

10 principles for reducing food waste together

- An industry roadmap for responsible and inclusive innovation and collaboration processes to reduce food waste



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Background

Reducing food waste (Sustainable Development Goal SDG 12.3) is a crucial measure to decrease the climate footprint of the world's food production and consumption alongside other consequences related to the environment, animal welfare and the economy. Since 2019, the research project [BREAD](#) has aimed to contribute to increased responsible innovation in the Norwegian food industry, specifically related to food waste, and has carried out a number of studies and activities. The project has revealed a great potential to reduce food waste even more if the companies along and across the value chain cooperate with each other. At the same time, it is acknowledged that there are barriers to such cooperation. The signatory companies in this document have therefore joined forces with BREAD partners [NORSUS](#) and [Matvett](#) to develop *a roadmap* that will provide advice and motivation to companies in the Norwegian food industry to work together with joint measures to reduce food waste further.

Objective of the road map

The main target group for the roadmap are employees who work with innovation, product development, product flow, and sustainability in companies' head offices. These people have an externally oriented function and can provide guidance for the rest of the organization at various levels, including operating units that belong to the organization. The purpose is to create written principles that can serve as a roadmap for the entire industry, so it will be possible to refer to shared values and norms that have been discussed in a broader community, rather than that individual companies must promote proactive and innovative measures themselves. The roadmap can also be essential in training employees, when overall and superior values and perspectives are put forth. Because individual actors within the food sector are very diverse, it will be important that the organizations that use the roadmap create an internal dialogue about what the roadmap means at different levels and departments within the company.

The principles and sub-points in the roadmap are intended to provide *the direction* for cooperation on food waste reduction towards 2030. Endorsing the roadmap does not mean that the companies have fixed solutions for the issues discussed but rather express their support for the entire process along the presented values.

Collaboration across the value chain

To achieve the goal of halving food waste by 2030, it is crucial that the food industry works together to address systemic challenges.

1. We must challenge ourselves to improve together

- All actors must contribute to putting food waste on the agenda in the value chain, based on their different standpoints. This means contributing to norm building and skills development internally and externally (with partners), related to the understanding of what food waste is and its consequences for climate, environment, and economy, as well as causes and possible solutions to the food waste problem

- The industry must also contribute to making the consumers competent at reducing consumer food waste as the food industry produces, packages, labels, transports, and sells the food consumers eat and throw away at home. The food industry has both direct and indirect influence on the quantities and types of food consumers buy, as well as their attitudes and knowledge about food

- We should share good practices with others in the industry by initiating awards or panel discussions at industry meetings, articles in industry magazines, etc., where good practices for internal culture building on food waste are shared.

2. We must cooperate more in the value chain

- All links in the value chain, including consumers/guests, must be involved in developing sound solutions to reduce food waste

- We must build trust and have closer dialogue (for example, through customer-supplier talks) to jointly achieve the goals of reducing food waste and avoid individual actors having an increased risk of food waste (within the framework of competition law)

- We need to build coalitions that communicate the value of food and responsible food production/distribution, which can also change perceptions among consumers

3. We must facilitate openness and sharing in the value chain

- We must clarify common goals for the industry's total amount of food waste and facilitate collective activities

- Actors should share food waste-relevant information for better planning of production and sales volumes

- We should have a low threshold for communicating and coordinating across the value chain, for example, when the producers and wholesalers know that they have larger volumes of "before date" food that must be released or when they have some warehouse/production food surplus that the catering/service sector firms can use. This could also apply to hotels and restaurants having surplus food.

4. We must think holistically

- Each organization and consumer must take responsibility for reducing food waste and, at the same time, help others in the value chain to reduce their waste

- Solutions that are beneficial for individual actors but increase the overall amount of wasted food must be avoided

- All actors in the value chain must contribute to avoiding overproduction and over-supply of food

- Utilization and distribution of product shelf life between the players must be optimized

- Contracts must be flexible and adapt to the selection and volume, etc., based on changes in demand or production

- In product development and sales planning, the industry must encourage less wastage by consumers, for example, with correct portions, packaging sizes, placement of good

alternatives when fresh products run out, storage solutions for increased shelf life at home, planning of purchases, etc.

Communication internally in corporate groups (enterprises)

Enterprises have a special responsibility to build a good culture against food waste. The actors should communicate, raise awareness, and guide food waste reduction internally in their organization and share good examples to benefit others in the food industry. They should also have operational plans to communicate food waste results externally

1. We must create ownership and incentives for reducing food waste throughout the organization, for example:

- Set goals and follow up on the organization's food waste results regularly, at least once a month, evaluate the development and implement measures where needed
- Provide sufficient skills development and build a culture to consider food waste at all stages
- Discuss the roadmap's principles with managers and employees at different levels and departments about what the roadmap means for them
- Follow up measures and reports on economic and environmental effects
- Put food waste high on the agenda of the management, and preferably the board, and involve all levels in the organization in planning how food waste measures and strategies can be implemented in practice
- Always consider food waste in product, packaging, and marketing innovations

Involvement and empowerment of consumers in the fight against food waste

The food industry must help consumers by giving them tools to minimize food waste in a hectic everyday life, whether it is through increased knowledge, attitude change, or practical solutions.

1. We must get consumers on board

- We can find new ways to analyse consumers' actual shopping behaviour in stores, e.g., by testing new products first in canteens
- The industry must contribute to better knowledge and attitudes about food and food waste among different consumer categories (based on age, marital status, ethnic/religious/cultural/linguistic background, economy, etc.)
- The industry must contribute to enhancing knowledge and safety among consumers by clearly labelling food products and developing packaging solutions that ensure the longest possible shelf life
- We must work together and build a culture of acceptance towards, among other things:
 - that there may not always be plenty of fresh food in shops, kiosks, buffets, and private homes
 - alternatives to the original products (e.g., crispbread, half-baked or frozen products if fresh bread is sold out)
 - aesthetic flaws in fruits and vegetables
 - to eat whole bread, vegetable leftovers and other leftovers
 - that the same products are not always available. Instead, you can create excitement around rolling and seasonal products

- increased use of "goody bags" (which is a much better word than "doggy bags") and acceptance of sharing dishes at restaurants

2. We must increase dialogue with consumers

- More interactive forms of communication should be explored, such as QR codes, in-store direct feedback installations, apps, or other digital solutions
- We should empower serving and store staff to collect feedback from customers/consumers on behalf of the stores and producers and communicate this widely so that consumers take advantage of this communication channel
- Increase interaction with the consumer in purchase situations, e.g., by communication/tips in departments with more waste, such as bread and fruit and vegetable sections, as well as good marketing of new products that will reduce waste (e.g., products that use the whole animal), or by the cashier receiving training and tips on storage and use of leftovers, which can be widely communicated to consumers
- Consumer-driven communication and innovation formats should be widely implemented, such as Living Labs, consumer councils, etc.

Involvement of authorities and other actors

The food industry has a special responsibility to reduce food waste but depends on support from other actors, including the government, the public sector, NGOs, researchers, and others.

1. We must involve the authorities in dialogue

- The industry should invite regulatory authorities to dialogue in which authorities build up or support industry-led initiatives and reduce regulatory barriers to important food waste initiatives

2. We must pass on our knowledge

- From its various angles, the industry should contribute to food waste initiatives towards buyers, the education sector and other players who can contribute to competence building and good attitudes among its own employees and society.
- We should work with public and private buyers so that food waste reduction becomes an evaluation point in all tenders
- We must support the education sector with more proactive work to educate future consumers and to get involved in children's food education from kindergarten to university
- We must involve the administration, environmental and consumer organizations and others in contributing to disseminating knowledge to consumers

3. We should, to a greater extent, become involved in new research collaborations. This can provide new knowledge and create new perspectives on:

- The food waste problem and provide updated statistics on the scope and consequences of food waste, as well as effective measures
- Consumers' preferences and their values
- Use of digital solutions such as smart refrigerators, sharing platforms, and more
- New packaging solutions

Some numbers on food waste:

- A total of 454 350 tonnes of food waste occurred in Norway in 2020, corresponding to approx. 85 kg per inhabitant annually. In the final number, the households accounted for 48%, the food industry for 42%, agriculture for 10%, and the public sector for 1%.
- Food waste in the food industry corresponded to approx. 180 000 tonnes in 2020, or 33 kg of food waste per inhabitant and year. This is equivalent to:
 - o An annual climate footprint of approx. 0.5 million tonnes of CO2 eq.
 - o An annual financial loss of over 7 billion NOK.
- Food waste in the food industry has been reduced by 14% measured in kg per inhabitant, or 21 000 tonnes from 2015 to 2020.