

# Food Waste Measuring Approaches

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## Abstract

In the EU around 931 million tones of Food Waste (FW) were generated in 2019, of which 26% are from foodservice and 13% from retail. This is equal to 174 kg per person, 143 billion euros, or 170 000 000 tones of CO<sub>2</sub> (EUFIC,2021). There are also social and environmental impacts related with many environmental issues such as 75 billion m<sup>3</sup> of water are used each year to produce fruits and vegetables that are lost, 751 million ha of land go to waste due to losses in meat and animal products. FW also burdens waste management systems, exacerbates food insecurity, making it a major contributor to the three planetary crises of climate change, nature and biodiversity loss, and pollution and waste. The UN SDG 12.3 aims to halve FW at the retail and consumption scale. The main step to achieving this goal is based on measuring FW on a local, national, regional, and global level. In addition, to reduce FW, it is necessary to understand the exact problem to be solved (Eriksson et al., 2019). To reduce FW, the existing strategy comprises: politics, business, stakeholders, behavior as well as research and digitalization initiatives. FW has received increased attention in the past decade especially after the 2007-2008 food crisis, which has rekindled debate about the global availability of food. There are several methodologies and tools that are developed focusses on how to measure FW. This paper presents a review on the existing quantified approaches in the European Union on FW can be calculated, as the results can served as a reference point to support decision-makers in adopting strategies for more sustainable food use as well as on how FW can be reduced.

**Keywords:** food waste, food losses, measuring, methods

## References

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