

# ENERGY EFFICIENCY OF YOUR SUSTAINABLE COMMERCIAL KITCHEN

by Olivia Imeson  
February 2021



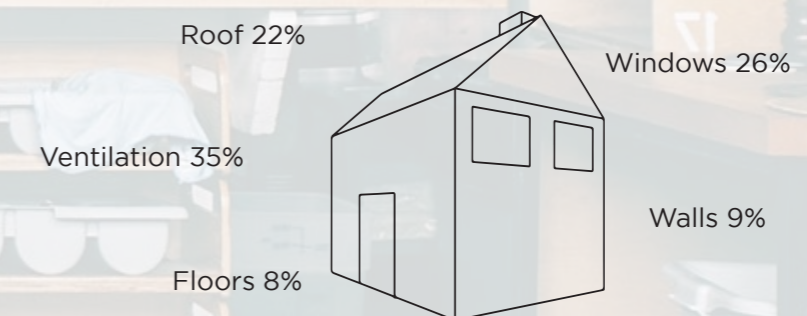
When it comes to design, there is the obvious importance of science, engineering and governance in attaining a sustainable environment, but without imagination and fantasy we will not have the dexterity and flexibility that we need to build a better world for the future.

In order to begin the process of converting to a more sustainable option, you will need the support of a design team. A good design team can provide you with valuable knowledge, skills and tools. They will be able to run through all of the various options available and provide some insights that will aid the decision process. Once you have chosen your preferred approach, it is up to your designer to bring this to life. With modern and sustainable equipment, carefully thought-out usage of space, exceptional design thinking and a holistic green strategy, your new commercial kitchen will not be dull!

The space in which your kitchen operates needs to be analysed and fully understood before the internal workings are factored in. Your building should undergo a full health check to see where problem areas lie and what needs to be patched up. A good place to start is looking at the energy efficiency of your building and where energy is being lost and wasted.

## ASSESSING YOUR BUILDING'S ENERGY EFFICIENCY

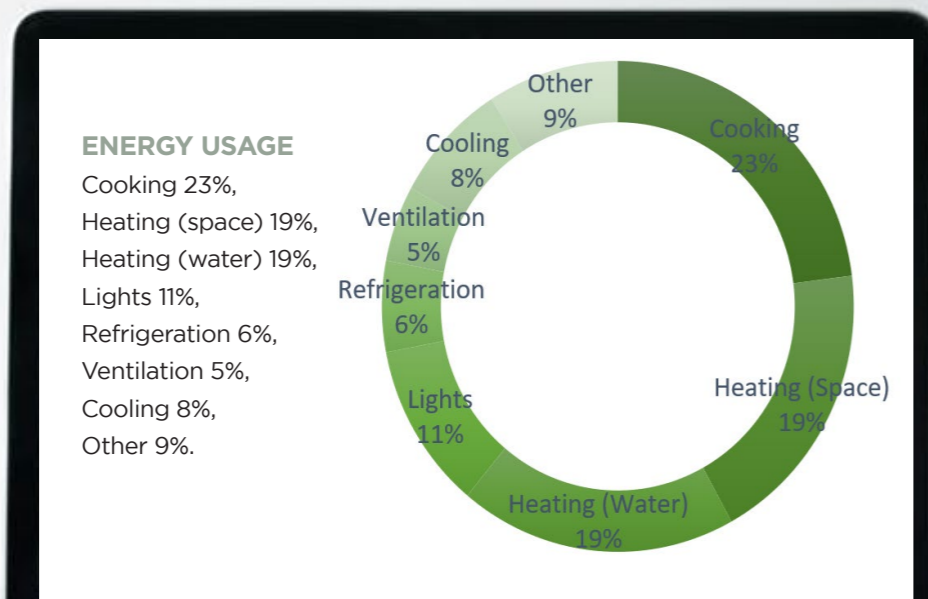
The diagram below shows where you are most likely to be losing your heat:



By taking steps to seal your building correctly you will avoid problems such as cold staff and customers and reduce long-term energy bills. You will lower the chances of harmful mould and damp and reduce expenditure on heating and cooling. These steps do not have to cost you an arm and a leg. Again, there are many options for tackling these issues, including monitoring and suitable equipment.

## HOW MONITORING AND THE RIGHT EQUIPMENT CAN HELP

### ENERGY USAGE



By reducing and monitoring energy waste and making even quite simple changes to improve equipment efficiency, valuable savings can be made.

Saving energy can increase revenue and profit directly without even an increase in sales. For example, if you properly insulate your roof, the heat that would have escaped through it will be retained and used to heat your property for longer.

Keep track of your kitchen's energy usage. Being 'on-the-ball' when it comes to monitoring energy usage will make a dramatic change. Mindfulness is important to practise and a quality that should be encouraged in others. By implementing new rules and methods of record-taking, you and your staff can keep on top of things whilst simultaneously protecting the environment. A new system for acquiring new information and knowledge could be helpful.

### MONITORING AND WASTE MANAGEMENT PLAN OF ACTION

- Keep a record of the energy consumption of the kitchen.
- Set targets for reduction of energy usage.
- Meter the kitchen's consumption of electricity, gas and water separately. (SMART meters are useful for this.)
- Consider installing individual meters on energy-hungry equipment.
- Record and measure against industry benchmarks.
- Watch out for sudden changes to your energy usage - it could indicate a malfunction in your equipment.
- If you have undertaken a 'green' audit, refer to the feedback to see which areas are used in excess and where cuts need to be made.
- Set up a leak detection programme.
- Don't run your dishwashers if they are only half full and try to clean produce and equipment in receptacles rather than using running water.
- Equipment calibration.
- Inspection.
- Cleaning and training.
- Recycle, compost and donate wherever possible.
- Work with suppliers to find 'green' packaging alternatives.
- Purchase equipment with running costs in mind. (i.e., replace equipment that is outdated with a new, modern version). Don't focus solely on the capital cost of the equipment and consider its lifetime energy consumption.

*\*FACT: In many commercial kitchens, an average of only 40% of the energy consumed is actually used for the preparation and cooking of food.*

## EQUIPMENT

Once you have addressed any existing 'energy-hungry' aspects of your building, you can look in to investing in better equipment as another solution to your sustainability concerns. There are hundreds of options for kitchen equipment on the market but careful analysis is important for your new, sustainable kitchen. There are a few key things to bear in mind when choosing your new 'green' tools:

- Energy-efficient products are a good investment. They will last longer, save you money and help to save the planet.
- Consider advantages and disadvantages from a sustainability point of view when comparing options. For example, if you have a little extra space, could you use a cold room rather than freezers and fridges? Over-packed freezers and fridges make your equipment work harder, consuming more energy.
- Communicate with your suppliers to get their opinion.
- Invest in chrome-plated griddles, electric induction hobs and 'green' fryers and grills.
- Look at the lifespan of these products and read reviews.
- Waste management equipment can help your kitchen to stay clean and fresh. Grease troughs, de-watering systems and compost processes can all aid your kitchen in sustainable and responsible waste removal.
- Look at the most up-to-date options. Sensor taps can help to curb excess water loss through leaks, taps being used for too long or being left on by mistake. The same goes for sensor lighting. Utilising natural light sources wherever possible can cut costs and energy usage. Opt for lights that are eco-friendly and better for your team's eyes.

**So, having covered the basics of how equipment and methods of energy-saving can benefit your commercial kitchen, it is now a case of looking at the core of your business which is FOOD. Food is the reason you are in business. A lot of time and effort goes into sourcing it. In the next article on sustainable commercial kitchens, I will explore the topic of food-sourcing. From looking at trading locally to exploring the latest high-tech methods of food production, there really are a great many possibilities for the future of catering.**

## AUTHOR BIO

In Olivia's final year at university, she wrote her dissertation on 'Ecotopias' (speculative futures concerning the environment and the way artists and designers have depicted these futures). While digging deep into the way humans perceive art and design of this nature, she became more and more interested in eco-design and sustainability. Olivia brings her knowledge and expertise to MYA and seeks to explore the ways by which the hospitality industry can become more 'green'. She also has the key task of guiding MYA to be carbon neutral in the near future.



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