

Tackling food waste: a review of good practices in the UK



Introduction

Towards over-consumption

In the past decades, consumption has become a central part of entire economic models, in the United States for instance, under the influence of economist and retail analyst Victor Lebow. The following quotation, popularized by the documentary on consumerist society *The Story of Stuff*, summarizes Lebow's line of thought on consumption in 1955: "Our enormously productive economy... demands that we make consumption our way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption... We need things consumed, burned up, worn out, replaced, and discarded at an ever increasing rate."¹

Consumption and waste

With greater consumption though, comes greater amounts of waste, especially from consumer goods and food waste. The impact of domestic food waste on environmental systems, such as climate change, is very direct, through excessive use of freshwater and fossil fuels for instance.² Food waste also contributes to landfill, which creates and releases methane gas into the air.³ Furthermore, estimations indicate that the combined amounts of European and US food waste could feed the whole planet three times. In the UK, 8.3 million tonnes of food are wasted, 5.3 million tonnes of which could have been eaten. Along with environmental implications, the costs of food waste for an average family with children in the UK amount to £680 per year.⁴ The Government, through numerous initiatives of the Waste & Resources Action Programme (WRAP⁵), has been encouraging behaviour change on part of individuals and organisations; whether councils, companies or consumers. In effect, food waste is not only an environmental issue, as it produces CO₂ and has profound effects on atmospheric & underground systems; but as an overconsumption issue, consumers buy far more than they can consume, linking waste also to financial and political issues.

Hence, current initiatives are being continuously sought to deal with such waste. The following case presents some of the most innovative and recent practices in the UK, classified under the 3Rs: Reduce, Re-use and Recycle.

Reduce

Consumption: increasing options for consumers

In the past couple of years, food producers and grocery retailers have been providing customers with new formats, such as half a loaf of bread, or a half-cucumber, as consumers commonly wasted these products and needed a smaller alternative more suited to their needs. Some retailers, such as Tesco⁶ and Sainsbury's⁷ have also been introducing in 2009 'Buy One Get One Free Later'-type deals, in effort to reduce household food waste; rather than using a mere 'Buy One Get One Free,' which often allow consumers to buy more than it is possible to eat before the expiration date and notoriously creates extra household waste in case of bad meal planning. In addition, WRAP has been launching the Love Food Hate Waste website⁸ in an effort to encourage people to produce less food waste by providing some essential food conservation tips for instance.

Packaging: managing the use of resources

Through the Courtauld Commitment of the Waste & Resources Action Programme (WRAP), voluntary retailers and brand owners have been reducing the weight of their packaging and reducing food waste since 2005 (Phase 1)⁹ and achieved to "halt packaging waste growth by 2008." Now in its second phase, the Courtauld Commitment is moving from measuring its goals in weight to a more holistic approach based on sustainability along the supply chain, and aims to reduce the carbon impact of grocery packaging by 10% by the end of 2012.¹⁰ Marks and Spencer also recently announced its intention of buying council waste. producers (around 45,000 tonnes in Somerset as well).¹¹

WRAP's website reminds us that the options to reduce food waste both in store and at home are numerous: "increasing the shelf life of products; using oxygen scavengers; modified atmospheres; interactive films, and resealable packaging."¹² M&S wishes to invest in plastics and cardboard collections and reuse the material for its own packaging (around 15,000 tonnes of waste in Somerset only) or resell it to other packaging it to other packaging producers (around 45,000 tonnes in Somerset as well).¹³ WRAP's website reminds us that the options to reduce food waste both in store and at home are numerous: "increasing the shelf life of products; using oxygen scavengers; modified atmospheres; interactive films, and resealable packaging."¹⁴

Re-use

Some retailers choose to give food away to the poor and the homeless. Fareshare, an organisation dedicated to distributing what would be food waste (meaning food that is safe for consumption and before its sell by date but would not be able to reach supermarkets in time to be sold²²) to poor and homeless recipients, reports receiving around 3,100 tonnes of food a year from retailers and supermarkets, while they are estimated to waste around 100,000 tonnes of edible food a year.²³ Fareshare faces a strategic problem through: some companies do not admit producing food waste, for public image reasons, because not being able to sell all stock is rather bad publicity for shareholders to be exposed to and for companies to encourage.²⁴ If giving food away to the homeless is not always an option, in spite of public support²⁵, most of retailers' food waste can be fed to livestock.²⁶ Food waste may also be processed through waste pulpers, which separates the waste from the water it contains and makes it easier and lighter to transport and to be used as livestock feed, supplemented with traditional cattle feedstuff such as urea and corn. The organic waste produced is easy to use, as the dryness of the pulp makes it easy for it to be mixed with the feedstuff while being less expensive to transport than raw food waste. Overall, it may serve as part of a source reduction strategy.²⁷

Recycle

Collecting and recycling/composting

By providing relevant options for collecting food waste, local councils do not only benefit the environment, they also reduce landfill taxes for citizens and can also help clean the street by providing bags or recipients strong enough to resist the attacks of seagulls for instance. Hence, the council saves money, the consumer saves money and streets are cleaner.¹⁵ In addition, to encourage behaviour change and disseminate practical information such as food waste collection times, the Cherwell district council has created a twitter account for instance,¹⁶ while Warwickshire county council chose to launch an iPhone application to help people locate household waste and recycling centres around the county.¹⁷ Some councils, Harrow and Enfield for instance, choose to supplement their citizens' sustainable behaviour by providing separate collections for food waste. The action is supported by Friends of the Earth, who feel that if more councils went in this direction, the UK could significantly reduce the amount of waste sent to landfill, and help the UK comply with the EU directive aiming to divert bio-degradable waste from landfill sites.¹⁸

Food waste to fuel

Sainsbury's recently announced its plans to use food and packaging waste to generate energy to heat its customers' homes. This follows the Government's Renewable Heat Incentive, which will soon pay the retailer and others cash for heat generated from renewable sources, including biomass. Sainsbury's already provides food waste to two anaerobic digestion plants in the UK.¹⁹ Essentially, through the anaerobic digestion process, food waste is digested by bacteria in an oxygen-deprived environment, and is used to create biogas (70% methane, 30% carbon dioxide) that can be used as a sustainable source of energy.²⁰ The Department for Environment, Food and Rural Affairs (DEFRA) recently released a report entitled "Accelerating the Uptake of Anaerobic Digestion in England: an Implementation Plan"²¹ r

revealing ambitions to make England a “world leader” in Anaerobic Digestion, while tackling the issue of waste.²⁸ While anaerobic digestion and other food to fuel processes often require technology-intensive processing, some food waste does not need to be transformed. Take the example of the fast food industry, which rather than re-packaging and reprocessing or disposing of used vegetable oil, may allow drivers of certain car models, with little modification, to use filtered cooking oil to power their cars.²⁹



Conclusion

Food waste, as the burden it represents on local communities and the loss of resources it represents for the planet, may be turned around as an opportunity for business for innovative organisations, which recognises the value of reducing, re-using and recycling it. It might contribute to leaner processes, to create fertiliser or to be re-used as animal food for instance, among a wide variety of uses. Tackling food waste issues greatly contributes to tackling environmental issues including global warming, from reducing resource depletion to reducing landfills and methane emissions. When properly managed, it also allows food and grocery retailing companies to gain a competitive edge on their counterparts, in operations and in the public eye. Taking the case of Marks and Spencers and their commitment to reducing food waste through packaging, doing good to the environment has opened up opportunities for new business, buying council waste, transforming it and reselling it as packaging, while reducing the use of resources and the burden on the environment.

- 1 <http://www.storyofstuff.com/>
- 2 <http://www.nextgenerationfood.com/news/looking-at-food-waste/>
- 3 <http://news.bbc.co.uk/1/hi/uk/7389351.stm>
- 4 http://www.wrap.org.uk/retail/food_waste/index.html
- 5 <http://www.wrap.org.uk/>
- 6 <http://www.dailymail.co.uk/news/article-1220842/Tesco-plans-Buy-one-free--LATER-deal-bid-cut-food-waste.html>
- 7 <http://www.dailymail.co.uk/news/article-1229259/Sainsburys-launches-buy-one-later-campaign-cut-waste.html>
- 8 <http://www.lovefoodhatewaste.com/>
- 9 http://www.wrap.org.uk/retail/courtauld_commitment/
- 10 http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=217&listitemid=54764§ion=packaging
- 11 http://www.edie.net/news/news_story.asp?id=17701&channel=0&title=M%26S+to+buy+council+waste
- 12 http://www.wrap.org.uk/retail/food_waste/index.html
- 13 http://www.edie.net/news/news_story.asp?id=17701&channel=0&title=M%26S+to+buy+council+waste
- 14 http://www.wrap.org.uk/retail/food_waste/index.html
- 15 <http://news.bbc.co.uk/1/hi/england/somerset/8523938.stm>
- 16 http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=217&listitemid=54851§ion=local_authority
- 17 http://www.letsrecycle.com/do/ecco.py/view_item?listid=37&listcatid=217&listitemid=54700
- 18 <http://news.bbc.co.uk/1/hi/uk/4444429.stm>
- 19 <http://www.guardian.co.uk/sustainable-business/sainsburys-waste-recycle-customers-homes>
- 20 http://www.organic-power.co.uk/what_is_anaerobic_digestion.aspx
- 21 <http://www.defra.gov.uk/environment/waste/ad/implementation-plan.htm>
- 22 <http://news.bbc.co.uk/1/hi/uk/4444429.stm>
- 23 <http://www.guardian.co.uk/sustainable-business/sainsburys-waste-recycle-customers-homes>
- 24 <http://news.bbc.co.uk/1/hi/uk/4444429.stm>
- 25 <http://www.belfasttelegraph.co.uk/news/local-national/celebrity-chef-urges-supermarkets-to-give-homeless-leftover-food-14597705.html>
- 26 <http://www.scotland.gov.uk/Resource/Doc/915/0023204.pdf>
- 27 http://www.p2pays.org/ref/20/19926/P2_Opportunity_Handbook/7_II_A_5.html
- 28 <http://www.mrw.co.uk/page.cfm?action=Archive/ArchiveID=10/EntryID=6453>
- 29 <http://www.biofuelswatch.com/from-fast-food-to-fuel/>