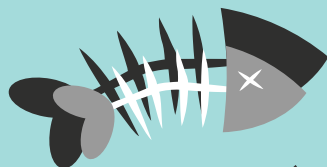


BIO- WASTE GUIDE



Co-funded by
the European Union



The guide has been created in a project *Citizen-oriented circular economy solutions in South Karelia* (03/2023-06/2025). The project aims to enhance the separate collection of bio waste and develop regional circular and sharing economy solutions together with the residents and organizations of South Karelia. The project is implemented by LAB University of Applied Sciences and the City of Lappeenranta with the help of South Karelia Waste Management Ltd (EKJH).



For more information about the project, visit our website: lab.fi/en/project/citizen-oriented-circular-economy-solutions-south-karelia or scan the QR code.

2024, updated 2025

Text:

Kaisu Isomäki, Katariina Pakarinen & Henri Heikkilä (LAB University of Applied Sciences)
Maria Jokela (City of Lappeenranta) & Marjo Majanen (student trainee)

Layout and illustrations:

Kaisu Isomäki



Co-funded by
the European Union

Local biogas

South Karelia Waste Management Ltd utilizes 100% of sorted biowaste! Biowaste is used to produce biogas and fertilizers, reducing dependence on foreign fertilizers and gas.

Don't sort biowaste in a plastic bag

Plastic bags and packaging cause blockages at the biogas plant. It's also impossible to completely remove plastic, which means it ends up on fields. A paper bag is the best choice!

Burns like water!

Dry waste (mixed waste) is used for energy production. Biowaste mixed in dry waste affects the combustion process and reduces the energy recovery from the material.

What a waste!

More than 25 % of dry waste is biowaste and up to 60 % of biowaste ends up in dry waste.

In South Karelia everyone must sort biowaste

The obligation to sort biowaste applies to all residents of the region. Depending on where you live, biowaste must be sorted into your own or your housing company's biowaste bin, a shared bin, a regional collection point, or a composter.

What can be put in biowaste?*

- Peels of vegetables and fruits
- Leftovers from meals
- Spoiled food
- Eggshells and egg cartons
- Fish bones, small bones
- Coffee grounds and filter papers
- Tea bags and tea leaves
- Tissues, such as paper towels
- Small amounts of garden waste, potting soil
- Wooden utensils and toothpicks
- Pet bedding made of wood (e.g., chips and pellets)

What must NOT be put in biowaste?*

- Liquids
- Plastic (such as plastic bags)
- Coated cardboard packaging
- Medicines or vitamin tablets
- Chewing gum
- Ash
- Stones
- Cat litter
- Vacuum cleaner dust bags or dust
- Biodegradable diapers and sanitary pads
- Parts of harmful plants
- Cigarette butts
- Human or animal hair
- Other non-biodegradable waste

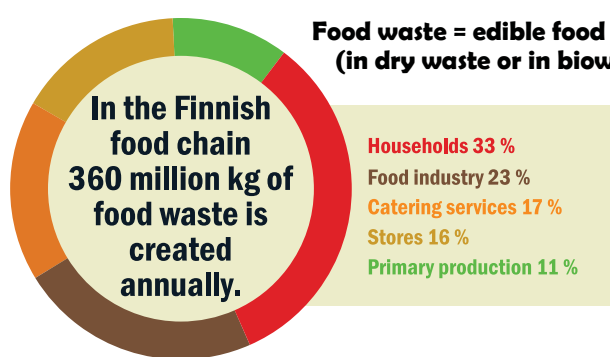
***Note: Applies to South Karelia.**
Instructions may vary by region. If necessary, please check the guidelines specific to your municipality.

Tips for sorting biowaste

- 1 Do not use a plastic bag as a bio waste bag.** Plastic does not belong in bio-waste, so sort food items and their plastic packaging separately.
- 2 Use paper biowaste bags.** You can **get a free biowaste bag, for example, from a flour bag, cereal box, or folded newspaper.** Do not use coated cardboard packaging, such as milk cartons.
- 3 Let food waste cool down and dry before putting it in the bag, so the bio waste bag lasts longer.**
- 4 Keep the biowaste bag airy,** for example, in a perforated container. In a closed container, the bag becomes damp, and the bio waste starts to smell faster.
- 5 Tear up egg cartons,** newspapers, or used paper towels as bedding at the bottom of the biowaste **bin to prevent it from getting wet.**
- 6 Do not pour liquids into the biowaste bin.** You can **absorb cooking oil and other liquid fats, for example, with paper towels,** and then put them in biowaste.
- 7 Empty the bio waste bin every few days,** especially in the summer. This way, you avoid odors and fruit flies.



Food waste in Finland



Households 33 %
Food industry 23 %
Catering services 17 %
Stores 16 %
Primary production 11 %

The most waste occurs in families with children and single women's households.

The share of households over 100 million kg annually.

23 kg /person

-100€

139 000



CO₂

Food production, transportation, preparation and restaurant services cause about a quarter of all climate emissions.



THE MOST WASTED



Vegetables & root vegetables 23 %
Fruits & berries 17 %
Coffee 15 %
Milk products 12 %
Cereal products 12 %
Meat products 8 %*
Others 8 %
Ready meals 4 %

*Meat accounts for about 40% of the climate effect of the total loss.

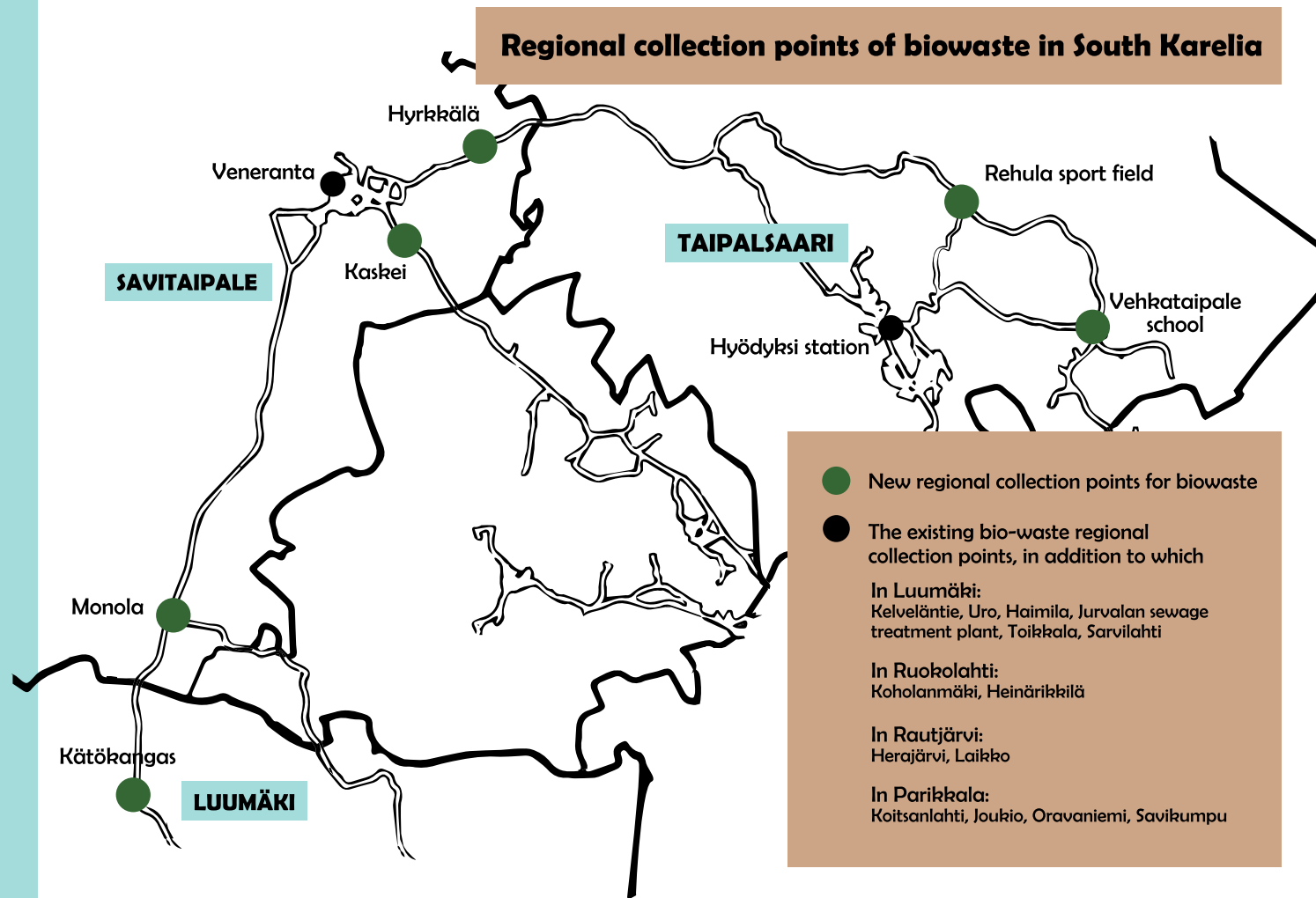
Tips for reducing food waste

- 1 Check your cabinets and freezer before going shopping, **plan your shopping list using the products in your cabinet.**
- 2 **Don't go to the store hungry** to avoid impulse purchases.
- 3 **Take only as much food on your plate as you will eat.**
- 4 **Freeze excess portions**, label them with the date, and eat them starting with the oldest.
- 5 **Smell and taste before throwing it away.** Many expired products can be used, for example, in baking.
- 6 **To make use of leftover food**, try out leftover recipes that the internet is full of.
- 7 **Use transparent airtight containers for storage.** Containers make it easier to see the contents and extend the shelf life of food.
- 8 **Store ethylene-producing vegetables and fruits (tomato, mango, avocado) separately** from ethylene-sensitive vegetables (cucumber, orange, kiwi), because ethylene accelerates ripening.

Separate collection of biowaste expanded

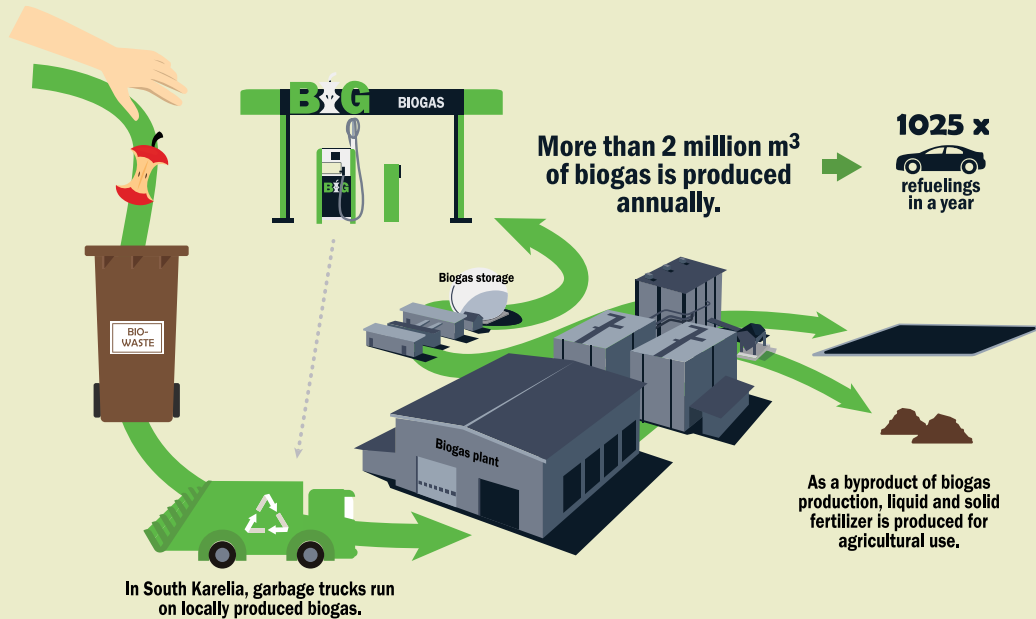
In May 2024, the separate collection of biowaste was expanded to six new regional collection points. This was part of a collaborative pilot project between the project *Citizen-oriented circular economy solutions in South Karelia* and South Karelia Waste Management Ltd (EKJH). New biowaste collection points were established in Taipalsaari, Savitaipale, and Luumäki. **These points especially improve biowaste sorting for residents and summer cottage owners living in sparsely populated rural areas.**

The functionality of the new biowaste collection points was assessed between May and October 2024. **The pilot proved successful: a total of 38,500 kg of biowaste was collected during the trial period.** It was concluded that there is a genuine need for the new points, and they will remain in use. However, the ventilated biowaste bins used at the collection points did not perform as intended. While such bins work well in households — keeping waste drier and reducing odors — ventilation was ineffective given the large volume of waste at these sites. The ventilated bins will be replaced with regular containers as they reach the end of their service life.



What happens to sorted biowaste?

In short: Local biogas is made from it!



Biogas is produced from biowaste and sewage sludge.

About 6.3 million kg of biowaste is processed annually at the facility.

Local biogas and fertilizers

Household bio waste in South Karelia is processed at the Kukkuroinmäki treatment center's biogas plant. Through the anaerobic digestion process, biogas is produced for gas-powered vehicles. Biogas produced at the Kukkuroinmäki biogas plant can be refueled in Lappeenranta, Imatra, Luumäki, and Parikkala in South Karelia.

As a byproduct of biogas production, nutrient-rich liquid and solid fertilizers are produced, which are utilized in, among other things, agriculture.

Sorting supports security of supply

With the changing world situation, the availability of natural gas and fertilizers has declined. Producing biogas and fertilizers from Finnish biowaste supports security of supply.

RECYCLING EVERY KG IS WORTH IT

1 kg of biowaste

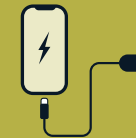
100 h

1,4 km

70 h



=

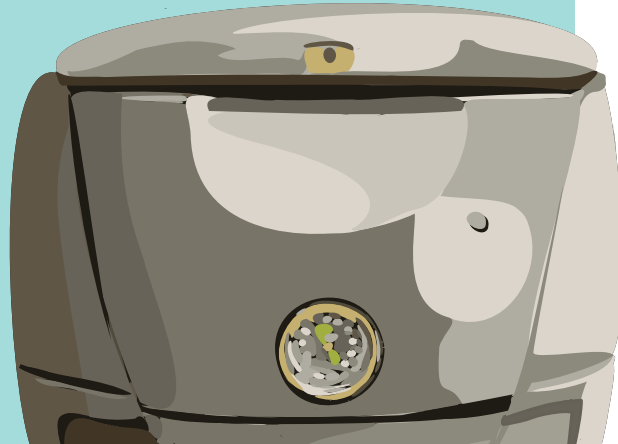


Interested in composting?

An alternative to property-specific bio waste collection bins is composting. Composting is a good option for residents of detached houses, terraced houses, and apartment buildings with yards who have a need for compost produced from composting. Composting requires a little more time and effort from residents. However, people who compost save on biowaste bin emptying costs. If there is little biowaste generated, consider whether you could jointly own a composter with neighbors, for example.

When purchasing a composter, it is advisable to familiarize yourself with the differences between composters. The choice of composter depends on factors such as the number of residents and the amount of biowaste, i.e., what size composter is needed, whether the composter is used throughout the year, and whether it composts garden waste in addition to food waste.

If you recycle your food waste by composting, **remember to notify the waste management authority!** You can make the notification at asiointi.ekjh.fi



Plant lover, consider bokashi!

Bokashi is a small “composter” suitable for indoor use, benefiting especially green thumbs, gardeners, and plant enthusiasts. **Bokashi produces super soil where nutrients are preserved.** Bokashi ferments bio waste, preserving its nutrients with lactose-fermented bran or liquid.

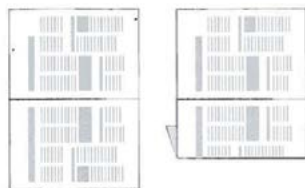
Bokashi is best for processing carbohydrate-rich food waste, such as cereal products and vegetable and fruit peels. In addition to these, small amounts of meat or dairy products can be added to bokashi at once.

Bokashi produces leachate, which can be used as a diluted plant nutrient at a ratio of 1:100. There are also various types of bokashi bins available, and one can build oneself. It's often good to have two containers, so while waiting for the fermentation of the full container to finish, you can start filling the other one. Properly maintained, a bokashi bin doesn't smell outwardly. Fermented bio waste cannot be used directly as a fertilizer for plants or gardens but must be composted separately in a “soil factory” or put into a bio waste collection bin.

Folding biowaste bag out of newspaper



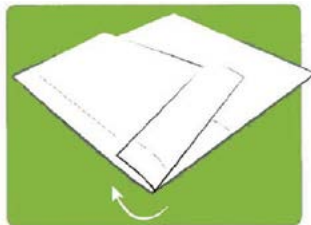
You need three newspaper spreads for the bag.



For each spread, make a 10 cm fold at the back parallel to the short edge.



Arrange the folded spreads partially inside each other so that each spread goes half on top of the previous one.



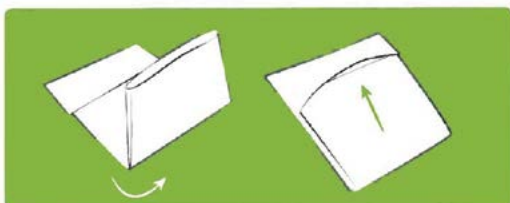
Fold 2/3 from one edge to the middle and 1/3 from the other so that the folds overlap.



Slip the top fold inside the bottom fold.



Turn the bag over.



Fold about half the height of the bag towards the top edge of the bag and tuck under the folded top edge.



Open the mouth of the bag and flatten the bottom corners so that the bag stays upright.

More info and sources

- [Bokashi Garden Finland: Bokashin ABC](#)
- [Etelä-Karjalan Jätehuolto EKJH: Biojäte](#)
- [Etelä-Karjalan Jätehuolto EKJH: Biokaasulaitos](#)
- [Helsingin seudun ympäristöpalvelut HSY: Biojäte](#)
- [Helsingin seudun ympäristöpalvelut HSY: Ruokahävikin vähentäminen on ilmastoteko](#)
- [Hyötykasviyhdistys: Bokashi](#)
- [Kasvikset.fi: Etyleeni](#)
- [Kiinteistölehti:Tutkimus: Biojätteen määrä sekajätteessä vähentynyt 15.5.2025](#)
- [Kuluttajaliitto: Ruokahävikki](#)
- [Luonnonvarakeskus LUKE: Elintarvikejätteen ja ruokahävikin seurantarjestelmän rakentaminen ja ruokahävikkitietokartta 2021](#)
- [Luonnonvarakeskus LUKE: Kotitalouksien ruokahävikki vastaa 139000 henkilöauton kasvihuonekaasupäästöjä 1.11.2022](#)
- [Martat: Biojäte](#)
- [Martat: Hävikistä herkkua](#)
- [Motiva Oy – Saa syödä: Ruokahävikki Suomessa](#)
- [Suomen Kiertovoima ry KIVO – Kaisa Halme: Uusi kampanja päivittää suomalaisten tietämyksen biojätteen lajittelusta](#)
- [Suomen Kiertovoima ry KIVO – Biojäte.info: Tilastot](#)
- [Yle. Lena Gillberg. Bokashi on tapa kompostoida kotona keittiössä – saat multaa jätteen sijaan 23.10.2020](#)
- [Ympäristöministeriö: Suomalaiset laiskoja lajittelemaan biojätettä – Erilliskeräyksen ympäristöhyötyjä ei tunnisteta 21.10.2020](#)