

Green Energy:

Going green and reducing your electricity costs

“THE CHEAPEST AND CLEANEST ENERGY IS THE ENERGY THAT YOU DON’T USE.”

There are many ways you can reduce your carbon footprint and play your part in business to help the environment and save on your bottom line. The misconception about going green or looking at alternative solutions to reduce your carbon footprint is that it is going to cost your business money. Yes, there may be an initial upfront cost yet you need to look at the return on investment and then the ongoing benefits it provides to your business. In many cases after payback your business will be in front not only on the bottom line, you will be also be in front on the social and environmental issues that we are confronted with today by just making that decision to think green.

It's all too often easier to have the ostrich syndrome of sticking your head in the sand yet if you look at the options it is not difficult to make a decision that will start your business stepping in the right direction.

If you are driven by the bottom line and cost reduction is your motivator then consider some of the options below, these alone could entice you to seriously think about efficiencies within your business that will have significant impact on reduction in the bottom line, by default you are heading in the green direction.

So what are your options and how difficult is it, you may be asking?

Option 1 – GreenPower

The easiest option is to offset your business by using GreenPower. It doesn't have to be 100% of the electricity bill it can be a percentage like 10%.

What is GreenPower? It is a government accreditation program for renewable energy. It is bought by your energy provider on your behalf. Renewable energy is generated from sources like mini hydro, wind power and biomass which produce no net greenhouse gas emissions. When you choose to buy a GreenPower product the few cents extra you pay in addition to your electricity account each day is invested in the renewable energy sector. Your purchase of accredited renewable energy does not mean your electricity will come directly from a renewable source to your property. Instead the equivalent amount of new renewable energy is added to the electricity grid on your behalf every year so you will be responsible for a reduction in greenhouse gas emissions. For further information go to the government website www.greenpower.gov.au.

Option 2 – Demand side management and demand reduction

Reducing and managing your electricity demand plays a significant role in going green. “The cheapest and cleanest energy is the energy you don't use”. Taking this option not only has a positive impact on your bottom line it expands to wider economic impacts and has significant environmental benefits. There is an interesting statement listed on the CSIRO website about demand-side resources, it says, “demand-side resources could be worth up to \$1 billion per year to the national electricity market while helping to keep the lights on during extreme events”. Not small change by any means.

Demand reduction has to be a key topic if we are to develop a sustainable approach on the development of new power infrastructure. Our electricity supply is often taken for granted by most people yet it is now a matter of concern. With our population growth, temperature shifts in the extremes with heat waves and cold snaps and our general our demand for power increasing will we get to a point where our demand for electricity is greater than supply.

Think of the electricity network this way. It is all about supply and

demand. Electricity generally cannot be stored so it has to be produced based on the demand at the time. If the demand for electricity keeps growing and we hit capacity with current infrastructure, where do we get further supply from if a power station takes eight years to build and we don't have enough renewable sources?

We have seen examples over the last 12 months where the network has hit peak demand with the heat waves in Melbourne and South Australia that caused turmoil in the network and shut down non essential supply to cope with this demand. If we build more power stations to fuel this demand you do the maths, the economic and environmental impacts are significant to say the least.

So if you want to be serious about making a real difference and also have reduced electricity costs start learning about DSM (demand side management). DSM is a term that you as managers or owners of property will start to hear in the near future if you have not already. What does it mean? In technical terms it is the process of managing electrical load and managing peak demand, both in quantity and in timing of use. The bottom line is you save money by reducing your peak demand and the total consumption of electricity. Peak demand costs your business significantly pending on the tariff or contract that you are on, it also has a big impact on the electricity network providers, as explained above.

How do you as a business manager, owner or operator play your part in reducing your own businesses demand for electricity? Start simple, then work out where you will achieve the best return on investment. Understand and assess your property, undertake an energy audit; that way you will know and understand what are the critical areas within your operation that use power and how the critical areas use it. Education is the key.

Below are some of the ways to reduce demand and your electricity consumption:

- Reduce lighting operating times in car parks and stairwells through intelligent control
- Look at efficient lighting like energy efficient globes, T8 – T5 converters or LED
- Hot water systems such as heat pumps
- Renewable energy sources like solar or wind
- Air conditioning and refrigeration: establish minimum performance and monitoring standards. These devices cool to a controlled temperature then turn off or power down, this cycling can be controlled to minimise demand and peak prices.
- Swimming pool and spas: don't run filters and non essential items in peak times, put a timing controller on the system and switch on if off peak.
- Power factor correction: speak to your electrician
- Pumps and compressors : look at using in off peak times

In your effort to go green and save money maybe you can use some of the savings you generate from DSM initiatives to invest back into green power, then you have a double benefit to the environment with no or minimal cost to your business. ■

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