelende visie op verpakkingsafval en voedselverspilling met uniforme metrics, zodat doelstellingen gemeld kunnen worden op een manier dat er geen trade-off moet zijn tussen food waste vs. packaging waste
- Afvalstatus: Stuur of risicoprofiel van stromen (pre-consumer) Post-consumer.
- Eenduidige interpretatie van wetten
- Handhaving invullen vanuit geest/doel wet
- Maak het voor bedrijven aantrekkelijk om afval en andere stromen te scheiden middels een incentive
- Meer toelichting voor consumenten over plastic recycling en CO2 input van voedselverspilling
- Rekening houden keuze verpakkingsmateriaal vanuit perspectief verwerken in veevoer (hard
- Boekwaarde van reststromen zichtbaar maken op balans van bedrijf leidt tot meer zichtbaarheid op directie/board niveau van de kosten/kansen
- Impact voedselproductie verpakking inzichtelijk maken
- Emissierechten voor afval (vrij te verhandelen) → Markt zorgt voor oplossing? Producent blijft eigenaar afval
- Betere en nauwere samenwerking tussen ministerie IoW en ministerie LNV
- Naar gesloten systeem, kringlooplandbouw
- Promoten/ incentive plant based voeding → veel minder afval, zelfde voedingswaarde
- Aantrekkelijk maken bedrijven en consumenten om afval te scheiden
- Novel FEED wetgeving. Introduceren nieuwe grondstoffen

Thema 6: Informatie op verpakking

19. Informatie op de verpakking

Lang houdbare producten

- Maak een duidelijk onderscheid tussen de benamingen 'THT' en 'TGT'. De betekenis van de TGT-datum is vastgelegd in Europa, maar de THT-datum is vertaald door de Nederlandse overheid. Deze definitie is dus relatief makkelijk aan te passen, aldus een maatschappelijke organisatie.
- Maak betere afspraken over etikettering van bewaaradviezen, kijken-ruiken-proeven en portiegrootte op verpakkingen. Deze aanpak is benoemd door dezelfde maatschappelijke
- Zorg voor betere voorlichting aan consumenten over de THT en TGT, gebruik van producten na het verstrijken van de THT, en hoe bedrijven omgaan met de THT-datum.
- Pas de regelgeving rond houdbaarheidsinformatie aan. Voor enkele producten is de THTdatum al afgeschaft. De lijst is echter aan te vullen met producten als pasta en suiker, aldus twee maatschappelijke organisaties en twee stakeholders uit de out-of-home-sector.
- Volgens een stakeholder uit de out-of-home sector kan het invoeren van een Kwaliteit Gegarandeerd Tot (KGT)-datum helpen.
- Pak reclameacties als '2 voor de prijs van 1' aan. Die werken in de hand dat consumenten te veel producten kopen en vervolgens weggooien. Dit probleem speelt vooral bij producten met een korte houdbaarheid, aldus een maatschappelijke organisatie.

Overige maatregelen

- Spreek af dat duurzaamheid ook een belangrijk aspect wordt, in plaats van alleen marketing op uiterlijk, vorm, kleur, volle etiketten, etc.
- Zorg voor een betere inzet van co-producten van de vleesindustrie in de vleessector zelf.
- Maak afspraken over wat reële en gezonde porties zijn in het kader van voedingswaardedeclaraties
- Front-of-pack labelling
- Maak afspraken rond eenduidige bewaaradviezen op producten
- Zorg voor een eenduidige aanpak en indicatoren voor het vaststellen van de THT-datum, voor zover die niet al bestaan.
- In het Klimaatakkoord staan afspraken rond transparantie over klimaatimpact van producten. Hoe sneller dit gerealiseerd wordt hoe beter.
- Introduceer meer convenanten over de transparantie van de voedselverspilling van bedrijven (al dan niet gekoppeld aan de LCA).

Er is overeenstemming dat er onduidelijkheden zijn in aanduidingen. Dit betreft houdbaarheid (inclusief de definities); bewaaradviezen; portiegrootte; ingrediënten en voedingswaarde, maar ook

Genoemde oplossingen liggen op het gebied van voorlichting, educatie en techniek (innovaties).

Er wordt gevraagd om een nieuwe intuïtief duidelijke definitie van THT TGT 'Best before'.

- THT op lang houdbare producten. Er wordt voorgesteld om THT op 'eeuwig' houdbare producten te verbieden
- Eenduidige aanpak vaststellen THT datum:
- Best if bought by --> verantwoordelijkheid van winkel bij consument.
- Productiedatum in plaats van THT.
- Tool ontwikkelen "Wat te doen na THT?"

Wat betreft portiegrootte: invoeren van een generieke portie-aanduiding op basis van grote en kleine

Bewaring: herleving diepvries voor bewaren, perceptie vers verbeteren. En misvatting dat je diepvries niet weer kunt invriezen uit de wereld helpen.

Voorlichting:

- wat 'beperkt houdbaar' is door middel van tools, instrumenten of afspraken
- SIRE overheidscampagne over uitleg THT en TGT --> nieuwe technologie hierbij betrekken (sensoren ontwikkelingen)
- Visueel maken. Wanneer niet meer goed, bijvoorbeeld laagje schimmel? (bewustwording / opvoeding)
- Kijken, ruiken, proeven, moet basis zijn bij consument

- Inzicht over ingrediëntendeclaratie mist bij consument. Kan een Nutriscore (impact duurzaamheid, CO2) helpen?
- Ingrediënten: bijproducten vlees (5e kwartier) voor duurzaamheid optimaal inzetten en als positief ervaren in plaats van als inferieur
- Bewaring: verbieden chilled wanneer ambient bewaartechniek beter is: bewaartechnieken veel beter onder aandacht brengen/bij consument. Vriezer/koelkast sticker

Educatie:

- Voedselverspilling lesprogramma scholen + challenge
- Betere scheiding definities THT, TGT en kwaliteits/garantie-eisen. Niet alleen scholen ook professionele opleidingen zoals koksopleiding

Techniek:

- Makkelijk maken om claims gerelateerd aan THT te checken
- Houdbaarheid op basis van item-specifieke conditie. Cold chain, ethyleen
- Hersluitbare verpakking als norm
- Date enabled barcode: RFID, 2D (QR),
- Creëer coherente data stroom tussen ketenspelers
- Datum in barcode verplichten: Iedere ketenspeler kan supply chain efficiënter maken
- Stimuleer innovaties in de gehele keten die: impact, schaal, winst bewijzen

To explore the potential of nature to improve the quality of life



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The mission of Wageningen University and Research is "To explore the potential of nature to improve the quality of life". Under the banner Wageningen University & Research, Wageningen University and the specialised research institutes of the Wageningen Research Foundation have joined forces in contributing to finding solutions to important questions in the domain of healthy food and living environment. With its roughly 30 branches, 6,500 employees (5,500 fte) and 12,500 students, Wageningen University & Research is one of the leading organisations in its domain. The unique Wageningen approach lies in its integrated approach to issues and the collaboration between different disciplines.

