

# Double Glaze Matters

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## **Montmorency Carbon Neutral Bush Dance**

*Sat 4th Aug,  
\$20 for adults*

## **The Shenanigans Dance Band**

*Email to join me*

## **Montmorency Food Swap**

*Sun 1st July,  
10:00—11:30*

*Montmorency Primary  
School*

*Bring your home grown  
produce to swap.*

*This month we are having  
a special day and  
providing home made soup  
from 11.00*

## The Carbon Tax

Only 1 sleep to go and then we will all be saved!

I know there is a lot of concern about the tax, but it seems to me that it should have considerable benefits in that it will encourage people to reduce their energy usage and will also encourage renewable energy.

At a philosophical level, I see no issue with implementing a carbon tax. Taxes are used to serve 2 purposes. The first is to raise money and the second is to influence behavior.

We tax the earning of income to raise money. It has a slight adverse influence on behavior since it discourages people from working.

We tax petrol. This is primarily to raise money, although also has positive influence of reducing usage.

We tax cigarettes. While this was originally to raise money, it now has a strong component of influencing behavior and reducing smoking levels.

So why shouldn't we tax people's carbon emissions? It raises a lot of money and it acts as a positive influence on people. Provided the money is principally used to offset existing taxes (which at least 50% is) then I see it as being positive.

Of course there is the problem that if we ever manage to eliminate CO2 emissions totally, there will be no income from the tax and so no compensation paid... but we are a long way from that.

I admit it will serve little purpose if other countries do not "follow our lead". If in 10 years time we find that no one else is doing anything we can wind back the tax, but I suspect by then it will seem so normal, we wouldn't even bother!

I just got a pleasant surprise! I have been buying Green Power for several years and paying an additional 5 cents per KWH for power. With the Carbon Tax I don't pay anything extra – which makes sense since I am not using coal fired power. My power increases by 2.5 cents and my Green Power surcharge reduces 2.5 cents!



**Franciscus Henri's contribution**

## My Projects

At the moment I have three projects on the go, although none are progressing too quickly! If you are interested in any of them, drop me an email and I can provide more information.

**Home Sensors.** As you may know, I currently have 6 temperature sensors spread around my house at the end of long cables.

My plan is based on the \$30 Arduino processor board. I would build multiple Arduino boards with temperature, humidity or current sensors as required. These will talk via wireless to an Arduino board which can store data for 24 hours and forward it to my computer when it is active.

Hopefully I can get 24 sensors and 4 Arduino satellites for around \$200. I have found that the Melbourne Hacker Group has already built and programmed a similar system. So I plan to attend one of their meetings and copy their design and software.

The good thing about this design is that I can lend it to people to monitor their house for a 4 week period. It should all install without any cabling or electrical work. I can monitor temperature, humidity, power usage and Solar panel power generation.

**Secondary Glazing.** I have done some secondary glazing in my house which involves adding a second sheet of glass to the existing window. My problem has always been condensation.

I have now sourced the aluminium spacers that they use in double glazed windows plus the silicon crystals that absorb moisture. By using them I hope to get a much better result.

One concern is that the crystals only absorb moisture once. Depending on how well the unit is sealed, it may only last 6 months before it starts fogging

again. So My first test will be to see how much moisture the crystals absorb over 12 months.

I plan to design it so that the crystals can be removed from the aluminium spacer. By heating them in the oven they will dry out and once again absorb moisture.

Of course this is only worthwhile if you have a source of cheap glass. If you are paying \$100/sq metre, you are better to buy a replacement double glazed unit. Currently I have some glass from customers who have double glazed their house. If you double glaze half your house you then have free glass to secondary glaze the rest of your house!

This could be a solution for aluminium windows. Just silicon the spacer and second sheet of glass to the existing glass or frame, making sure that it can't "fall off" of course.

**Ducted Heater upgrade.** I have a problem with my rumpus room in that it doesn't get sufficient air flow from the heater. So I have bought a fan to act as a booster for the flow. But I couldn't work out how to turn on the fan. I couldn't hook it up to the heater fan since the heater fan is variable speed. I have decided to try placing a thermal switch in the duct.

When the heater starts running, some hot air will flow down the duct. Once the sensor heats up, it will turn on the fan and it will increase the air flow. Once the heater turns off, the sensor will cool and the fan will turn off.

In summer I hope to disconnect the duct at the heater, then manually turn on the fan to draw cool air from under the house into the rumpus room.