

Mabbett®



Bars & Restaurants

**SUSTAINABILITY GUIDE**

# BARS & RESTAURANTS – SUSTAINABILITY GUIDE

The role of pubs, bars and restaurants for Irish society is an important one in both urban and rural areas alike, with 23% of Irish consumers visiting a pub, and 32% visiting a restaurant, at least once a week<sup>1</sup>. Sustainability is playing an increasing role in driving consumer purchasing decisions when it comes to food and drink, with 45% of Irish consumers choosing to pay for more environmentally conscious options<sup>2</sup>.

Resource efficiency means using the Earth’s limited resources in a sustainable manner, while minimising impacts on the environment and is key to operating a sustainable bar & restaurant. Improving resource efficiency also makes complete business sense – it saves money, boosts business reputation, and helps to reduce our environmental impact, slowing down the impact of climate change. For businesses already operating off tight margins, strengthening resource efficiency has never been more important, as food and energy prices continue to rise.

In a fast-paced and dynamic environment, making changes to daily working practices can be easier said than done. One of the aims of this guide is to support businesses in Ireland to understand the benefits of maximising resource efficiency and support you in doing so.

KEY BENEFITS	
<b>Financial savings – both long and short term</b>	Improving the efficiency of resource use not only saves money on bills and purchasing costs, but it can reduce ‘hidden’ costs such as energy, labour and waste management, making a difference to your bottom line.
<b>Reduced carbon footprint</b>	Better resource efficiency could see you reduce your business’ carbon footprint. This can support future proofing your business from both a financial and regulatory perspective.
<b>Good for the environment, good for Business</b>	With <b>45% of Irish consumers choosing to make more environmentally friendly food choices</b> , improving your environmental performance could also improve your sales. Taking an active approach to sustainability can also make you a more attractive employer, which could lead to better team motivation, higher job satisfaction and reduce staff turnover.
<b>Enhances supply chain stability</b>	Improved resource efficiency and sustainable sourcing can reduce demand on materials and shorten the supply chain, enhancing resilience in the face of wider supply chain instabilities.

*This guide looks at some key resource intensive areas in the bar & restaurant businesses, including:*

- **ENERGY**
- **WASTE**
- **WATER**
- **SOCIAL SUSTAINABILITY**

For each topic, we identify common ‘hot spot’ issues and share some ideas that could enhance the sustainability performance of your business.

1 <https://www.drinksindustry.ie/assets/Documents/Building-a-Sustainable-Drinks-and-Hospitality-Sector.pdf>  
 2 [https://www.bordbia.ie/globalassets/irish-food-service-2021/2021\\_irish-foodservice-marketconsumer-insights-report.pdf](https://www.bordbia.ie/globalassets/irish-food-service-2021/2021_irish-foodservice-marketconsumer-insights-report.pdf)

# ENERGY

## UNDERSTANDING YOUR ENERGY CONSUMPTION

Energy is by far the biggest utility expense for Ireland's bars and restaurants. The first step in working out how best to increase energy efficiency in your business is to identify:

- Key business areas that require energy e.g. equipment, parts of the building, specific activities.
- How much energy is being consumed. This should include electricity, gas, and oil, where applicable. Information can be found on bills, meter readings, and expense receipts.

**The industry benchmark for energy consumption in restaurants is 8 kWh per cover.** You can use this figure to compare your performance against the industry average and drive further improvements.

## HOT SPOT AREAS FOR ENERGY EFFICIENCY

### HEATING

Heating can account for more than **40% of energy use in non-domestic buildings**. This makes it a priority area when looking at where resource efficiency opportunities could be achieved. There are two main heating requirements in bars and restaurants – heating space and heating water. The following tips for both are a good place to start.

#### SPACE

**Upgrading thermostat controls** – check if thermostats are working correctly and set to the correct temperature.

**Thermostat location** – check that the temperature isn't being influenced by draughts, sunlight or internal heat sources like radiators.

**Optimum temperature** – make sure rooms and areas are at the correct temperature. Do you know the recommended temperatures for different areas of your business?

**Air con vs heating** – do you have air conditioning operating at the same time as your heating? Heating and cooling systems that 'fight' each other is a big drain on energy and bills.

**Zoning** – depending on the size of your venue and how it is used, consider separating areas and ensuring energy isn't being wasted in unoccupied areas, or adjusting temperatures to different areas accordingly.

**Use timers** – discourage staff from using thermostats as an 'on/off' switch and use timers for more efficient and regulated heating.

**Regular boiler maintenance** – it's important to make sure your boiler is running efficiently so that energy (and money) isn't being wasted.

**Refurbishment** – according to The Carbon Trust most hospitality businesses have a refurb every 7-10 years and some venues have seen energy savings of up to 40% when energy efficiency opportunities are maximised during upgrades.

#### WATER

**Temperature check** – is your hot water too hot? The optimum temperature for stored hot water is 60°C which is adequate to kill Legionella bacteria and sufficiently warm for staff and guests. Excessively hot water is wasteful and could harm staff and guests.

**Heat pumps** – buildings with consistently high heat demands throughout the year may benefit from installing heat pumps, which produce hot water for heating and water.



**OPTIMUM TEMPERATURES FOR DIFFERENT AREAS WITHIN YOUR BAR OR RESTAURANT.**

ROOM TYPE	TEMPERATURE (°C)
Bars, lounges	20 – 22
Customer toilets	26 – 27
Restaurants & dining rooms	22 – 24
Corridors	19 – 21
Kitchens	16 – 18

**LIGHTING**

Correct levels of lighting are an important health and safety requirement, but bars and restaurants should consider additional concerns when looking at increasing lighting efficiency.

**EFFECTIVE LIGHTING**

is it doing the right job? Check whether lights are so dim they’ve become ineffective or so bright that they cause discomfort. Adapting ineffective lighting may lead to increased energy efficiency.

**SWITCH OFF POLICY**

encourage staff to switch off lighting in areas of low occupancy e.g. offices, stock rooms and the cellar.

**UPGRADE TO MORE EFFICIENT LIGHTING**

replace tungsten light bulbs with compact fluorescent lamps (CFLs) or light emitting diode (LED) bulbs to achieve up to 80% cost savings. CFLs and LEDs have the added benefit of a longer lifespan, providing additional savings in reduced replacement costs. Low wattage bulbs can also save energy.

**MAINTENANCE**

ensure lighting systems including both lamps and automatic sensors are cleaned regularly to remove dust and other debris which reduce their effectiveness.

**REPLACE**

flickering, failed or blown lamps continue to consume energy so remove or replace them immediately.

**OCCUPANCY SENSORS**

sensors can achieve savings of 30% to 50% on lighting costs (and energy consumption). They are particularly handy in cellars, customer toilets and zoned areas.

## KITCHEN ACTIVITIES

Effective energy management in catering can provide substantial savings, as well as improving working conditions in the kitchen. In some kitchens **40% of the energy consumed is used for food preparation and storage**. Most of the wasted energy is dispersed into the kitchen as heat.

### EQUIPMENT

**Capacity** – running equipment that doesn't match the capacity is a key source of wasted energy in hospitality kitchens, e.g. heating ovens or stock pots that are larger than necessary results in inefficient energy use and extra cost.

**Efficiency** – modern deep fat fryers can heat oil more quickly, have better temperature recovery times and use less oil than older models.

**Capacity** – under and over-used fridges and freezers can result in inefficiencies, e.g. over-stocked appliances can become strained. Unit capacity should match requirements as closely as possible for best resource efficiency.

**Duplication** – many bars and restaurants have multiple cold storage units. Consider condensing fridges/freezers in quieter months and turning off unused appliances to save energy.

**Maintenance** – check when appliances were last serviced and whether older units are performing. Old and inefficient models could use additional energy resulting in higher operational costs compared to investing in newer, more efficient ones.

### SMART WORKING

**Overfilling** – avoid over-filling kettles, pots of water and saucepans – and use lids where possible to retain heat. This can reduce the time and energy required to bring what you're heating up to the required temperature.

**Pre-heating** – make a note of kitchen appliance pre-heating times and only switch on when necessary, not automatically at the start of the shift.

**Segregation** – is your equipment well placed and spaced? Locating fridges/freezers tightly together or near cooking stations, makes units hot, meaning they work harder. This is bad for equipment – and your electricity bills.

**Switch off policy** – encourage staff to switch off equipment when not in use, such as extraction fans, grills, hot cupboards.



# WASTE

As with energy, using your bar or restaurant’s raw materials more efficiently should have a direct impact on the waste that’s generated. Preventing waste has been estimated to **save up to 10 times the actual disposal cost**, due to the hidden costs of waste such as lost labour time, energy costs, lost materials. Typical materials and waste include food, packaging, catering relating disposables, cleaning products and back-of-house/ office materials.

## HOT SPOT AREAS FOR WASTE REDUCTION

### FOOD WASTE

For bars & restaurants, food waste typically occurs in three primary waste streams: preparation waste, customer plate waste and spoilage waste. By measuring and monitoring, you can **better target where intervention would be most effective**.

#### PREPARATION

**Maximise use** – using as much of the ingredient as possible – many fruits and vegetables don’t need to be peeled, especially if they are going into sauces, stocks and soups. Consider how much of what is thrown away could have been eaten instead.

**Efficient preparation equipment** – kitchen gadgets can help to reduce food waste. Vacuum pack machines can extend the shelf life of some produce by up to ten times longer than regular storage.

**Pre-portioning** – preparing menu item portion sizes, such as pie fillings, vegetables portions or cuts of meat can reduce waste as portioning can be better controlled and more consistent during busy service times.

#### PLATE WASTE

**Portion sizes** – regularly review food that comes back on customer plates and make a note if there are any trends in specific dishes or menu items that are often wasted. This could be an opportunity to reduce portion sizes and save food (and money) ending up in the bin.

**Garnishes** – do your menu dishes include a garnish or small side salad that are often left by customers? If so, consider the value they bring and whether they could be removed.

**Feedback** – trialing changes and seeking customer feedback can be an effective way of making waste saving changes.

#### SPOILAGE

**Stock rotation** – practice using ‘first in, first out’ system to ensure that the freshest produce is retained and waste is minimised.

**Temperature control** – ensure all fridges and freezers are set to the correct temperature, not cooling food too quickly and reheating food to the correct temperature. This is important for both maximising food quality and food safety.

**Effective stock management** – reduce the chance of ingredients spoiling through over-ordering, poor labelling and untracked items.

## CASE STUDY

One pub took part in a project with the Environmental Protection Agency and their local County Council, to reduce the food waste they generated on site. By reviewing and decreasing portion sizes they managed to reduce their food waste by 37% in a year.

## CONSUMABLES AND DISPOSABLES

### PACKAGING

**Single use packaging** – reduce single use packaging by asking suppliers if they can deliver materials in reusable or returnable packaging, such as plastic crates instead of cardboard boxes. This should improve your resource efficiency, and reduce waste disposal costs.

**Recycled content** – ask suppliers if their packaging is made from recycled content. Packaging made from recycled content means that it was not made from fully virgin materials, making it the more sustainable option.

**Go without** – where possible, ask if suppliers will deliver without packaging. Some independent local suppliers often foster strong relationships with clients and greater flexibility around delivery options.

### CATERING RELATED DISPOSABLES (*BEER MATS, PAPER MENUS, NAPKINS*)

**Alternatives** – take a note of all of the disposable items used throughout your bar or restaurant and assess how many could be switched to reusable alternatives. For example, could you use cloth napkins or hand towels instead of paper ones? Could you make use of reusable storage tubs with lids instead of clingfilm?

**Need** – consider whether disposable items have a necessary function or if they could be removed altogether.

### CONSUMABLES (*CLEANING PRODUCTS, OFFICE STATIONERY, TOILETRIES, ETC.*)

**Consider concentrated products** – purchase concentrated cleaning fluids that can be decanted and diluted into smaller spray bottles. Not only will this reduce packaging, it should also reduce waste disposal costs.

**Bulk purchasing** – reduce the quantity of smaller containers by purchasing in bulk. This is particularly good for items that can be decanted into smaller containers for customer use. Try providing sauce ramekins or sauce bottles instead of single-use plastic sachets.



# WATER

Water is used in the hospitality sector for many activities, from professional kitchens to cleaning and customer toilets. One of the most effective ways of reducing water use is knowing all of the areas in your business that require water. Doing so will help you be able to identify how much is being used and where savings can be made. This information can usually be found on water bills if your venue has a water meter.

## TYPICAL AREAS OF WATER USE IN YOUR BAR OR RESTAURANT:

BACK OF HOUSE		FRONT OF HOUSE
Cooking and food preparation	Drinking	Bar and/or restaurant ingredients
Handwashing	Refrigeration	Toilet flushing
Cleaning	Ice machines	Customer handwashing
Kitchens	Grounds maintenance	

## HOT SPOTS FOR WATER CONSERVATION

For most pubs, bars and restaurants, the kitchen will be the area where the highest volume of water is consumed. As well as direct water use, **20% of restaurant energy consumption goes to heating water**. Managing water use more efficiently could improve your venue's environmental sustainability performance, which should also lead to financial savings.

### KITCHEN CONSIDER THE FOLLOWING FOR WATER SAVING OPPORTUNITIES:

**Dishwasher specifications** – is your dishwasher using more water than it needs to? Compare how many litres it consumes per cycle with other similar capacity units on the market. Saving even 0.5 litres of water per wash load would lead to substantial water and energy savings.

**Maximise capacity** – ensure your dishwasher and glasswasher are filled to their capacity before running the cycle, as this will optimise cycle times. Instilling efficiency habits such as this in staff should result in real long term time and money savings.

**Defrosting** – defrost produce overnight in the fridge rather than under a running tap.

**Over-filling** – use the correct size of pots and pans for cooking to avoid over-filling. Over-filling not only wastes water, but wastes the time and energy required to heat a bigger pan.

**Pressure valves** – consider installing pressure reducing valves on taps. Regulating water flow is a simple way to reduce water use, and the energy needed to heat it.

**Handwashing** – for handwashing taps, a flow rate of 4 – 6 litres per minute is recommended. This can reduce water consumption while maintaining a sufficient flow for hygiene.

**Pre-rinsing spray guns** – pre-rinsing spray guns can maximise water efficiency in the pot wash section. A flow rate of 5 – 6 litres per minute is recommended best practice.

**Boiling water tap** – consider whether installing a boiling water tap would increase water and heating efficiency.





## OTHER AREAS OF WATER USE IN BARS AND RESTAURANTS INCLUDE:

### CUSTOMER TOILETS

**Install water saving taps** – these minimise water use by automatically closing the tap and/or by reducing flow rate using a flow limiting device.

**Install low flush toilets** – older style toilets can use up to 13 litres of water per flush. Many efficient toilets only use up to 4.5 litres per flush, leading to potential water savings of over 50% per flush.

**Consider retrofitting toilets with low flush devices** – there are a number of water saving devices available which minimise water use in existing toilets by restricting the volume of water used per flush. These include retrofit dual flush conversion kits, cistern dams and cistern bags.

**Install urinal flush controls** – which use occupancy or water pressure to control water usage in urinals, e.g., non-concussive, occupancy detection, and hydraulic valve. These will avoid continual passing of water when the urinals are not being used.

### GENERAL GOOD PRACTICE

**Leaks** – identify and fix leaky taps and pipes.

**Turn off policy** – implement a 'turn off' policy, encouraging staff not to leave taps running.

**Table water** – only serve water to guests who ask for it.

**Staff engagement** – introduce staff training and awareness to highlight the importance and benefits of water efficiency to the business. This should be done semi-regularly as some long-term staff may require refresher sessions.

### CASE STUDY

In an effort to reduce their water usage, one bar & restaurant decided to retrofit their conventional urinals with inserts containing a chemical trap. This allowed the urinals to work completely without water or flush valves, through a touch-free and easy to install system.

The cost-benefit-analysis showed savings of €1,300 per year on water charges and €169 in maintenance costs, giving a total saving of €1,469 per year. The project's estimated cost was €2,350, and the estimated payback time was 22 months. However, since this system was installed in 2009, the cost of implementation has significantly reduced, putting pay back periods more in the region of six months.

# SOCIAL SUSTAINABILITY

Social sustainability assesses a company’s engagement with, and impact on, its workers, customers, suppliers, and the local community. Organisations can positively contribute to fairness in society, investing in fair and equal opportunities and conditions for employees, people working in the supply chain, and local communities.

*The benefits of improving social sustainability in your bar or restaurant:*

- Enhanced business reputation.
- Attracting employees who value working for a socially, and environmentally conscious employer.
- Attracting customers who may be more willing to support socially and environmentally progressive business compared to those who are less so.

## HOT SPOTS FOR SOCIAL SUSTAINABILITY

### WORKFORCE

**Staff development** – providing regular training and support to staff to improve their confidence and sense of value in the team. Staff who feel valued and included are more likely to perform well and foster company loyalty. This can reduce costs associated with staff turnover and low productivity.

**Health & safety** – supporting health, safety and wellbeing makes your bar or restaurant a safe, welcoming and desirable place to work.

**Equality** – promoting equality in the workforce with diversity and inclusivity policies.

### SUPPLIERS

**Labour** – preventing abuses within the supply chain such as labour rights, including modern slavery.

**Fair trade practices** – uphold standards of fair trade and social equality.

### CUSTOMER AND COMMUNITY

**Food safety** – ensuring products and dishes are safe for customer consumption.

**Equality** – preventing social injustices and promoting equality and inclusion within customer base.

**Community engagement** – contributing to the local community, such as investing in local projects or funding educational initiatives,

**Donating** – donating products or redistributing surplus food/drink, such as meals to those in need.



#### CASE STUDY

#### FoodCloud

FoodCloud is an Irish social enterprise tackling the twin issues of food waste and food insecurity by partnering with leading retailers, food companies, non-profit organisations, government and the wider business community to redistribute surplus food and help drive progress towards a circular economy for our food systems. Since 2013, they have redistributed more than 75,000 tonnes of surplus food, nearly 180 million meals, across their two solutions in Ireland, the U.K. and parts of Europe. Find out more here: <https://food.cloud/>

# RESOURCES & SUPPORTS

## AIB GREEN LIVING WEBPAGE

provides detail on the various supports available to businesses seeking to transition to a more sustainable footing.

<https://aib.ie/green-living/green-business>

## FÁILTE IRELAND

is the National Tourism Development Authority for the Republic of Ireland. They have produced a number of 'Climate Action Roadmaps' to support hospitality and tourism businesses transition to more sustainable operations.

<https://supports.failteireland.ie/climate-action/>

## THE GREEN HOSPITALITY PROGRAMME

is the Irish Hospitality, Travel & Tourism Resource for Sustainable and Responsible Tourism. They provide industry news, latest best practice guidance, case studies, and resources such as a green supplier list.

<https://greenhospitality.ie/>

## ORIGIN GREEN

is Ireland's food and drink sustainability programme, operating on a national scale across the full supply chain, including the foodservice and retail sectors.

<https://www.origingreen.ie/>

## SEAI

is Ireland's national sustainable energy authority. The SEAI provides a range of supports for businesses to help them cut down on energy costs, meet energy saving targets, and make significant savings.

<https://www.seai.ie/business-and-public-sector/small-and-medium-business/supports/financial-supports/>

## THE CARBON TRUST

provides advice and support to businesses looking to improve their environmental performance.

<https://www.carbontrust.com/>

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