Tip Sheet for

Lighting Options

When designing and selecting lighting for your home make the most of natural light. Lighting impacts energy bills and some types of lighting can also adversely affect the thermal effectiveness of our homes. So it's important to consider the type and use carefully. Different areas of the home also tend to need different levels of lighting. For example the kitchen, family rooms and bathrooms generally require greater levels of lighting than hallways, bedrooms and laundries.

Natural Lighting

Natural light is always best, and it's free! Maximise the use of natural lighting where ever possible, and in those internal areas consider double glazed skylights (if they open all the better for summer ventilation). Light coloured paint also helps to reflect the light and make a room feel more light and open, dark colours will absorb it.

General Lighting

Pendant lighting is making a style comeback and is much more efficient (thermally and cost wise) than down lights. There's a great range of pendant lighting in the stores these days, choose the one that works best for you and your budget. Compact Florescent Light (CFL) globes are good options for these but they can take up to a minute to 'warm up'. Be aware when choosing the globes, they come in different colours, different wattage and some (not all) are dimmable. For domestic use go for a 'warm white' colour and if you need them dimmable, check the packaging to ensure you get the correct one.

Concealed lighting is also making a comeback using energy efficient fluorescent or Light Emitting Diodes (LED) strip lighting, ensure they have good reflectors behind them to maximise the light output. These are also thermally efficient for the ceiling and you can complement your living area with energy efficient task lamps.

Finally down lights. Probably the most in-efficient lighting you could use, both from a cost and thermal efficiency perspective. Not only do they cost more to buy and run, it also takes more lights to illuminate a given area. Additionally, the holes in the ceiling act like lots of little mini 'chimneys' which allows heat to escape into the ceiling space. They are not very thermally efficient and if not appropriately covered can reduce the effects of ceiling insulation.

However, if you must have down lights you can install a sealed mount with a good quality LED (with a broad beam) and a down light cover in the ceiling so you can maintain insulation levels. Be aware that LED lighting varies significantly in quality, colour and appearance. Find a reseller who knows what they are doing and get good advice. Megaman are a good CFL brand, EcoDecisions can help with LED advice.

Switching

Where you can, put lighting on to separate switches. This provides more flexibility and better control of your lighting; it can also save you in running costs because you only use what you need.

External Lighting

There are energy efficient CFL and LED external lighting options available. These use around 80-90% less energy to run and last much longer. These are ideal for entertainment areas and entrance lighting. If using motion control switching use LED as they are better suited for this type of lighting.

Garden Lighting

Solar garden lighting has been cheap and readily available for many years. If you are looking at a new system, look for lights powered by a capacitor rather than batteries. Capacitors don't wear out and don't need to be replaced like batteries.

Replacement Lighting – What can you save?

Existing Light	Life span Hrs	Repl. Cost each	Cost over 10 years	Repl. option	Life span Hrs	Repl. Cost each	Cost over 10 years	Savings over bulb life
Incandescent	1,000	n/a	n/a	CFL	5,000	$9	$71	n/a
4 X 50W Downlight	2,000	$5	$860	LED	30,000	$40	$232	$1416
300W halogen floor lamp	2,000	$4	$904	Replace entire unit with CFL Fitting	5,000	$50+ $9 for each bulb	$165.80	n/a
100W incandescent floor lamp	2,000	$5	$332	CFL	5,000	$9	$115.80	n/a
Double outdoor flood light+	2,000	$9	$1020	CFL LED	5,000 30,000	$20 $60	$237 $190	$1780
Double T8 Fluoro	5,000	$3	$252	LED	30,000	$69	$245	$152

Courtesy of EcoDecisions

Costs based on 4 hours per day and 20cents per kWh
+ Typical for lights on motion detectors

For any queries or additional information on this tip sheet please contact Green Moves Australia on (03) 9024 5515 or 1300 898 742

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