



## Why should I consider an energy audit for my business?

The bottom line is that having your business energy audited and implementing recommended changes to reduce consumption and waste can save your company money.

According to John Herbert, who has conducted energy audits for Hong Kong-based Kelcroft since 1993, every audit he has done has paid for itself, in many cases, several times over. This track record is unlikely to be broken as oil rolls past \$100 a barrel. Saving money on energy bills can make your business more profitable or more competitive if those cost savings are passed on to the customer. A happy side-effect is that your company can reduce its carbon footprint and become cleaner, greener and more sustainable.

## How does an audit work?

An energy audit is a systematic review of energy operations and practice.

Conducted by professional service providers, an audit will cover some or all of the following areas: energy efficiency, water efficiency, lighting, heating and cooling, appliance efficiency, recycling and waste, and transport. The energy audit will show you where energy consumption could be reduced and wasteful usage eliminated.

## What will it cost me? What cost savings can I expect?

In Hong Kong you should expect to pay around HK\$1-HK\$2 per square foot for an energy audit. Other markets might be cheaper.

Unfortunately the biggest potential cost saving – turning down the air conditioning – won't be available to most businesses operating in large buildings in Asia because of shared central air systems. Turning up the temperature may reduce your carbon footprint but any cost savings will be enjoyed by the landlord rather than you. Until the system changes so that savings are passed on to tenants, there will be no financial incentive for most companies to turn up the temperatures – and little respite for workers shivering through the work day.

An audit could enable workplaces in buildings without a central air system to cut 30% or more from their energy consumption. Even those hampered by a central air system will find numerous areas in which energy consumption and costs can be reduced. Kelcroft's Herbert identifies some common considerations.

# ENERGY AUDITS — SHOW ME THE MONEY

- Small powerloads can add up to big bills. Take a tour of your workplace at night or at the weekend to really see the waste in action. Common culprits include mobile phone transformers which are left plugged in and continue to draw power, computers and other office equipment left on full power, and redundant machinery such as chiller pumps operating 24/7. A master switch that controls all power sockets can quickly eliminate that waste.
- Those responsible for buying electrical appliances should opt for the most efficient models – most jurisdictions in Asia have a system that rates the efficiency of electrical appliances making it easy for consumers to make the smart choice.
- Does your workplace lighting make economic sense? If you have a master light switch that instantly turns all the office lights on and off, you might as well be burning money – particularly if the lights are left on all night. By lighting areas separately and only when people use them, you can slash electricity bills.
- If you're still using standard incandescent lighting then more than 95% of the energy going into them is coming out as heat rather than light. Not only does that mean inefficient lighting but in hot climates you'll have to turn the a/c up to counteract the heat increase. Efficient alternatives to incandescent bulbs include LED or compact fluorescent bulbs.
- Get your motor running – efficiently. Motors run everything from lifts and escalators to a/c unit fans and chilled water system pumps – they also use up three-fifths of the world's energy. Many developers will install cheap, inefficient motors leaving the customer to pick up the tab for years to come. Typically, the cost of running a motor for a year is the same as its initial cost, so installing a new, efficient one will pay for itself after just a year.
- A bit of old fashioned elbow grease can go a long way. Some basic housekeeping can ensure equipment operates at maximum efficiency. Clean windows let in more natural light and reduce the need for artificial lighting while clean diffusers on lamps ensure that they do a good job. **3°**