

How to build sustainable homes and communities.

Why do we need sustainable homes?

One answer would be to live a healthier lifestyle with more comfort whilst reducing the amount of resources we use, particularly energy, to create that health and comfort.

In Victoria, for every 1 kw/hr. reduction in electricity use there is a corresponding reduction of approximately 1.3 kg of carbon dioxide (CO₂) , a green-house gas.

Therefore living in energy saver homes contributes to the reduction of CO₂ and therefore climate change, whilst at the same time making them more comfortable to live in.

A better aim for the future would be to create a sustainable community whilst creating our sustainable homes.

A sustainable community contributes to the health and well being of the people living in these homes.

How do we create this outcome?

Essentially it is a matter of considering the ecological design of both homes and community together, this would start at the design stage for any new housing development. (eg. size, shape and layout of blocks of land)

A good first step is the State Governments decision to require all new homes built from July 2004 to achieve a house energy rating of 4 or 5 stars.

This includes the future provision for rainwater tanks connected to all sanitary flushing systems or a solar hot water heater.

As well, councils are requiring new housing subdivisions to include WUSD. (Water Urban Sensitive Design)

This is a system of storm water drainage designed to slow down the flow of runoff water to the sea by where possible, directing the water flow through natural land and plant forms rather than directly into drains and pipes.

A 'wish list' of some of the items necessary to make our homes and communities more sustainable and therefore healthier, could be:

- Increase the mandatory house energy rating beyond 5 stars by setting higher energy efficiency design standards

- Support a program of 'retrofitting' energy saving and comfort creating features to all existing building stock including homes
- Investigate the reduction of fossil fuel consumption in all building and construction activity
- Support research into 'grey water' use in homes
- Provide information as to the embodied energy impact on the choice of building materials (the energy consumed to create and transport the materials)
- Provide information on the toxicity impact of the use of house building materials and furnishings eg. fumes emanating from particle board, paints and fabrics
- Investigate mandatory installation of water tanks and solar hot water systems
- Support the installation of household photo voltaic (PV), grid interactive electricity generation (renewable energy)
An increase to the MRET (Mandatory Renewable Energy Target) from 2% to 5% or 10% would achieve this aim.
- Encourage the 'ecological' layout design of housing developments to reflect the maximum benefit to future inhabitants and the ecology eg. wildlife corridors
This would enhance the triple bottom line impact (TBL – people, planet and profit)

In my view, these are all good sustainable steps on the journey towards healthier homes and communities.

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