

10 Tips to Save Electricity and Water

Here are ten things you could consider as an initial action list to reduce energy consumption in your office. They are listed roughly in order of cost/benefit (the most benefit to you at the least cost listed first).

	Benefits	Capital Cost
Switch off all appliances, air conditioners or lights when not in use.	Very often lights and other appliances such as water heaters etc, are left on 24/7 because that's the way its always been. A few simple changes may have dramatic effects to your energy bills.	Zero
Take control of air-con temperature settings	It takes a lot of electricity to heat and cool large office spaces. People who turn up the heat to maximum all the time on cold days to the point that others become uncomfortably hot or who do the opposite on hot days, not only cause office squabbes over what is a comfortable setting. But more importantly, result in vast amounts of energy being wasted, especially if the temperature is set to maximum heating or cooling and then turned down later when it gets too hot or cold, and then turned back up again etc. Its far more efficient to decide on what a comfortable temperature setting is and stick to it year round.	Zero (in most cases).
Turn off the geysers that only supply hand wash basins.	Most people dont wait for the water to get hot before they wash their hands. Keeping water hot for this purpose alone uses a lot of energy for very little benefit.	Zero
Install water flow restrictors on all basin taps.	These devices have standard threads that fit most taps. They reduce the water flow while adding air bubbles to the flow. They save water because most people wash their hands for the same amount of time, regardless of the water flow.	Low
Critically evaluate the need for all 50W halogen downlighters	These little lights consume enormous amounts of energy when used in large numbers. They also give off a lot of heat which discolours the ceiling and adds significant extra heat load to the building's air conditioning system. They should not be used unless absolutely necessary. If they are used in lage numbers, consider either simply switching them off, or replacement with T5 luminaires or replacing the halogen bulbs with CFL or LED alternatives.	Low-Medium or High depending on the solution chosen.
Have your power quality measured.	Power quality problems often have significant costs associated with them. Sometimes those costs are obvious, in other cases they are hidden.	Low-Medium
Replace all old fashioned T8 and T12 flourescent tubes with T5 adaptors .	Modern electronically controlled T5 tubes use 20-30% less electricity. One can get adaptors so that they fit straight into the older T12 and T8 fittings.	Low-Medium
Install T5 light fittings.	These units provide more light and use up to 40% less electricity than traditional T12 and T8 flourescent	Medium-High

	tubes.	
If your power factor is low install power quality correction equipment ASAP.	Low power factor at maximum demand is like throwing money down the drain. You are paying much more on your monthly bills than you need to. This is easily rectified.	Medium-High
Consider variable speed drives for chiller and air-con fans and other devices that could be run at slower speeds	Most electric motors run at fixed speeds. In some cases fans being driven by those motors need not run at maximum speed all the time. By slowing them down, the power consumed to drive them often falls exponentially.	High