Greener Retailing For Pubs





Foreword

This guide is for publicans. It is the result of a partnership between Robinsons brewery and Manchester Metropolitan University's Centre for Enterprise. Robinsons owns 260 pubs, inns and hotels and is one of the oldest and most respected names in British brewing. The Centre for Enterprise is a professorially led team of enterprising academics who are passionate about research — and even more passionate about turning research into useful knowledge for businesses. We worked together on a project called 'Greener Retailing' with two aims: to support pro-environmental actions in tenanted and leased pubs that would lead to bottom line business benefits; and to generate learning for the wider pub retail sector.

'Greener retailing' activities included a desk-based review of evidence, one-to one diagnostic sessions with publicans, facilitated workshops, and close working between an MMU researcher (Dr Tamara McNeill) and Robinsons tenanted retail department where a team of Business Development Managers is based. Other specialist staff within Robinsons, and Carolyn Branston from the Department of Food Tourism and Hospitality at MMU, have provided valuable expertise. We worked very closely with eight "trailblazer" publicans on five practical, industry specific themes (food and drink, energy, business waste, water and staff behaviour). We would like to extend our heartfelt thanks to all the trailblazers for their generosity with time and ideas. You will see some of what we have all learned along the way in this guide.

We hope the guide will inspire other publicans to find practical ways of generating bottom line benefits by saving energy and reducing waste. We thank the Economic and Social Research Council for funding 'Greener Retailing'.

William Robinson

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Greener Retailing: a guide for pubs

Welcome to Greener Retailing.

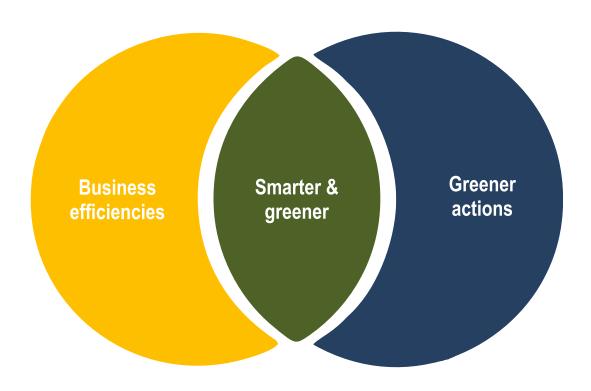
This guide is designed specifically for publicans, to help you find ways in which your business can be greener, whilst saving you money.

Most people are aware that we need to do more to protect the environment, but the first response is often that it will cost money, take too much time, and is not an immediate priority. In fact, there is much that can be done that will also save the business money, so you can do better on the bottom line and feel good about doing the right thing.

This guide is all about finding the win/wins, mainly by reducing different kinds of waste. Often when people think about 'the environment', recycling is the first thing to spring to mind.

- Reducing waste altogether is better for your business and the environment
- BUT recycling is still better than sending waste to landfill

This guide looks at how you can make efficiencies in relation to **Food and Drink, Energy, Water, Trade Waste, and Cleaning**. The final section deals with **Changing Staff Behaviour** as we know this can be more than half the battle.



Food Waste

WRAP* estimate that food waste costs the UK pub sector a staggering £357 million each year. That's approximately £8,000 per year for the average pub. Any food that ends up being thrown away has been purchased, stored, cooked, and served, all of which have associated costs. And then it costs even more to get rid of it. Separate food waste collections are expensive, but if it goes in the general bin it will affect the weight. Anyone who has ever triggered an excess charge will know how expensive this can be!

Like everything else in the Greener Retailing guide, the actions that we set out here should save you money, but there are also strong environmental arguments. Before food even gets to you it may have been transported many thousands of miles - at great environmental cost. For example, beef often comes from South America, and fruit and vegetables, especially out of season, from all over the world.

On top of this, if food waste goes to landfill it generates methane, a greenhouse gas that is 21 times more damaging than carbon dioxide $(C0_2)$. Globally the carbon footprint of food waste is equivalent to 3.3 billion tonnes of $C0_2$ released into the atmosphere per year. Each year approximately one third of all food produced is lost or wasted.

Waste from drinks is less well publicised and can be less visible, as liquids are easier to dispose of. Consider the potential costs to pub businesses though. Assuming a cost of £3 per pint, wasting just one pint of beer per day is equivalent to £1,095 of potential sales over the course of a year.

First we look at tackling food waste. We will explain a simple way of measuring waste and working out how much it costs. Then we show you how to reduce waste and increase profits on food. Then we look at tackling waste on drinks.

The annual carbon footprint of food waste is approximately 3.3 billion tonnes

Each year approximately one third of all food produced is lost or wasted

^{*}WRAP is a registered charity working to reduce waste and achieve more sustainable use of resources. See further information on page 26 for details.

Case Study

Just the process of measuring waste can have a dramatic effect and really help you think about how it can be reduced. There will be immediate cash benefits.

A focus on food waste at The Swan Inn, Wybunbury

Ian Booth has been separating and measuring food waste at the Swan Inn, Wynbunbury and trialling the food waste calculator.

"The waste sheet is great. We put the sheet on the wall in the kitchen and then it gets filled in. Anything that just requires the numbers to be typed in and then gives you the figures and generates the numbers is perfect."

While a waste book is traditionally used to record kitchen waste this is time consuming and some waste may be missed. As Ian says, "What you are really asking someone to do is to write down all their mistakes. What we are doing here — by simply weighing the waste and using a simple cost per kilo — is tackling the same issue but in a much less threatening and more subtle way. People react to it better."

"At the start of this process I thought well ok I'm actually pretty good on waste. But once you start looking and actually going in the bins you start thinking and there has been a shift in what we do in the kitchen". Ian's team are now much more waste aware and have made practical changes including a new menu with more soups and stocks using veg trimmings. The chef is also prepping veg to create less waste and makes the plate attractive using the food itself rather than putting on a garnish.

"We use Chantenay carrots which just need a quick scrub and add a bold splash of colour".

The impact? As part of a wholesale redesign of the pub's food business, this focus on waste has helped gross profit on food increase from 63% to 76% - a real cash benefit as well as an environmental one.



How much have you got?

For this easy way of measuring food waste all you need is three plastic buckets and a set of luggage scales. Download the food waste calculator (see page 26) and you're ready to start!

Separate food waste from general waste using three buckets labelled 'spoilage', 'preparation waste' and 'plate waste'.

- **Spoilage:** Food that has gone off or is too damaged to be used when preparing meals.
- **Preparation waste:** (often called 'chef's waste') All waste produced in the preparation of food.
- Plate waste: Any waste food that comes back from the table on plates, serving dishes, bread baskets etc.

This will let you work out which stages in the process the waste is coming from. This is important as the solutions are different for each.

Weigh the waste at the end of each day (or more often if you need to empty the buckets). Either enter this information in kilograms directly into the calculator or use a paper sheet in the kitchen and enter the figures later. You will also need to know how many covers were served each day.

Calculate how much food is being wasted and what this is costing your pub. We use a cost per tonne figure of £1.20 per kilo for pubs, and £1.78 per kilo for restaurants. The figures are based on WRAP Research.* For the purposes of the calculator a 'pub' is defined as an establishment where less than 50% of the income is from food. A 'restaurant'

has 50% or more or the income from food. Note that these figures are for food purchase costs only. Wasting food also wastes other resources including energy for storage and cooking and staff time.

The calculator is designed to be used for four weeks. This is long enough to cover both busy and slow times and to show the impact of any changes you make immediately. You may wish to use the calculator more than once so you can see change over a longer period.

Identify ways to reduce food waste by looking at where in the kitchen it comes from.

- **Spoilage:** Tends to be a result of over ordering, inappropriate menu items or problems with storage.
- **Preparation waste:** May be due to chefs over preparing, overcooking, or possibly being wasteful when trimming meat and veg.
- **Plate waste:** Usually due either to garnishing, large portion sizes or the food being unpalatable.

^{*}This figure is based on research carried out for WRAP and is specifically calculated for pubs and restaurants. The data used by WRAP were based on 2011 prices. We have updated these for 2016 using the Consumer Price Inflation tables provided by the Office of National Statistics. These figures have already been discounted to take into account that some food waste, like bone and eggshells, is unavoidable.



Reduce food waste & start saving money

Menu Design

- Continually review the menu and check your wastage records for patterns. If a regular item is being wasted, then change your menu and production.
- Use a number of core items across the menu. Cross utilisation means you are more likely to use up the stock and generate less waste.
- Understand your customer base and plan menus around them. Don't offer food that they do not want. Keep the menu to a manageable size too. Giving the customer too much choice will result in slow turnover of all the stock items and lead to waste.
- Design your menu around the skill base you have in your kitchen. An overly complex menu may result in food being over-cooked or wrongly cooked.
- Avoid unnecessary garnishes (salad garnishes, lemon wedges etc).
- Think about what is made in-house and what can be bought ready made in the right portions.

Ordering and Storage

- Don't over order. Work towards 'just-intime' delivery and keep stock to a necessary minimum. A stock holding value of 7-10 days is ideal.
- Rotate stock regularly and store goods in air-tight containers clearly marked with dates and contents.
- Handle produce carefully and check all deliveries carefully for short shelf life products.

• Store at the right temperature. Don't keep items in fridges if they don't need refrigeration and make sure temperatures are right (usually at or below 5 °C). According to the Carbon Trust, refrigeration temperatures set 1°C too low can increase running costs by 2-4%.

Preparation

- Avoid pre-preparation of food that will spoil quickly and don't defrost more than you need for the next 24 hours.
- Avoid excess trimming and order pre-cut and peeled where appropriate. This is often the greener option too as waste can be dealt with more efficiently during industrial processes.
- Offer skin-on potatoes and find uses for trimmings and excess. Look at ways of reusing leftovers. For example, turning roast meats into hot sandwiches and wet sauce based dishes. Jacket potatoes can easily be turned into potato wedges. Think about what can be used in a homemade soup or to flavour stocks.
- Encourage good communication about demand between front of house staff and the kitchen.



Service and Portioning

- Look at reducing portions and keep sizes consistent. Ensure all chefs offer the same portion sizes using spoons and measures.
 Use a scoop for chips. If you are worried about customers' reaction to this you could offer free refills or different size portions.
- Monitor and record dishes that are regularly overcooked or burnt. There may be a training need.
- Train staff on the menu. If they can't explain what a dish is, or make it sound appealing, it's less likely to be ordered.

- Encourage staff to sell slower moving dishes. If they regularly don't sell consider why you are offering them.
- When serving a group consider presenting veg and potatoes in single dishes for selfservice. This lets people take what they want and you can offer a refill if they need more. This works well for Sunday roasts.

Case Study

Running an efficient carvery: Almond Pubs

The Almond family have five pubs with substantial food operations and carveries. As experienced operators, they keep waste to a minimum. James Almond told us how.

Gauging demand is difficult in pubs with low levels of booking so you need to be able to respond if it gets busy. This means roasting the right quantities.

- "Our chefs roast two to three times a day".
- Gastronome trays are small and different sizes, depending on the contents. Trays are filled frequently so food is always fresh and there is less waste.
- The last meal should be as good as the first so you may need fresh veg quickly. For small amounts try a pressure cooker or steaming in a microwave.
- Good communication from front to back of house can also help to avoid over preparation. Start running down supply if it's quietening down.
- "Bear in mind that a good carver can also make a big difference to gross profit."

Portion control is difficult with a carvery. Meat is easier to control but it's probably not a good idea to refuse outright if someone asks for extra.

- Almonds offer a carvery upgrade for £1.50. That's an extra slice and customers get a bigger plate.
- Use the right size plates for adults and children.

Efficient food preparation includes:

- Using leftover meat across the non-carvery menu, for example, in pies and stews.
- Pans are deglazed after each transfer as this compensates for waste and evaporation.
- Fresh veg is bought daily and James says "pre-prepped veg makes a lot of sense" as it saves on staff time and generates less waste.
- Importantly, meat is roasted to minimise shrinkage. Try covering the tin with foil and keeping an inch of water in the bottom until browning off.

Using skilled staff and keeping them motivated is key.

• "We incentivise managers, head chefs and also second chefs with performance related bonuses. Skilled and motivated staff really make a difference."





Above - The Puss in Boots

Below - The Almond Family



Making the most of your cooking oil

Each week, thousands of litres of perfectly useable cooking oil gets discarded. A 20 litre drum of oil costs between £14 and £32 and each fryer can contain up to 40 litres. If you have two fryers and you change the oil weekly it will be costing you between £1,456 and £3,328 per year. Save money by prolonging the life of your oil and only change it when necessary.

Stage One oil break in

Clear in colour, no odour, very little oil soaked up by food

Stage Two fresh oil

Slight browning at edge of fry, crisping, more oil soaked up by food

Stage Three optimum oil

Golden brown colour, good crisping, optimum soak up by food

Stage Four degrading oil

Darker food, uneven frying, hardening, too much soak into food

Stage Five spent oil

Hardened frying, bad or 'off' odour and too much oil soak, very uneven frying

- Skim regularly during service to remove any particles as these will burn and ruin your oil quicker.
- Do not deep fry animal products such as sausages. Animal fat burns at 100°C.
- Drain and filter your oil as often as possible and pour back into the fryer using an oil filter cage and filter papers.
- Clean oil using wire scoops and paper filters. Turning fryers down to 100 °C when not required during service will also help.

- Use a clear plastic pipette to check whether your oil needs changing. You can't tell by simply looking in the fryer because it's dark and the oil will look dark (see colour guide above).
- If possible, keep a separate fryer for chips. This oil will last weeks if looked after.
- Consider switching to a long life oil. By looking after it you could save over £1,000 per year.

Most pubs will produce some waste oil — are you making the most of yours? It can be converted to bio-diesel, an alternative and more environmentally friendly vehicle fuel. Many companies now offer to come and collect your used oil for free and some will even pay you for it. Try an internet search for "waste cooking oil collection in [your area]".

Beer



Keep beer lines short

• Line cleaning is essential and must happen weekly. Inevitably that means drawing off the residual beer, but the longer your lines are the more beer you will waste when cleaning. Remember this waste can't be put back into the keg (called 'filtering back') as it has been exposed to oxygen and will impair the quality of the fresh beer.

Consider reducing duplicate pumps

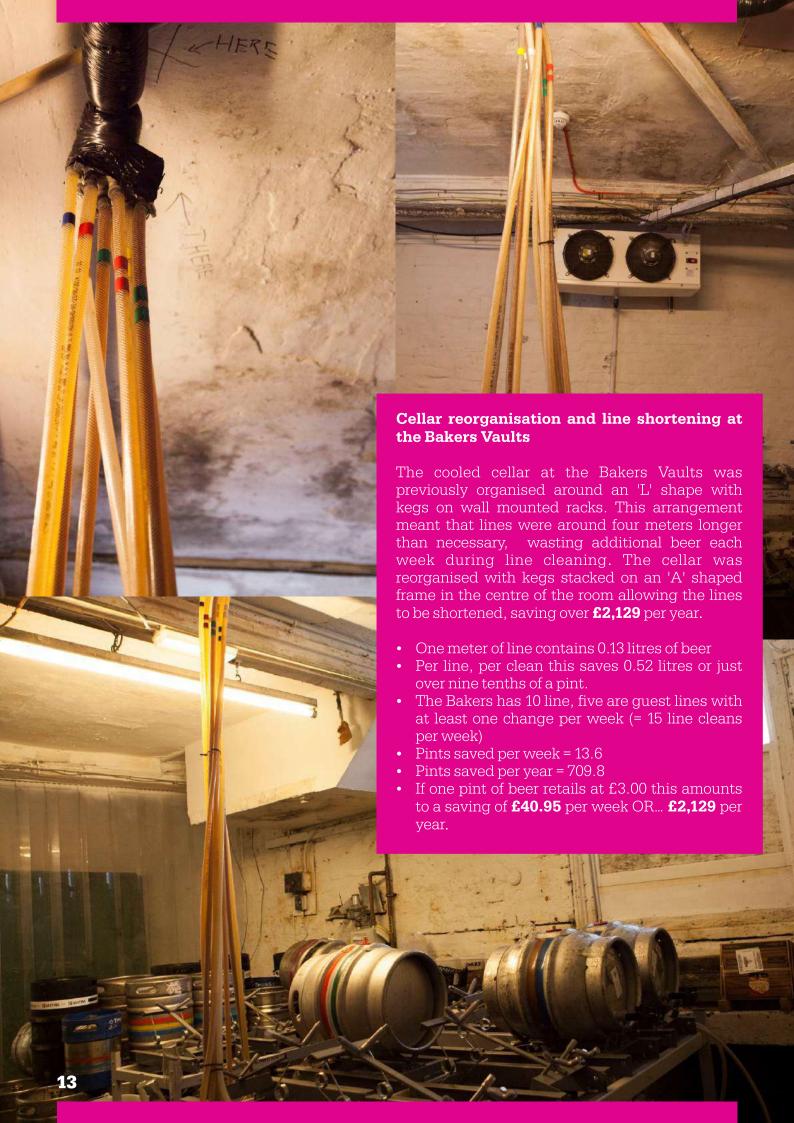
• Sometimes extra lines are put in to make the bar look symmetrical or to accommodate demand at busy times. It might not seem a lot, but each line will lose a minimum of two pints during cleaning. Assuming an average cost of £3.00 per pint, over the course of a year that's £312 per pump. If your lines are too long you'll be losing even more. If you had 10 lines each with an extra pint in, that's the equivalent of £1,506 per year going down the drain.

Pour accurately (and make sure staff are pouring accurately)

• It may seem obvious that sloppy pouring will waste product and drive down profits but it is still not uncommon to see bar staff letting glasses overflow. Consider staff training to reduce waste on drinks. A good pour will also improve quality and customer satisfaction.

Consider selling or giving away the beer from the lines after you have turned off the pumps.

• Whether this is appropriate will depend on your pub and your line cleaning routines. It may not work for you but some pubs have a regular 'free beer' evening. Pumps are turned off early — say 10.30pm with the residual beer put out in jugs for customers to share. This can generate good will, bring in a regular crowd and encourage people to try new beers.



Energy wastage is an obvious area to target when looking at ways to cut carbon and save money. The Carbon Trust estimate that most hospitality businesses can reduce their consumption by making some simple changes. A 20% decrease in energy consumption can equate to a **5% increase in gross profit.** The potential for immediate cash savings is considerable, but future savings are likely to be even greater. Consider recent rises in energy prices and the unpredictability of energy markets. Taking a longer-term view could really pay off.

There are plenty of opportunities to cut energy use and costs. Here we look at energy saving opportunities for different areas of the pub that are cheap and easy to implement. First, though, a word on monitoring.

Monitoring and Targeting

Monitoring and targeting (M&T) your energy usage gives you the valuable information you need to communicate to staff and influence behaviour to save significant amounts of money. Once an M&T process is established, it will help you:

- Detect and reduce avoidable energy waste
- Quantify savings achieved
- Provide feedback for staff awareness campaigns and improve budget setting.

The energy costs of running a pub are comparatively high. The simplest way to start monitoring and targeting is to read your gas and electricity meters on a regular basis and watch out for changes.

Space Heating

People often disagree on whether rooms are too warm or too cold. The ideal temperature for a lounge is 21°C. Other areas (such as function rooms) may not need to be as warm.

- Create different temperature zones. Use thermostats and room thermometers to keep temperatures regular. A constant, comfortable temperature will improve the customer experience too.
- Tackle drafts using draft excluders for doors and draft excluder tape for windows. Watch out for cleaners and other staff leaving doors open too.
- Consider loft insulation if it isn't installed, it is easy and cheap with a quick return on investment. If that isn't practical, insulate the loft hatch with draft excluder tape.

Kitchen

Turn fans and appliances off when not being used. There are some common reasons why equipment is often switched on long before it is needed - and left on when service has finished:

- Kitchen staff put fryers and ovens to warm the kitchen in winter consider heating the space in a more conventional way.
- Cooking equipment is switched on ahead of service to make sure it works. Make sure all equipment is regularly serviced.
- Staff forget to turn things off. Consider using timer switches or stickers as a reminder.

Choose appliances with good energy efficiency ratings. These will usually be better quality and last longer, saving you money in the long term as well as reducing immediate energy bills.

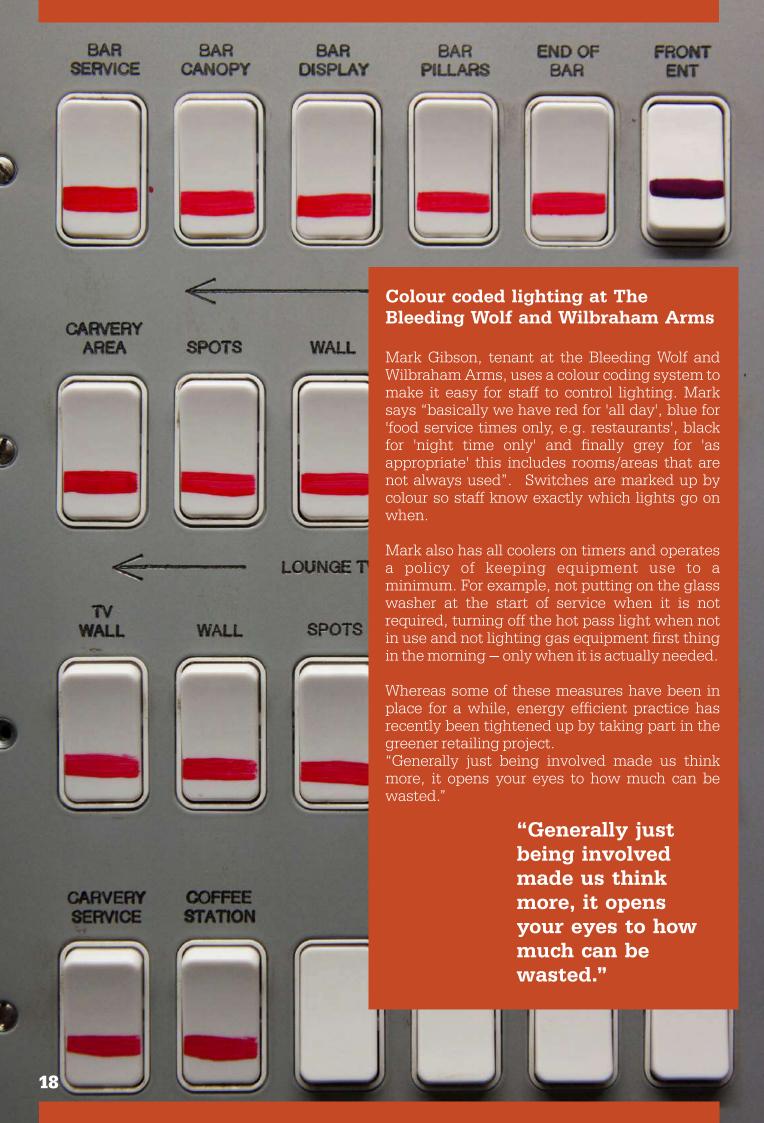


Lighting

Lighting can be an easy and cheap way of cutting energy usage. Try changing bulbs for low energy ones, if you haven't already. Many pubs now use vintage style bulbs in bar and food service areas. These look great but are usually incandescent, using much more electricity than LEDs or compact fluorescent lights (CFLs). The ambience of the pub is important, so you need to think about which bulbs can be changed without losing too much luminance or creating glare.

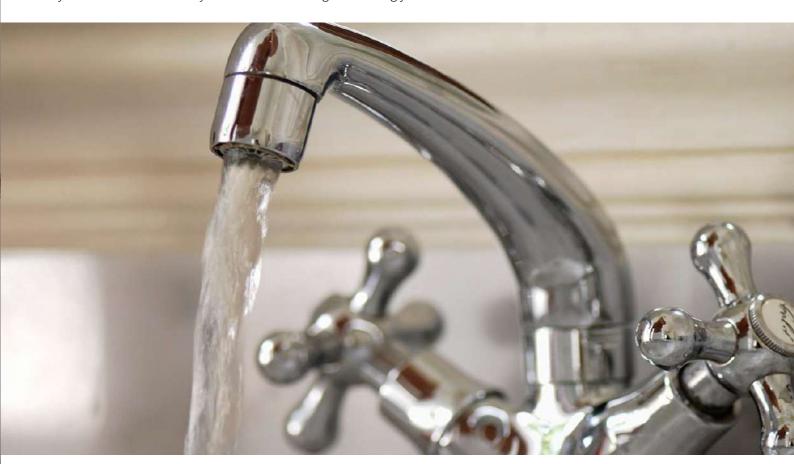
- Consider changing bulbs hidden behind shades, that are recessed or back of house. While changing an individual bulb may not generate a huge saving, the numbers add up when you change a few over time.
- Replacing ten 40-watt incandescent (old style) bulbs with low energy bulbs will save £529 over three years. This takes into account the cost of bulb purchase and replacement as LEDs last longer as well as being cheaper to run.
- Remember to clean bulbs and shades to avoid losing the level of light you are paying for.
- If you have linear fluorescent lights (LFLs) in the kitchen and storage areas make sure you are using the newer style 1" LFL tubes and turn them off when not in use! You may have heard that more energy is used turning this type of light off and on again than leaving them on. This is not true. The new style tubes are very efficient.
- **Use timer switches** for plug-in lights, especially outside lights, which tend to be left on. Remember to change the timer seasonally as daylight hours change.





Water

How much do you think about the water you use? If you are in a relatively wet region (like the North West), saving water might seem like a non-issue from an environmental standpoint. However, the processes used to provide clean fresh water to homes and businesses are energy intensive, so saving water also means saving energy. From a business perspective, remember you pay for your water supply and then also pay for waste water disposal so using less means a saving twice over. If you waste hot water you're also wasting the energy used to heat it.



Raise staff awareness about water wastage. Simply making people aware of the environmental and financial costs can be an important first step in making savings. For example, kitchen taps are often left running during food prep and breaking this habit could generate substantial savings.

Monitoring your water usage will help you see the impact of any changes that you make. WRAP have developed a set of water monitoring tools that are free to download from the WRAP website.

Free water saving devices are available from water companies. These will reduce the amount of water used in toilet flushing and when fitted to taps and showers, will make them more water efficient.

Reduce your water pressure. If your water pressure is over 5 bar, consider installing a pressure reducing device.

Consider water efficiency when buying new appliances. Washing machines, potwashers, dishwashers and ice machines can all be water intensive but buying a more efficient model could save you money in the long-run.

Consider using a rainwater butt if your pub has gardens, beds, plant pots or baskets that need watering. Use chippings or mulch on beds and pots to stop them drying out so quickly in hot weather.

Trade waste



Choosing recycling services

To find the best deals you will probably need to shop around as waste and recycling services very considerably by area. Many pubs stick with the service they inherited from the previous tenant or go with the council or a big name private company. This may be the best option but waste is a rapidly changing market with new operators emerging all the time.

Some of the best deals are with smaller companies or community recycling schemes and you might find a service that suits you better and saves money too.

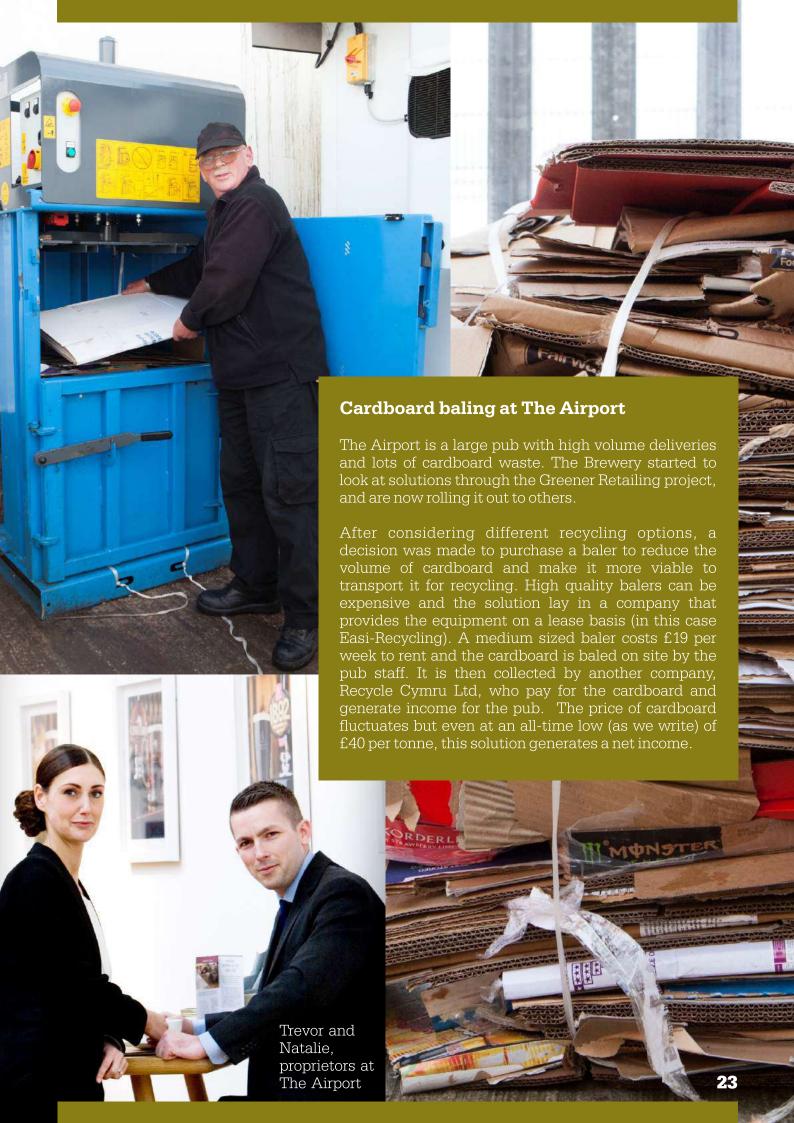


Cardboard



Pubs generate plenty of cardboard waste and it takes up a lot of space. You may choose to pay for a separate cardboard collection or you may put the cardboard in your general bin. Either way you're paying for someone to take it away and it could be generating an income. Robinsons have found a revenue generating way to recycle cardboard at one of their managed houses.





Cleaning



Cleaning products and practices may not spring immediately to mind when thinking about reducing waste. However, there are some easy opportunities to be clean, green and lean.

Use measures and dispensers instead of glugging cleaning products from the bottle. Bleach can be diluted and used in a spray. This should have the added benefit of reducing chemical odours at opening time and providing a pleasanter environment for customers.

For window cleaning why not use hot, soapy water and a squeegee like window cleaners do. The results are great and you can stop buying blue roll and expensive sprays.

Asking the cleaners (or staff who clean) to keep the doors shut can also make a big difference to the energy bills. They might not feel it if they're warm from moving around but, if the pub gets cold, it'll need heating up again before the customers arrive.

Changing staff behaviour

After reading through the guide you may have picked up some useful tips and ideas to try in the pub. You may also be wondering how you're going to convince the staff. We know that this can be much more than half the battle but there are some useful tips we have picked up from tenants while we've been compiling the guide.

Make being 'green' part of the pub's identity

- If staff feel like they are working for a business that takes waste efficiency and environmental concerns seriously it will help to give shape and purpose to any extra effort expected of them.
- You could go a step further and make 'being green' part of the pub's brand if you think it's something your customers would value.

Make waste reduction easy for people

- Use systems and reminders so they don't have to remember everything.
 Many pubs use checklists for opening and closing in bar and kitchen areas.
- Lighting can be colour coded (see the lighting case study in energy efficiency) and you might use labels to remind people to off turn appliances.
- Reduce the number of things to do by automating tasks where possible. Timer switches are great for this.

Think about incentivising staff to get them motivated

- You can set waste efficiency as well as financial targets. Environmental arguments may encourage some staff to be more efficient although financial arguments may work better for others.
- Think about appointing champions for different aspects of waste reduction. It might not work in every pub but can help with implementing changes and can work alongside incentives.
- Encourage staff to implement their own ideas for reducing different kinds of waste.
- Know your staff and think about what approaches will work best.



Acknowledgements

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Participating pubs:

- Bakers Vaults, Stockport Market Place
- Bleeding Wolf, Scholar Green
- Dane Bank, Denton
- Fingerpost, Offerton
- Hatters Arms, Marple Bridge
- Puss in Boots, Offerton
- Swan Inn, Wybunbury
- The Airport, Manchester Airport
- The Bulls Head
- Union, Reddish
- Wilbraham Arms, Alsager

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Further Information

If you have found the information in this guide useful and would like to know more about saving money whilst being greener, you might find the following resources helpful:

- 1. **WRAP** works to drive more sustainable use of resources in three key sectors including Food and Drink. The WRAP website is an excellent resource to help you reduce different kinds of waste: www.wrap.org.uk
 - Search 'pubs' or 'restaurants' on the WRAP website to find interesting case studies and useful guidance.
 - Find the water calculator tools mentioned in this guide by searching for 'water monitoring tool' on the WRAP website.
- 2. **The Food Waste Calculator** developed through the Greener Retailing project is available to download and use free of charge from My Pub Hub, an online resource bank for Robinsons licensees. Find this at www.robinsonsbrewery.com under 'run a pub' then 'supporting you'.
- 3. This guide and the Food Waste Calculator are also available to download from the website of the **Centre for Enterprise at Manchester Metropolitan University**: go to www.mmucfe.co.uk and search for Greener Retailing.
- 4. **The Carbon Trust** mission is to accelerate the move to a sustainable, low carbon economy. The main focus is on energy and the Sector Overviews for Hospitality and The Food and Catering Sector are particularly useful. You can find them by searching under 'Tools Guides & Reports'. www.carbontrust.com
- 5. **Water companies** provide guidance on how business can reduce their water consumption. Look on your water suppliers website under 'businesses'. They will also provide water saving devices free of charge.
- 6. **Energy companies** can also be a useful source of information and guidance on how to be more energy efficient in businesses and homes.

