



Food among Waste





REPUBLIC OF SLOVENIA
STATISTICAL OFFICE

Food among Waste

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The publication is available on the website www.stat.si/StatWeb/en/publications
Information provided by the Information Centre
phone: +386 1 241 64 04
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 @StatSlovenia

CIP - Kataložni zapis o publikaciji
Narodna in univerzitetna knjižnica, Ljubljana

641:628.4.032(0.034.2)

ŽITNIK, Mojca, 1970-
Food among waste [Elektronski vir] / [authors Mojca Žitnik, Tanja Vidic ; translated by Boris Panič]. - El. knjiga. - Ljubljana : Statistical Office of the Republic of Slovenia, 2016

Način dostopa (URL): <http://www.stat.si/StatWeb/en/publications>. - Prevod dela: Hrana med odpadki

ISBN 978-961-239-362-5 (pdf)
1. Gl. stv. nasl. 2. Vidic, Tanja, 1985-
287843840

FOREWORD

According to the latest data, one in eight people in the world is hungry and one in three suffers lack of food, despite the fact that – for now – enough food is produced.

One of the problems we are facing is unequal distribution of food in the world. Another one is our attitude towards food and the amount of food waste. According to the European Environment Agency, every year about a third of food is wasted.

Wasting food is not only a moral and social issue but also has adverse effects on the consumption of natural resources such as soil, water and energy, and indirectly also on environmental pollution due to the use of pesticides and fertilisers and due to greenhouse gas emissions, either during food production (e.g. animal production) or during recovery or disposal of food waste (composting and landfilling). With food also work (time, knowledge) is wasted as is the energy needed for preparing food.

How do we treat food **in Slovenia**? How much food do we waste? Who wastes food? What do we waste? Where does such food end up?

Until recently these questions could not have been answered since there is no common methodology for monitoring food waste at the EU level. Within an international project, this year the Statistical Office of the Republic of Slovenia set up the methodology for monitoring the amount of food waste and thus set up the basis for statistical monitoring of food waste in Slovenia. The statistical data published here are the first data of this kind that have been collected and will therefore be even more interesting for many users.

Genovefa Ružić
Director-General

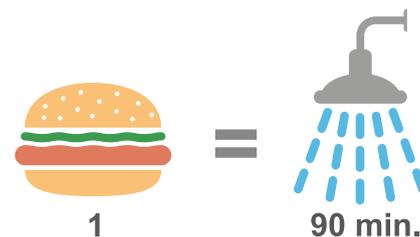


Globally, up to 40% of what is raised or grown is not eaten.

And yet, one in eight people in the world is **hungry** and **one in three** suffers lack of food.

Let us solve the problems!
Much would be solved if we changed our attitude towards food and if we wasted less of it.

Everyone should start with him- or herself!



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Are you aware that by throwing away one hamburger you have thrown away so much water that you could shower for 90 minutes?

Terminology

is explained on page 18.

From Cambridge Dictionary:

waste *noun* [C or U]: unwanted matter or material of any type, especially what is left after useful substances or parts have been removed

food *noun* [C or U]: something that people and animals eat, or plants absorb, to keep them alive

waste *verb* [T]: to use too much of something or use something badly when there is a limited amount of it

morals *pl. noun*: standards for good or bad character and behaviour

ethics *noun* [U]: the study of what is morally right and wrong, or a set of beliefs about what is morally right and wrong

plenty *noun* [U]: the situation when there is more than enough of something

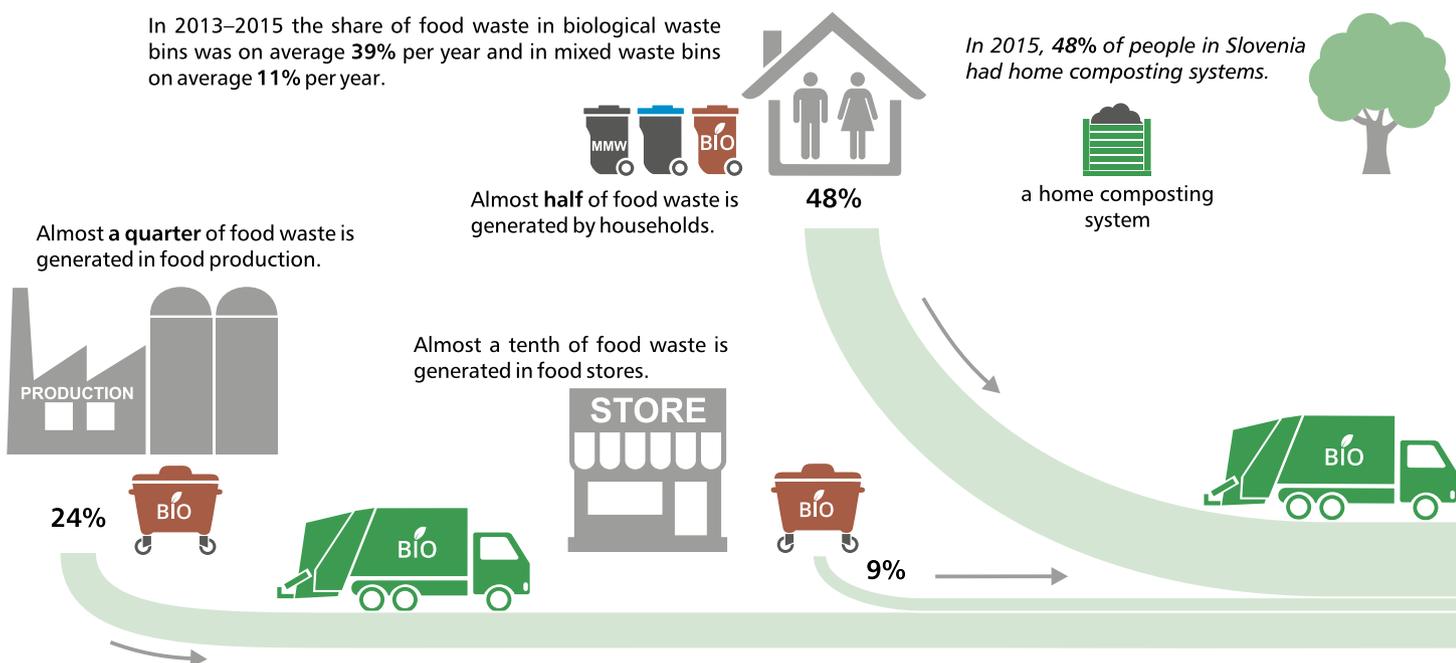
hunger *noun*: the feeling you have when you need to eat

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THE STORY OF FOOD THAT BECAME WASTE IN SLOVENIA

In 2013–2015 the share of food waste in biological waste bins was on average **39%** per year and in mixed waste bins on average **11%** per year.



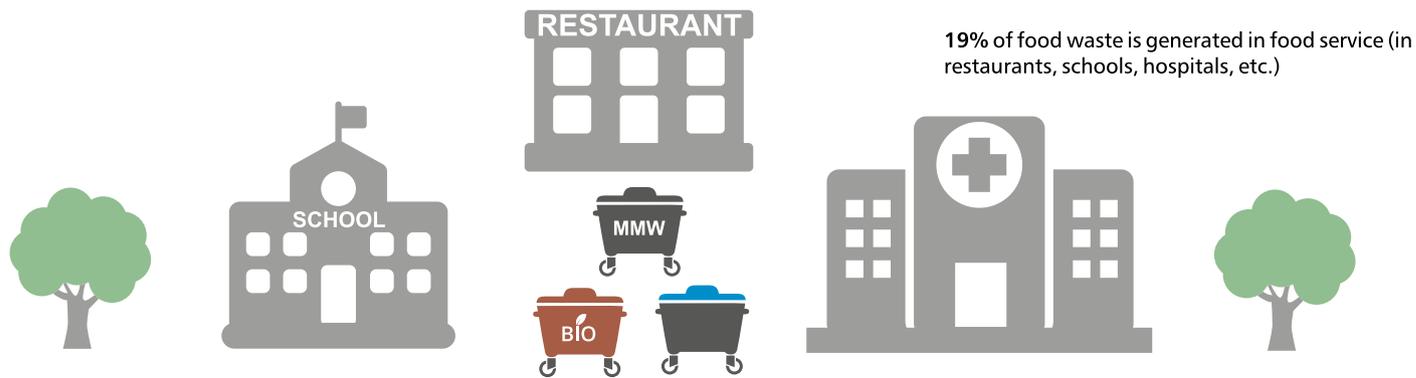
The amount of food waste has been increasing for the past three years. A person in Slovenia wasted on average **73 kg** of food waste in 2015, i.e. **14%** more than in 2013.

A household in Slovenia spent on average **14%** of total disposable income on food and non-alcoholic beverages in 2015. For this money a household could buy around **380 kg** of food per household member. **16%** of this food (worth **EUR 163**) ended up as waste.

Food waste is about **3%** of total waste and about **22%** of biological waste generated in Slovenia.

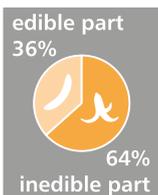
More than **36,000 tons** of food waste was aerobically processed in composting systems in 2015.

Most of the food waste is processed anaerobically in biogas plants. In 2015, **60,000 tons** of food was processed in this way.



19% of food waste is generated in food service (in restaurants, schools, hospitals, etc.)

19%



It is estimated that in the past three years 36% of food waste was edible and 64% of food waste was inedible (peelings, bones, etc.).



Emissions from landfill sites account for around 3.4% of total greenhouse gas emissions.



landfilling

15%



The total amount of landfilled food waste is declining. In 2015, 21,000 tons of food waste was landfilled, i.e. 8% less than in 2013.

other treatment
(e.g. oil refining)



18%

Food waste in biological waste, Slovenia, 2013–2015



Source: SURS

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Within the system of public municipal waste collection, biological waste – which in addition to kitchen waste includes garden and park waste – is collected separately. In 2013–2015 the share of food waste in biological waste bins was on average 39% per year.

Food waste in mixed municipal waste, Slovenia, 2013–2015



Source: SURS

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Despite separate collection of biological waste, some food waste still ends up in mixed municipal waste bins. The share has been declining but according to estimates it was still on average 11% per year in 2013–2015.

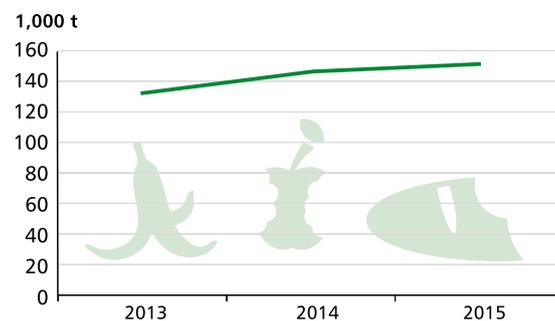
HOW MUCH FOOD IS WASTED?

The amount of food waste is slightly increasing

In the past three years on average 143,000 tons of food waste was generated in Slovenia each year.

In 2013, a person in Slovenia wasted on average 64 kilograms of food and in 2015 73 kilograms or 14% more.

Food waste, Slovenia



© SURS

Sources: SURS, ARSO, MOP

Food waste as a share of total waste and the current trend, Slovenia, 2015



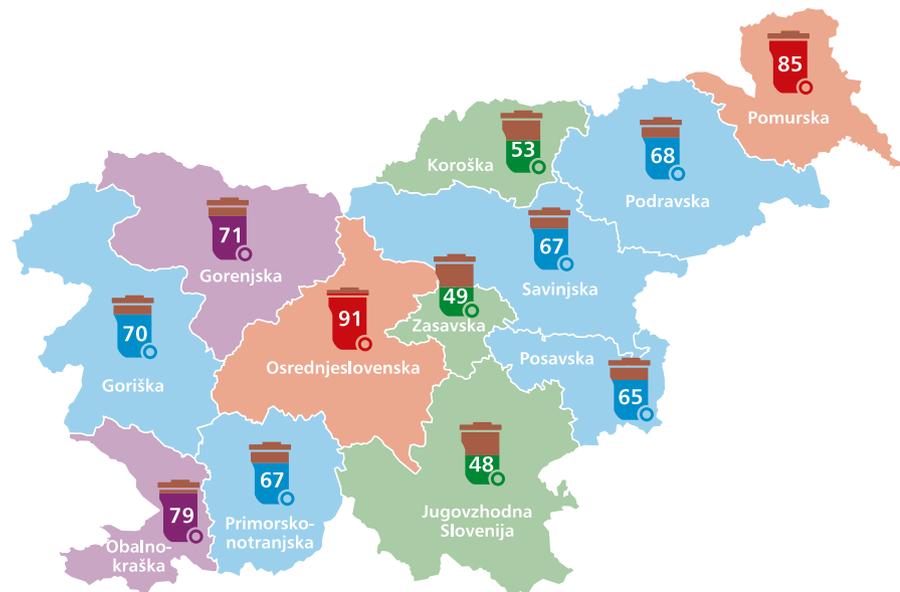
Sources: SURS, ARSO, MOP

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More than 5 million tons of waste was generated in Slovenia in 2015, i.e. 12% more than in 2013. Of the 5 million tons of waste, almost 700,000 tons (13%) was biological waste; compared to 2013 the share went down by 2.5 percentage points.

In addition to garden and park waste, wood, textiles and other, biological waste includes food waste. In 2015, food waste represented more than 22% of biological waste or almost 3% of total waste in Slovenia.

Food waste per person by statistical regions, Slovenia, 2015

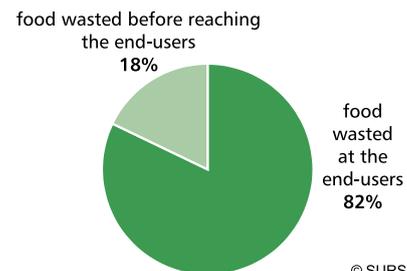


In 2015, less food than in 2013 was wasted only in the Primorsko-notranjska (by 20%) and Zasavska (by 10%) statistical regions and significantly more in the Goriška (by 26%), Obalno-kraška (by 24%) and Savinjska (by 21%) statistical regions.

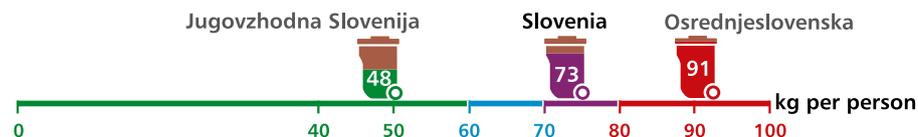
The amount of food wasted before reaching the consumers' plate is increasing.

In 2013, almost 14% of all food was wasted before it reached the consumers' plate. In 2015, the share was almost 18%.

The share of food wasted before reaching the end-users and share of food waste generated at this end-users, Slovenia, 2015



Source: SURS



Sources: SURS, ARSO, MOP

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In 2015, in cohesion region Zahodna Slovenija 29% more food waste per person was generated than in cohesion region Vzhodna Slovenija.

More food waste was generated in the Osrednjeslovenska (on average 91 kg per person) and Pomurska (on average 85 kg per person) statistical regions.

The least food waste was generated in Jugovzhodna Slovenija (on average 48 kg per person).

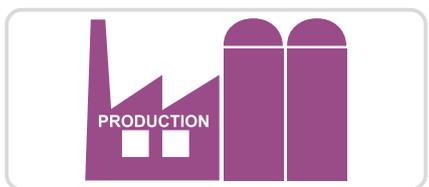


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Almost half of food waste is generated in **households**. The amount of food waste in households increased between 2013 and 2015 from 68,000 tons to 73,000 tons, but in total food waste the share of food waste from households is declining. In 2013, the share of food waste generated in households was almost 52%; in 2015 it was just over 48%.

Of course, the share represents only food waste that enters the waste management system. Many households namely do not use public waste management services for food waste but compost food waste at home and use compost in their gardens.

Generally, food waste used at the place of origin is not counted as waste, so these quantities are not covered.



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On average, almost a quarter of food waste is generated in **food production**. In 2015, 14% more food was wasted in food production than in 2013.

WHERE IS FOOD WASTE GENERATED?

Food waste by activities, Slovenia, 2015

GENERATION OF FOOD WASTE				SHARE
ACTIVITIES	FOOD PRODUCTION 	meat and fish		24%
		fruit and vegetables		
		dairy products		
		bakery wares		
		beverages		
	FOOD TRADE 		distribution	9%
	ACCOMMODATION AND FOOD SERVICE ACTIVITIES 			19%
	HOUSEHOLDS 		consumption	48%

Sources: SURS, ARSO, MOP

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Food waste is generated in certain activities broken down into four main groups: food production (where most of the food waste is generated in the process of food production), food trade (where food waste is generated in food distribution), accommodation and food service activities (restaurants, schools, hospitals, other, where food waste is generated in food preparation, distribution and consumption) and households (where food waste is generated in food preparation and consumption).

Amount of food waste by source, Slovenia

	2013	2014	2015	Trend	Shares in total amount
	t				
TOTAL	131,866	145,568	150,991	↑	↑
Food production	27,692	34,208	36,691	↑	↑
Food trade	9,626	10,772	13,438	↑	↑
Accommodation and food service activities	26,505	29,114	27,782	↑ ↓	↓
restaurants	11,077	10,772	9,210	↓	↓
schools, hospitals, etc.	9,890	10,044	10,267	↑	↑
other	5,538	8,297	8,305	↑	↑
Households	68,043	71,474	73,080	↑	↓

Sources: SURS, ARSO, MOP

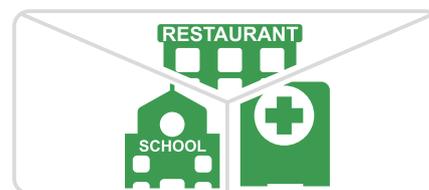
Despite separate waste collection, some food waste can still be found within mixed municipal waste. The map below shows that in 2015 most food was thrown in mixed municipal waste bins in the Obalno-kraška statistical region (21 kg per person), followed by the Goriška and Koroška statistical regions (19 kg per person in each). The least food could be found in mixed municipal waste bins in the Gorenjska statistical region (13 kg per person), followed by the Podravska and Savinjska statistical regions (14 kg per person in each).

Food waste within mixed municipal waste by statistical regions, Slovenia, 2015



Source: SURS

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Around 19% of total food waste is generated in **restaurants and other institutions serving food** such as schools, kindergartens, hospitals, old people's homes, etc. Whereas the amount of food waste in restaurants started to decrease in the past three years, the amount of food waste in other institutions serving food was slightly increasing. Despite that, the share in total food waste decreased between 2013 and 2015 by 2 percentage points.



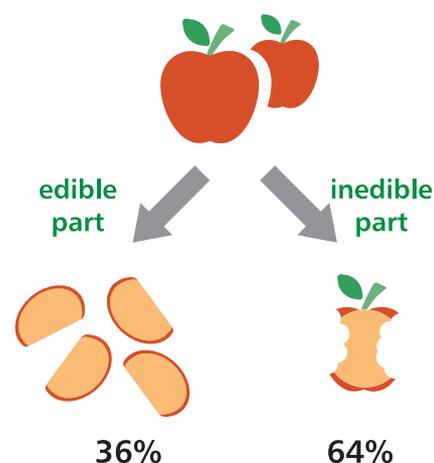
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In **food stores** food waste is generated mostly due to discarded food with expired "use by" date or because the quality of food changed during sale. In 2015, almost 9% of food waste was generated in food stores. With proper measures (e.g. with timely redistribution of food just before the expiration date) the share could be significantly reduced.

Could really all food be consumed?

Not all of it.

According to estimates, in the 2013–2015 period 36% of food waste in Slovenia was still edible; with proper awareness of and attitude towards food the share could be significantly reduced. 64% of food waste is inedible, i.e. bones, pits, peelings, eggshells, etc. This part of food waste cannot be significantly reduced.



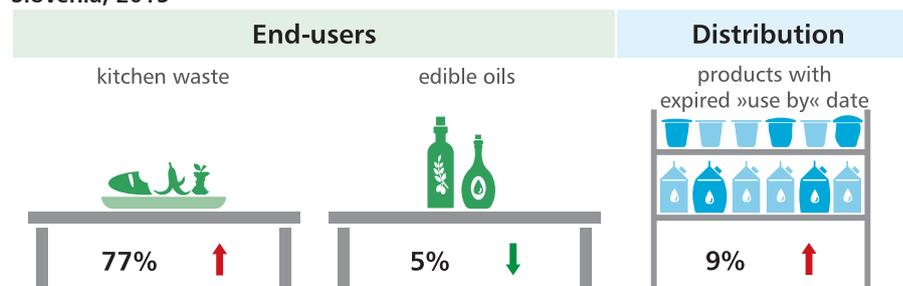
Source: SURS (calculation for the 2013–2015 period) © SURS

In 2015, 151,000 tons of food waste was generated in Slovenia, of which 55,000 tons was edible.

A person in Slovenia threw away on average about 27 kilograms of edible food in 2015, i.e. food that should not end up in waste bins but should be used; 20 kg of food per person was wasted by the end-users and 7 kilograms during the distribution.

WHAT DO WE THROW AWAY?

Shares of food waste by type of waste and trend in food waste amounts, Slovenia, 2015



Sources: SURS, ARSO, MOP

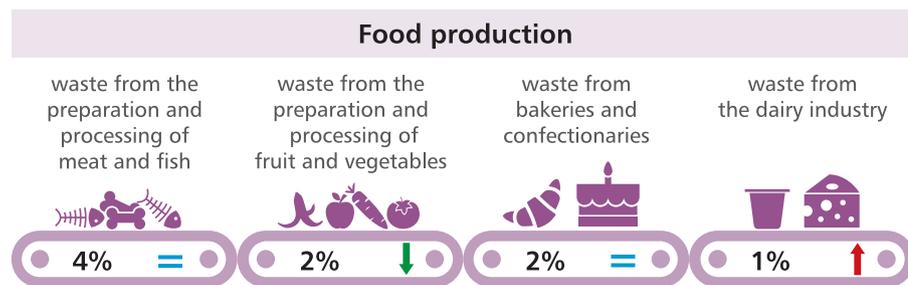
More than two thirds of food waste generated in Slovenia in 2015 was kitchen waste, i.e. waste generated in preparing meals, food left on plates at the end-user and food waste generated by end-users in food production. 9% of food was discarded because of the expired “used by” date or because during the sale its quality changed. Waste edible oils represented 5%, waste from the preparation and processing of meat and fish 4%, waste from the preparation and processing of fruit and vegetables 2%, waste from bakeries and confectioneries 2% and waste from the dairy industry 1%.

Between 2013 and 2015 the shares of kitchen waste and waste edible oils in total food waste each declined by 2 percentage points, while the share of food discarded because of expired “used by” date or changed quality increased by 4 percentage points.

Food waste by type of waste, Slovenia

	2013	2014	2015
	t		
Food waste – total	131,866	145,568	150,991
kitchen waste (200108, part of 200201 and 200301)	104,823	112,955	117,125
food with expired “used by” date (160306)	6,979	9,769	13,839
waste edible oils (200125)	8,826	9,026	6,875
waste from the preparation and processing of meat and fish (0202)	4,989	6,759	6,038
waste from bakeries and confectioneries (0206)	1,821	2,129	2,563
waste from the preparation and processing of fruit and vegetables (0203)	2,573	2,775	2,321
waste from the dairy industry (0205)	696	1,069	1,606
waste from the production of beverages (0207)	1,161	1,087	625

Sources: SURS, ARSO, MOP, and List of Waste (p. 18)



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The infographic shows that in 2015 the share of waste from food preparation and processing was around 10% of total food waste. Except for waste from the dairy industry, this type of food waste is declining or stays the same. The phenomenon is, of course, logical, since production is aimed to generate as little waste as possible and thus lower production costs. In addition to waste from food preparation and processing, during the production so-called kitchen waste can also be generated. The table on the previous page shows that between 2013 and 2015 the amount of most of the types of food waste increased. The amount of waste edible oils decreased from 8,800 tons to 6,900 tons, of waste from the preparation and processing of fruit and vegetables from 2,600 tons to 2,300 tons and of waste from the production of beverages from more than 1,200 tons to 600 tons.

Despite the fact that the share of kitchen waste in total food waste is declining (in 2015 it was 78%, in 2013 it was 80%), in the past three years the absolute amount of this waste has been growing: in 2015, more than 117,000 tons of this waste was generated, which was 12% more than in 2013 when the amount was around 105,000 tons.

Kitchen waste, Slovenia

	2013	2015
Amount of kitchen waste (t)	104,823	117,125
Kitchen waste as a share of food waste (%)	80	78

Sources: SURS, ARSO, MOP

Most food waste is kitchen waste.

Kitchen waste and waste edible oils represent 82% of total food waste and are mostly generated by end-users (124,000 tons in 2015).

According to estimates, at end-users two thirds of food waste is inedible from the beginning and a third is edible if handled properly.

Edible and inedible parts of food waste at end-users, Slovenia, 2015



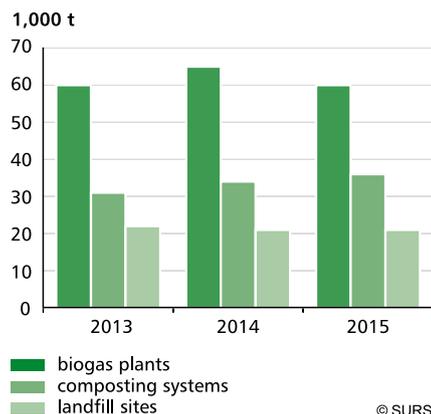
Source: SURS

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In food preparation and processing (food production) more than 13,000 tons of food waste, which is almost entirely inedible already from the very beginning of food preparation, was generated in 2015.

Food with expired "used by" date and food with changed quality during sale also amounted to 13,000 tons. With timely and appropriate measures, almost all food waste from food stores would be edible.

Recovery in biogas plants and composting systems, and landfilling on landfill sites, Slovenia



Sources: SURS, ARSO, MOP

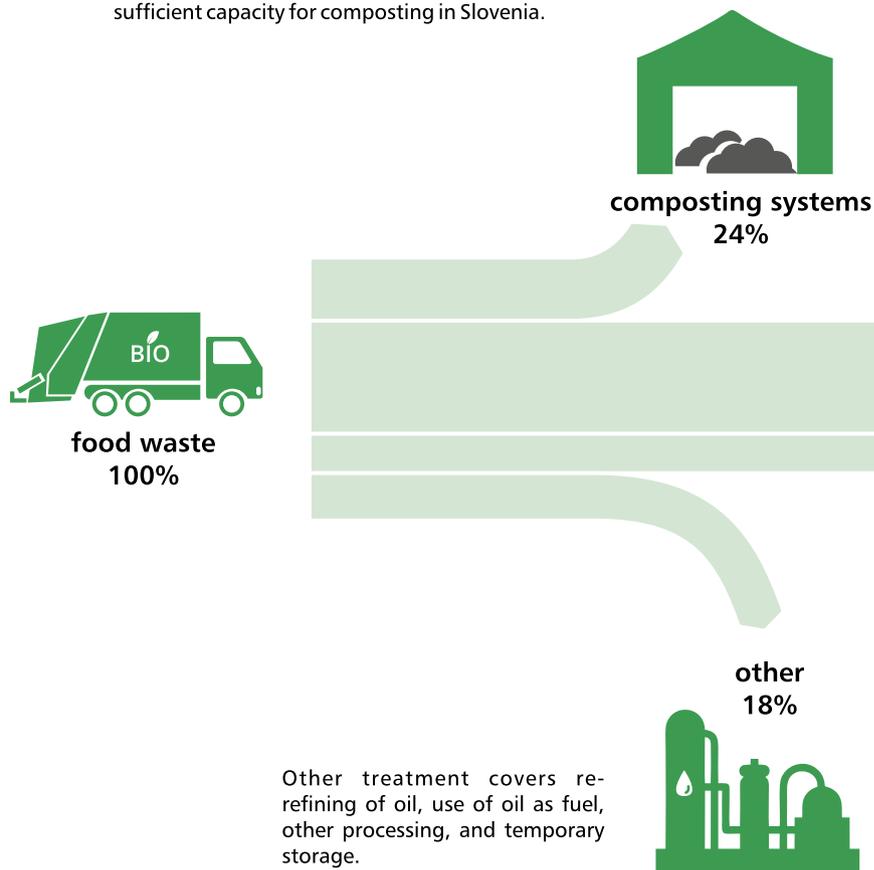
Most food waste is recovered anaerobically in biogas plants. In 2013 around 60,000 tons of food waste was recovered in this way; in 2014 the amount increased to 65,000 tons and in 2015 it decreased again to 60,000 tons. The reasons are the rather unstable situation as regards the input amount of food waste and transfer of facilities from owner to owner.

Aerobic recovery in composting systems is much more stable, so the amount of composted food waste is slowly but steadily increasing. In 2015, composting systems recovered 24% of food waste (just over 36,000 tons), i.e. as much as 19% more than in 2013. The amount of food waste that is landfilled is declining but too slowly. More than 22,000 tons of food waste was landfilled in 2013 and 21,000 tons or almost 8% less in 2015.

WHERE DOES FOOD WASTE END UP?

Food waste management, Slovenia, 2013–2015

Twenty-two composting systems with environmental permits for aerobic recovery of biological waste were operating in Slovenia in 2015. Their total permitted annual recovery capacity was 168,000 tons, meaning there is sufficient capacity for composting in Slovenia.

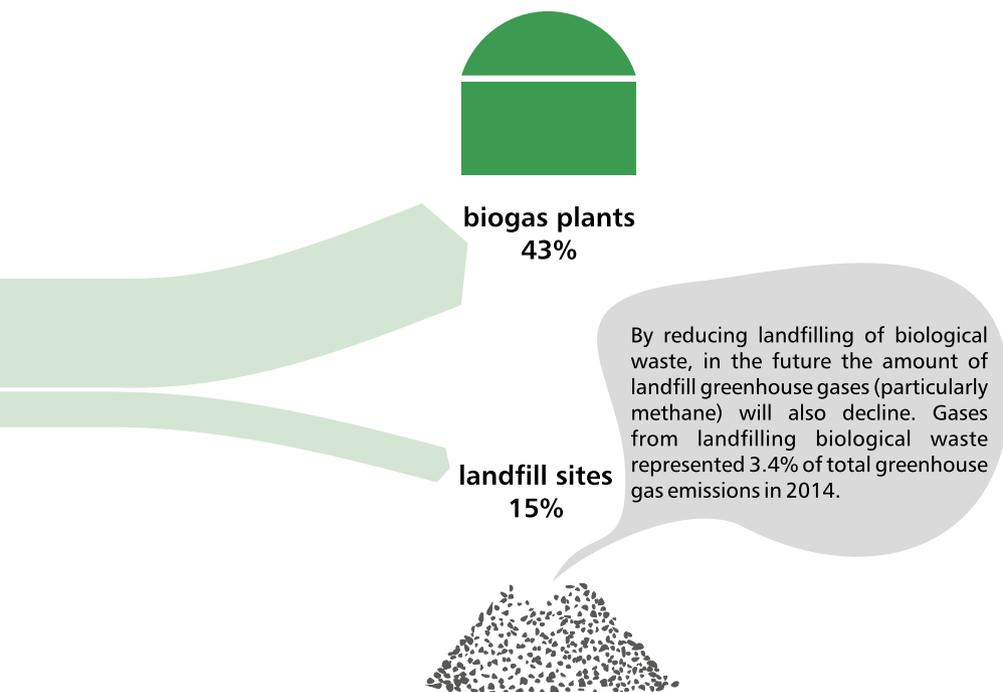


Other treatment covers refining of oil, use of oil as fuel, other processing, and temporary storage.

Sources: SURS, ARSO, MOP

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Eleven biogas plants with environmental permits for anaerobic recovery of biological waste were operating in Slovenia in 2015. Their total permitted annual recovery capacity was 464,650 tons.



Fourteen landfill sites on which municipal waste was landfilled, thus also food waste, were operating in Slovenia in 2015. In 2013, there were 23 such landfill sites.

Mostly kitchen waste generated in households is landfilled.

Kitchen waste generated in households is not collected separately but in mixed fractions of municipal waste and in biological waste. In 2015, kitchen waste thus represented more than 99% of total landfilled food waste.

Biological waste from food production is mostly recovered in biogas plants.

In 2015, more than 62% of total waste generated in food production was recovered in biogas plants. 16% of this waste was used as fuel or for energy production and 10% was composted. The rest of the waste was landfilled, stored or pre-treated.

Food waste with expired "used by" date and food whose quality changed during sale mostly ends up in biogas plants.

Food waste from restaurants and other food service activities is recovered in biogas plants and composting systems.

Food waste from restaurants and other food service activities is collected separately and therefore a good input source for recovery in biogas plants and composting systems. In 2015, 63% of this food was recovered in biogas plants and 31% in composting systems.

Almost 6% of people in Slovenia (one in 17) were materially deprived in 2015.

At that time 11% of households made ends meet with great difficulty and 20% with difficulty.

8% of households could not afford a meal with meat or vegetarian equivalent at least every other day or could not afford quality food.

A household in Slovenia spent in 2015 on average EUR 2,671 (14% of total disposable income) or EUR 1,031 per household member on food and non-alcoholic beverages. For this money a household could buy around 380 kg of food per household member. If 60 kg of food waste per end-user was generated in 2015, this means that 16% of food per household member (worth EUR 163) was wasted.

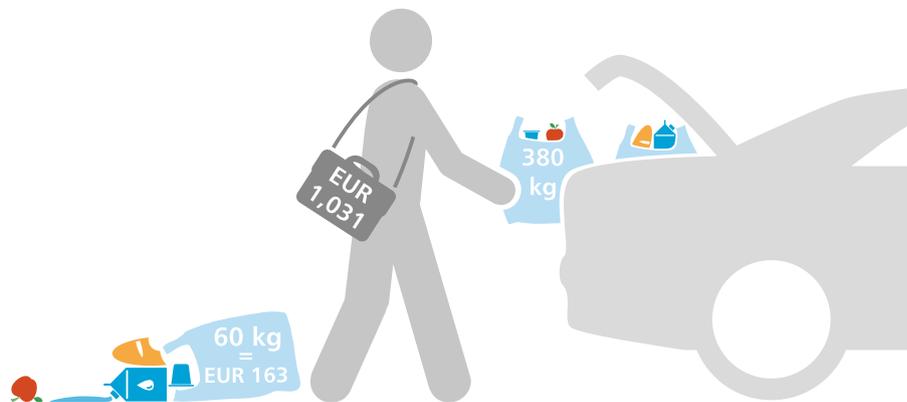
A household in Slovenia spent almost EUR 147 on waste management in 2015 or 24% more than in 2012.

Some households compost food waste themselves in home composting systems. As many as 48% of people in Slovenia dealt with food waste in this way in 2015. Most home composting took place in Jugovzhodna Slovenija statistical region where more than 81% of people were engaged in this activity. In the Posavska statistical region the share was 75% and in the Gorenjska statistical region 60%. Home composting was the least frequent in the Obalno-kraška (18%) and Goriška (19%) statistical regions.

IT WOULD BE GOOD IF ...

... WE KNEW FACTS, THOUGHT ABOUT THEM AND ACTED

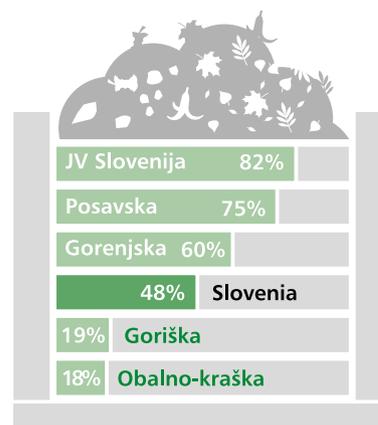
How much food was bought by a household member in Slovenia in 2015 and how much of it was wasted by an end-user?



Sources: SURS (Household Budget Survey, surveys on waste), ARSO, MOP

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Share of people with home composting systems¹⁾²⁾ by statistical regions, Slovenia, 2015



- 1) The amount of food waste composted at home is not included in the presented amount of food waste and also not in the data on individual methods of food waste processing.
- 2) People composting biological waste themselves, i.e. in home composting systems, can give part of this waste to the system of public waste collection, but the amount of this waste is small.

Sources: SURS, MOP

© SURS

What can one do to not throw food away

Stale bread can be used for preparing bread crumbs. Or for bread dumplings. Or for "trijet", a dessert eaten by our grandmothers and grandfathers.

"TRIJET"

Ingredients:

- 4 slices of stale bread
- 2 dl of red or white wine mixed with 0.5 dl of water
- a pinch of cinnamon
- 2 table spoons of sugar

Preparation:

1. Quickly bake thinly cut slices of old bread in the oven.
2. Warm up wine mixed with water, cinnamon and sugar, which should be completely melted.
3. Stack the baked slices of bread on a plate and pour the lukewarm wine mixture over them.
4. Enjoy your meal.

Overly ripe fruit such as apples, pears and plums can be used for preparing compote, puree or strudel. We often buy too many bananas that quickly become overly ripe on the kitchen counter. Such bananas can be used for making delicious ice cream or for baking delicious banana bread.

BANANA BREAD

Ingredients:

- 200 g of spelt or other flour
- 200 g of brown sugar
- 3 ripe bananas
- 50 g of butter
- 1 egg
- a tea spoon of baking soda
- a pinch of salt

Preparation:

1. Slowly melt the butter.
2. Line a baking tray (17 cm x 29 cm) with baking paper and heat the oven to 170 °C.
3. Whisk the egg slightly.
4. Crush peeled bananas in a bowl with a fork. Add melted butter, an egg and a pinch of salt. Mix well.
5. Add sugar, mix and add sieved flour with baking soda. Stir gently.
6. Pour the dough on the tray making it flat. Put the tray into the oven for 40 minutes. The cake should become dark but not burnt.
7. Cool banana bread before serving.

Do you know the difference between the "best before" date and the "use by" date?

"Best before" denotes the date by which the product keeps the expected quality.

"Use by" denotes the date by which food is safe to eat.

In other words, the "best before" date on an apple pie means that the producer guarantees for example a crispy crust of the product by that date. This does not mean that after that date the pie may not be safe to eat.

The "use by" date is stated on the packaging of rapidly perishable goods such as fresh fish, fresh minced meat, fresh salad, etc., that may not be safe to eat after the stated date.



EXPLANATIONS AND DEFINITIONS

There is no official definition of **food waste**. The definition was prepared by the working group dealing with waste statistics at SURS.

According to Regulation (EC) No. 178/2002 **food** is “any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans.”

In line with the Environmental Protection Act (OJ RS, No. 39/2006) **waste** is any substance or object which the holder discards, intends to discard or is required to discard.

Based on this, **food waste includes** raw or processed food and remains of this food lost before, during or after food preparation or during food consumption, including food discarded during production, distribution, sale and implementation of food- related services and in households.

Food waste does not cover:

- remains of food intended for processing into animal fodder in line with EU regulations,
- food for humanitarian purposes,
- paper tissues, napkins and towels collected as kitchen waste together with biological waste,
- packaging discarded together with food waste.

Food waste covers the edible and inedible part of individual foodstuffs.

Edible part of an individual foodstuff is that part of the foodstuff that could at some point, under normal circumstances, be used for human consumption, but was due to various reasons (e.g. expired “use by” date, too large meals, inappropriate storage, etc.) was discarded during production, distribution or sale or during food preparation or consumption.

Inedible part of an individual foodstuff is that part of the foodstuff that is not suitable for human consumption or that, under normal circumstances, is not deemed suitable for human consumption but is generated as waste during production, distribution or sale or during food preparation or consumption. Such waste is for example peelings, bones, pits, eggshells, etc.

List of Waste is a list of hazardous and non-hazardous waste defined by Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council. Waste is classified into groups according to its origin. In addition to the precisely defined name, each waste has a six-digit code of the waste.

Food waste includes the following waste codes:

- 02 02 Wastes from the preparation and processing of meat, fish and other foods of animal origin
 - 02 02 02 Animal-tissue waste
 - 02 02 03 Materials unsuitable for consumption or processing
- 02 03 Wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
 - 02 03 04 Materials unsuitable for consumption or processing
- 02 05 Wastes from the dairy products industry
 - 02 05 01 Materials unsuitable for consumption or processing
- 02 06 Wastes from the baking and confectionery industry
 - 02 06 01 Materials unsuitable for consumption or processing
- 02 07 Wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
 - 02 07 04 Materials unsuitable for consumption or processing
- 16 03 Off-specification batches and unused products
 - 16 03 06 Organic wastes other than those mentioned in 16 03 05 (95% of total amount)

- 19 08 Wastes from waste water treatment plants not otherwise specified
 - 19 08 09 Grease and oil mixture from oil/water separation containing only edible oil and fats
- 20 01 Separately collected fractions (except 15 01)
 - 20 01 08 Biodegradable kitchen and canteen waste
 - 20 01 25 Edible oil and fat
- 20 02 Garden and park wastes (including cemetery waste)
 - 20 02 01 Biodegradable waste (39% of total amount)
- 20 03 Other municipal wastes
 - 20 03 01 Mixed municipal waste (11% of total amount)
 - 20 03 02 Waste from markets

In Chapter 3 **What do we throw away?**

- Kitchen waste covers waste under codes 20 01 08 and a part of waste under codes 20 02 01 and 20 03 01.
- Edible oils cover waste under codes 20 01 25 and 19 08 09.
- Products with expired “use by” date cover food waste under code 16 03 06.

In food sale “changed quality of foodstuffs” refers to all food that could not be sold in food stores due to the wrong treatment by personnel and customers.

Municipal waste is waste from households and similar waste from trade, manufacturing, service and other activities and from the public sector.

Biological waste is biodegradable waste from gardens and parks, food and kitchen waste from households, restaurants, accommodation and food service activities, retail trade and comparable waste from food processing facilities.

Kitchen waste is biodegradable kitchen waste in line with the regulation on the treatment of kitchen waste and green garden waste.

Separate waste collection is collection where the waste flows are separated by type and nature of waste to facilitate specific type of waste treatment.

Composting is aerobic decomposition of biodegradable waste or a mixture with biodegradable natural non-hazardous materials from agriculture or forestry with the help of micro- and macro-organisms with oxygen.

Home composting is composting of biodegradable waste generated in households as kitchen waste or as green garden waste from the garden belonging to the household, and the use of such compost on the garden belonging to the household.

Composting system is a set of structures with facilities for composting under controlled conditions.

Anaerobic decomposition is anaerobic decomposition of biodegradable waste or a mixture with biodegradable natural non-hazardous materials from agriculture or forestry with the help of micro- and macro-organisms without oxygen. Anaerobic decomposition takes place in biogas plants.

Biogas plant is a set of structures with facilities for anaerobic decomposition of biodegradable waste under controlled conditions.

ABBREVIATIONS AND UNITS OF MEASUREMENT

ARSO	Republic of Slovenia, Ministry of the Environment and Spatial Planning, Slovenian Environment Agency
EU	European Union
MOP	Republic of Slovenia, Ministry of the Environment and Spatial Planning
SURS	Republic of Slovenia, Statistical Office

%	percentage
cm	centimetre
dl	decilitre
EUR	euro
g	gram
kg	kilogram
min.	minute
t	ton

SOURCES

Demography and social statistics. Population. SI-STAT Data Portal. Ljubljana: Statistical Office of the Republic of Slovenia. Retrieved on 3. 10. 2016 from the website: <http://pxweb.stat.si/pxweb/Database/Demographics/Demographics.asp>

Demography and social statistics. Level of living. SI-STAT Data Portal. Ljubljana: Statistical Office of the Republic of Slovenia. Retrieved on 4. 10. 2016 from the website: <http://pxweb.stat.si/pxweb/Database/Demographics/Demographics.asp>

Environment and natural resources. Waste. SI-STAT Data Portal. Ljubljana: Statistical Office of the Republic of Slovenia. Retrieved on 5. 10. 2016 from the website: <http://pxweb.stat.si/pxweb/Database/Environment/Environment.asp>

Internal documents of the Working Group of Waste at SURS, March 2016. Preparation of the definition of food waste. Ljubljana: Statistical Office of the Republic of Slovenia.

List of waste processors. ARSO, Ljubljana. Retrieved on 6. 10. 2016 from the website: <http://www.arso.gov.si/varstvo%20okolja/odpadki/podatki/>

Processing of biodegradable waste into compost. ARSO, Ljubljana. Retrieved on 6. 10. 2016 from the website: <http://www.arso.gov.si/varstvo%20okolja/odpadki/podatki/>

Cambridge Dictionary. Retrieved on 21. 11. 2016 from the website: <http://dictionary.cambridge.org/>

