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Twelve best energy management Actions

- 1. Empower the student body.** Having students police the energy waste in their school is potentially the most significant action you can put in place. This one exercise can reduce your energy consumption and emissions generation by as much as 25% on its own when properly implemented. Fostering good switch off habits in the next generation is vital in changing our culture from one that wastes energy to one that values it.
- 2. Switch off at the wall.** Nearly all modern-day appliances and equipment carry standby or phantom loads. Photocopiers consume as much as 100 watts even when switched off. Computers, printers, chargers, coffee machines, fax machines, projectors, speakers, TVs, CD players, PA systems and other appliances carry between 2 and 20 watts, 24 hours a day, 365 days a year. One photocopier produces 1.2 tonnes of emissions and costs \$114 per year when left on at the wall. This is without producing a single photocopy! Roughly 30% of the total daily energy consumption occurs when there is no one occupying the school.
- 3. Change school policy.** Make it school policy to purchase the highest energy rated appliances for all equipment and lighting at all times. Cost is always a consideration but our experience has shown that appliances or equipment that are cheaper to buy and have lower energy stars generally consume far more energy over their life cycle. As a consequence, they produce more emissions and cost more to run. When life cycle costs are added to the purchase cost, poorly rated equipment makes little economic sense and delivers poor environmental outcomes.
- 4. Use the power save options built into your equipment.** Computers, printers and photocopiers have power save and/or hibernation modes that can be programmed to shut down the appliance after use. Ask your service technician and/or read the instructions to enable these energy saving features in your equipment. Encourage your I.T staff to activate energy saving features in all school computers (including laptops). Computers and I.T related equipment is the fastest growing user of electricity in your school. It can be as high as 25% of the total energy consumption.
- 5. Eliminate Screen Savers.** Screen Savers do not save energy and are no longer necessary in modern computer screens. They actually waste energy. They were designed to prevent imprinting or burning of text and images in the phosphors of early monitor types. They can consume as much or more energy than if you were operating the computer!

- 6. Use timers.** Timers are a clever and convenient way to eliminate energy waste. We all forget to switch off from time to time. A timer will not forget! Place timers (24hr, or better, programmable ones that can also turn off during weekend and holiday periods) on all items that have phantom or standby loads. Timers can be of the plug in variety, radio controlled or hard wired by an electrician. They can be used on all manor of equipment including split systems, gas heaters, photocopiers, hot water systems (including over- sink types), lighting (including security & outdoor) and computers. One timer on the staffroom hot water boiler will save nearly half a tonne of emissions and save \$40 per year.
- 7. Signage.** Good and relevant signage with messages that show a benefit for action and a consequence to inaction will have more impact than static messages such as 'switch it off please'. One example; 'Switching off lights in this school will save 16 tonnes per year. This is equal to taking 4 cars off the road.' Be creative with signage. Have a competition for the student population to design their own clever and interesting signage that has relevance and lasting impact.
- 8. Turn off the fluoros.** There is a myth that its better to leave fluorescent lighting on rather than switch if off when exiting a room. This was true of the original fluorescents of yesteryear, yet this myth has persisted to this day. We have calculated that if you're leaving the room for longer than two minutes, there is a cost benefit both for the life of the lamp and the cost of running it, in switching it off. It is a good behaviour change exercise too!
- 9. Reset the run times.** Just like outdoor/security lighting, most centralised heating systems are programmed to come on in the winter months very early in the day. Usually way before the first staff member or student has arrived. This is wasteful, costly and just adds to global warming. If it cannot be put on manual mode, changing the run times by even just half an hour will have an enormous impact on your emissions reduction strategy.
- 10. Program the temperature and leave it alone!** Setting an extremely high or low temperature on the thermostat control does not heat or cool a room any quicker. Educate staff on this myth. Split systems and gas space heaters, heat and cool a room at fixed rates. Accepted comfort temperature is between 18 and 21 degrees. Set maximum cooling temperature to 24 degrees and max heating temperature to 19 or 20 degrees and implement a policy of 'Do Not Touch'. If staff persist in altering temperature settings the temperature range can be set internally by a qualified electrician or by the manufacturer. Every one-degree thermostat change equates to a 10% increase or decrease in cost and in turn emissions.
- 11. Set a target.** Setting a % target will allow your school to measure your success against stated goals. This can be done in ResourceSmart Online and monitored by a student action team.
- 12. Celebrate Your Success.** Dedicate a section of the newsletter or web page to your energy management strategy. Show the whole school community the enormous gains that can be achieved. Schools are centres for change within our communities and as such, have a fantastic opportunity to lead local actions to reduce the future effects from Climate Change.