

Articles

The Win/Win situation. (The cost of building sustainably.)

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The concept of sustainable practice having a link with profit has long been anathema to most people. Environment and profit have for years been cast as mutually exclusive. Sustainability (environment and profit) was always thought to be a sort of abstract, fringe 'greenie' concept that meant sitting in a dark corner of your house shivering with cold because turning on the heater or the lights meant you were destroying the planet with pollution and being a rabid consumer! In addition, it was believed there was no profit in being "green". But let's briefly examine that 'logic'.

Of course we all in business to make money. If we don't make money we don't have a business. So what actually is sustainability, if it is not 'shivering'?

One view of sustainability is that it is about doing 'more for less'. It is preserving the future from today. It is about being efficient.

Remember, no business makes money if it is inefficient. Does your business make money if it inefficient? Maybe it does. If so, and then it can make a lot more money if it is efficient.

But sustainability is more than making money. It is also about improving your environmental footprint.

This is achieved by reducing your demand for our undervalued natural capital such as water, air, energy or human resources such as staff. Sustainability is also about reducing your waste output in the guise of green house gases, wasted water, sewerage, rubbish.

But is that all it is about? Surely there is more to it!

Comfortability. Sustainability greatly improves the comfortability of your occupants. This is achieved by improving the design features to incorporate thermal comfortability (known as thermal neutrality) with minimal use of mechanical heating and cooling, as well as removing chemical emissions from the internal environment. The benefits of these initiatives are obvious. Then, of course, there are the proven benefits of increased daylighting, the connection of human beings to nature through the implementation of Bio-Phillic concepts (mans inherent desire to connect with nature) into your building design and the improved occupant amenity, for instance, of cross flow ventilation or thermal cooling and heating without the use of mechanical, energy sapping ventilation. By incorporating all these thermal comfort features and many others, such as reduced artificial lighting through improved natural daylighting, we have just reduced our energy demands quite

significantly. It is also easy to note that by improving one aspect of our sustainable design we are positively affecting many other interrelated building properties, thus once again improving our efficiencies.

Integrated sustainability also results in a building that lasts longer, is cheaper to maintain and is more functional in operations. There is significant evidence of improved staff productivity and reduced absenteeism. The building is significantly more comfortable and healthier to live in.

But is this all just 'feel good' stuff? Let's look at some facts on profitability and improved life cycle costings.

The demographics of aged and retirement care are changing. The baby boomer generation are demanding changed caring and living environments. So are their children, who in many cases have a major input into the standard and type of accommodation mum and dad will move to when they 'leave home'.

The use of sustainable practice for all buildings is the way of the future and the facility that embraces this concept will gain the competitive advantage. Government legislation, social responsibility, climate change, improved marketing potential and increasing costs of natural capital are all making sure of that. Sustainable practice is not a complicated premise, but a logical engineered practice that has proven results.

Just making a building the right shape and pointing it in the right direction for solar orientation is enough to save one third in energy use. (A.S.H.R.E.A Journal, June 1995)

If we decide to go sustainable what are the cost analyses. How does it 'stack up'?

The sustainable industry is very new in Australia so a lot of our background support comes from Europe and America where sustainable practice has been encouraged for around 5 years.

Green buildings deliver a suite of compelling economic and social benefits that conventional buildings do not.

It is possible to identify the following key economic benefits from a sustainable building:

- 1) 60% reduction in water and energy consumption (Green Building Council 2006)

This equates to a dollar value of \$100-120 sq mt. and a benefit of \$50-00 -\$60 sq mt.

- 2) Higher relative investment returns = minimum 14% ROI. (GBC 2006)
- 3) Marketing advantage for zero cost. (GBC 2006)

“The general consensus is that green buildings cost around 1.5 -2% more to construct. This is substantially less than most people perceive.” (GBC 2006)

The Davis Langdon report “Examining the Cost of Green 2004” says “.....statistically there is no significant difference between the capital costs of green and conventional buildings...”

The same report also said “.....that total financial benefits of green buildings are over ten times the average initial investment required to design and construct a green building. Energy savings alone exceed the average increased costs associated with building green....”. These are only a few examples of the financial benefits of an integrally designed building sustainable building.

The evidence is clear .There are numerous advantages to determining a sustainable approach to your business. Too many to mention here. The largest expenditure your business will ever make is your structure which will be rented or sold to its occupants. Your structure has greatly improved value if it is more desirable to its occupants while being significantly cheaper to run and operate. Your business will not exist without this structure or its occupants. Surely then it is sensible to increase the profit from your building while at the same time improving the benefits to your residents while also providing great improvements to your environmental outcomes!

Surely a win/win situation?.