



Combating food waste

Context

Every year across the planet, 1.3 billion tonnes of food ends up being thrown out, though still edible, with no health risk. The cost of wasting farming produce (excluding fish and seafood) is estimated at \$750 billion per year worldwide. In environmental terms, food waste accounts for the release of 3.3Gt of greenhouse gases per year, making it the third biggest polluter in the world, after the United States and China. Food produced but not consumed occupies 1.4 billion hectares of land, or nearly 30% of the world's agricultural land.

This waste has a number of causes: overproduction, calibration criteria, interruption in the cold chain, poor stock management, supply-demand mismatching, etc. In France, 32% of food waste is generated by agricultural production, 21% by processing, 14% by distribution, 14% by catering (collective and commercial) and 19% by home consumption. At each step in the farming and food chain, there are measures to be taken on cutting down waste.

In 2018, Carrefour evaluated food waste throughout the value chain, from the farm to the consumer's table, for five of its best-selling fresh products: avocados, cod, carrots, bread and chicken. This evaluation yielded a number of solutions throughout the value chain: crop growing & harvesting, sorting, packaging & transport, quality control, distribution and consumption. These solutions could eventually be rolled out across all the products sold by Carrefour.

For Carrefour, food waste is a major issue, closely linked to the operational efficiency of its activities. Markdown management (unsold goods generated in stores related to inventory management, product preservation, etc.) is essential to limit the loss of sales due to scrapping, while the recovery of unsold food and rejected products provides an opportunity for reducing the associated losses.

Our objectives and performance

Carrefour shares the Consumer Goods Forum (CGF) goal of reducing food waste by 50% by 2025 compared with 2016. To achieve this goal, Carrefour is implementing a global policy on cutting down food waste. This involves a number of measures:

- **Adopting a more professional approach to waste at stores:** matching stock levels to demand flows, running special offers as use-by dates approach, devising product second-life solutions, making donations to food aid charities or subsidised grocery stores and recycling waste;
- **Developing solutions with suppliers:** extending the shelf life of Carrefour's own-brand products, conducting surveys on production waste, and selling visually defective products that are as good and safe as non-defective ones, etc.;
- **Promoting waste reduction among customers:** developing innovative solutions, raising awareness and offering support to make progress in this area.

Carrefour's ambition is to ensure operational excellence in its own waste reduction and to catalyse action among stakeholders (suppliers and consumers) throughout its business ecosystem.



9.7%
reduction of food waste
in 2019 (vs. 2016)

Target:
50%
reduction of food waste
by 2025 (vs. 2016)

Indicateurs	2018	2019	Évolution (2018/2019)	objectifs
Percentage reduction in food waste (vs 2016) ⁽¹⁾	-	9.7	-	50% in 2025
Percentage of food waste recovered ⁽²⁾	-	67.7	-	
Number of meal equivalents distributed as unsold food to charitable organisations (in thousands) ⁽³⁾	116,530	105,382	-9.5%	
Weight of unsold products recovered through sale of food baskets in partnership with Too Good To Go® (in tonnes) ⁽⁴⁾	New	2,374	+ 100%	

(1) Scope: Excl. SP, BE, BR, RO (75% of 2019 consolidated sales excl. VAT).

(2) Scope: Excl. SP, BE, RO (81% of 2019 consolidated sales excl. VAT).

(3) Scope: this figure includes food donations made by the stores in all the Group's integrated countries, as well as donations made by the Group's warehouses in France.

(4) Scope: BE, SP, FR, IT, PO.



105,382

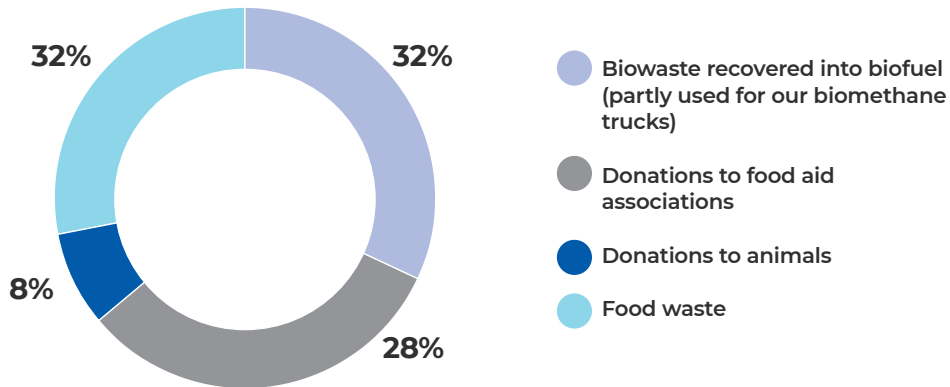
meal equivalents distributed through the donation of unsold food to charitable organisations.

11.2

million Too Good to Go® shopping baskets sold, that is to say 2,374 tonnes of unsold food recovered.

RECOVERY OF UNSOLD FOOD IN 2019

(Argentina, Brazil, France, Italy, Poland)



Our plans of action

The plans of action to achieve our goals are as follows:

- 1. ADOPTING A MORE PROFESSIONAL APPROACH IN STORE TO CUTTING DOWN WASTE
 - 1.1. Reducing markdown quantity in stores
 - 1.2. Recovering unsold food generated in stores
- 2. DEVISING SOLUTIONS WITH SUPPLIERS
- 3. CUSTOMER EDUCATION

1. ADOPTING A MORE PROFESSIONAL APPROACH IN STORE TO CUTTING DOWN WASTE

Carrefour's plan of action to combat food waste is implemented throughout the product life chain. From the choice and ordering of the product by the store to its end of life, solutions exist for food recovery.

1.1. Reducing the markdown quantity in stores

In order to reduce in-store markdowns, corresponding to products withdrawn from sale, solutions are implemented to:

- **Improve stock and order management:** store managers are issued daily information on their scrapping rate. The TOP 40 products are classified according to value or scrapping rate. Fresh produce line managers use sale and production forecast charts, adjusting them to allow for weather and other external factors. In this way, in order to meet demand, stores adapt their orders as best as possible, with the least amount of markdown possible. This reduces the amount of potentially spoiled unsold food;
- **Promote products nearing their use-by dates and sell products up to one month beyond the minimum best-before date:** in-store, Carrefour offers -30% to - 60% off on products nearing their use-by dates. A specific process using a ZEBRA enables labels to be printed in the warehouse and promotes stock flow. Carrefour also sells products with exceeded best-before dates in a dedicated gondola head. The project is being tested in 14 hypermarkets in France. Initial results show a 50% reduction in unsold items;
- **Provide solutions for selling products:** stores are responsible for finding solutions suited to their environments for selling products rather than marking them down. Examples of solutions: cutting pineapples whose leaves are dry, the same principle is applied to other fruits, misting leafy vegetables, selling croissants with almonds or breadcrumbs from dry bread, selling bananas individually, packaging garlic cloves or delicatessen products, etc. Carrefour has reaffirmed its commitment to the Too Good to Go® application, which offers food baskets of unsold goods at low prices. In 2019, Too Good to Go® was rolled out to 2,624 stores in France, Spain, Italy, Belgium and Poland.

1.2. Recovering unsold food generated in stores

When unsold products are generated, solutions exist to make the most of the food withdrawn from sale:

- **Optimizing donations to charitable organisations:** in Poland and France, Carrefour has set up donation partnerships with food banks for all of its hypermarkets.
- **Every morning, store teams sort the products they take from the shelves.** This sorting directs unsold products that are safe and eligible for donation to local food aid organisations. These donations represent the equivalent of 105 million meals throughout the Group in 2019, and require the implementation of partnerships and cold chain compliance. The Carrefour Foundation finances the provision of charitable organisations with refrigerated vehicles;
- **Recycling into bio-waste:** when products cannot be donated, they are disposed of as bio-waste, transformed into biomethane, which is used in our trucks to transport goods.

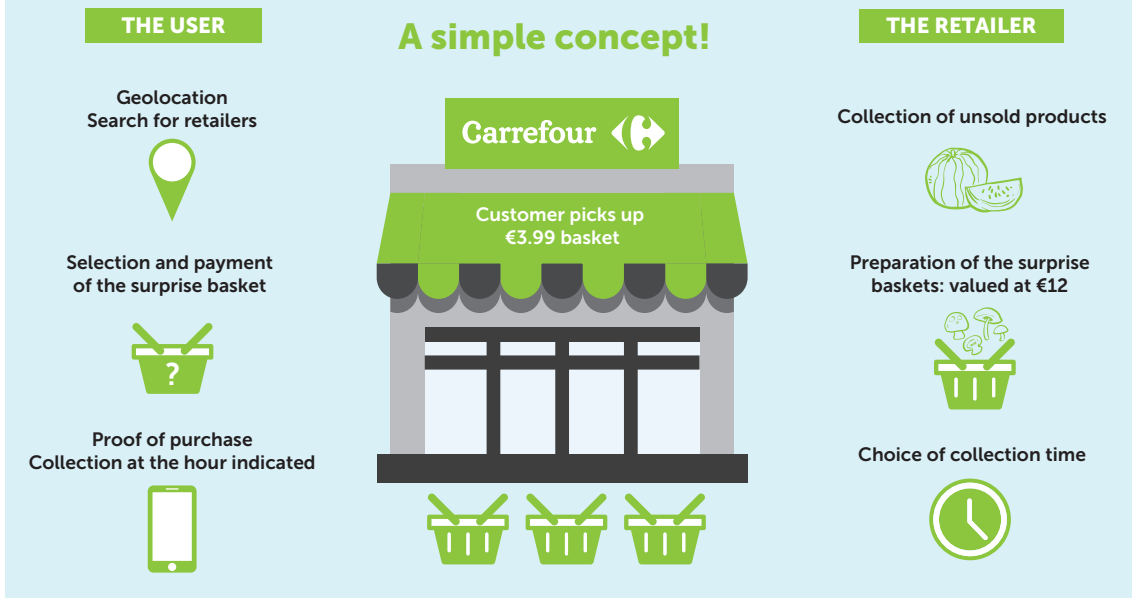
Items that cannot be donated or recovered by food aid organisations can be offered to associations or companies that use unsold items as raw material to create eco-responsible products (e.g.: jams). The eco-responsible products created are then resold in stores. For example, companies are working in partnership with hypermarkets in which jams made from unsold fruit and vegetables are sold.

CASE STUDY:

Anti-food waste partnership with Too good to go®

To combat food waste, in 2018, Carrefour entered into a partnership with Too Good To Go®, which offers a smartphone application enabling customers to identify stores that offer low-price surprise food baskets of the day's unsold products. In France, Belgium, Spain, Poland and Italy, Carrefour offers Too Good To Go® baskets comprising products with the day's use-by dates along with fruit and vegetables that may have minor surface damage but are still perfectly safe to eat. In 2019, Too Good to Go® was rolled out to 2,624 stores.

In 2019, 1,187,400 baskets were sold, which is the equivalent of more than 2,000 tonnes of unsold food products.



2. DEVISING SOLUTIONS WITH SUPPLIERS

To go further in reducing food waste, the Carrefour Group is getting its suppliers involved to collectively find innovative solutions:

- **Sale of downgraded products:** Carrefour proposes to its suppliers to sell products are non-compliant for shape or weight reasons under the exclusive brand name «Tous Antigaspi». This brand offers products 20% cheaper and guarantees the same qualities as the original product. Today, 16 products are sold at Carrefour in France. In Brazil, the idea was taken up and adapted to sell a range of fruit and vegetables called «UNICAS». They have been sold in our professional and private network for more than a year and have been commercially successful. Similarly, a range based on this principle was launched in Taiwan last year;
- **Revision of the best-before dates (BBD), and use-by dates (UBD):** In 2017, Carrefour and its suppliers began a joint programme to extend or remove use-by dates. So far, more than 400 Carrefour own-brand products have had their use-by date and best-before date extended, while the latter has been removed from over 100 products. The extension of the dates is carried out in accordance with a testing protocol including organoleptic tests to ensure that the taste is not altered. Carrefour has also decided to remove the non-mandatory best-before dates (BBD) on its products (sugar, salt, vinegar, alcohol, sweets). Examples of date extensions on Carrefour products:
 - BBD: toasted brioche bread: from 6 to 9 months;
 - BBD: frozen tuna steak: from 24 to 30 months;
 - BBD: multifruit drink: from 6 to 8 months;
 - UBD: Carrefour natural yoghurts: from 33 to 40 days;
 - UBD: chocolate mousse: from 32 to 35 days;
 - UBD: cured smoked ham: from 25 to 33 days;
 - UBD: veal blanquette: from 35 to 50 days.


3. CUSTOMER EDUCATION


Carrefour forged ahead with food-waste avoidance programmes for products with minor appearance defects or approaching their use-by date, but still as good and as safe as the rest. Drawing inspiration from the “Tous Antigaspi” operation in France, in 2018, Carrefour Brazil launched a programme for fruit and vegetables outside the usual size or appearance norms. These “únicos” (one-offs), as they are called, are offered at a marked down price in 74 hypermarkets and supermarkets in the state of São Paulo.


Special offers and in-store displays help inform customers on the cost advantage of buying products for same-day or next-day consumption. Along similar lines, products approaching the use-by date are sold at a 50% markdown. This also applies to fresh meat, bakery, fish and cold meat products nearing the use-by date, offered at special discounts. The “eat now” programme in Argentina also offers discounts on products approaching their use-by dates.

CASE STUDY:

All Group host countries ran food-waste avoidance operations for World Food Day:

 in **France** and **Belgium**, Carrefour reaffirmed its commitment to the Too Good to Go® application, which offers baskets of unsold food at low cost and pushes for better information on “minimum use-by” dates. To clarify how use-by dates are determined, Carrefour France appealed to consumers to sign and massively share the #changetadate petition. Carrefour aims to push for a review of European legislation and simplified wording along the lines of “better before” in place of “best before”.

 Carrefour **Spain** signed a partnership agreement with the Universidad Autónoma de Madrid, the Spanish Ministry of Agriculture and three suppliers, on joint food-waste avoidance operations.

 in **Romania**, a kitchen laboratory ran an awareness-raising operation addressing students at Tartasesti University on different ways to cook products with appearance defects or approaching their use-by dates, but with no loss of taste.

The Group also involves its suppliers in this educational approach, as with Barilla in Spain and Italy, where Carrefour launched a consumer awareness campaign focusing on cooking visually less appealing vegetables; or with Unilever in Argentina, for the organization of the national anti food-waste day; and also in Spain, with a research programme involving Danone, Barilla and Pascual.

Our organization



SCOPE

The anti-food wastage policy is applied within our operations in all formats and warehouses. All the Group's integrated countries must put in place actions to limit food markdown and waste as much as possible. The measures implemented vary depending on the existing infrastructure and the regulations in force in the different countries.



GOVERNANCE

Food-waste avoidance is one of the priorities identified in the strategy for the food transition for everyone. Performance is monitored at Group level. In the countries, national committees meet on a monthly basis to monitor the evolution of in-store markdowns. These committees bring together the Supply Chain, the Executive Divisions, Financial Divisions and the Organizational Divisions of the various formats.



PERFORMANCE EVALUATION

With a view to achieving its goal, Carrefour has measured the quantity of food waste produced in its stores from 2016 onwards. This calculation is based on the methods proposed by the Food Loss and Waste (FLW) protocol convened by the World Resources Institute (WRI) and UNEP. Our work is shared within the Consumers Goods Forum (CGF), particularly TESCO. The Group's objective is to reduce the amount of food waste that is effectively not recovered.



JOINT INITIATIVES AND PARTNERSHIPS

- Consumer Goods Forum
- Too Good to Go® pact, bringing together industry, retail, NGOs, trade organisations and digital operators in the fight against food waste.



FOR FURTHER INFORMATION

- Carrefour.com: studies into food waste for Carrefour's biggest-selling fresh food (avocados, cod, carrots, bread and chicken).
- Too Good to Go® pact: <https://toogoodtogo.fr/fr/campaign/pacte>