

Energy Matters

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Green Loans Report

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Disclaimer

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

The big news is that the reports are just about ready to be released. The people running the program say that they will start coming out next week. I have had a look at them and while they are a bit confusing, once you get in to it, it generally makes sense. I have sent a sample report for my house which you may wish to look at. I must stress that it is still in draft status and the final reports may be different. I should also mention that I haven't written the report, it is generated automatically based on data I collected from my home.

There are 4 sections to the report.

The first section contains a summary of the big energy users in the house and comments on them. These are categorised with smiley faces (good) and sad faces (not so good). My comment would be that some of the sad faces are a bit harsh and even contradictory (e.g. the washing machine is both efficient and inefficient)! This section also shows your overall standing based on running costs, emissions and water usage. The dotted line in the middle is the average, the solid house is where you are now and the dotted house is where you could get to if you followed all of the recommendations. (I am not sure why the efficient house is so sad!)

The second section describes actions you can take, showing the cost, the money



...the solid house is where you are now and the dotted house is where you could get to..

savings, emissions savings and water savings. The savings are annual savings and are only approximate.

The third section provides a process for implementing the changes.

The fourth section is probably the section you are most interested in. It details what things you are eligible to get under the interest free loans. If it does not include something that you think you should be eligible for, get back to me and I will see what I can do.

Some comments are confusing. For instance the final comment in my report "*Connect to natural gas for all of your cooking, hot water heating and space heating*" has nothing to do with my heating or hot water. It refers purely to my electric oven.

Anyway, when you get your report, I hope it makes sense and is useful. If you have concerns, drop me an email



Install close-fitting blinds or curtains, or install high performance window treatments to your windows to better regulate the temperature in your home [19]

Sample recommendation from my report

Heat Pumps – What are they and are they any good?

Looking for external blinds?

Try Margaret and Sue at Diamond Valley Canvas

22 Elizabeth St
Diamond Creek
9438 5065

www.dvcanvas.com.au

“If you live in Tasmania, heat pumps are ideal...”

Energy Shop

The Enter Energy and water saving shop is a great starting place for your energy saving needs.

Corner Susan and Bridge rd Eltham, or visit www.enter-shop.com.au

You can register as a member for great deals. Include my name as the Green Loans assessor. <http://www.enter-shop.com.au/?dologin=yes&>

Firstly, I apologise if this article gets a bit confusing, but I think it highlights some of the dilemmas we encounter when trying to decide what is the best thing for us to do.

Firstly, how does a heat pump work. Basically it is a reverse cycle air conditioner. If you put an air conditioner in reverse, it heats up the air inside and cools down the air outside – it pumps heat into the house from outside. A heat pump does this for your hot water. It pumps heat from the air into your hot water. If you are an expert in thermodynamics you can show that a heat pump can be 8 times as efficient than a normal electric heater. In reality, they normally come out at about 4 times as efficient.

So... heat pumps are great. Throw out your old electric hot water service and replace it with a heat pump. And if you lived in Tasmania, heat pumps are ideal. There they have no Natural Gas and generate their electricity from Hydro power.

However, in Melbourne, we do have natural gas and our electricity comes from brown coal. Brown coal generated electricity has approximately 5 times the emissions as natural gas for the same amount of energy. The heat pump gets back some of this efficiency, but a natural gas hot water service should have less emissions than a heat pump.

So what is the best? I would go for solar hot water, backed with a natural gas booster. This truly has the least emissions

But what if I use Green Power? All of my electricity comes from renewable sources, so surely it is better than natural gas? Perhaps a good argument, since green energy encourages renewable energy production, but I'm not convinced. From a community point of view we should be minimising our electricity usage until we have replaced all of our coal fired stations. Every KWH of electricity saved means more brown coal left in the ground. And gas is 30% cheaper for the same heat in your water tank. You could spend the savings on "Green Gas", or invest it in Hepburn Wind www.hepburnwind.com.au

Of course this is only a part of the analysis. I have talked about the emissions generated from running the heater. We should also look at the energy used to build the unit. I believe that a gas heater will last longer and consume less energy in its production, than a heat pump. But the energy content of a solar hot water service plus a gas heater may be more than just a heat pump.

So my preferences (in order) would be:

- Heat pump on renewable power
- Electric heater on renewable power
- Solar plus gas booster
- Gas heater
- Heat pump on coal fired power
- Electric heater on coal fired power.