

# **Energy Efficiency Inquiry Submission**

**Attention Rob Nansen  
Research Director  
Environment and Resources Committee  
Parliament House  
BRISBANE QLD 4000**

**Prepared by Queensland Youth Environment Council members:**

**Nadja Kunz  
Andrew Hay  
Katrina Bukauskas  
Grace Field**

**Please contact us through our website: [www.qyec.org.au](http://www.qyec.org.au) or via the QYEC  
Secretariat to [ali.vandergaaf@derm.qld.gov.au](mailto:ali.vandergaaf@derm.qld.gov.au)**

## **1. What have been the economic and environmental costs and benefits of energy efficiency initiatives affecting households, industries/business, governments and communities in Queensland?**

Costs:

The Queensland Youth Environment Council (QYEC) is in support of energy efficiency initiatives, however the Council also acknowledges that there are a number of economic and environmental costs associated with implementing energy efficiency measures. These include:

- Environmental costs associated with the energy and material costs of creating new products the waste generated from discarding old products prior to the end of their life and issues of proper disposal.
- To solve this problem, the cost and benefits of embracing new technologies now, as opposed to in the future, need to be evaluated. Energy-return-on-energy-invested calculations and life-cycle analysis can help with this evaluation.
- Economic costs exist for those involved in the production of outdated technologies which are no longer viable in the current energy efficient business climate. Incentives and guidelines need to be implemented to support industry to transition to new products and production methodologies.
- High upfront costs for businesses, industry and households can often be an inhibiting factor when choosing more efficient technologies. This issue was also recently identified in a study conducted by McKinsey and co. (2009) investigating energy use in the USA.

Benefits:

- Energy efficiency is beneficial to Queensland's economy and the provision of infrastructure, as it extends the lifetime of current resources enabling the state to better cope with increased growth and the impacts of climate change.
- Businesses, industry and government who embrace energy efficiency are likely to be viewed more positively by the public as cutting edge, innovative and environmentally conscious.
- Energy efficiency reduces costs associated with the provision and consumption of energy, therefore saving money, as well as reducing carbon emissions and reducing the economic and environmental costs of the impacts of climate change.

## **2. In economic and environmental terms, what energy efficiency initiatives have been effective in Queensland?**

- The ClimateSmart Home Service has been informing Queenslanders of the connection between their lifestyles and climate change, and in showing that it is possible to begin tackling the problem with action now.

- QYEC members who have utilized the ClimateSmart Home Service found it informative and recommend the scheme's effectiveness be publicized through the reporting and publishing of householders' energy savings.
- Energy ratings on new appliances enable consumers to be aware of their options when purchasing. Currently there is no building rating scheme directly aimed at energy efficiency during the construction phase. If such a system were introduced for entire buildings it would enable quick comparison and could even be used as a method of property valuation if a CPRS is introduced.

### **3. What role do commonwealth government initiatives, including the proposed Carbon Pollution Reduction Scheme (CPRS), play in encouraging energy efficiency?**

- In the Youth and Environment Survey it was found that a majority of young people wanted federal and state authorities to take a lead on environmental issues (Fielding, 2009), as opposed to taking action themselves. This does not necessarily represent apathy towards environmental problems, but may reflect the Herculean task that young people realise is required to mitigate and adapt to climate change.
- Governments should reflect the will and the character of the people. That is why in this instance it is important for the Queensland Government to take a lead role in improving energy efficiency. Young people believe the Government has power and influence, and look to their political representatives for leadership.
- As a member of the public it is hard to evaluate whether the role of the Queensland Government in improving energy efficiency has been effective, or whether other sectors of society (such as the business sector) have been more successful. If there was more feedback to communities on how our carbon footprint was changing (both individually, as a state and as a country) people would have a benchmark against which the effectiveness of policies and initiatives could be measured.
- The proposed CPRS may be highly influential in encouraging companies to become more energy efficient as it provides a legislative framework that encourages and rewards energy efficiency and discourages inefficiency, using monetary measures.

### **4. What additional policies should the Queensland Government implement to encourage energy efficiency improvements?**

It is vital that the Queensland Government create a coordinated system of energy efficiency policies and initiatives that are understood and cross-referenced across government departments, and limit costly duplication. The system must be easy to use and should provide a 'one-stop-shop' for information dissemination (in the form of an all encompassing online portal) providing advice on government policy and programs applicable for households, commercial enterprises and industry. This initiative was previously recommended by QYEC in 2008.

The following are recommendations for Queensland Government policies to encourage energy efficiency improvements:

- Remove GST from energy efficient products and place an energy tax on the sale of inefficient products. Furthermore, the sale of highly inefficient products (according to a national standardised energy star rating found on products) should be banned similar to the European Union ban on inefficient appliances in 1999 (University of Cambridge, 2007).
- Implement a program to encourage property owners to improve energy efficiency by qualifying for grants of up to \$5000 per house or \$50,000 for a commercial/institutional project. These grants should be offered in accordance with recommendations made through energy efficiency evaluations (conducted by a licensed energy auditor). The exact value of each grant will be dependent on the individual upgrades required. Natural Resources Canada has implemented a scheme with these characteristics and could be used as a model for Queensland (Natural Resources Canada, 2009b). This scheme could potentially be linked with the current ClimateSmart Home Service.
- We encourage the Government to consider policies that will make it more affordable for first home owners to implement energy efficiency improvements to the new/existing homes that they purchase. This may take the form of substantial grants (of similar value to the home owners grant) to install solar hot water, insulation, and to purchase energy efficient appliances, for example. This could be implemented when the Commonwealth Government's First Home Owners Boost terminates in October 2009.
- Free ClimateSmart Home Service for young people who are renting based on age (e.g. 18 - 25) and/or concession (i.e. current tertiary student) status.
- Expanding the ClimateSmart Home Service to include a larger array of initiatives to reduce the carbon footprint of Queenslanders. These could include ideas such as 'no junk mail' stickers, vouchers to purchase composting containers and worms or vegetable garden starter kits. Although some of these may not be directly related to energy efficiency, by reducing the embodied energy contained in food, packaging and waste disposal methods inevitably improvements will be made in how energy is used and thought of by society.
- Provide rewards for households that achieve reductions in energy use in the form of discounts and vouchers from participating local businesses.
- Introduce minimum energy efficiency ratings for all new homes and commercial buildings under the National House Energy Rating Scheme (NatHERS) with periodic improvements in the rating level required. Furthermore support the use of the National Australian Built Environment Rating System (NABERS) home rating tool for comparing energy and water use of existing households as a means of encouraging improvements in

household energy and water efficiency. It has been shown that minimum standards play an important role in eliminating worst practice but consumers play an equally important role in demanding better practice (Reidy et al, 2008).

- Mandatory disclosure of energy efficiency ratings for all private and commercial properties for sale in Queensland. This will enable purchasers to make well informed comparisons based on a property's energy efficiency, influencing purchase decisions and leading to increased competition. This system should utilise a standard label to disclose specific details of the rating system used and the results obtained (Natural Resources Canada, 2009a). According to Reidy et al, 2008, "Recent studies demonstrate that mandatory disclosure of energy efficiency in the ACT shows a very strong correlation between star ratings and house value – something in the region of 3 per cent for each star."
- Initiate and expand rebates for energy efficiency improvements to existing buildings and for installations in new buildings. As jurisdiction in construction regulations is, to our knowledge, divided between all levels of government, Queensland should consider expanding rebates for areas exclusively within its control, whilst cooperating with federal and local government in areas of joint cooperation to ensure that incentives exist in all areas of construction and renovation for energy efficiency e.g. solar hot water/power, insulation etc.
- Toughen fuel efficiency standards for all new and old cars sold in Queensland (requiring minimum fuel efficiency values that are increased progressively) as well as provide tax breaks and/or lower registration costs for more fuel efficient models.
- Limit company car tax concessions (and novated leases) to highly fuel efficient vehicles. Current concessions are expected to amount to almost \$2 billion dollars in tax breaks by 2010 in Australia (Sydney Morning Herald, 2008).

## **5. What barriers and impediments to energy efficiency enhancements exist in Queensland?**

- The Youth and Environment Survey<sup>1</sup> indicates that many young people take actions which are bad for the environment because they are "too lazy", "feel there is no alternative", "don't have time", and are "more concerned with saving money" (Fielding, 2009).

---

<sup>1</sup>

The "Youth and the Environment Survey" was a joint project of the Queensland Youth Environment Council, DERM, DET and the University of Queensland in 2008. The results of the survey provide an indication of the attitudes held by young people in Queensland towards the environment, their knowledge about the environment, and their behaviour in relation to environmental issues. A total of 3658 young Queenslanders aged 12-24 completed the survey.

- Young people and individuals from low socio-economic groups may have a lack of incentive to improve energy efficiency, if they perceive it to be costly.
- There is little incentive for tenants of rental properties to invest in energy efficiency devices such as solar hot water, solar panels or insulation. Similarly, landholders may not deem these investments to deliver a suitable return on their investment, given that they will not benefit from the associated reductions in electricity costs.

## **6. What policies should be considered to overcome these barriers and impediments?**

- The Youth and Environment Survey (2009) highlighted a need to address the barriers to acting in pro-environmental ways. Laziness, lack of time, and cost may be overcome if Government makes it easier and more economical for young people to make choices which improve energy efficiency. The Government communication campaigns must be accessible and target youth, so that young people are aware of which appliances and practices are more energy efficient (i.e. make them aware of their alternatives). It is also important to highlight the significance of how individual actions can make a difference, and to emphasise the cost savings associated with many energy efficient actions.
- Target youth and publicise the ClimateSmart Home Service during university and TAFE orientation weeks, in February and July.
- Furthermore, individuals who receive the ClimateSmart Home Service should be asked to recommend family/friends who may also be interested. This would target family/friends who may not know about the service, or who have intended to access the service, but have been too “lazy” to do so. They may be more likely to access the service if they receive a call from ClimateSmart rather than needing to make the call themselves in the first instance.
- To target low socio-economic groups and young people who are concerned about cost, the Government should consider the implementation of a voucher system for purchasing energy efficient devices instead of offering rebates. This would ensure that the most vulnerable groups of our society are not out-of-pocket due to investments in energy efficiency. This could also be administered in the form of a concession card that allows these individuals to purchase energy efficient appliances etc. at reduced cost.
- Energy efficiency should be encouraged rental properties by tax concessions for landlords who install energy efficient devices. Tenants who make energy efficient choices should be supported and encouraged by having the ClimateSmart service free-of-charge, or by providing discounts on the purchase of energy efficient appliances.

## **7. How can governments make information on energy efficiency improvements more accessible?**

- Public information campaigns can be effective, but are also expensive. Considering the environmental values of employing energy efficiency, it is contradictory to have a public information campaign that is resource intensive (e.g. high paper consumption). Thus the government should consider using innovative, carbon light mediums such as the internet, email and mobile phones to inform the public (this method has already been successfully employed by the federal tax office). Online and other electronic media can still be expensive, but they are proven to be among the most effective and environmental friendly methods of dispersing information and should be more explored in more depth.
- The government should consider expanding legislation so that a greater range of products require energy efficiency labelling (e.g. small appliances, game consoles, computers etc.). There is also the potential to require the carbon footprint (e.g. embodied energy) of products to be clearly shown.

## **References**

Fielding, 2009. *Youth and the Environment Survey*.

<http://www.qyec.org.au/downloads/qyecsurveyreport.pdf> (accessed August 8, 2009).

Natural Resources Canada. 2009a. *EnerGuide Rating Label*.

<http://oee.nrcan.gc.ca/residential/personal/new-homes/upgrade-packages/label.cfm?attr=4>  
(accessed August 6, 2009).

Natural Resources Canada, 2009b. *Grants and Incentives: ecoENERGY*.

<http://oee.nrcan.gc.ca/corporate/incentives.cfm?attr=4> (accessed August 6, 2009).

Peatling, S. 'Abolish company car subsidy, says greens', *Sydney Morning Herald*, 30 January 2008. <http://www.smh.com.au/news/environment/abolish-company-car-subsidy-say-greens/2008/01/29/1201369135260.html> (accessed August 8, 2009).

Reidy, C., Reardon, C. and Milne, G. 2008. *Technical Manual: Design for lifestyle and the future – 1.5 Rating Tools*. <http://www.yourhome.gov.au/technical/fs15.html>  
(accessed August 6, 2009).

Sabapathy, J. 2007. *Sustainable Consumption and Production: A business primer*, University of Cambridge, Cambridge,

<http://www.cpi.cam.ac.uk/PDF/Sustainable%20Consumption.pdf> (accessed August 10, 2009).

World Business Council for Sustainable Development 2009, *Huge Benefits Seen in Raising Energy Efficiency*. <http://www.wbcsd.org> (accessed 8 August 2009).