



Ministry of Economic Affairs

# Facts and figures on consumer food waste in 2013

How much food is wasted by  
consumers?



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## Definition

Food waste: any food that is intended for human consumption removed from the food supply chain. In quantifying the waste in kilogrammes, account is taken with the extent of high-value utilisation according to Moerman's ladder (Soethoudt and Timmermans, 2013).

- Meat and meat products
- Pasta and rice
- Cake and biscuits
- Cheese

Source: CREM (van Westerhoven, 2013)

## How much food is wasted by consumers?



The following figures are based on market research bureau GfK's information on household purchases, consumer survey data on food waste via alternative routes and the waste sorting analysis of household waste (residual waste and green or bio refuse). These studies provided information about food thrown away by households:

- Households buy 368 kilograms of solid food per person annually. Solid food includes milk products and oil, but excludes drinks and other liquid foods.
- Out of these 368 kilograms, 19 kilograms are unavoidable food loss, which means 349 kilograms is edible food.
- Of this edible quantity, each person wastes 47 kilograms (32 kilograms via household waste and approximately 15 kilograms via alternative routes), amounting to 13.6% of edible food (47 kg/349 kg).
- This comes down to over 105 kg a year per household.
- For the Netherlands, this amounts to 0.8 billion kg of food wasted by consumers every year.

Source: Van Westerhoven, 2013.

## Top 10 most wasted products excluding drinks (in kg)

- Milk and dairy products
- Bread
- Vegetables (other than potatoes)
- Fruit
- Sauces, oils and fats
- Potatoes

## 2010 comparison

Compared to 2010, both the avoidable (37 kilograms in 2010 versus 35 kilograms in 2013) and unavoidable food losses (29 kilograms in 2010 versus 30 kilograms in 2013) in waste and green or bio refuse in 2013 remain at the same level: there are no significant differences, the reliability margins are bigger than the differences (van Westerhoven, 2013). Furthermore, after waste added via alternative routes there is no significant difference: 48 kg pppy in 2010 versus 47 kg pppy in 2013.

## How much money does food waste cost?

- Consumers in the Netherlands throw away an estimated € 2.5 billion a year in edible food.
- This is some €340 per household.
- And over €150 per person.

Source: CREM (Van Westerhoven, 2013) and food expenditure by households (Statistics Netherlands, Statline, n.d.)

## What is the environmental impact of food waste?

Food wasted by consumers leads to relatively larger energy losses than losses occurring earlier in the chain. To begin with, the indirect of the product per kilogramme is larger at this stage as energy was already put into processing, transport and preparation. When the consumer buys food in the shop, 85 to 90 per cent of the energy was used in the production chain prior to this. In addition, the options for recycling waste by consumers is limited because of the considerable diversity in waste mass, as opposed to losses earlier in the chain where the wasted food can still be used for high-quality applications.

You do not therefore simply throw away food, but also the energy that was put into the cultivation, packaging, transport, refrigeration and preparation of food. This means you also throw away energy. For every kilo of food you throw away, you are actually throwing away 1.3 litres of petrol (Milieu Centraal, 2012). In the top three of products that (considering the levels of food waste) have the highest climate impact, meat occupies the first place, followed by dairy and vegetables. Dairy does not have a very high impact in terms of kilograms,

but we waste a substantial part of it. We also waste a lot of vegetables, and a large part of the vegetable supply is flown in or grown in heated green houses, which has a huge impact on the climate. The impact of this top three accounts for over 50 per cent of the total impact of waste on the climate. This means that climate benefits can especially be gained in combating waste of these product groups.

### Waste throughout the whole production chain

FAO studies show that worldwide each year 1.3 billion tonnes of food end up as waste, which is more than a third of the total food production. (Gustavsson et al., 2011).

In 2013, the Ministry of Economic Affairs commissioned Wageningen University and Research Centre (WUR) to study food waste in the Netherlands throughout the whole production chain, resulting in the Monitor Voedselverspilling (Food Waste Monitor). The conclusion was that the amount of food waste in the Netherlands in 2009 was between 83 and 151 kilograms per capita and in total amounted to 1.4-2.5 million tonnes. This figure differs from the abovementioned figure of 47 kilograms per person per year as WUR provides figures referring to waste over the whole production chain (thus also what is wasted in the agricultural sector, during processing, in restaurants and in supermarkets), while those 47 kilograms refer to household waste only. Another of the findings from the Monitor is that in relative terms, the consumer is the largest waster of food throughout the entire chain (Soethoudt and Timmermans, 2013).

European research indicates that waste in the consumption phase (comprising both consumption in the home and the out of home channel) accounts for almost a third of the total waste in the entire chain (Gustavsson et al., 2011).

### Central government policy

Both the Ministry of Infrastructure and the Environment and the Ministry of Economic Affairs have included the reduction of food waste in their policy. In the 'Policy Document on Sustainable Food' produced by the Ministry of Economic Affairs and presented to the House of Representatives on 11 July 2013, Minister for Agriculture Dijkzema confirmed she would make every effort to cut food waste by 20%. (Ministry of Economic Affairs, 2013).

The Ministry of Infrastructure and the Environment also strives for this target, as indicated in the Waste Prevention Programme (Ministry of Infrastructure and the Environment, 2013a) and in the policy document

'From Waste to Raw Material', presented to the House by the Minister for the Environment Mansveld on 20 June 2013. Reducing food waste is considered to be one of the most significant ways of reducing the impact on the environment (Ministry of Infrastructure and the Environment, 2013b).

## More information:

[www.milieucentraal.nl](http://www.milieucentraal.nl)  
[www.voedingscentrum.nl](http://www.voedingscentrum.nl)

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