



Council of Mayors

South East Queensland

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Mr Rob Hansen
Research Director
Environment and Resources Committee
Parliament House
BRISBANE QLD 4000

Dear Mr Hansen

**Re: Queensland Parliament's Environment and Resources Committee Inquiry I
into Energy Efficiency Improvements**

The Council of Mayors (SEQ) welcomes the opportunity to provide a submission for the Inquiry into Energy Efficiency Improvements, which is being undertaken by the Queensland Parliament's Environment and Resources Committee.

The Council of Mayors (SEQ) is an independent political advocacy organisation that represents the interests of the one in seven Australians who live in the nation's fastest growing region - South East Queensland. The Council of Mayors (SEQ) has strategic objectives relating to energy efficiency including:

- Supporting SEQ Councils in adapting to climate change and reducing energy consumption and greenhouse gas emissions; and
- Advocating and supporting renewable energy initiatives for SEQ.

We would welcome further discussion on this submission and look forward to hearing from you.

Yours sincerely

John Cherry
EXECUTIVE DIRECTOR



Council of Mayors

South East Queensland

Council of Mayors (SEQ)

**Submission to the Queensland
Parliament's Environment and
Resources Committee Inquiry into
Energy Efficiency Improvements**

Overview of the Council of Mayors (SEQ) Submission

The Council of Mayors (SEQ) welcomes the opportunity to provide a submission for the Inquiry into Energy Efficiency Improvements, which is being undertaken by the Queensland Parliament's Environment and Resources Committee. This submission responds to the areas for comment outlined in the background information provided for the inquiry, with suggestions provided for the Committee's consideration.

About the Council of Mayors (SEQ)

The Council of Mayors (SEQ) was established in September 2005 as an independent political advocacy organisation that represents the interests of the one in seven Australians who live in the nation's fastest growing region - South East Queensland (SEQ).

The Council of Mayors (SEQ) aims to influence Federal and State Government policy and funding priorities. It includes regional and city councils from the Gold Coast in the south to the Sunshine Coast in the north and west to Toowoomba. The region covers more than 35,000 sq kms of land including the local government areas of Brisbane, Gold Coast, Logan, Lockyer Valley, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba.

1) What have been the economic and environmental costs and benefits of energy initiatives affecting households, industries/businesses, governments and communities in Queensland?

Energy economics is generally poorly understood, and it is difficult to accurately estimate the true cost of energy efficiencies. Energy efficiency initiatives have largely been funded through programs such as grants and rebates. At the same time, these rebates and grants stimulate economic activity and encourage the manufacture of energy efficient products. The costs to consumers for energy efficient products and services are often reduced through the creation of competitive markets and in some cases initially by rebate schemes (e.g. ceiling insulation, solar panels, etc.).

Costs of undertaking energy efficiency initiatives:

- Retrofitting costs incurred (including increased waste).
- Higher up-front costs for more efficient appliances (e.g. LED lights, solar H/W).
- Higher compliance costs to meet new building star ratings.
- Higher community education costs to gain awareness/trust in new technology.
- Increased imports of overseas efficiency technologies.
- RECs system transfers rather than adds to efficiency effort.
- Diminished fossil fuel profits.
- Reduced fossil fuel job opportunities.
- Risks to food security to generate biofuel supplements.
- Higher government policy development, facilitation and community engagement costs.

Overall benefits

Environmental benefits are gained through energy efficiency improvements because the energy consumed in manufacturing these products is always lower than the amount of energy used to run the products.

Benefits to be gained through energy efficiency initiatives include:

- CO₂ emissions can be mitigated in all sectors.
- Vehicle pollution reduced (=health benefits).
- Manufacturing and service employment generated through technology upgrades.
- Australian energy efficiency research stimulated.
- Export earnings from Australian energy technologies generated.
- Energy infrastructure costs reduced.
- Energy generation costs reduced.
- Future adaptation costs reduced (e.g. storm water and road retrofits, new dams, disaster management infrastructure, insurance costs, health costs, biodiversity losses etc.).
- Ability to demonstrate how fossil fuels can be avoided e.g. by changing to solar water heating.

Specific information about costs and benefits

Communities

- CSIRO's 'Your Development' website is an excellent resource on sustainable urban development and provides information on 'Neighbourhood Efficiency'. TravelSmart Australia aims to reduce community car dependence and greenhouse gas emissions and is administered through Local, State and Federal Governments.
- Local Government planning schemes attempt to capture community energy efficiencies through design and development controls. These controls contemplate lot design and orientation, convenient and accessible communities, public transport infrastructure and pedestrian and bicycle linkages (among many other provisions).
- Programs such as TravelSmart, have few environmental costs but many benefits.
- There needs to be greater consideration of energy efficiencies over profitability. Whilst the development industry may argue that incorporation of energy efficiency elements to development may not yield similar profit outcomes, the actual environmental outcomes through the energy efficiencies are significant and long-lasting.

Industry

- Funding and administration for projects such as EcoBiz comes at a cost to government but are effective and must have ongoing facilitation support.
- EcoBiz results in improved cost efficiencies for business, reduced waste and less consumption of energy and water resources.
- The SEQ Energy Efficient Street Lighting Trial, also comes at a cost to State and Local Government, but will provide policy and direction for future street lighting developments and potentially reduce energy costs and greenhouse gas emissions.

Government

- The only true energy efficiency benefits will be demonstrated when decreases in the amount of fossil fuel generated energy produced occur, over all.
- Under the Australian Government Energy Efficiency in Government Operations (EEGO) policy, minimum energy performance standards of 4.5 star ABGR are required for new, refurbished or new lease Commonwealth Government buildings.
- Environment benefits or retrofitting existing government buildings include less energy consumption and emissions compared with sub-standard buildings.
- The Queensland Government within its Climate Smart 2050 initiative will be requiring 4 Star ABGR for new commercial buildings and 4.5 star ABGR for new government buildings by 2010.
- There is already a move towards more energy efficient buildings such as the recently built and award winning Department of Primary Industries Building at Nambour.

- Under the QFleet Climate Smart Policy Government vehicles must meet a minimum GVG greenhouse rating of 5.5 for passenger vehicles and 3.5 for light commercial vehicles. QFleet's target of a 15 per cent reduction in greenhouse gas emissions is to be achieved by 80 per cent of the light commercial fleet being diesel or LPG and 50 per cent of the passenger fleet being diesel, hybrid, micro, light and small vehicles. Costs associated with changes to vehicle fleet could be substantially less in terms of capital and running costs, with the obvious benefit of reduced emissions.

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

- The effect of energy efficiency initiatives in Queensland are not widely known. Some programs will have been effective on an individual household or business basis but the overall effectiveness is not immediately obvious. Raised awareness through the ClimateSmart Homes Service however, is something that is likely to have occurred as a result of the intensive advertising campaign. The maintenance of that awareness is something that will need reinforcement over time.

Households

The following programs appear to be economically and environmentally cost effective (without examining quantitative data on these programs).

- Climate Smart Home Service Program.
- Improved standards for energy efficiency in residential homes.
- More efficient shower roses through the Climate Smart Program and Water Wise initiatives have been very effective in reducing water heating loads.
- Energy labelling for electrical and gas appliances.
- Phase out of electric storage hot water systems with greenhouse-friendly alternatives from 2010.
- Energy Star labelling for office equipment.
- The Australian Government Energy Efficiency Home Package for insulation.
- The Australian Government 'Your Home' Technical Manual and 'Global Warming Cool It' information resources.
- The Qld Governments 'The Big Light Switch' offering free compact fluorescent light bulbs.
- Canberra's Energy Efficiency Ratings developed for the sale of homes.
- The Building Code of Australia (BCA) Section J Energy Efficiency for buildings and energy efficiency standards for air conditioning units.
- The solar water heating initiatives has been effective at house hold levels. The uptake of GreenPower in the residential sector has also seen significant environmental benefit but has not yet resulted in economic benefit for Queensland.

As well as reducing emissions, all these things have generated significant employment for manufacturers, installers and consultants. However, they have also generated significant legislative and operational costs to implement them.

Communities

At a community level the TravelSmart program has been very effective in some communities, changing travel behaviours and being a driver for improved infrastructure for bikeways, paths and public transport. Some of the on-line resources such as 'Your Development' are an excellent information repository.

Industry

Generally the following programs appear to be environmentally and economically effective:

- EPA's EcoBiz program with substantial savings in energy, water and waste.
- The Commonwealth Low Emission Technology and Abatement (LETA) Grant in support of EcoBiz programs.
- Australian Governments Energy Star labelling program.
- Some sections of the BCA's Part J Energy Efficiency provisions.
- The initiative led by local government known as CitySwitch Green Office is working at the 'grass-roots' to encourage occupiers of offices to manage energy. Occupiers of office buildings can use up to 50% of the energy used in the building. Simple changes could reduce this by 30% and save Queensland businesses considerable money.

Government

The Energy Efficiency in Government Operations (EEGO) policy has been effective in raising the environmental standards of Australian Government buildings. EEGO provides a policy framework including standards and targets, a framework for green leasing, energy monitoring, reporting and communication strategies.

3) What role do Commonwealth Government initiatives, including the proposed Carbon Pollution Reduction Scheme, play in encouraging energy efficiency?

CPRS

- CPRS revenue should be partially invested in to energy efficient alternatives such as public transport.
- Federal government rebates for solar hot water and insulation have significantly reduced energy consumption and generated significant employment. The CPRS will drive up energy costs making energy efficient appliances and fittings more attractive.
- The CPRS is a catalyst for behavioural change. Changes in affordability are a powerful way of getting consumers to rethink behaviour and this approach is reflected in the CPRS. The scheme needs to be supported by awareness campaigns to inform consumers of the choices they can make to reduce their energy consumption or make technological changes and upgrades to their homes and appliances.

Other initiatives

- Tax incentives should be provided for energy efficiency for example 100% depreciation for energy efficient capital purchases in the year of purchase.
- Improved minimum standards (MEPS) for all appliances imported or manufactured in Australia.
- Other government programs and schemes also offer the ability to make energy efficiency gains. Provisions such as Green Loans and rebates make it possible for consumers to make choices about their energy future. It does seem however, that the average Australian is confused about where to get information about these provisions or how they apply to them. Greater publicity is required to improve the effectiveness and uptake of such provisions.
- The National Framework for Energy Efficiency has had impact, especially where building codes, appliance standards and smart metering are concerned. The National Strategy on Energy Efficiency, committed to by COAG, provides for key measures to improve residential and commercial building energy efficiency. This has great potential as an effective, nationally consistent and climatically relevant program. The benefits of which are greater because of its national status.
- The role of the Commonwealth Government is to support, through funding and advocacy, programs such as TravelSmart. The Commonwealth Government also acts as an information resource for on-line and technical resources.
- The Commonwealth plays a leadership role and provides incentives for energy efficiency in government operations.

Specific household initiatives

- The Commonwealth Government plays a role in stimulating demand for energy efficient products and services through provision of grants and rebates, and through education and fostering more environmentally conscious behaviour by consumers.

- The Commonwealth Government is also responsible for energy efficiency standards for buildings through Building Codes Australia (BCA), sections of which are adopted by the State through their Building Regulations.

Industry

The Commonwealth provides funding and support for various programs such as:

- Appliance energy labelling.
- The Climate Ready Program.
- The Green Building Fund and guiding documents such as the National Energy Efficiency Initiative.
- Provides on-line information resources for business and industry.

4) What additional policies should the Queensland Government implement to encourage energy efficiency improvements?

The Council of Mayors (SEQ) suggests the Committee consider the benefits of the following additional policies:

- Energy Efficiency should focus on carbon efficiency as well. Queensland Government policies should focus on directing Gas and Coal to the export market not for on shore consumption.
- Adopt a 100% GreenPower position for all state run enterprises.
- Stamp duties should be waived or discount applied on homes sales on 6 star or better homes.
- Greater differentiation on registration fees in favour of low carbon emission vehicles (greater fees for above 15l/100 k and free for electric vehicles).
- Clearer price signals for energy efficiency e.g.:
 - Lower price for electricity if use is low and 100% GreenPower (e.g. under 10 kWh per day).
 - Higher price for peak times to spread the load and increase infrastructure efficiency.
 - Feed-in arrangements based on time of use for electric vehicles charging and network support.
 - Default position for all new accounts 100% GreenPower.
 - Increase price for above average users (say over 25 kWh per day).
 - Mandatory GreenPower for high users (say over 35kWh per day).
- Using the learning and the success of the water saving campaigns of South East Queensland as examples, the Queensland Government needs to consider that kind of intensive communication campaign for energy efficiency. The greatest need is for the public to understand the benefits of taking energy efficiency seriously.

Households

- The marketing for the Climate Smart Home Service Program needs to promote that rental properties are included in the program. The current promotional material is targeted at the home owner and not tenants, this excludes a significant number of households from thinking that they are eligible for the service.
- The Climate Smart Home Service Program needs a follow up with householders to ensure ongoing support especially around the Energy and Water Efficiency Plan. Secondly, encouraging behaviour change needs to be delivered over a long term rather than just a one-off event.
- A long-term plan is needed to increase the stringency for all energy efficiency initiatives over time.
- Increase research funding to develop energy efficient fittings and appliances and low-cost energy management and monitoring systems. Introduce a window tinting rebate program to compliment the Federal government's insulation program – windows have been shown by CSIRO and others to be a major heat exchange point (note – ensure tinting offer is targeted to sites where energy can be saved).
- There could be more home owner incentives and industry training for 'greener' houses.

- Mandatory declaration of energy efficiencies upon sale of buildings would also act as an incentive to improve energy efficiencies.
- More stringent requirements for building to be correctly orientated and designed to take advantage of local climatic conditions would improve energy efficiencies.
- State guidelines need to be prepared for the planning and design of energy efficient residential communities.
- Policy measures to improve the energy efficiency of our older buildings, which comprises the majority of our building stock (new initiatives such as the Building Code of Australia only target new buildings).

Industry

- Under Climate Smart 2050 Queensland Government has set a target for 4 star Australian Building Greenhouse Rating (ABGR) energy efficient for new commercial buildings. Consideration could be given to raise this standard to at 5 star ABGR and above.
- Consideration could be given to requiring green leases for owners and tenants of existing commercial buildings.
- Policy could also be developed to improve the environmental performance of heating ventilation and air conditioning (HVAC) systems which place the largest energy loads on our commercial buildings. New policy could be backed up by grants and rebates for building energy audits and energy management plans. The Australian Government Green Building Fund offers 50 per cent funding towards retrofitting commercial buildings and operational training for building managers. The BCA energy efficiency provisions are designed for buildings with air conditioning, rather than designed for the climate. Policy may need to be reviewed to consider air conditioning as secondary to good building design.

Government

- The Australian Government Energy Efficiency in Government Operations (EEGO) policy could be considered for adoption at all levels of government. Consideration could also be given to raise all government building policy standards to 5 Star ABGR and above. A similar policy to QFleet's Climate Smart Policy could be considered for adoption at all levels of government.

5) What barriers and impediments to energy efficiency enhancements exist in Queensland?

- Current building standards, particularly for multi-unit residential buildings, do not provide for significant energy efficiency outcomes. Investment and incentives are required to ensure that new buildings meet increased standards for energy efficiency.
- One significant barrier is the cost of starting on the journey to energy efficiency. The cost of getting an energy assessment done can delay even the most well-intentioned business.
- The ability to change a building is another issue that needs to be considered by government. For example, renting families have less influence over the property that they live in and therefore have less ability to implement structural change. Therefore they need solutions that are manageable for them and that do not require hard solutions like refurbishment.
- Lack of technological knowledge and product supply by buyers, builders and tradesmen.
- Lack of understanding of the relative benefits of efficient technologies (e.g. low maintenance).
- High up-front costs of new technologies.
- Only moderate political and funding support for Australian energy efficient innovations.
- Poorly organised building industry training and facilitation to adopt sustainable building designs and technologies.
- As it is, current Fringe Benefit Tax (FBT) rules for motor vehicles actually encourage people to drive more to receive a cheaper tax rate.
- A lack of SEQ case examples of energy efficient communities.
- A lack of resources for funding and education.
- A lack of awareness in the development industry.
- There may be an expectation of low returns and high risk for developers in investing in energy efficient developments.
- Industry expectations of little return on investment.

6) What policies should be considered to overcome these barriers and impediments?

The Council of Mayors (SEQ) suggests the committee consider the following initiatives:

- Unfortunately a lot of Queensland Government programs are top-down with subsequent large transaction costs in delivery. An alternative approach is where the Queensland Government assists local government to engage with the 'grass roots' – both businesses and residents.
- Examples of successful local –state partnerships exist in other states. For example, the 1200 Buildings Program in Victoria, CitySwitch Green Office in Victoria and Western Australia, NSW and Newcastle City Council's ClimateCam.
- An exciting overseas example is the Chicago Green Office Challenge <http://www.chicagogreenofficechallenge.org/>
- Local-focus programs build on existing networks, are more likely to provide the information that is relevant to stakeholders, and are flexible to suit local conditions. Such programs can be delivered locally within an agreed state based framework. The critical step is to get the buy-in (commitment to change).
- True Smart meters are needed in every business. An ability to measure change is vital for any policy to be successful (mandatory or voluntary).
- The policy approach needs to consider the supply chain and the design, construction, ownership and occupation of residential buildings and commercial buildings alike.
- Increase assistance to building industry to adopt more energy efficient designs and technologies beyond mandated requirements;
- Establish government approved energy efficient products and suppliers online portal.
- Consider more assistance programs to help community overcome higher up-front costs of energy efficient fittings and help industry to produce fittings more cheaply.
- Focus incubation funding on new energy technologies start-ups.
- The Queensland Government might consider implementing greater financial support for rebates and programs through its Climate Smart 2050 Strategy. In the Australian Capital Territory, householders who undertake energy efficiency improvements to their house are entitled to a \$500 rebate.
- In terms of policy, consideration could be given to addressing luxury appliances with the requirement for users of luxury appliances to contribute to green power.

Industry

- Policies that include funding for energy audits and energy management plans for industry including guaranteed returns on energy efficiency investments would improve energy efficiency uptake. Sustainability Victoria offers a rebate to contribute to energy audits and environmental improvements to commercial buildings.

- A continuation of funding for coordination of programs such as EcoBiz would also be an advantage.
- The emphasis of the BCA towards design for air conditioning as opposed to design for the climate could be reviewed.

7) How can governments make information on energy efficiency improvements more accessible?

The Council of Mayors (SEQ) suggests the committee consider the following initiatives:

- The Queensland Government should actively support the National Australian Built Environment Rating Scheme (NABERS) scheme.
- NABERS Assessors based in Queensland do not have the support of state government enjoyed by those in other states. Brisbane-based NABERS Assessors have recently moved to fill this gap by establishing a support group.
- A dedicated Queensland NABERS resource based in the Office of Clean Energy rather than the Department of Public Works would be able to provide timely advice, assistance etc to the property industry, tenants, assessors and to the Australian government, especially as mandatory disclosure of commercial building energy efficiency comes into force in 2010.
- Measurement of improvements is critical for successful energy efficiency initiatives. The question is how is the Queensland Government going to help business and communities to measure and so improve?
- Inclusion in sustainability in school curriculum, particularly:
 - Energy efficiency
 - Energy auditing
 - Renewable Energy.
- Accessibility to information is one issue, but similarly so is the willingness of the public to pick up that information and invest time in thinking about the issue. Like the South East Queensland water campaigns, the publicity around the energy efficiency issue needs to be constant and broad so that it touches everyone in the community.
- The use of different forms of media and the ability to make energy efficiency an interesting topic is all important. Using the web, the print media, but also opportunities through news programs, like the Channel Nine Ecowraps, are all ways of making information accessible and of bringing it to the attention of those citizens that may not otherwise seek it out.
- Residential energy bills are an excellent medium for disseminating information on energy efficiencies and carbon emissions because they are delivered over a long-term rather than a one-off event. Energy bills could have an energy saving hint which highlights ways of reducing energy and greenhouse gas emissions for householders.
- Governments need to provide case study success stories of energy efficient communities that can be applied in Queensland. This information would need to be target marketed to developers, training and education institutions, local governments, and communities and be made accessible online.