

# SAVING ELECTRICITY IN TOURISM

## Autumn 2010

NamPower is looking at an increase of 35% on electrical costs. As everyone in the industry is now very concerned about their financial bottom line, here are a few ideas on how electrical consumption can be reduced in many small ways that can make a big difference.

### 1. Lighting:

- Buy energy-saving bulbs and replace all your incandescent light bulbs. A large selection of warm-white and other bulbs are available.
- Put stickers at the light switches noting the need to turn lights off if there's no one in the room. Catchy phrases like: "Done for the night? Switch off the light!" Can fit on the cover plate of a conventional switch.
- Open curtains rather than putting on lights in the day.
- Move desk/chair closer to windows so that people are less tempted to switch on lights in the day.
- Paint interiors light colours and choose lighter colours for "softs" when you decorate to brighten up dark interiors.
- Go for larger mirrors to help reflect light.
- Use movement sensitive outdoor lights rather than leaving lights on all night (with infra-red sensors).
- Don't leave spotlights on waterholes all night – have a cut-off point.
- There are now more energy efficient lighting for spotlights: ask your friendly electrical supplies shop for their ideas.

### 2. Water heating:

- Put timer switches on electrical geysers to switch them off during peak electrical consumption times (07h00 to 13h00, 17h00 to 21h00). You can even leave it off for 2 to 3 days and still have hot water.
- Reduce the maximum temperature on the thermostat of electrical geysers.
- Install solar water heaters on all new projects and seriously consider converting all existing geysers to solar. The capital expenditure will be worthwhile in the end when your guests still have hot water even if there is a blackout.

- On the coast, solar does work, but if you aren't keen – what about gas?
- Wrap the geyser cylinders and hot water pipes in blankets or insulation to lose less heat during the night and winter.

### 3. Cooking food:

- Cater with more raw fresh fruit and vegetables in salad selections, smart sandwiches, etc. instead of a lot of cooked food.
- Design the menu around stove-top dishes that can be cooked on gas rather than baked in an electric oven.
- Rather than keeping the food warm for hours on an electrical hot plate, wrap the pots in stuffed felt "cosies".
- Also serve cold meats, etc. for lunch instead of hot food, to reduce the amount of keeping hot.
- Cook with the lid on the pots as much as possible.
- Don't use a small pot on a large stove plate.
- Use a "hotbox" for gentle slow cooking.

#### HOW TO MAKE A HOT BOX:

Take two large old cushion covers (or make two cloth bags). Fill them both with old polystyrene packaging material broken into little pieces and sew or staple them closed. Place one bag in the bottom of a cardboard box.

When your food is boiling, place the pot on top of a piece of cardboard on the bottom "cushion" and cover the pot with the second cushion, making sure that the pot is well covered all around. The food will continue cooking for 2 to 6 hours, depending on how well the hot box is made.

- If you cook with electricity, cook the evening meal before 17h00.
- A microwave uses 1/3 of the energy of a stove.
- If you cook with wood, use a wood-efficient stove.
- Even better than electricity or wood - cook with gas or with a solar cooker. (Solar cookers are also a talking point and can be used as an additional "point of interest" for your guests)

#### 4. Cooling/ freezing food

- Don't leave the fridge/ freezer doors open for long periods.
- Buy fresh food more often in small quantities and get a smaller fridge (food is healthier too!).
- Keep the fridge full rather than empty (put in water bottles to fill empty space). Freeze water bottles and place them in the fridge for "free" cooling.
- Cover food to prevent moisture build-up and defrost regularly.
- Pull the fridge freezer a little away from the wall so that the coils can work more efficiently.
- Install an old-fashioned "farm-cooler" to pre-cool drinks and reduce the load on your freezers.

#### 5. Boiling water:

- Don't boil a full kettle when you only want a cup.
- Keep a thermos flask next to the kettle and fill it when you boil too much water.
- Use kettles on the gas hob rather than electrical kettles. They are more efficient and don't use electricity.
- Invest in thermos flasks for hot water rather than urns that need power all the time.

#### 6. Heating spaces:

- Don't use space heaters this winter – encourage guests to dress warmer (stock a range of warm themed safari clothing in your curio shop), put brisk evening walks on the programme and hot water bottles in the bed.
- Install ceilings and/or insulation if you don't have in the rooms. For canvas and thatch roofs – provide extra bedding.

#### **INSULATION CAN BE ALMOST ANYTHING:**

Old polystyrene packaging, layers of cardboard, packs of old newspaper – just stuff it in boxes or bags and put it in the ceiling space. Commercial options are Sisalation, Bubble-foil, Isotherm, Isoboard, Aerolite ('think pink'), Thermguard etc.

#### 7. Cooling spaces:

- Open windows to let cool air in and through rooms.
- Encourage guests to dress cool and take off jackets and ties.
- Shade windows that get direct sun.
- Shade outside walls against the sun.
- Paint buildings in lighter colours outside.
- Plant trees on the west sides to shade buildings or tents.

#### 8. Appliances:

- Switch off all the appliances that still use power in standby, like computers, TV decoders, video machines, cell-phone chargers, etc. – a microwave oven uses as much as 40% of its total monthly power consumption just through its standby mode.
- Don't keep televisions and radios running when no one is watching or listening.

#### 9. Washing clothes:

- Reduce the temperature in the washing machines from 60° to 30° (reduces energy use by almost 50%)
- Wash as much as you can by hand and create employment.
- Rather than tumble-dryers, use a washing line and the natural sun.

#### 10. Garden and homecare:

- Set the pool timer to operate the filter pump from midnight to 06h00 (off-peak times).
- Set pool timers to run for short periods regularly (e.g. 5 minutes every hour), rather than for prolonged periods.

#### 11. Renewable energy and energy generation:

- Look into alternative sources of energy, especially renewable energy like solar (for inland locations) and wind (for coastal locations). The cost of these systems is reducing all the time and, combined with a good energy efficiency programme, it may be less expensive than you expect.
- Use a hybrid system with solar or wind rather than a polluting genset for back-up power.

#### 12. Saving water:

- Save water! It needs pumping to get where it is, and saving water thus saves energy.
- Set your water pumping systems for off-peak times.
- Cover pools (it also helps to keep the water warmer and reduces cleaning as well).
- Separate grey water (from showers, baths and basins) from black water (toilets) and use it to irrigate the garden instead of fresh water.
- Use water-saving toilets and devices (like a brick in the cistern!)
- Cut down on that heavily irrigated lawn and lush garden.