

Energy Matters

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Next Issue

- *Your Life Time carbon Debt*
- *Water Tanks*

".. my fridge hasn't missed a beat in 30 years"... but it is costing \$300 a year to run ..."

Update on the Green Loans program

I just heard today that they are now promising reports will be provided within 3 weeks of the assessment, which is good news, although I am not sure why they couldn't do it sooner!

There have been over 54,000 assessments booked and nearly 32,000 completed. They are about to mail out 17,000 reports, so I suspect that any assessments done before mid October should arrive in the next few days.

I hope you find the reports are useful. If you do have any queries, please get back to me.

A couple of people have about what is happening with Solar panels. Last month I said that 1.5 KW systems were available starting around \$2,300. These prices are generally no longer available. They were based on REC's having a value of around \$40. As you may have heard in the media, the market has been flooded with REC's (partly because the government in there wisdom decided to give out 5 times as many for solar panels) so that the price has dropped to \$25. This means a 1.5 KW system has increased to over \$3,500 - it would have been more except for the high Aussie dollar.

The Amazing Fridge

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At a recent assessment the owner mentioned, "*My fridge is fantastic. It hasn't missed a beat in 30 years*". I was impressed. At the end of the assessment she mentioned that her electricity bills seemed high and I suggested it may be because of the fridge - I had noticed it had been running all of the time I had been there. I connected up my meter and let it run for 24 hours. It showed the fridge used 4Kwh a day. My fridge, which is similar in size and only 2 years old, uses .8 Kwh a day.

So her fridge costs \$300 a year to run, mine costs \$60. I suggested that she take out a Green Loan to buy a new 5 star model. She will be able to pay off the interest free loan over 4 years from the savings.

So if your fridge is old and is running

half of the time, think about getting a new one.

What's more, that old beer fridge in the garage could be cooling some very expensive drinks.



Probably ready to replace...

Disclaimer

The views in this newsletter are those of the author and not necessarily those of the Green Loans program

Looking for external blinds?

Try Margaret and Sue at Diamond Valley Canvas
22 Elizabeth St
Diamond Creek
9438 5065

www.dvcanvas.com.au

"..A tumble drier emits 7 times as much CO2 as using the gas heating... and hanging them outside is even better ..."

Winter Mode versus Summer Mode

While this may be quite obvious, it is worth thinking about the differences between running your house in winter and running it in summer.

In winter the aim is to keep every bit of heat in that you can, while in summer you want to keep it out.

Roof and wall insulation works great. It keeps the summer heat out and the winter heat in.

Blinds are different, you close them in the winter nights to keep the heat in, open them during the day to let the sun in. In Summer you leave them open at night to let the heat out and closed during the day to keep the heat out.

The same with outside blinds, open during the winter, closed during summer. This is why deciduous trees are great for

shade. They automatically keep the summer sun out but let the winter sun in.

This goes for shade sails too. It is really a good idea to take your shade sail down in winter, give it a good wash and pack it away in a nice dry spot. Not only will it last longer, but you maximise the winter sun coming into the house.

And this is why North facing windows are so great. The eaves keep the summer sun out but let the winter sun in.

With air flow, during winter you keep the house closed up as tight as possible, since the outside air is always colder than inside. But in summer you leave it open all night to get as much heat out as possible, then close it during the day.

Drying Clothes

What is the most energy efficient way of drying your clothes? Obviously the clothes line is the best, and the electric tumble drier is the worst. But what about the third option, hanging them inside over the heater vent?

Most people dry their clothes outside in summer and inside in winter. While this seems reasonable, if you are concerned about thermal performance of the house rather than getting your clothes dried quickly, you should do the exact opposite.

Wet clothes inside the house act exactly like an evaporative cooler. So, in Summer you should dry your clothes inside to help cool the house, but in winter, dry them outside, or at least get most of the moisture out using the clothes line.

How much heat will be it take to dry a load of washing? The energy to remove 1 Kg of water exactly equals the Latent Heat of Evaporation, 2.260 Mj. The average washing machine load has 6 Kg of clothes and 3 - 6 kg of water. It will take 6 to 12 MJ of heat which is about 5% of the average daily gas usage. But what about the electric tumble drier? It is really bad. Not only does it dry the clothes, it heats the air, so it takes 10 to 20 MJ (3 to 6 KWH). But the bad part is it emits 7 times the amount of CO2.

So, while drying clothes over the heater duct in winter is much better than a tumble drier, the clothes line is even better!