

Suite 201 T: + 61 3 9929 4100
18 Kavanagh Street F: + 61 3 9929 4101
Southbank VIC 3006 E: info@cleanenergycouncil.org.au
Australia www.cleanenergycouncil.org.au
ABN: 84 127 102 443



Clean Energy Council Submission to
Queensland Government Sustainable Housing Discussion Paper
Via email sustainablehousing@dip.qld.gov.au

Dear Sir / Madam

Thank you for the opportunity to provide feedback on the Sustainable Housing Discussion Paper. The Clean Energy Council (CEC) is Australia's clean energy industry peak body representing a quarter of Australia's total electricity production sector. The Clean Energy Council membership represents the interests of the low-emission energy and energy efficiency industry which includes gas, wind, hydro, bioenergy, solar PV, solar hot water, geothermal and cogeneration.

The CEC understands this is an opportunity for the Queensland government to engage with the stakeholders, industry and the householders in finalising sustainable housing improvements to encourage house and unit owners to use less water and energy and respond to climate change. The CEC is keen to work with the Queensland government in delivering these outcomes.

There is wide support and international agreement energy efficiency plays a vital role in meeting our economic, social and environmental policy objectives. It is essential that the potential of energy efficiency, particularly building efficiency, is realised as both a frontline climate change action but also as a key contributor to improved productivity benefits across the economy.

Realising the full potential for building energy efficiency would make possible the retirement of older power stations and a deferment of capital investment required for new generation. This is particularly important in buying time and cushioning price impacts and risks associated with the introduction of a Carbon Pollution Reduction Scheme and making the transition from high to low carbon economy. Internationally avoided energy consumption through energy efficiency has become the energy resource of first choice and premier energy security measure.

The public benefit of improved energy security, economic productivity, environmental outcomes and deferred infrastructure investment through progressing energy efficiency is compelling, the government has a clear mandate to regulate and intervene in the market around energy efficiency action and specifically minimum energy performance standards of housing.

As acknowledged in the discussion paper a higher energy rated home is a more comfortable home. The running costs are much lower and the additional cost at the time of planning is adequately paid back through energy savings. Combine the energy savings to the householder with the avoided energy infrastructure required to meet additional air-conditioning load, there is clear cost benefit imperative to set minimum standards, particularly if the life time of the house is an average of 100 years.

There are also equity and energy poverty considerations to support robust minimum energy standards to protect Queenslanders from sweat boxes and associated high energy bills.

From a consumer protection perspective, the Clean Energy Council would strongly support the mandatory energy rating disclosure at the time of sale or lease and remedial actions required to bring the house up to a minimum of 3.0 stars. The 3.0 star standard in majority of cases would require ceiling insulation only.

In order to minimise or eliminate the need for heating and cooling appliances the priority design components will be the building shell and orientation, followed by major appliances such as water heating and lighting standards.

With the Victorian Government precedence, the Clean Energy Council would anticipate, an introduction of a 5 star standard, mandatory Solar Water Heater (or heat pump where SWH not appropriate) and a rain water tank as the minimum acceptable for the Qld government to consider as an housing standard.

The UK is setting targets for housing to be carbon neutral by 2016. The CEC estimates a carbon neutral house would be a 10 star standard. Achieving a 5 star house is straight forward with only thoughtful design and minimal cost impacts required. A 7 star home requires additional thought and costs around site specific considerations, building material selection and smart design such as the installation of effective adjustable shading. A 10 star house, will require a level of innovation and capacity the industry would be challenged to achieve in the short term.

The Clean Energy Council would therefore like to see the Qld government set a clear indicative path to a goal of carbon neutral housing, while allowing the industry to build this capacity by setting an incremental transition path with incentives to achieve the next standard. This approach would provide a level playing field for industry in the short term but incentivise industry to roll out and innovate around higher standard house design.

As Queensland's peak electricity demand is primarily driven by air conditioning load a separate summer and winter performance standards would be recommended. This will allow summer performance and peak electricity demand to be managed. To arrest the currently high investment required for network augmentation due to this peak demand, it would be appropriate to then require houses to have a calculated peak cooling demand of less than 4-5 kW (thermal). A high efficiency air conditioner consumes less than 1 kW (electric) at peak demand. An allowance of anything more than a 4-5 kW thermal load could be tied to a requirement for PV or similar local generation or energy storage.

Conclusion

The Clean Energy Council would encourage the Queensland Government to adopt the following:

- Mandatory disclosure of energy rating on sale or lease.
- Houses to retrofitted to a minimum of 3.0 stars prior to sale or lease.
- Introduce a minimum 5 star energy rating with SWH / heat pump and rain water tank for new and renovated homes.
- Require a minimum energy efficiency lighting standard
- Mandate SWH and heat pumps.
- Incentivise houses that meet a 7 star or higher rating.
- In the mid term move to a carbon neutral 10 star housing standard.
- Limit summer cooling demand to 4-5 kW (thermal).

Please do not hesitate to contact me if you would like more information. My contact details are (03) 9929 4118 or email vikki.mcleod@cleanenergycouncil.org.au

With thanks,

Vikki McLeod
National Policy Manager
Clean Energy Council
12 Sept 2008