

Focus on the Coast Climate Change – The Business Impact 16th September 2010

Q: Scope 3 emissions (embedded carbon) has the potential to exceed scope 1 & 2 by an order of magnitude. Is it possible to work on these now?

Typically most business emissions are coming from Scope 2 (which is purchased electricity) with electricity about the highest contributor of emissions for most service based businesses. Some companies such as transport companies with have the majority of their emissions in Scope 1 (fossil fuels). With the advent of more renewables and biofuels along with efficiencies in energy and vehicle use, Scope 3 may have the potential to rise. Absolutely, it is certainly possible to reduce Scope 3 emissions now with initiatives like replacing air travel with video conferencing, reducing paper usage by switching to online and printing duplex and many others.

Iain Smale
Pangolin Associates

Q: Will we get a larger variation of tidal movement with warmer seas?

The height and timing of tides are principally governed by the position of the Earth in relation to the Moon and to a lesser extent, the Sun. Thus tides are not in themselves affected directly by warmer seas. However, indirectly the extent of the penetration of tides inside an estuary are predominantly governed by the configuration of the estuary and frictional effects. If increasing mean sea level results in the entrance becoming more hydraulically efficient over time, this might result in the tidal range actually increasing within parts of an estuary. However, these additional impacts are far less certain or well understood at this point in time.

Phil Watson
Department of Environment, Climate Change & Water

Focus on the Coast Innovation in Education 16th September 2010

Q: Is efficiency not a concern if we use renewable energy?

Absolutely not, there is currently a limited supply of renewables on the grid, around 2% and a constant demand for more energy so any energy efficiency initiatives will decrease the load on polluting power stations and the requirement for more power stations. Efficiencies will also lead to power savings, typically in the tens of thousands for most SME's. Q: Is it a good move for government to plan for biodiversity fall back now as well as planned development retreat? It would be a good idea to consider these important aspects in the context of sustainable long-term coastal zone management.

Phil Watson

Department of Environment, Climate Change & Water

Q: Is any agency modelling the cumulative impact on coastal areas of SLR + King tide + onshore wind + landward stormwater runoff?

When considering design water levels it is standard protocol to consider water levels with an average recurrence interval (ARI). Consideration of long term ocean water level records such as Fort Denison (from 1914) automatically takes care of these separate phenomena which are already imbedded within the data record. Additional allowances for projected sea level, wave setup and runup are readily integrated with these design water levels as required (and relevant) on a site by site basis.

Phil Watson

Department of Environment, Climate Change & Water

Q: Do you expect the cost of L.E.D replacements for fluoro tubes to come down to an economic level?

Like any new product once it hits mass production and consumption prices will drop. China is investing heavily in LED manufacturing capacity and we will see better designs with more options at a lower cost point over the next few years. Bear in mind LED's have an extremely long life, up to 25 years in domestic situations so should be considered as part of any retrofit.

Iain Smale

Pangolin Associates

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Q: Has Norway achieved CO2 reduction over the 10 years of their carbon emission scheme?

To quote from Wikipedia http://en.wikipedia.org/wiki/Carbon_tax Various studies in the 1990s, and an economic analysis by Statistics Norway, have estimated the effect of the CO2 tax to be a reduction of 2.5-11% of Norwegian emissions under a business-as-usual approach (i.e., the predicted emissions that would have occurred without the tax).

Iain Smale
Pangolin Associates

Q: How much does it cost small/medium business for a review/audit of energy saving recommendations?

Taking a small service based business, single site as an example, say a legal firm with about 50 staff. Typically a comprehensive GHG (Greenhouse Gas) Assessment would be in the order of \$4,000 to \$6,000 ex GST and an Energy Efficiency Audit around \$3,500 - \$4,000 ex GST. Various factors can effect the cost so this is just a rough guide.

Iain Smale
Pangolin Associates

Q: In what ways is the Australian economy falling behind in the carbon economy by dragging the chain on a carbon price?

Australia is per capita one of the highest if not highest emitters in the world. This is due to our high dependence on fossil fuels such as coal and oil along with a cheap, easily accessible local supply of coal. The only way to reduce to reduce this is through a market mechanism such as an Emissions Trading Scheme or a direct tax on carbon. The longer we leave action the more expensive this is going to be for our economy. For example, if we set a target for 2020 and don't action till 2014, we will only have 6 years to spread the costs over versus taken action now and spreading it over 10 years.

Iain Smale
Pangolin Associates