

Hospitality Industry



Energy Use - Hotels

Hotels operate all year around the clock. Although there are certain down times, mechanical services are in continuous use. The highest consumption areas within a hotel are:

- Kitchen
- Refrigeration
- HVAC (Heating, ventilation and air conditioning)
- Lighting
- Water Heating
- Lifts
- In house laundry (if applicable)
- Leisure facilities (if applicable)

Reducing temperature by **1°C** can result in an energy reduction of up to **10%**

Energy Costs – Hotels

The hospitality industry in Ireland is one of the heaviest consumers of energy.

The Irish Hotels Federation state that the hotel industry in Ireland is spending in the region of €70 - €100 million per year on energy. The Irish hotel industry is one of the largest energy users in the commercial sector, albeit the one with the most potential for energy efficiency improvements.

A significant factor with hotels is the amount of energy wastage of the HVAC system by room occupants. A clear understanding of where the energy is being wasted allows management implement the necessary strategies to reduce these unnecessary losses. Our objective is to help you to take control of your energy costs.

For many hotels, energy costs account for a substantial proportion of operating costs. Many hoteliers view energy costs as a fixed cost and one of which they have no control over. When looking at reducing energy costs it is not enough to look at the unit rate only. Energy costs can be effectively managed and reduced. Reducing energy costs and improving energy efficiencies have a direct positive impact on your bottom line.

You can not manage what you don't understand. This concept applies even more so to energy management. Your first stop should be to get familiar with your energy bills – what tariff are you on, what is your bill made up of (standing charges, day rates, night rates, VAT etc), and how much are you using each billing period.

Once you understand your bills, the next step is to understand where that energy is being used and to identify opportunities to reduce this.

How to make savings with Digren Energy

There are a number of ways to substantially reduce energy costs. These vary from no cost, to low cost to high capital expenditure projects. However, The best way to maximise savings is to implement an energy plan specific to your facility and budget. A significant barrier to using energy efficiently is a lack of awareness.

At Digren Energy we encourage a developing a plan that follows and includes the following steps to energy efficiency success:

1. Procurement

Obtaining and fixing the best pricing for your electricity and gas is a key factor. A fixed price contract removes the worry of fluctuating gas prices when preparing budgets. A key part of procurement is analysing all the costs of your bill over the past 12 months. Digren energy provide tariff and consumption analysis to provide the maximum savings. The unit rate cost alone is not enough as this is only one component of the bill. The actual unit price is derived from your total bill divided by your consumption - this figure is always considerably higher than the unit rate. We provide full detailed proposals outlining all costs.

2. Energy Audit

Digren Energy provide a sensible approach energy audit. We will request copies of your business's gas, electricity, water and heating oil to determine the energy usage patterns. We then carry out a full survey of the nursing home to identify energy use and wastage. The audit becomes the blue print for your energy plan.

3. Energy Awareness

Digren Energy are committed to helping you get a complete understanding of your energy requirements and to help you develop the tools to create awareness among your staff and the nursing home residents.

4. Energy Monitoring

We offer a number of monitoring products and services. These range from simple reconciliation and verification systems to hi-tech analytical diagnostic measuring and monitoring systems.

5. Energy Projects

Digren Energy can offer a full design and specification service for a wide range of energy projects. In regard to nursing homes these would generally be lighting projects, HVAC efficiency controls and advanced BMS.

6. Digren - Energy Bureau.

Digren Energy offers an Energy Bureau service. This allows our clients get impartial information and/or advice in regard to all aspects of energy management, energy efficient projects, bill reconciliation and energy training.

It's Easier Than You Think to save money

Many Energy Audits offer advice that requires significant capital cost. Our approach comes very much from a financial control perspective. We identify what can be achieved through in house energy awareness and then apply certain low cost measures. An energy management plan ideally should be implemented over a 3 year period, in a sustainable manner working with existing resources.

Example of simple energy saving opportunities.

AHU - Air Handling Unit

*Based on average electricity cost of €0.1365 c/kWh

Energy Opportunity	Calculation Method	kWh savings per year	Cost* Savings per year	Capital Cost €
ENERGY AWARENESS				
Train staff to turn off bar and restaurant lights at closing	40 No. 50W spots 12 hrs/day, 365 days	8,760	1,196	0.00
Turn off Bar ventilation plant 01:00 - 10:00	2 AHU's @ 7kW each 9 hrs/day, 365 days	45,990	6,278	0.00
LOW COST OPPORTUNITIES				
Replace all applicable tungsten light bulbs	100 lights @ 82W saving/ light, 24hrs/day, 365	71,832	9,805	600.00