



17 August 2009

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

Email: erc@parliament.qld.gov.au

Dear Sir / Madam,

Submission to the Inquiry into Energy Efficiency Improvements

Origin Energy Limited (Origin) welcomes this opportunity to respond to the Queensland Parliament's Environment and Resources Committee inquiry into the economic and environmental potential provided by energy efficiency improvements for households, communities, industry and government.

Origin is Australia's largest integrated energy company. As a major retailer with over two million electricity customers and one million natural gas customers we are a significant participant in a range of national and state based energy efficiency regulatory schemes and initiatives.

Origin has been at the forefront of delivering sustainable energy solutions to the market for many years. We currently have over 500,000 customer accounts with green energy products such as Government accredited GreenPower and our Green Gas products. Origin was Ethical Investor's Sustainable Company of the Year 2007 and we have recently received the Association of Chartered Certified Accountants' annual best Sustainability Report award in the energy and utilities sector.

As a retailer, Origin has developed a range of programmes and services which support our customers to assess, implement and monitor energy efficiency improvements. A few examples are:

- our campaigns to build awareness and offer energy efficiency services to business customers such as 'compressed air energy efficiency' for the manufacturing sector and Energy Challenger which provides a free online energy efficiency analysis tool;
- our energy efficiency packs (containing low-flow showerheads and fluorescent light bulbs) that have been issued to residential customers; and
- Origin's Power On program that conducts approximately 750 energy audits annually to assist low income and disadvantaged households to reduce energy consumption and save money on their energy bills.



Origin's Position - Overview

Improving the efficiency of energy usage has an important role to play in combating climate change.

Origin's fundamental position is that Queensland and other jurisdictions should adopt a national and cohesive approach to energy efficiency policy and that the market failures and impediments associated with energy efficiency should be addressed in a transparent and efficient manner. We therefore express a strong preference for energy efficiency policies to be coordinated by the Commonwealth Government. The proliferation we are currently seeing of state-based energy efficiency measures is creating unclear policy outcomes.

As a business that operates across Australia, Origin understands the need to develop national policies that enable innovation and accommodate the differences across the states. From our experience, a nationally harmonised approach provides a range of benefits, many of which can be passed onto our customers and Australian households and businesses, including:

- synergies developed across states provide opportunities for economies of scale in product development and programme implementation;
- policy measures can be implemented more widely in a cost effective manner;
- limited duplication and inconsistencies;
- streamlining and reduced complexity; and
- minimisation of regulatory compliance burdens.

Origin believes that imposing regulatory requirements on retailers (as a proxy for their energy customers) is not always the best policy approach. Governments should always target their energy efficiency policies on a range of approaches that constitute the most cost effective ways of addressing potential market failures.

Careful consideration must be given to the use of market mechanisms to facilitate energy efficiency improvements. Markets rely on price mechanisms to send signals to change behaviour and influence investment decisions. The role of Government is to ensure that all costs to society are priced accurately and that market inefficiencies are addressed. In the area of energy and climate change policy, the best economy-wide signal to achieve least-cost abatement is a price on carbon - and this is exactly what the Federal Government is proposing under the Carbon Pollution Reduction Scheme (CPRS).

This CPRS will in theory send a direct and actionable signal to consumers to implement energy efficiency measures. However, energy users have historically been highly price insensitive, i.e. they don't respond quickly or substantially to changes in the cost of electricity.

The correct Government response to this situation is not to introduce another market mechanism or cost/price incentive - but rather to address the underlying barriers that are preventing the uptake of energy efficiency initiatives. Some of the key barriers include:

- split incentives (e.g. property owners not installing energy efficiency devices/equipment in their tenanted properties);
- limited knowledge and awareness about the cost of energy and the efficacy of efficiency investments; and
- a lack of information about the energy profile of different appliances, devices, materials and building standards.



Another case against new energy efficiency specific market mechanisms is that in addition to the CPRS, the States are all considering or have in place overlapping schemes such as: white certificates, feed-in tariffs for solar, various subsidies etc. This is resulting in the marketplace becoming overly complex resulting in:

- (a) potential distortions of the carbon price signal; and
- (b) burdensome compliance obligations which increase costs, which in the end are borne by consumers and taxpayers.

Origin is participating in the Australian Government's Department of Climate Change consultation workshops to determine how voluntary action (including energy efficiency activities) can best be taken into account when setting future CPRS caps.

Submission Responses to the Terms of Reference

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

Origin is not able to provide a complete answer to this question.

In July 2008, the Council of Australian Government's (COAG) communicated that "all jurisdictions are assessing the complementarity of their existing climate change measures". The Independent Pricing and Regulatory Tribunal in New South Wales has published a review of climate change mitigation measures that are complementary to the CPRS and recommended an assessment framework to ensure that NSW policies are efficient, effective and complement the CPRS in future. We are not aware of a similar assessment being undertaken in Queensland that has been publically communicated.

It is important to have a strategic approach to identifying lowest cost energy efficiency opportunities and enable their realisation through targeted measures that overcome their particular impediments. Therefore, we recommend that a comprehensive assessment (which is linked to the National Strategy on Energy Efficiency) be conducted for all key sectors in Queensland to better understand the impacts in an economical sense and the potential for greenhouse gas abatement. The assessment can also facilitate the development of a transparent and formalised methodology for assessing policy options.

The assessment should also quantify, where possible, the expected impacts of the energy efficiency initiatives on energy consumption with respect to peak and total load. It is important to ensure the scope of the assessment and Queensland's subsequent energy efficiency strategies are aligned with the National Strategy on Energy Efficiency and include Government policies on all initiatives that impact demand for centralised power, including: appliance purchasing choices, demand management, embedded generation, smart grids and distributed generation.

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

The Climate Smart initiative is believed to be successful in assisting Queensland households to immediately benefit from the use of more energy efficient lighting and the opportunity to monitor and reduce their energy consumption in 'real time'. It is hoped that household energy consumption levels actually decrease - despite the increased sales of high energy consumption appliances such as plasma televisions and other appliances.

The Sustainable Housing Code now helps consumers minimise their household energy consumption by restricting the choice of fixtures, fittings and prime cost items to low carbon options for items such as: hot water systems, air conditioning units, lighting, tap fittings and insulation. Federal schemes such as the Solar Hot Water REC subsidy and the Solar PV rebate have also been successful in Queensland.

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

Origin strongly supports the Carbon Pollution Reduction Scheme (CPRS) as the primary policy measure to reduce Australia's greenhouse gas emissions. The CPRS will provide an emissions price signal over the longer term for a range of climate change responses including investment in low carbon energy generation and least cost approaches to reducing greenhouse gases such as energy efficiency improvements.

Various studies have shown that demand for electricity isn't particularly responsive to changes in prices, particularly in the price range impost expected by the proposed CPRS. Therefore, the competitive market supported by a CPRS price signal will not address all market failures, such as inelasticity between price and consumption, split incentives and lack of consumer information. For this reason, complementary measures will also be required to overcome barriers to energy efficiency.

With respect to timing - energy efficiency initiatives need to start now, before CPRS commencement to mitigate the impact of the Scheme, particularly upon low-income and disadvantaged households. Further, some energy efficiency initiatives are very low in the abatement costs curve and it would be beneficial to begin implementing these as soon as possible.

Origin also supports:

- COAG's initiation of a National Strategy on Energy Efficiency (NSEE) and encourages national harmonisation between Federal and State policies;
- development of national Mandatory Energy Efficiency standards; and
- the Commonwealth *Energy Efficiency Opportunities Act* (Origin has completed energy consumption assessments and is developing detailed business plans for the most promising opportunities identified).



Another reason that Origin advocates for national coordination and convergence of existing jurisdictional energy efficiency policies is that there will be greater certainty that such policies are consistent with the:

- CPRS; and
- the Ministerial Council on Energy's - energy market reform program to transition to national energy regulation across energy markets.

Origin also supports and actively promotes the Federal Government's rebates for Solar Hot Water and small generation Solar Photo Voltaic Systems, as well as the national appliance energy labelling program and the phasing-out of incandescent light bulbs.

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

As detailed in response to Question 1, Origin recommends the development of a comprehensive transparent assessment by the Queensland Government (which is linked to the NSEE) to methodically assess a broad range of possible policies. It's likely that the most appropriate and lowest-cost abatement policy options will be sector-based and comprise a fairly broad range of initiatives that target the specific sectoral barriers.

As explained in the overview above, careful consideration must be given to policies supporting additional market mechanisms and interventions, particularly if they are not harmonised nationally. Some states have implemented white certificate schemes with the aim of mitigating the severity of consumer cost impediments to energy efficiency. While Origin supports the use of markets to arrive at the most efficient carbon reduction outcome, it is important to not automatically assume market interventions are the best approach for energy efficiency. In particular, it's important to avoid interventionist mechanisms like white certificate schemes with a retailer obligation that risk:

- a. being over-complicated
- b. not addressing the pertinent market failures (e.g. split incentives and other behavioural impediments); and
- c. having an unpredictable relationship with a carbon price, particularly if there was any attempt to create certificates that could be fungible with the CPRS.

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

There are a large range of barriers and impediments, some are specific to certain sectors, others apply more broadly to energy usage. As detailed in response to Question 1, Origin recommends the development of a comprehensive assessment by the Queensland Government (linked with the NSEE) to assess a broad range of possible policies and identify related potential barriers and impediments.

One barrier that applies to all sectors is that current retail price regulation in Queensland does not allow for the full cost of energy to be reflected in customer tariffs. This issue is expected to exacerbate with the introduction of the CPRS and the expanded Renewable Energy Target which are complex and their price impacts are difficult to predict. This leads to muted price signals to customers, compounding the cost barrier for energy efficiency. Price regulation reduces the incentive for retailers to offer more comprehensive energy efficiency services to their customers as they may be inhibited from recovering all costs associated with such initiatives.

Origin urges the Queensland Government to remove the regulation of retail energy prices where markets are deemed suitably competitive. In those markets where the regulation of energy prices continue, any costs associated with all mandatory government energy efficiency policies must be allowed to be fully passed through to the customer.

The list of other specific barriers is extensive, by way of example, some of the detailed barriers for the residential sector observed by Origin in Queensland include:

- households being deterred from connecting their solar hot water electric booster elements to off-peak tariffs because of the added cost of Gazetted Minimum Monthly Payments at times when they may not be using booster
- air conditioning efficiency is not related to unit efficiency alone - as even high star rated units will only be efficient if sized correctly and used in accordance with manufacturer instructions. Therefore, not having the appropriate information at the point of sale is a barrier to energy efficient usage behaviour; and
- having rebates only available to owner-occupiers provides barriers to both private and commercial property investors.

A recent study in the US provides an analysis of a range of barriers for various sectors that may be useful for consideration in the context of a Queensland assessment.¹

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

There is no 'silver bullet' for policy responses to barriers and impediments. Draft policies will need to be assessed on a sector by sector basis and within a national context.

For example, in the residential and building sectors - PricewaterhouseCoopers (PwC)² concluded that building and appliance standards are the most effective for government adoption because they:

- address (to some degree) misaligned incentives
- have the potential to be cost effective, and
- are complementary to the forthcoming emissions trading scheme.

Policies should also incorporate consideration of national policies and development associated with new technologies such as: smart metering³, smart networking, and embedded generation.

¹ *Unlocking Energy Efficiency in the US Economy*, McKinsey Global Energy and Materials, July 2009. http://www.mckinsey.com/client-service/electric-power/natural-gas/downloads/US_energy_efficiency_full_report.pdf

² *Review of energy efficiency policy options for the residential and commercial building sectors*, PricewaterhouseCoopers, November 2008.

³ *National Electricity Amendment Bill - Smart Meters MCE Standing Committee of Officials Policy Response*, Ministerial Council on Energy, June 2009.



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

Origin supports the position that the provision of information to consumers and businesses represents one of the main barriers to improving energy efficiency. Education, standards, labelling, certification, collection/distribution of data and mandatory disclosure provisions on energy efficiency are all key for consumers, business and industry.

The Queensland Government, in conjunction with other states, territories and federal Government departments must play a strong leadership role in providing information. Again coordination across jurisdictions (including via COAG's National Energy Efficiency Strategy) will minimise duplication, complexity and ensure consistent messaging, smoother roll-out and maximise up-take.

There may also be merit in Governments seeking to participate in public-private partnerships to proactively support the provision of energy efficiency advice to the general public. An example of public-private partnership is the Solar Cities program, where Origin is a key member of the Adelaide Solar Cities project which will result in 5,000 smart meters being installed in participant customers' sites. This kind of partnership could be used to develop pilot projects focused on certain sectors or to respond to specific barriers.

Should you have any questions about this submission please direct them to myself or Anne-Marie Kirkman (Senior Carbon Markets Analyst) on (02) 8345 5271.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Tim O'Grady".

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