

Double Glaze Matters

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A great Video

Last week I spent an hour watching a Utube video by Us futurist, Tony Seba

He has studied many disruptive technologies such as the car, the PC and the I-Phone. In all cases, once these technologies had reached a point where they were cheaper than the technology they re-

Grandparents Against Adani

In March I am leading a group of grandparents/seniors to Qld to show our contempt towards the Adani mine. If you wish to join me, please contact me.

Thankyou!

A big thank you to all those who contributed to my Crowd funding campaign to pay fines encountered in Qld. I raised \$1,600. It has covered my fines and will hep towards the fines that others have received.

placed, the growth was astronomical and they moved from 10% of the market to 90% within a few years.

He showed this tipping point has been reached for renewables and will be reached by electric cars within 3 years. Within a further 5 years, both will dominate. No new coal plants, no new petrol cars. Take some time and watch it:

<https://www.youtube.com/watch?v=2b3ttqYDwF0&feature=youtu.be>



Insulating Paint

A customer was recently extolling the value of some paint additive called Insuladd. It is a small granulated material that you add to the paint which is supposed to increase the insulating properties of the paint. I was sceptical, so I got some from him.

I used a piece of 3 ply and used 3 different coloured paint, white, brown and green. The bottom section in the diagram has no additive, the middle section has some additive and the top area has more additive.

In addition I attached a piece of foam (half covered with foil) plus just piece of foil. I then placed some ice in the esky turned the ply over and placed it on top.

I then used the thermal camera to look at the back of the 3 ply. Poorly insulated areas would look cold, well insulated areas would look warm. (Note that the image is backwards because the thermal camera is looking at the back of the wood).

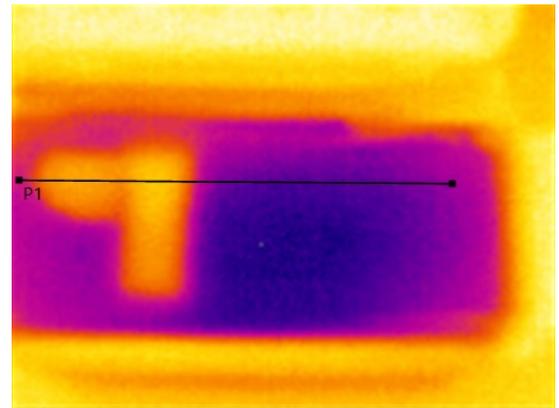
The thermal profile along the black line shows that the insulating material does in fact insulate while the painted area has minimal insulation. The paint with the granular material shows minimal difference to the normal paint. It seems it is a failure!

The interesting thing is that the aluminium foil area is warm, suggesting well insulated. In fact Aluminium is a poor insulator. But it does reflect heat really well. In this case, it is reflecting the radiant coldness from the ice keeping the 3 ply warmer! This is why the cooler bags you buy have an aluminium lining. Pretty cool hey!

Next month—see how it works when reflecting solar radiation

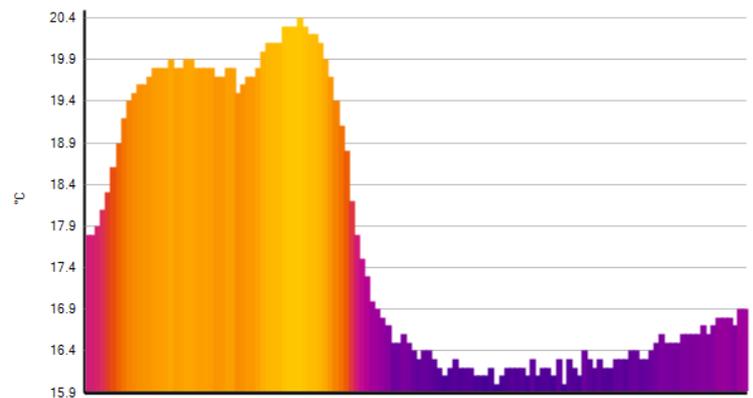


Three coloured paint areas, additive added to the top areas. Insulation plus foil then just insulation on right



Thermal image. The foil is now on the left since we are looking at the other side of the board

Minimum: 16.0 °C Maximum: 20.4 °C Average: 17.7 °C



Thermal profile. The foil works well, the foil plus insulation is better, the paint, with or without additive isn't much good.



The 3 ply on the ice filled esky

Araluen Solar Panels

Energy This Month = 3.5 Mwh = \$800

Total Energy = 18 Mwh = \$4,000