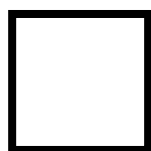
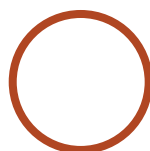




**IPA SUBMISSION TO THE SENATE ECONOMICS  
LEGISLATION COMMITTEE**  
**THE ENERGY EFFICIENCY OPPORTUNITIES BILL 2005**

**ALAN MORAN**

**OCTOBER 2005**



**Institute of Public Affairs**  
Australia's Leading Free Market Think Tank

# SUBMISSION TO THE SENATE ECONOMICS LEGISLATION COMMITTEE

## the energy efficiency opportunities bill 2005

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*“Ladies and gentlemen, the Treasurer and I have called this news conference to announce the appointment of a taskforce to identify practical options for alleviating the compliance burden on businesses from Commonwealth Government regulation. The taskforce will examine and report on areas where regulatory reform can provide significant, immediate gains to productivity and for business. Regulation is necessary to protect the public interest but it can become too burdensome and there has been a growing chorus of concern expressed by both small and large businesses about the regulatory burden.”*

The Prime Minister’s Press Conference, 12 October 2005

### ENERGY REGULATIONS AND RED TAPE

At a time when the Government has just launched its Task Force to reduce the regulation on business, it is simultaneously introducing new measures like the Energy Efficiency Opportunities Bill which will needlessly intensify that regulation.

It is an unfortunate commentary on the efficiency of government that no conflict is apparently recorded in the simultaneous pursuit of goals that on the one hand seek to reduce the impost government has on business efficiency and on the other seek to impose a greater impact. It is even more regrettable that the increased regulatory activities require firms to take measures in their own interests on matters and in ways in which the government itself has scant information.

### DEVELOPMENTS IN ENERGY USE

The events that centred on oil in the 1970s led to the

development of a quite massive change in attitudinal approach to energy. The effects of higher crude oil prices on overall energy prices in Australia were moderated by a switch to coal, the cost of which has risen less than that of crude oil. Other countries have also seen their aggregate energy prices moderated by coal (and, in many cases, nuclear energy) assuming an increased importance.

The switch in energy use over the long term was founded upon a general view that the OPEC oil cartel, supported by a scarcity of low cost energy, would bring a steady increase in the price of energy. The attitude change also had concrete effects in bringing a rapid shift of demand into existing and innovatory energy saving methods and of research and development effort into energy efficiency improvements.

The ensuing introduction of energy saving technology and supply side economies appear to have broken the previous relationship between GNP growth and energy growth. Prior to the early 1970s, the use of energy in developed countries increased more rapidly than real levels of income. Since then, energy growth has been below the growth in real GDP.

For Australia, between 1973/74 and 1990/91, energy consumption increased by only 51 percent compared with a growth of GDP of 63 percent. This represents a ratio of energy use to GDP of 0.8:1. Moreover, the reduction took place in spite of a rapid expansion of energy intensive industries like aluminium that took place as the industry migrated from Japan to lower cost energy locations like Australia.

The trends to lower ratios of GDP to energy are expected to be maintained. Over the medium term AB-

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ARE forecasts an annual growth in energy demand in Australia of under 2 per cent, only two thirds of the average 3 per cent annual GDP growth forecast.<sup>1</sup>

## THE EVOLUTION AND MERITS OF GOVERNMENT ENERGY SAVINGS POLICIES

Prior to the 1970s energy crises, the focus of government policies towards energy was in regard to exploration and, given its inelastic demand, taxation. This changed markedly from the mid 1970s.

Government policy of promoting energy saving had their genesis in the long discredited Club of Rome notions that the world was about to run out of energy and many other resources. This gradually infiltrated government thinking and was the basis of many of the energy saving regulatory policies that are in place today. Among these are the star system for refrigerators, and regulations covering other domestic appliances.

No sooner had the excitable claims about an energy crisis been dampened by reality when the greenhouse scare emerged. Without skipping a beat the same pressure groups that once urged us to conserve energy to prevent its depletion now told us that government must regulate to prevent carbon dioxide emissions building up. The policies to prevent energy use were pulled off the shelf and mutated into policies to reduce carbon dioxide emitting energy use. Government under pressure from the elites in the media (and in some cases persuaded by the arguments) acted to implement a new phase of regulatory measures.

Stemming from these developments there arose a plethora of regulatory measures targeted particularly at energy conservation. These gave expression to some politicians' views that they are better able to recognise what is good for businesses than firms' managers and directors. Thus, in his Earth Day address back in 1993, President Clinton offered a view that lower use of energy is beneficial in itself. He said that energy savings mean there is, "More to invest in new jobs and providing better living standards." In a statement that he would obviously not wish to be remembered for, he

suggested that higher energy efficiency is, "One of the reasons why over the last couple of years, for example, the average German factory worker has come to make over 20 per cent more than his American counterpart." It is doubtful that Mr Clinton, or those writing his speeches, would now view the reversal of the productivity gap between Germany and the US as evidence of the benefits of increased per capita energy consumption.

In truth, it is very easy to sacrifice overall efficiency on the altar of energy efficiency. European energy usage is less than that of the US (or Australia) because of energy taxes and the different availabilities of local low cost energy sources.

Obviously, raising the price of energy means less will be used. But this is no more a contribution to efficiency than are Japanese and European agricultural policies raising domestic beef prices and reducing its consumption.

Although reduced energy use per unit of output, like reduced labour input or reduced raw material input, brings gains to productivity and to real incomes, the means by which the reduction is achieved is critical in determining whether or not it is real. Government imposed cost increases for one input will lead to substitutions away from it. But this is very different from saying they will bring net economies. Gains to income levels are best achieved through the government adopting a neutral stance on their attainment. Cases where markets, left alone, fail to achieve the best outcomes are much rarer than many choose to think.

President Clinton's remarks refer to a partial concept of efficiency, one that focuses entirely on the use of energy. Yet, greater energy use may be more efficient than conserving energy if it results in a lower use of other factors of production. That Clinton's view is widely shared reveals deep popular misunderstandings of the nature of market forces and of demand. They are posited on the notion that government measures are required to combat adverse decisions taken by individuals in the marketplace. However, satisfaction of demand brings benefits; where regulation, forces managerial resources to focus attention on a particular area of business will shift demand and supply and result in output migrating to less productive sectors.

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<sup>1</sup> Australian energy: national and state projections to 2029-30, ABARE eReport 05.9

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Where any one input into production and its supply is required to receive special attention, other inputs are denied attention by an equivalent amount. The blend of inputs is shifted away from those with the lowest costs; and consumers' preferences no longer fully determine final outputs. These distortions reduce the economy's level of real income. They bring some consumers to shift their purchases to goods and services that they would not have chosen in the absence of the differential tax rate. And they rearrange relative costs, causing producers to shift their own purchases to inputs that would give less value if goods were treated similarly.

In some cases, these outcomes are the very ones that governments want to bring about, as they consider themselves better judges of individuals' true interests. This can be true if there is inadequate information on which individuals can base their decisions or if there are monopolistic situations in the market.

The case for the sorts of taxes that President Clinton's Earth Day remarks may presage rejects this view. It rests on the government being superior than the market at collecting and sifting the complex amalgam of information on costs, preferences, and changes in demand and supply. The absence within governments of the strong personal interest that individuals have in obtaining the best value for their money, and their frequent bending to the power of interest groups makes this unlikely.

Moreover, under close scrutiny the sorts of claims of major savings becoming possible if there were less consumer ignorance have been shown to be groundless. People's decisions on matters like avoiding up-front expenditures that save future on-going costs are generally in accord with their budget constraints and the risks and opportunities that they face with their outlays. For example, many people have avoided tying up capital in innovatory new lighting systems, even though it could be demonstrated that future savings offer a high return. Such actions reflect a need to avoid being locked into one form of capital when the future might bring something even better. Such measures receive even greater scrutiny in business situations where people are specifically tasked with taking a view on the most productive course of actions. Moreover, in so being tasked, there are abundant opportunities for those seeing to win

business from them to point out the savings available by adopting a different expenditure pattern.

## THE ENERGY EFFICIENCIES OPPORTUNITIES BILL

As the paper accompanying the invitation to offer submissions to this Review has noted, the Productivity Commission has expressed grave reservations about the Energy Efficiencies Opportunities Program.<sup>2</sup>

According to the Explanatory Memorandum (the Regulation Impact Statement) circulated by the Minister, there are many available free lunches, of which private sector businesses are unaware. Essentially, according to the framers of the RIS, business firms, not having the same level of skill that the public servants who have drafted the RIS claim for themselves, should be required to undertake measures for their own shareholders' good. The IPA would not support this conclusion. On the contrary, we consider it risible to imagine that a government agency without the day to day operational responsibility of managing businesses and without the motivation that comes from private sector pursuit of profits can know better what is in firms' interests than their management.

The RIS, in arguing that there are major savings from the regulatory route proposed draws upon information prepared by Victoria's Environment Protection Authority (EPA). The EPA is charged with implementing the Protocol for Environmental Management (PEM) as part of its Greenhouse Gas Emissions and Energy Efficiency in Industry Program. Under the PEM, EPA license holders are required to undertake an energy audit if usage and emissions are above threshold values. All identified action items that provide financial payback within three years or less must then be incorporated in action plans and undertaken. Table 1 illustrates the anticipated GHG savings from action plans approved to date.

The report estimated that these measures will achieve financial payback between 1.5 to 2 years on average, with a net financial saving of around \$30 million per annum.

<sup>2</sup> Productivity Commission, Energy Efficiency, Draft Report, April 2005

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It is unusual for such savings opportunities to be discovered by government agencies and their existence would mean the Directors of the businesses concerned have been ignoring profitable opportunities to improve the wealth of their shareholders. There is now a very broad consensus agreeing that private sector provision of business outputs is more efficient than public sector provision. Accordingly, legislators should examine critically claims that the latter have insights that would allow them better to operate the formers' businesses.

The RIS takes two lines of argument. The first emphasises the market failure of corporate ignorance. The second addresses the externality benefits that regulation might bring but the RIS itself does not estimate these or discuss them other than in passing.

In developing its case for regulation, the RIS argues, "While the relatively lower price of energy in Australia may explain some of the difference, Australia has lower rates of energy efficiency improvements than countries with similar energy prices, such as Canada and the USA." No evidence is provided for such a sweeping

statement. If this is true (and not simply a result of the different aggregation of supply within GDP), the statement would seem to suggest that there are shortcomings in our nation's entrepreneurial culture. This would, indeed, be a grave issue facing the nation.

More generally, the paper claims that there is an "energy efficiency gap". The Commonwealth's RIS on this matter, to demonstrate that its authors have read the requisite literature says,

*"The existence of an energy efficiency gap may appear counter-intuitive. Generally, firms would be expected to take up cost-saving energy efficiency opportunities without any need for government intervention. Firms which use large amounts of energy would have a particular incentive to increase energy efficiency and reduce their input costs."*

As is typical of such pieces of work designed to prove the need for regulation, the RIS then says that, "However, empirical evidence has established that an energy efficiency gap exists. There are a number of possible explanations for the energy efficiency gap.

These include:

- Market failures, including imperfect information, split incentives and externalities;
- Organisational failure and behavioural norms; and
- Other reasons, including hidden costs."<sup>4</sup>

The sophistry such statements encapsulate is breathtaking. The RIS simply entails trotting out the textbook reasons for non-intervention to disarm future detractors by maintaining that it is on the right wavelength before proceeding to undermine the reasons against government intervention with spurious empirical data.

This has been the classic approach used by all pro-regulationists. Historically, those favouring protection would assure everybody that they were in favour of free trade - with

TABLE 1: ANTICIPATED ANNUAL GHG SAVINGS – EPA PEM PROGRAM

Action Category	Number of Actions	GHG emission reductions, (kt CO <sub>2</sub> -e/yr)
Air conditioning / heating / refrigeration / ventilation	120	56.7
Appliances / office equipment	15	0.4
Boilers / steam plant / steam reticulation	188	99.8
Building construction / modification	18	2.7
Compressed air systems	232	40.8
Energy management systems	300	73.7
Hot water systems	34	4.7
Industrial / manufacturing process modifications	517	374.6
Lighting	305	43.1
Plant drives (motors)	278	82.2
Power generation	10	5.59
Other	62	123.6
Non-energy related	45	134.0
<b>TOTAL</b>	<b>2,124</b>	<b>1,041.8</b>

*Greenhouse Gas Emissions And Energy Efficiency In Industry – EPA Victoria's Role In The Victorian Greenhouse Strategy*, John A Marsiglio

<sup>4</sup> [http://www.comlaw.gov.au/com-law/legislation/bills1.nsf/0/0285C33447F2CF3BCA25707D00062087/\\$file/05158em.pdf](http://www.comlaw.gov.au/com-law/legislation/bills1.nsf/0/0285C33447F2CF3BCA25707D00062087/$file/05158em.pdf) (p. 9).

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its demonstrable income enhancing features – but, for reasons like those sketched out above, would maintain that the particular industry for which they were battling was different.

In support of the regulatory requirements, the RIS refers to a report quoted in the PC Draft Report on Energy Efficiency by Energetics. This argued that over 90 per cent of firms with annual energy bills exceeding \$5 million did not do what Energetics regarded as being adequate energy management diagnostics. Doubtless encouraging firms to do more such diagnostics would proved beneficial to Energetics and this might have given the authors of the RIS cause for concern about the dispassionate nature of the advice.

The RIS then constructs hypothetical scenarios on the basis of which it estimates major savings to the economy (and to the firms on which its regulations are imposed). These involve three options<sup>5</sup> against which totally fabricated estimates of savings are made. On the basis of these a net benefit is claimed in Net Present Value terms of between \$239 and \$497 million for Option 2 and \$279 and \$557 million for Option 3. This extrapolation of fanciful assumptions to detailed pseudo-scientific estimates provides no basis for supporting the Bill. Rather, it underlines the considerable politicisation inherent in government agencies' decisions, a politicisation that is one reason why government businesses are seldom able to compete successfully with those of the private sector.

The PC's Draft Report on Energy Efficiency discusses many reasons why firms and individuals do not wait to assemble all the possible information before making a decision. The notion of "bounded rationality" helps to explain why perfection is never achieved – in order to thoroughly examine all options before taking a decision would require spending inordinate amounts of time. It makes sense that decisions are made on partial information and that the more important a decision is, the greater the amount of time spent acquiring and processing information. Thus we spend more time assessing our needs and the offerings available in buying a house or a car than in buying a computer. In the case of very low cost goods we may spend hardly any time – some may be "impulse" purchases.

The PC (p. 93), drawing on research from ABARE

also marshals evidence that half of the recommendations of energy audits are not taken up. This is thought to be because the implementation costs are not adequately recognised by the audits. It also suggests that there may be some double counting in the cost saving estimates.

## CONCLUDING COMMENTS

It is instructive in this regard to recall the words of Arthur Seldon, the immensely influential recently deceased head of the British IEA, who confronted the frequent cry of "market failure" with the charge of what he called "incorrigible government failure". The trouble he diagnosed was "that politicians are not generally saints pursuing the long-term public interest, but party politicians responding to demands from organised lobbies".<sup>6</sup>

The cynical would argue that the proposed provisions were put in place as a sop to those seeking more draconian measures like steeper energy taxes. They would maintain that the obligations to be put in place are unlikely to entail significant costs since most firms should carry out energy audits in any event. Requiring actions simply to allay misplaced concerns and to forestall even more onerous regulation impact may be preferable to the sort of policies that those same concerns have fostered in the EU, particularly Germany with its aggressive energy taxes and consequential economic lassitude.

Even so, putting in place a set of second best requirements is hardly a noble and efficient basis for the formulation of government policy. Passing legislation on the basis of palpably deficient evidence placed before it sets a poor standard for Parliamentary democracy.

<sup>5</sup> Option 1 is the status quo scenario; Option 2 is the initial proposal for a mandatory scheme, entailing assessments with minimum performance standards; Option 3 is the revised proposal for a mandatory scheme, without minimum performance standards.

<sup>6</sup> <http://www.telegraph.co.uk>

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