

Sustainability is Survivability.



Construction and Sustainability Consultants

The AIPM National Conference 2008

SUSTAINABILITY –

'The Do's and Don'ts'!

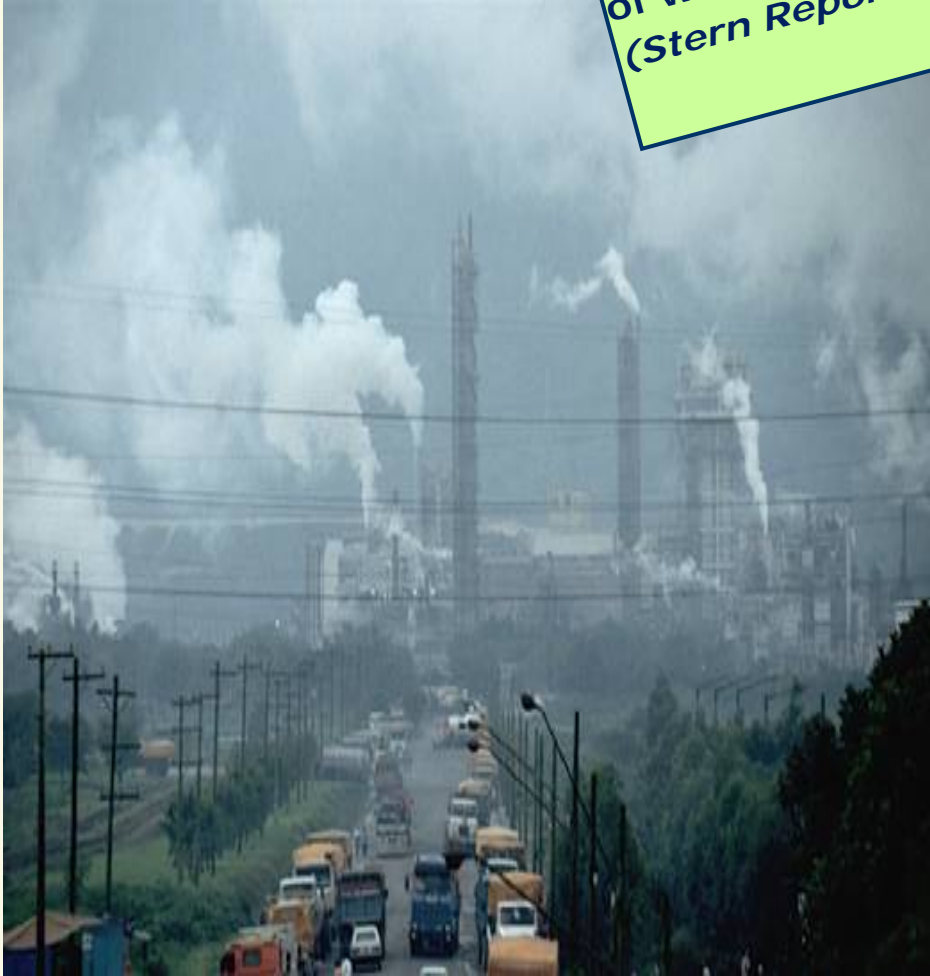
Presented 14th October, 2008

John Brodie
Managing Director
VIM Sustainability

Our World!

...Climate change will cost 5%
of world GDP by 2050...
(Stern Report, 2006)

Temperature
increase up to 6.5
degrees by 2100...
(‘Stern Report’
2006)

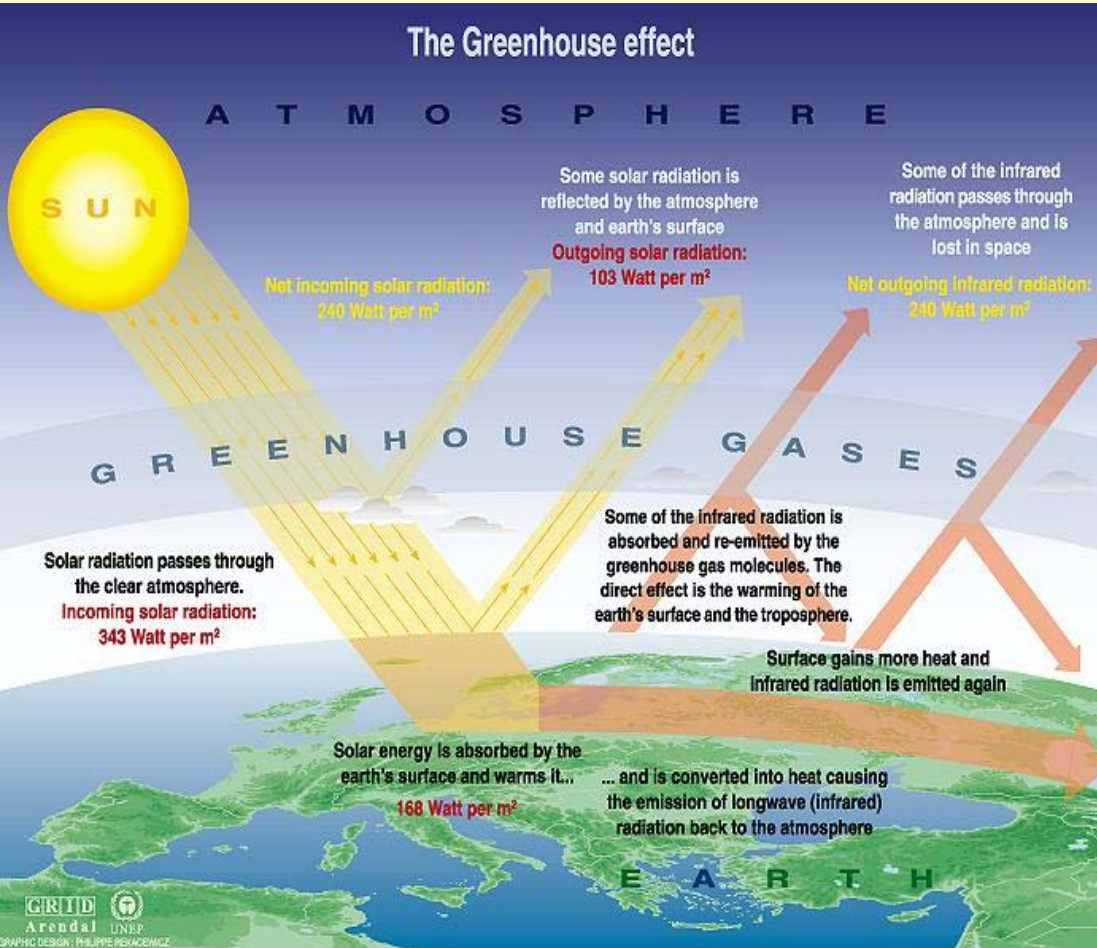


- ❑ Every Australian produces average of 27 tonnes /yr –highest per capita
- ❑ Currently we are at 384 parts per million (ppm) of carbon in the atmosphere. (Sept, 2008)
- ❑ 450 ppm is the trigger point
- ❑ BAU =450 ppm by 2025?
- ❑ ‘The latest studies show that a 450 PPM level of CO2 is expected to cause more than a one meter rise – and perhaps as much as a 3 meter rise – in the sea level during this century, and more than 20 meters over a longer period.
We need to aim for 350 ppm stabilised’
- ❑ James Hansen; NASA; June 2008

...20-60% of all species will disappear at 3 degree increase... ‘Dr Tim Flannery’ 2006



The argument is over!



'If we do nothing we face catastrophic consequences in our lifetime'

Professor Ross Garnault; July 08



Sources: Okanagan university college in Canada, Department of geography, University of Oxford, school of geography; United States Environmental Protection Agency (EPA), Washington; Climate change 1995, The science of climate change, contribution of working group 1 to the second assessment report of the intergovernmental panel on climate change, UNEP and WMO, Cambridge university press, 1996.

What is Sustainability?

Sustainability is
simply about
efficiencies...

Sustainability... Design-Do's...or.. 'How can we do it'.. not 'How we can't do it'?

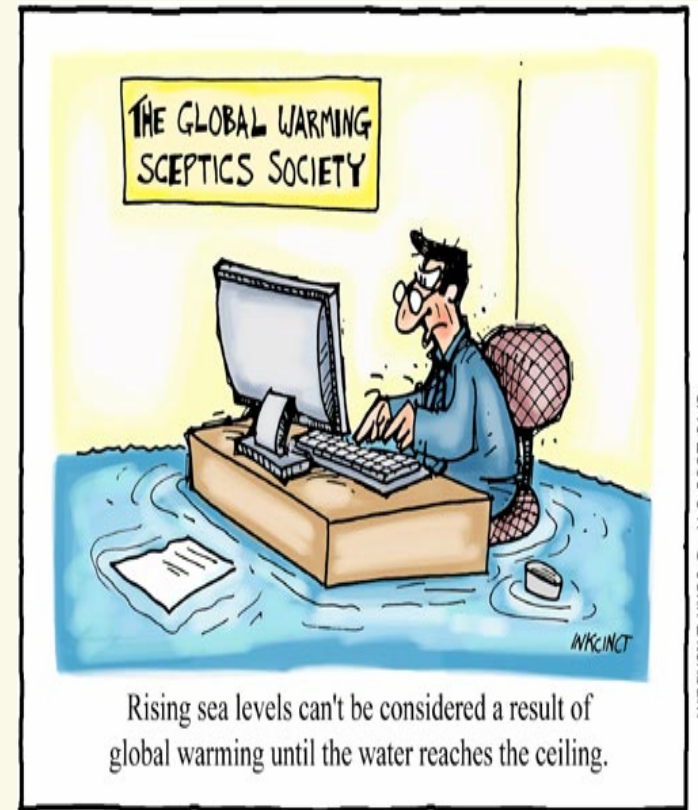
- ❑ Must have a project champion supporting sustainability –prefer CEO or board.
- ❑ Sustainability must be a core project principle.
- ❑ Get your sustainability consultant on board as early as possible. He has to set parameters
- ❑ Prefer have them report direct to client
- ❑ **Set performance targets –imperative**
- ❑ Decide how far you want to go-a water tank does not make a sustainable building
- ❑ Make your decision as early as possible other wise sustainability becomes a variation
- ❑ Consider the difference in scope/benefit between a green field site or a refurbishment of a 50 year old building
- ❑ Be and **stay committed** to a sustainable outcome from day one
- ❑ Design is where we can make the most difference- 40 % of green house gas via design
- ❑ Select the right design team committed to and understanding sustainability. Must have the correct attitude and must believe- no 'flat earthers'!!
- ❑ Keep the sustainability consultant on as long as possible - or sustainability will go...!
- ❑ Beware the 'White Ant syndrome' or ensure your staff and business understand and are behind sustainability before you start or your project will suffer.

Design Don'ts!

- ❑ Try not to wake up in the middle of the night and decide you suddenly want your almost completed building to become sustainable
- ❑ Don't make sustainability initiatives a late addition (Variation costs are first things to go)
- ❑ Don't dismiss unusual ideas before proper discussion
- ❑ Don't let your builder tell you what to do regarding sustainability
- ❑ Don't let the design development progress without your sustainability consultant on board
- ❑ The 'Big Cover Up' or 'Don't have your sustainability consultant working straight for the builder'
- ❑ Don't hire consultants and then later on tell them you are going sustainable
- ❑ Don't listen to the 'Neysayers'
- ❑ Don't change design midstream
- ❑ Don't give in to the negatives.... stay focused and committed

'The Hanrahan Syndrome' or 'Is everyone singing from the same prayer book'?

- ❑ Beware the 'Hanrahans'
- ❑ Beware the 'Instant Experts, 'Know-it-alls', Ney-Sayers, Critics'
- ❑ Don't buy your builder a 'Rolls Royce' or
- ❑ ... (have your builder price a non sustainable design then tell him you are going to change it to a sustainable design)
- ❑ Sustainability encourages innovation
- ❑ Get your own staff involved in ideas –promote involvement
- ❑ Understand your project requirements and what you need as much as possible before beginning
- ❑ Scope up your project as much as possible
- ❑ Sustainability works for new or existing buildings
- ❑ Remember....in any project 90% of all costs are dedicated on the first day



Building Do's!

- ❑ Ensure your design team is able to support the building process through the whole project
- ❑ Use a builder who actually believes in sustainability
- ❑ Does he have a track record?
- ❑ Invoke a rigorous inspection routine
- ❑ Sustainability is about quality and longevity in building practice, not just energy efficiency
- ❑ Ensure the builder understands all the sustainability initiatives being incorporated in the project
- ❑ Prefer builder with ISO 9001 and ISO 14001 accreditation for quality and environmental performance
- ❑ Use an independent commissioning agent for the services design and install—very cost effective.

Building Don'ts!

- ❑ Don't let your builder change the sustainability issues without design team approval
- ❑ Don't let your builder do his own inspections
- ❑ Don't tell your builder later on 'Oh we have decided to add sustainability to the project'
- ❑ Don't let your builder price the sustainability initiatives after he has already priced the project
- ❑ Don't give your builder 'carte blanche'
- ❑ Be careful using a builder who hasn't worked in this area before
- ❑ Be careful of the builders variation prices for changed sustainability initiatives
- ❑ Don't build an out of date and irrelevant facility
- ❑ Don't build for the next 5 years build for the next 30 years.

The Builders view – Sustainability = LOT\$\$\$\$\$



- ❑ Many builders think sustainability is a load of gobbley-gook
- ❑ Many builders think sustainability is cost negative
- ❑ Many builders think sustainability means adding a water tank somewhere
- ❑ Many builders think waste management is throwing their beer cartons in the bin.
- ❑ Most builders think sustainability initiatives cost 50 times more /sq mtre than non sustainability initiatives.
- ❑ Most builders don't need an independent building inspector !!!!!?????????
- (tee hee hee!)
- ❑ If your sustainability consultant works for the builder who is his allegiance really to?
- ❑ If you are concerned about the right price get another builder to price the final design once the sustainability initiatives are completed
- ❑ Many clients have started with an innovative sustainable design and ended up with a typical inefficient design

Risk Risk Risk

At the end of the day,
sustainability is about one
thing....

Risk

...or....



11/01 2007-024 © John Ditchburn

OPPORTUNITY

...Carbon down
-profit up!

Sustainability doesn't have to cost money!

TESTIMONIAL 20.11.07

"...we used a number of John's sustainability strategies in our building including improved building thermal envelope, double glazing, night purging and Building Management System (BMS). Whilst our consultants warned these measures would be cost prohibitive the project build price came in \$1.3 million under our initial budgeted expectations which had only allowed for a limited number of sustainability measures !!..We were thrilled with the overall outcome."

Viv Allanson • CEO Maroba Aged Care, Newcastle NSW.



Green is Green!

'Sustainability is the single biggest business opportunity of the 21st century, and will be the next source of competitive advantage.'

H. Lee Scott, President and CEO of Wal-Mart

Conclusion

SUSTAINABILITY

- ❑ Sustainability must be core discipline
- ❑ Set performance targets
- ❑ Get the champion
- ❑ Get the right team
- ❑ Make the commitment early
- ❑ Employ the sustainability consultant asap.
- ❑ Ignore the critics
- ❑ Stick to your guns
- ❑ Consider RISK....or...**opportunity!**
In a recent *Price Waterhouse Coopers* survey, (USA, 2004)
79% of C.E.O'S agreed that sustainability is vital to the profitability of any company.

Think of all of the things
you need
to do



Who is 'Vim Sustainability'?

- ❑ We understand sustainable design science
- ❑ We are strategists, engineers and consultants
- ❑ We make proposed, new or old buildings/developments more sustainable
- ❑ We do energy/water/eco audits of designs or new and existing buildings
- ❑ We provide sustainable solutions for your business operations.

❑ **Contact us:-**

WWW.VIM.NET.AU

Mob:0401 84 8888

johnbrodie@vim.net.au

❑ www.vim.net.au



Australian Institute of
Project Management

Message for today

Efficiency is free
...Ask for more!

