The above graphic shows that the amount of food that is wasted is immense. Put into relation, these numbers tell us that the entire world's hungry people could be “lifted out of malnourishment on less than a quarter of the food that is wasted in the US, UK and Europe”¹² Worldwide, a total of 842 million people were estimated to be suffering from chronic hunger. This means that around 1 in 8 people in the world regularly not getting enough food to conduct an active life,³ while in Europe we have nearly twice as much food as is required by the nutritional needs of our population⁴.

Food Waste

There is no common definition of food waste. The European project FUSIONS defines food waste as follows:

“Food waste is any food, and inedible parts of food, removed from the food supply chain to be recovered or disposed (including - composted, crops ploughed in/not harvested, anaerobic digestion, bioenergy production, co-generation, incineration, disposal to sewer, landfill or discarded to sea)”.⁵

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¹ Source: http://www.eea.europa.eu/media/infographics/wasting-food-1/view#tab-related-news-and-articles
² Source: www.feeding5k.org/food-waste-facts
⁴ Source: www.feeding5k.org/food-waste-facts
⁵ New definitional framework of food waste proposed by FUSIONS. Source: http://www.eu-fusions.org/press
Food waste can be classified into three categories:

- Food losses, which means food products lost during the production phase.
- Unavoidable food waste, referring to food products lost during the consumption phase (banana peelings, fruit cores...).
- Avoidable food waste, meaning products that could have been eaten but that were lost during the consumption phase.

Food losses take place at production, post harvest and processing stages in the food supply chain. Food losses occurring at the end of the food chain (retail and final consumption) are rather called “food waste”, and relates to retailers’ and consumers' behaviour.

With regards to composting, it is usually understood that home or community composting is waste prevention as it contributes to reduce waste before it has to be managed by municipalities, while centralized composting cannot be considered as waste prevention.

**Food Waste**

Around one third of the food produced globally is lost or wasted. Food waste represents a substantial loss of other resources such as land, water, energy and labour.

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Food Facts

- It has been estimated that **89 million tonnes of food are wasted** each year in the EU. This number is expected to rise to approximately 126 million tonnes by 2020 if no action is taken.
- Reducing the household food waste amount would result in **budget savings worth almost 600 € per year** and household.
- The European Commission cites that the **EU food and drink value chain is responsible** for 17% of direct greenhouse gas emissions and 28% of material resource use. Food production and consumption in the EU generate an estimated 20% to 30% of all EU environmental impacts.
- Some products have a deeper impact in environment than others. For instance, beef and lamb food are the ones with the highest carbon footprint of all meats.
- In 2012, the European Food Banks distributed 388 000 tons of food, equivalent to 776 million meals, to 5.4 million people in partnership with 32 000 charitable organisations and social services.

What can be done to stop food waste?

- As figure 2 shows clearly, **food waste** in the European Union occurs at all steps of the food chain. Food waste prevention measures therefore have to be taken at all steps: manufacturing/production, retail, and consumption in households and via food services.

- **Consumers** are responsible for the biggest share of food waste in Europe: 42% of food waste is generated in private households! This means that consumers have a great power in reducing the total amount of food waste by taking measures on all levels of our daily lives: Shopping, storing and cooking habits need to be revised.

- In addition to this, consumers can and should also use their power as consumers to influence production and retail patterns regarding food waste. Surveys show that clients are willing to purchase more heterogeneous (“misshapen”) products as long as the taste is not concerned. **Consumers** could therefore **pressure the farmers and wholesalers** via the retailers to not sort out “misshapen” fruits and vegetables and pressure **retailers** to loosen their aesthetic standards.

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How to succeed?

The overall purpose of this graphic is to provide an array of options to prevent food from being wasted and ending up in landfills. The pyramid also shows the preferable options when avoiding food waste; where avoiding the generation of food waste should always be the priority. Nevertheless, feeding people in need and feeding livestock are good alternatives too, but trying to Reduce is still the most desirable one. Unavoidable food waste should be sent to composting, or to produce fertilizer or renewable energy instead of being disposed of in landfills.

Figure 3: Food Waste Pyramid for London. Designed by Tristram Stuart in collaboration with the Feeding the 5000 steering group.

Feeding the 5000 steering group: the Mayor's Waste Strategy team, the London Food Board, Recycle for London, Friends of the Earth, WRAP, FareShare & FoodCycle. Source: [http://www.feeding5k.org/businesses-casestudies.php](http://www.feeding5k.org/businesses-casestudies.php). With regards to composting please note that it is usually understood that home or community composting is waste prevention as it contributes to reduce waste before it has to be managed by municipalities, while centralized composting cannot be considered as waste prevention.
Impacts of food waste on the environment

How does the food we buy, eat and don’t eat impact the environment?
Before reaching our plates, food needs to be produced, processed, packaged, transported and distributed. Every step uses up resources and generates more waste and pollution.

In Europe, agricultural production of food, fibre and fuel accounts for:

- **90%** of ammonia (NH₃) emissions, impacting air quality
- **50–80%** of nitrogen load in freshwater bodies, affecting water quality and aquatic ecosystems
- **10%** of greenhouse gas emissions (incl. 80% of methane emissions) contributing to climate change

Figure 4: Environmental Impact, EEA website