



# Hidden costs of waste



- Guide No.7 -  
in a series of 10 for you to collect and keep

## WASTE NOT WANT NOT

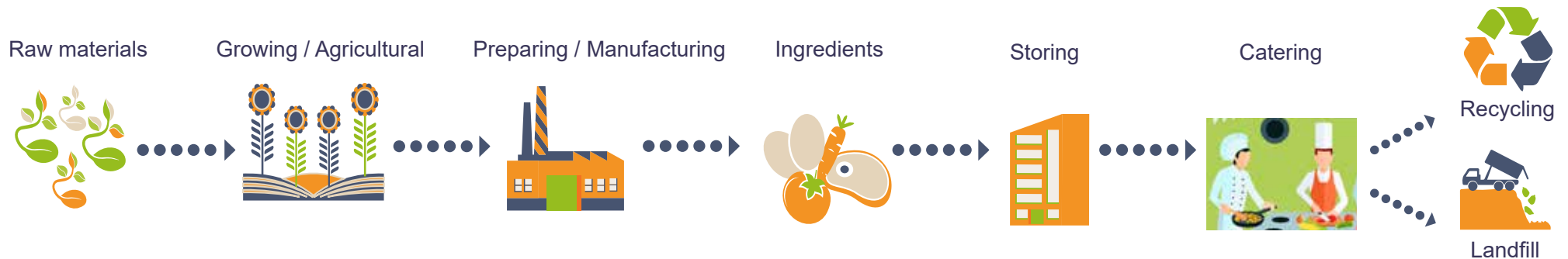
Bite sized guide to help hospitality businesses to find innovative  
ways to reduce waste



# Where waste occurs

1. **Supply Chain Waste:** Food production requires a huge input of hidden resources. Often food waste is associated only with disposal costs, but there is also other expenditure to consider including food purchase and labour which account for nearly 90% of the cost of food waste. Each stage of the supply chain uses: water, energy, time, land, manpower, fertilizer, fuel, packaging, money, and transport. When food is wasted the resources used across the supply chain are also wasted.

As such, any improvements to reduce avoidable food waste puts savings straight onto the bottom line, and that's at every stage of the process, whether its preparation, spoilage or plate waste.



2. **Onsite Waste:** When food is wasted on site the expenses associated with the item include: cost of purchase / cost to store (space, chillers, freezers) / labour and energy (cooking).

3. **Waste Collection:** The costs of waste collection and treatment include:

- gate fees up to £43/tonne<sup>1</sup>
- landfill tax of £84.40<sup>2</sup>

Other charges are variable rental of bins, labour, fuel, bin lorry running costs.

4. **Environmental Costs of Waste:** Organic material including food waste and paper sent to landfill produces methane as it rots. Methane is a greenhouse gas 21 times more powerful than CO<sub>2</sub>.

<sup>1</sup>WRAP, July 2015

<sup>2</sup>WRAP, April 2016

## Turning your bin upside down

If you think the cost of emptying a food bin is high, try calculating the cost of filling it.

For example, to fill a bin with something as relatively inexpensive as value baked beans would cost hundreds of pounds. Now, consider all of the types of food that actually end up in the bin and what the actual value being thrown away might be.



A 240 litre bin would need 1800 tins to fill and cost £270

# The True Cost of Food

Some foods are a lot more resource intensive than others.

This is especially true for animal-based food products because foods like grains and soy, which can be eaten by humans, are used to feed animals. As such, more land is required and more water is used, resulting in higher food prices.

## Avoidable vs. Unavoidable Waste

Many people think that food waste is unavoidable.

In reality, food waste can be categorized into 'avoidable' and 'unavoidable' waste.

To find out more about how you can reduce your avoidable and unavoidable waste, take a look at the '[Waste Misconceptions](#)' edition.

Focus on what you can control. Managing inventory control, stock rotation and adjusting production will help you understand what is actually happening in your business and how you can change your processes to reduce waste.

Resources: Beef vs potatoes<sup>3</sup>:



**Meat uses:**

**160 X** more land

**6 X** more water

**11 X** more greenhouse gas

Incorporating local and seasonal vegetables on a menu could therefore reduce menu costs and carbon emissions.

Did you know?

Potatoes make up the largest quantity of avoidable food loss - 359,000 tonnes of potatoes go uneaten every year (WRAP). Nearly half of all potatoes are thrown away (excluding peelings) because they are left on the plate at the end of a meal. Check your portion control which can allow for less food to be wasted after a meal.

Potato skins are often mistakenly seen as an example of unavoidable waste. Although not edible under normal circumstances, there are many ways that the skin can be used to limit waste. Try composting to make skins into soil fertiliser, baking them with oil and seasoning to make a delicious snack, or contacting your waste management provider to determine how most efficiently dispose of the excess peels.<sup>4</sup>



*"WRAP research has shown that not only is there more hidden food waste than people think in business, but that food waste costs more than most businesses realise. We found that typically 21% of food waste comes from storage and spoilage, 45% is in the preparation of food and 34% from plate waste. The cost of this waste to a business is typically around 22 pence per cover". - Richard Swannell, Technical Director at WRAP*

<sup>3</sup>Carrington, D. (2014) Giving up beef will reduce carbon footprint more than cars. Available at: <http://www.theguardian.com>

<sup>4</sup>Davies, R. (2008) The food we waste. Available at: <http://www.ifr.ac.uk/waste>

# Where are your hidden waste costs?

Looking at the activity in each area of your kitchen in more detail will help you to trace the inputs of goods and products. It will also help you to identify factors that contribute to the production of food waste and enable you to calculate the hidden cost associated with the waste.

## Storage and spoilage

- **Hidden cost:** Utility usage (electricity, gas).
- **Factors that can contribute to storage waste and spoilage:** Food stored in damp conditions, wrong degree of temperature, lack of knowledge of hygiene.
- **Preventing spoilage:** Review stock management and food delivery processes for food items. Store stock correctly at the right temperature and date all products when you receive them. Put new products at the back of the shelf so older food gets used first.

## Plate waste

- **Hidden cost:** Cost of labour's time invested in preparing the food.
- **Factors that can contribute to plate waste:** Poor purchasing practices, failure to check deliveries, poor storage practices and lack of proper production record to indicate how much of each item to prepare.
- **Preventing plate waste:** Monitor how much and what type of food waste is left by your customers. Once you have this information, you can implement back-of-house changes as well as working directly with your customers. Give customers choice and portion options and offer doggy bags for leftover food.

## Preparation

- **Hidden cost:** Utility usage (electricity, gas, water).
- **Factors that can contribute to waste:** Cooking error, over-trimming, lack of standardised recipe.
- **Preventing waste during preparation:** Providing training to improve efficiency of food preparation will help you to reduce food waste, obtain the optimal number of dishes from the purchased ingredients and as a consequence reduce your costs.

## Overproduction

- **Hidden cost:** Cost of labour's time invested in preparing the food, cost of collection.
- **Factors that can contribute to overproduction:** Poor purchasing practices, failure to check deliveries, poor storage practices, lack of proper production records to indicate how much of each item to prepare.
- **Preventing overproduction:** Small things such as switching from bulk production to smaller batches, revising order quantities regularly and preparing daily production estimates can lead to significant results in reducing overproduction.



Practical advice and expert know-how for the hospitality industry created through collaboration between Winnow, SWR and the BHA:



The BHA aims to be the single most powerful voice actively championing the interests of the whole industry and its business partnership scheme enables the best suppliers and partners to the industry to participate in developing insight and sharing best practice.

[www.bha.org.uk](http://www.bha.org.uk)

SWR offers a comprehensive, integrated waste management service, helping companies control costs and improve their recycling and sustainable environmental performance.

[www.swrwastemanagement.co.uk](http://www.swrwastemanagement.co.uk)

Winnow is the revolutionary smart meter that helps kitchens cut food waste in half by automatically measuring what's put in the bin.

[www.winnowsolutions.com](http://www.winnowsolutions.com)

#wastenotwantnot

Get in touch with us - we'd love to hear from you!

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