The costs of global heating continue to grow

The Tasmanian price of electricity is about to reflect the shallowness of the state government's misnamed Draft Climate Change Strategy when the forecast price rises occur.

They may paint Bass Link as good planning because it has made power available when without it the hydro system would now be almost empty [currently at 25% of capacity] and thus our dependence on power would be restricted to the Bell Bay gas fired power plant and the limited wind power available.

Dirty coal power has propped up the hydro system through its purchase in the National Electricity Market, demand in Tasmania determining the time of purchase and thus the price paid for the power coming over Basslink and according to Energy Minister Llewellyn is the driver of the 2008 price rises.

Originally touted as a positive for Tasmania's power system, all that investment to capture water could be turned into export income as the power sold to Australia would exceed the power purchased in this period, it has shown a negative value.

Seeing that it has become negative we can commence to quantify the current costs of global heating to energy supply in Tasmania.

The cost of the delivery system's lease at $92M a year sits on both sides of the ledger for without it the value of the states economy may have descended to a low level.

The impact of the forecast price rises throughout the economy adding some $70M to the costs of electricity production, the level of loss taken by Hydro.

Energy costs are a determinate for business location, Comalco being a classic example.

Whilst Blundstone's reason for relocation is given as the cost of labour a cost increase in another area is not desirable given that the other drivers for remaining here may also be marginal.

Of course measures to build up the hydro system are being flagged.

"The Government may also introduce incentives to encourage a reduction in power use by consumers, such as the rebates now available in other states to homeowners who install solar hot-water systems."

This quote from The Mercury 3MAR07 article "Hydro price rise warning" may have formed in the mind of the reporter independedntly but is more likely to have been part of the briefing to Sue Neales about the government's plans.

Is this to be the first step in a new Tasmanian strategy, Avoiding Dangerous Climate Change, including its economic impacts, that the Tasmanian Government will now take or will we seee another half deacde pass before a report is brought down in an attmept to reasssure the community into its ongoing stupor based on data that is 5 years out of date and thus put the payment for adaptation and mitigation of until they are unaffordable.

Or will we see the easy being green progam come to Tasmanian along with carbon trading, migrating across from NSW, where handing over your electricity carbon credits gets you a free light globe or a water saving shower head.

Already we see trees having a new value as carbon emission offsets begin to be taken seriously on the island next door, solar water heating rebates being old hat over there.

Yes, trees planted after 1990 and not to be harvested [at least for a century] are attracting a value of $9 per tonne, almost equivalent of the value of woodchips from native forests at $12 to $15 a tonne. It gives a new light to revegetating previously cleared land.

And if carbon trading comes in at %15 a tonee will the state sell its forests as carbon sinks or continue on the current path toward danger?.

How long will it be before a value is asssigned to not removing extant ecosystems that causes the price for woodchips from native forest to follow an upward curve as the value of climate regulation by the perilously endangered living systmes upon which we depend is belatedly recognized in our desperation to avoid a millenial event that we know to be of our own making.

Rabid ravings will not aviod danger

For those following the global heating debate and the criteria we need to meet to avoid further dangerous climate change the 'barking mad' are those who continue to be wedded to coal without a plan to move away from a high dependence on this fuel in a timely way.

The Stern Review places the cost to the economy of a ton of carbon emitted at A$110.00

A ton of carbon is emitted from burning 2.6t of black coal. Less from gas.

Average emissions per Australian are 28.2t per annum and for a Tasmanian 22t, because of the hydro based power system.

[Should Tasmanians, due to the foresightedness of taking the hydro path, receive a credit. This appears to be the basis of the governments no action required Climate Change Strategy to date.]

Therefore the current cost per head for an Australian is $3102 each and every year and for a Tasmanian $2420.

And what are do these costs consist of.

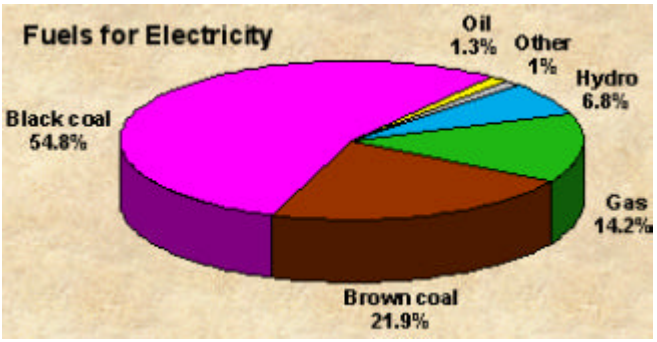
Bushfires reducing carbon biosequestration by the ecosystems burnt, the cost of replacing property destroyed, the droughts affecting same and also reducing agricultural and forest production, the cost of supporting the regional economies so affected, measures to address storms and coastal erosion, the costs in finding and delivering additional water supplies to cities and of reducing losses in irrigation systems, the investment diverted into addressing changes in buildings to make them habitable, the costs of ameliorating environmental impacts such as the management of threatened species or fox eradication.

20.2milion Australians gives a cost of global heating of $62,803,092,000 each and every year. [Tasmania $1,176,120,000 or the order of cost of a new hospital]. Whilst this is based on averages, a cost in the order of a Billion dollars should, if it can be reduced, be addressed by both government and industry.

Readers will no doubt recall the last measure taken by either.

I believe the value of the coal industry is a little above this cost at $70.2M per annum. It's value to the economy is a different matter. The current export value is of raw coal is $24.6B. The value of the energy when embedded in Australian product used in the national economy or exported is much larger than the balance.

76.7% of Australian electricity is generated by coal and warming gases come from over 93% of Australia's electricity fuels



When they say Australian coal is clean by world standards they mean low sulphur, so electricity is produced without very much sulfur dioxide being emitted (or requiring expensive equipment to avoid its emission).

Power generation contributes 36% of the country's net carbon dioxide-equivalent emissions [200 out of 550 Mt/yr, an increase to 2003 of 47% on 1990 levels.] Kyoto Protocol students will remember our target only allowed for an increase of 8% overall].

Black coal plants in NSW average about 850,000 tonnes CO_2 per TWh, Victorian brown coal plants emit over 1.2 million tonnes CO_2 per TWh of electricity flagging which is a

dirtier fuel re carbon. [Australia produces some 249,000,000,000, watt hours or 249TWh]

A Stern warning for Labor

Stern recommends spending 1% of the GDP/GSP on mitigation and adaptation

This is about $6,320,000,000. per anum or for Tasmania $172 Million

Failing to avoid further dangerous climate change [more than 2dC of warming or another 0.3dC on top of the warming we can expect from the current levels of greenhouse gases] is estimated by Stern to put costs at 20% of GDP or $126,400,000,000 at current GDP [for Tasmania at current GSP $3,438,600,000] each and every year.

The need for a planned change in the level of carbon emitted globally is undeniable. The costs of inaction will weigh heavily on every economy and therefore on families, the supposed holy grail of the old parties.

Any party without a comprehensive, effective and timely plan to take a national economy away from a path to such costs is failing its duty by avoiding its responsibility to protect the governed from such threats.

It is not possible to make a final judgement on the full offers that are put during a campaign, as a reaction to the polling in the community on the issues relative value by the 2 old parties will inform their offers, and we are not yet at full election tilt.

Howard's mad path is clear to all and sundry, business as usual. Geosequestration, if it works, and nuclear energy will only balance out the growth in the use of fossil fuels to power transport [ABARE 01.60 report]. This was clearly flagged at the AP6 summit in Sydney, in the special report Howard demanded

Garrett's party, on the current spiel by Garrett, Rudd and others, is that they remain wedded to coal.

Were they to adopt the Green's Brown plan to develop a strategy to phase out coal by 2010, and implement same from then on, given that we are between 9 years [all GHG warming at CO2equivalent 430ppm the value used by Stern] and 35 years [CO2 only] before we have breached the dangerous 2dC warming turning point.

At the current average CO2 growth rate [2001 to 2005] of 2.2ppmv to the atmosphere, we have very little time to turn around our own and all the other fossil fuel based economies.

If the growth rate of CO2 is now in a ramping up pattern, as the first years of this century indicate and some of the scientific experts in the relevant fields postulate, because we are overwhelming the capacity of the natural systems to absorb carbon through our level of emissions, the time line will shorten.

For example; at a rate of 3ppm [2006 at 2.9ppm CO_2 due to warming by El Nino] then time lines shorten to between 6 to 23 years respectively.

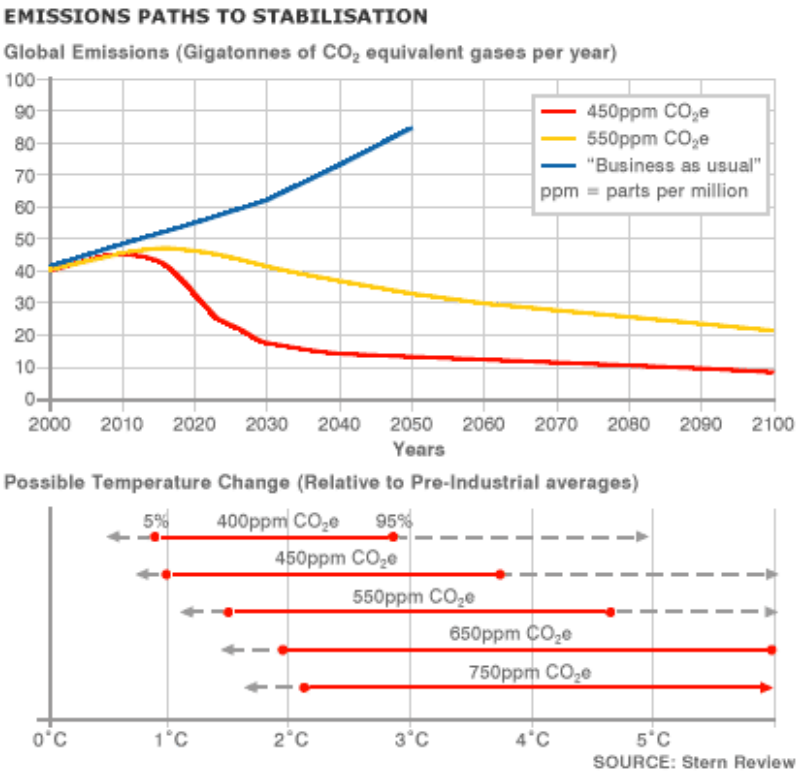
This ramping up will be driven faster by further forest destruction, by the reduction in capacities of living systems to absorb carbon as the temperature and rainfall parameters that define the capacity of terrestrial system to store carbon move and in the oceans by acidification and warming, and by the release of additional methane from the Arctic where it has remained frozen.

Of course, we may have a little more time to arrest growth in GHG but without an effective approach then we are taking risks that we do not fully understand. It is why the climate scientists can only be 90% sure and so give qualifications about outcome in the IPCC Fourth Assessment Report. Warming will occur but the range is between 1.8dC and relatively a lot more and the time scale varies.

[Howard, in his Lateline interview either showed his ignorance about what that means or was hoping to downplay the significance of global heating to save his political career at the potential cost of disaster, it shows either that he doesn't have a grip on the issues or full hubris has set in permanently]

The time to turn around global emission practices will not be short given the strength of national interest, of vested interests and the denial by some governments of the potential impacts of global heating.

Another line in the sand for warming is 550ppmv of CO_2. See above for the reasons why passing 450ppm is likely to lessen further the capacity of natural systems to absorb carbon and so shorten the time to pass this higher line.



In the above graph you can see we are at a point in warming [430ppmv CO2 eq] where the warming value mid range is in the order of 2dC some time between 2035 and 2045, without a miracle from a Branson like investment finding a solution.

So, even if we are trying to limit the carbon emitted with less than comprehensive, effective and timely measures, the growth rate of CO2 accumulation in the atmosphere will continue to increase, the positive feedbacks ensuring the negative effects arrive sooner with every failure to act.

This will shorten the timelines to address the problem and increase the costs through the need for more and more adaptation and mitigation measures to address the changes in climate [drought for Australia], sea level, public health and global security.

If the view now is its too expensive to address climate change in a comprehensive, effective and timely way what will be the reaction to greater costs that are more likely to empty the Treasuries of nations without less guarantee of a positive outcome.

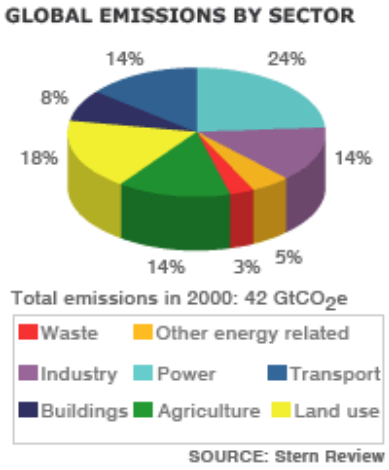
[Note the disappearance of the comparison of the amount Australia contributes to global warming from the debate. The greedy implication that our profligate lifestyle would be overrun by a short period of economic growth in China must have proved empty in the polling on this issue].

Labor is taking such a risk by retaining faith in geosequestration, not that it may not be effective or eventually adopted world wide and so become comprehensive; the risk lies in its timeliness.

The investment may prove wasted, in that it takes too long to develop, flagged as at least 8 years away by ABARE [01.06] and then to be implement on a global scale. Such implementation would require some years, as new plants are built and old ones converted or decommissioned early, between 20 and 30 years more provided all nations emitting from coal can agree and act.

And this only addressed emissions from coal. What about the other sectors

This means that were positive action on a global scale to reduce carbon emissions from coal and no alternatives for the other fossil sources found that emissions from coal burnt as a fuel would be paralleled by growth in emissions form the other fuels. Old party politician without a comprehensive policy to move to a low carbon economy are taking the voters for fools.



If emissions from agriculture are relatively fixed, from land use there is limited scope for reduction, considerable changes in the other sectors are needed to meet the internationally agreed goal of a 60% reduction in emissions by 2050.

Howard's mad plan takes us along the blue line in the graph above because it fails to make a 60% or even a 30% cut in emissions, a continuance of a destructive addiction.

Rudd's Labor plan may offer to go closer to a 60% cut, but fail to be in time to avoid the dangers inherent in such a path, and so joins the other in its madness, just a different manifestation of the addiction.

Sweden, at the same time it is decommissioning it nuclear power stations, is planning for a low carbon economy through measures to adopt the technologies that will supply the energy needs of a modern economy in a climate colder than ours [need for more heating]

and with reduced solar capacity due to its poleward location, without coal or the unsound dangerous dependence on other carbon emitting fuels.

The only rational approach to the danger we face is for Australia to take a path similar to Sweden, reducing over time the national dependence on coal and other fossil fuels through planned changes.

The Green's are the only party I am aware of who are offering to plan such a change to low carbon economy in the immediate term and then move to implement same.

Some may reduce this election to a need to support Labour to get rid of Howard. This is blinkered thinking that fails to address the real needs for survival of both natural systems and human society.

Further, it must be ranked as a silly argument in a preferential system where the voter can rank their vote to put their least favoured party last.

Election of more Greens to parliament may cause the old parties to coalesce on certain issues, as they often do to defeat the Greens in the Senate now.

Given the policies of Howard and the position of the Greens I cannot see Howard retaining the confidence of the House of Representatives on the votes of any Green party members elected.

I can however, see Labor continue to support Howard by opposing Green measures, were a balance of power in the Senate to arise with a Howard victory.

A reversed role if Labor were the largest party in the lower house would, in my opinion, see Liberal and Labor combining to continue the dangerous course of supporting coal use through continuing to block Green measures in the Senate, limiting the utility of the balance of power without growing support outside parliament.

Labor's fear of a forest wedge being used with coal is real.

It is a self fulfilling fear, and because of it policy timidity in the face of the evidence, it will continue to be so, as the old parties tussle over the seats dependent on the votes of the coal industry workers only to let them down badly as the impacts of global heating;

- ? eat up the value of coal to the national economy,
- ? eat up the savings of the very workers they are trying to protect and,
- ? eat up their children's future,

leaving the nation wedged between poverty from economic collapse due to a failure to act in a timely way and the loss of a habitable country on a newly inhospitable planet.

The only course for Australian voters to take, were they able to see the danger of the courses currently on offer by the old parties, would be to fill the lower house with Green Party members.

As the current polling makes this an unlikely event I can only hope that Labor, under the leadership of a person who appears to be intelligent, wakes up, once the advice they receive from the permanent government, the bureaucracy, looses its Howard bias.

The size of the Green vote over the climate issue may confirm the opinion of Australians to a new government, as the swing to the Democrats in the US showed people's opinion of the Bush course in Iraq, and also engender change.

Voting Labor may be seen as preferable to more years of Howard for many whose concerns are similar to those that the Greens climate policies address.

However, Labor does not, and for the reasons stated above, is unlikely to have in time, a plan that addresses the critical need to avoid further dangerous climate change in a way that is comprehensive and timely enough to be effective, if it continues to be duped into putting too many eggs in the coal industry basket through clean coal technologies including geosequestration.

If such a technology is to be pursued, it should be at the tail end of a plan to convert the Australian economy to low carbon.

Such a plan would have dignity and justice for coal workers and their families as they transfer to new technologies and assisted communities through the changes necessary, allow the economy to continue to function in a way that supports decent living standards and addresses the costs to the nation of its dependence on what has now become a danger to life on earth.

I reiterate my disdain for the Labor candidate for Lyons. I will need considerable persuasion to put him anywhere but last on my ballot paper for his behaviour in the forest wedge campaign.

A failure to adequately address the further dangers of climate change in a timely way will not do that.

phill Parsons is happy to have his calculations proved wrong or his argument demolished in any other way.

If has data withstands criticisms based on evidence he will be even happier with a policy that actually avoid further dangerous climate change by one of the old parties.

Given that data is now available, slights of hand, silver, slippery or wormtongues will no longer suffice. Public policy can now be scrutinized in the light of both climate and economic modelling.