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Rob Hansen Research Director **Environment and Resources Committee** Parliament House Brisbane QLD 4000

By email: erc@parliament.gld.gov.au

Dear Sir / Madam

Response to Environment and Resources Committee's Inquiry into Energy Efficiency Improvements

The Clean Energy Council (CEC) is the peak body representing Australia's clean energy and energy efficiency industries. Its priorities are to:

- create the optimal conditions in Australia to stimulate investment in the development and deployment of world's best clean energy technologies:
- develop effective legislation and regulation to reduce energy demand and improve its efficient use: and
- work to reduce costs and remove all other barriers to accessing clean energy.

The CEC advocates the development of policies on behalf of its members at federal and state government levels and promotes understanding of the industry and its potential through channels such as industry events, forums, conferences, newsletters and publications. The clean energy industry includes generation of electricity using wind, hydro, solar, biomass, geothermal and ocean energy as well as the emerging technologies and service providers in the energy efficiency sector, which includes solar hot water and cogeneration.

The CEC welcomes the opportunity to provide a submission in response to the QLD Parliament Environment and Resources Committee's Inquiry into Energy Efficiency Improvements.

This submission outlines the CEC's view on key issues in relation to the Inquiry.

# **Energy Efficiency and Emissions Trading**

A key barrier to investment in sustainable energy is that the full environmental costs are not included in the price of energy. The Federal Government's Carbon Pollution Reduction Scheme (CPRS) seeks to address this by creating a price for carbon. However, even when implemented, a price signal alone will not deliver significant energy efficiency improvements. This is because:

- in the residential sector, energy demand is relatively inelastic to price this means that a carbon price signal would be muted for this sector;
- energy efficiency is not seen as an energy resource in the energy market, which means that the full value of energy efficiency isn't realised (including deferring investment in supply infrastructure);

- there are a range of other barriers to energy efficiency that a carbon price won't address, including:
  - o energy efficiency is rarely core business in organisations, and energy efficiency is not seen as a priority when making capital investment decisions;
  - there can be significant transaction costs with finding energy efficient alternatives, also referred to as 'hassle factor':
  - o there is a lack of availability of timely and effective information, products and services;
  - bounded rationality, where consumers make decisions that may not be perfectly optimal, but are rational given their particular context, such as constraints on their time, or lack of information.

This would indicate that even with the CPRS in place additional measures will be needed to drive energy efficiency improvement particularly in the residential sector. Below we outline the areas that the CEC view as key to driving the uptake of energy efficiency.

## **Energy Efficiency Policy**

As the Environment and Resources Committee Issues Paper states - Australia has the fifth highest energy intensity of the International Energy Agency (IEA) member nations and our energy consumption continues to grow at an average of 2.3 per cent annually. In Queensland and Australia, the energy sector accounts for the largest source of greenhouse gas emissions. With emissions from stationary energy continuing to rise, more needs to be done to reduce the demand for energy. Improving energy efficiency is widely accepted as the least cost approach to reducing this energy demand and therefore greenhouse gas emissions.

The IEA lists energy efficiency as one of the most vital strategies to reduce global carbon dioxide emissions in the energy sector, estimating that unexploited energy efficiency offers the single largest opportunity for emission reductions. The IEA estimates that for OECD countries, 54 per cent of emissions reductions required to limit the carbon dioxide emission levels to 450ppm could come from energy efficiency improvements.

Measures to reduce the demand for energy, delivers many benefits such as:

- low-cost greenhouse gas abatement;
- a cost-effective alternative to investment in new energy supply infrastructure;
- lower energy bills for residential and industrial consumers; and
- reductions in peak demand

Currently there is a raft of measures in place throughout Australia, and Queensland has a number of its own initiatives around building standards, financial incentives and rebates for a move toward more efficiency energy efficient technologies, auditing tools and education.

While these measures have contributed to a reduction in energy use, a more coherent vision is required for energy efficiency and a better articulation of its role in reducing energy demand and greenhouse gas emissions. This should be framed around two main aims:

- To reduce demand for use of energy; and
- To increase efficiency of energy use.

This vision should also indicate the level of savings (in energy and/or greenhouse gases) that energy efficiency is expected to deliver over the coming decades and in particular in the period up to 2030.

The development of a comprehensive energy efficiency strategy incorporating this vision can bring together the raft of existing measures and identify new measures required to deliver the Queensland Government's long term energy efficiency aims.

Therefore we welcome the Office of Clean Energy's intention to produce an Energy Management Plan. This should provide a clear long-term vision of the role of energy efficiency in Queensland and the measures needed to achieve this vision. It should also attempt to quantify the impact of all the various measures in place or planned.

## Addressing barriers to Energy Efficiency Improvements

A comprehensive strategy needs to include the following actions in order to overcome the barriers to energy efficiency:

# • Supportive Regulation

Policy initiatives in the areas of new buildings, renovated buildings and retrofitting of existing buildings as well as minimum energy performance standards for new appliances are required to ensure a more energy efficient environment.

The Council of Australian Governments (COAG) recently announced a commitment to adopt a nationwide 6 star rating in 2010 as part of the new Building Code of Australia. In its recently published Climate Strategy 'ClimateQ' the Queensland Government confirmed that it will require new houses and major renovations to meet a 6 star rating by the end of 2010. However, it has diluted this initiative by reducing this standard to 5 stars if an outdoor living area, that meets certain requirements, is included.

The CEC can see no logic in allowing this dilution and recommends that the Queensland Government adopt 6 stars without any dilution for the inclusion of outdoor areas. The need for an early adoption of the 6 star housing without dilution is also important to address energy efficiency in tenanted properties especially given the withdrawal of the Federal Government's Landlord Insulation Rebate.

#### Developing a market for energy efficiency

The CEC believes that further energy market reform is required to drive the uptake of energy efficiency measures by end users and supports the development of a nationally consistent energy efficiency market.

Currently New South Wales, Victoria and South Australia have energy efficiency markets in place. They are all designed differently, have different rules and different methods of compliance. This means that those companies who operate across jurisdictions have to develop a different set of systems in each State. The CEC believes that a national energy efficiency market that brings together the existing systems under one set of rules will reduce confusion, reduce transaction costs and improve the delivery of energy efficiency measures to end users.

The CEC would like to see the Queensland Government support the development of a national scheme through COAG.

In the absence of a national scheme if Queensland is to develop its own energy efficiency market scheme, it should do so with reference to the existing schemes in New South Wales, South Australia and Victoria to ensure there is as much harmonisation as possible between the different schemes.

#### Engaged and Informed Consumers

Changes in consumer behaviour form part of the suite of actions needed to deliver a sustained decrease in energy demand. However, this is a particularly challenging area, with consumers surrounded by complex and potentially conflicting messages aimed at stimulating greater

consumption, and many barriers to the uptake of energy efficient technologies and services, not least of which is the 'hassle factor' of doing something differently.

The CEC commends the Queensland Government for its ClimateSmart Living education campaign and auditing tool as an effective way of identifying energy saving opportunities, and providing a starting point for households and businesses to target investment in energy efficiency products and services. Further promotion and subsidy of the energy audits is required to make the scheme more accessible.

### · Capable and Responsive Industry

Energy efficiency needs to be seen as a part of existing research and development activities as well as there being a need for specific energy efficiency R&D strategies. R &D in energy efficiency differs from that in many other sectors. In buildings, it is often focused on specific projects, rather than being ongoing. In industry it may be part of the development of new production processes and integrated with improvements in productivity and other objectives. For appliances and equipment, it may be linked to the development of other technologies such as telecommunications, sensors and materials, as well as a range of consumer products. Energy efficiency technologies will require support to bring them to the market, such as capital support for demonstration projects.

The Queensland Government also needs to identify the current and future skills and training required for tradespeople and other professionals to incorporate energy efficiency into their existing activities and roll out the relevant programmes. The CEC therefore welcomes the creation of the Queensland Energy Efficiency Industry Leaders Group as part of the broader Energy Skills Queensland, Sustainable Energy Skills Formation Strategy and looks forward to being involved in its work going forward.

The CEC and its members would be happy to discuss this issue further with you as your Inquiry progresses. In the interim if you require any further information please do not hesitate to contact Russell Marsh on: (03) 9929 4100 or Email: russell@cleanenergycouncil.org.au

Yours sincerely

Rob Jackson

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