



**Problem:** millions of kilos of food go to waste each year in the Netherlands. Food waste is everywhere: after harvesting, during storage and transportation, in supermarkets and restaurants and by consumers at home. This is not only a waste of good food, but also of all the raw materials, water and energy needed for its production and transportation. This has consequences for the environment and climate, and approximately 6% of all greenhouse gas emissions can be prevented by reducing food waste.



**TO2 Solution:** WUR researches how to prevent or reduce food waste and to reuse residual flows. For example, researchers at Wageningen are working on measuring and monitoring raw material efficiency and waste. They do so on a national level, at each link in the chain, by sector and for individual companies.



**Impact:** WUR's research and its catalyst function could reduce food waste by half in 2030. This makes an important contribution to a future-proof food system (more food security, fewer adverse effects on climate). For the Netherlands, this means that every year a million tons of food commodities with the highest possible quality can additionally be used within the food chain.

The inhabitants of the Netherlands waste about a quarter of all the food. We incinerate about 60% of the wasted food. It is such a waste of billions of euros and of the raw materials, water and energy used, says Sanne Stroosnijder of Food & Biobased Research at Wageningen University & Research. The Stichting Samen tegen Voedselverspilling (a foundation to jointly combat food waste), which is an 'ecosystem' of companies, organisations, consumers and public authorities, wants to be the global leader. This means that every year a million tons of food commodities can additionally be used within the food chain in a high-grade way.

#### A hundred parties

As an independent knowledge partner, WUR has been inspiring more than

# Challenge: less food in the wheelie bin



WUR

Nobody wants to throw away food, yet it happens on a large scale. Together with consumers, businesses and public authorities, scientists at Wageningen want to reduce food waste by half by 2030. What obstacles do they encounter?

a hundred parties, from small start-ups to large corporations. WUR measures and monitors waste on a national level and by sector and maps out opportunities for improvement, for example in the hospitality industry. Stroosnijder: "The Food Waste Challenge showed how restaurants can reduce waste by one-fifth using simple interventions." A well-known hotel chain even achieved a 70% reduction. That's how WUR likes it. "Ultimately, it's the companies, public authorities and consumers who make all the difference."

#### According to Sanne Stroosnijder, the three main obstacles are:

1. Where food waste is concerned, consumers are a factor that should not be underestimated, although a sustainable behaviour change is challenging. "Often people are not even aware of how much they throw away." The Waste-free Week, which the foundation organised together with the Food Centre in September, must bring about change in this with extra attention for the shelf life of products (and the difference between the 'sell by' and 'use by' expiry date).
2. At businesses, food waste is often hidden in their operations: procurement, storage, waste disposal. A benchmark makes it clear that one supermarket wastes a lot of bread,

while another has to focus more on fruit and vegetables. As such, businesses with similar problems could learn from each other. "We quantify all waste not only in kilograms and euros, but also in terms of nutrient loss and carbon emissions."

3. The most chronic are systemic changes. That actually calls for cooperation in the chain, for example between the hospitality establishment and the supplier. Are businesses willing to share data and experiences and make new commitments? "Sometimes a small adjustment in the planning already has a major effect." ■

**Who:** WUR and a consortium of a hundred large and small businesses, public authorities, knowledge institutes and consumers.

**Duration:** the foundation against food waste was founded in December 2018 with 25 parties. Since then that number has quadrupled.

**Budget:** €900,000 per year for monitoring, knowledge vouchers, rules of play and management.

**Follow-up:** after 2021, continue with innovations and solutions, especially for the above-mentioned obstacles.