GEORGE WILKENFELD AND ASSOCIATES
Pty. Ltd. A.B.N. 78 003 846 848 E-mail: geosanna@ozemail.com.au
POLICY AND PLANNING CONSULTANTS
ENERGY AND ENVIRONMENT
132 Chelmsford St, Newtown NSW 2042 Australia PO Box 934 Newtown 2042
Sydney (02) 9565 2041 Fax (02) 9565 2042

Energy efficiency inquiry
Productivity Commission
LB2 Collins Street East
MELBOURNE VIC 8003

24 May 2005

Dear sirs

I am responding to the Draft Report of the Productivity Commission Inquiry into Energy Efficiency.

My comments are confined to the Draft Findings and Draft Recommendations in the *General* and *Residential* sections.

General

The Draft Report states that (p1):

> This is not an inquiry into global climate change *or the least-cost options for greenhouse gas abatement* (emphasis added).

This sits oddly with the Terms of Reference, which state *inter alia* that:

> The Commission is to examine and report on the economic *and environmental* potential offered by energy efficiency improvements (pv, emphasis added).

This appears to oblige the Inquiry to consider energy efficiency in connection with the declared energy-related environmental objectives of Australian governments, prominent (perhaps paramount) among which is a reduction in greenhouse gas emissions.

I agree with the statement in the Draft Report (p17):

> An increase in energy efficiency beyond the economically-efficient level may be desired, not for its own sake, but because it is a suitable option for achieving another objective. For instance, if more direct and efficient approaches to reducing net greenhouse emissions (such as taxes on emissions or on energy use) were not politically acceptable, or if in the prevailing circumstances the more direct measures could only be applied at a level insufficient to achieve the desired reduction in emissions, there may be a role for policy measures that target energy efficiency.
>
> However, in going beyond the privately cost-effective level of energy efficiency, the value of the resulting improvement on the indirectly targeted objective would need to be balanced against the direct economic loss from a privately excessive investment in energy efficiency.

The current situation is clearly one in which 'more direct and efficient approaches to reducing net greenhouse emissions …[are] not politically acceptable', so there is a role 'for policy measures that target energy efficiency'.

The National Greenhouse Strategy (NGS) endorsed by COAG in 1998 provided the policy context for the eight Regulation Impact Statements (RISs) on mandatory energy labelling or MEPS that my firm prepared between 1999 and 2003. As required by the COAG *Principles and Guidelines for National Standard Setting and Regulatory by Ministerial Councils and Standard-Setting Bodies* (1997) each RIS stated the primary objective of the proposed regulation, which was generally:

> To bring about reductions in Australia's greenhouse gas emissions below what they are otherwise projected to be, while reducing the cost to the community of obtaining the specified energy service (eg hot water).

In other words, the criteria for adoption of a measure are that it met the 'no-regrets' criteria in the NGS: that it was likely to bring about significant greenhouse gas reductions with no net economic cost (and preferably an economic benefit) to the community as a whole. Addressing identified failures in the markets for energy services was the means to the primary objective.

Although projected greenhouse gas emissions were quantified they were not given a value, because any value (including zero) would have been controversial, and because it proved unnecessary. Most measures met the 'no net economic cost' criterion by a considerable margin, and indicated net economic benefits across a wide range of assumptions. It has not so far been necessary to balance 'the resulting improvement on the indirectly targeted objective' against 'the direct economic loss from a privately excessive investment in energy efficiency' because according to our analyses there has not been such losses *on average* (I shall come to distributional issues later).

However, should Australian governments continue to address greenhouse gas reductions indirectly rather than directly, and should more stringent mandatory energy efficiency measures continue to be part of this strategy (both of which are highly likely) then eventually proposals will no longer be cost-neutral solely in capital cost and energy terms, and the value of projected greenhouse gas emissions will need to be considered.

It would be useful for the Inquiry to nominate values (in $ NPV per tonne of emissions abated) to be used in future analyses. We agree with the comment in the Draft Report (p303) that 'the challenges of setting an economically efficient price for carbon — whether through emissions trading or carbon taxes — are formidable.' However, for the Inquiry to condemn measures as being not cost-effective without a carbon price, while at the same time declining to nominate a price against which cost-effectiveness can be tested, is singularly unhelpful.

To sum up, government sponsored or government-mandated energy efficiency measures should be considered in their full policy context, including the objective of greenhouse gas reduction. The deliberately circumscribed approach taken in the Draft Report appears to be inconsistent with both the inquiry Terms of Reference and with the stated objectives of many of the programs reviewed, especially MEPS.

Distributional Issues

The Draft Report makes reference in several places to the fact that MEPS will make some consumers worse off if it denies access to low-efficiency products (assuming the less efficient products would be cheaper to purchase, which is not always the case), because:

- They use the product less often, or on less energy-intensive settings, than the average, so the energy savings do not compensate for the higher purchase price

- They are capital-constrained, so would place high value on being able to allocate the additional cost to other purchases, even if they more than recoup the investment through lower energy expenditures.

I accept that these are consequences of MEPS, as indeed of most other government interventions in markets, including reductions in long-standing import tariffs (which often have a very high cost for workers in the affected industries, for which they may not be adequately compensated) and forced savings regimes such as obligatory superannuation contributions. However, they do not invalidate those policies provided the total net benefit exceeds the cost, and if groups subject to significant negative impacts are identified and, if necessary compensated in some way. As the PC *Draft Report* itself point out, energy and appliances account for only a small share of household expenditure (although greater for lower-income households) so any negative impacts are also likely to be minor, and in most cases offset by the value of *some* energy savings.

Nevertheless, I acknowledge the recommendation that future RISs should address these issues more directly and identify how different income and usage groups are affected, to the extent possible using the available data. This point was made in a recent review of RISs carried out by Lawrence Berkeley National Laboratory for the AGO, and has been incorporated in a forthcoming *Guide to Preparing Regulation Impact Statements for the Appliance and Equipment Energy Efficiency Program*, which I prepared for the AGO.

Estimating energy impacts of measures

In several cases the Draft Report questions whether the reductions in energy use projected for measures such as energy labelling or MEPS are over-stated, eg:

> any assessment of MEPS has to identify what proportion of observed improvements in energy efficiency are due to factors other than energy performance standards. This is not a straightforward task (p122).

In all our work on energy labelling and MEPS, going back to 1982, we have made considerable efforts to project the underlying trends in sales-weighted energy efficiency in the absence of whatever measures were proposed, and to use a 'dynamic' rather than static baseline against which to assess the energy impacts of the proposals. For most products we have assumed that energy-efficiency would increase even without the measure. For one product – electric water heaters – the historical evidence and the market structure indicated that efficiency would not improve unless MEPS levels were increased. For one product –

electricity distribution transformers – our review of the market indicated that average efficiencies of new stock were declining and would continue to do so without intervention.

The Draft Report notes (p127):

> It is not possible to say that the benefits of MEPS always outweigh the costs, or vice-versa. Whether there is a net benefit has to be judged on a case-by-case basis, and requires quantification of the various benefits and costs.

We believe that this is what happens now: all MEPS proposals are judged on their merits, and not all meet the criteria. We have recommended against MEPS in several instances. The following table illustrates the diversity of assumptions and conclusions in the analyses we have undertaken since 1993. (The 1999 RIS was unique in that the baseline was the continuation of pre-existing mandatory energy labelling and the ratification of MEPS already announced by the Ministerial Council in 1996 for refrigerators, freezers and water heaters, and for the most part already implemented by suppliers. We assumed that the abandonment of mandatory labelling would lead over time to a collapse of the scheme, a reduced tendency for consumers to prefer more efficient appliances and hence a decline in sales-weighted efficiency, rather than a technical decline in product efficiency *per se*).

Summary of assessments of mandatory energy labelling or MEPS proposals by GWA since the adoption of the COAG Guidelines (1997)

Products	Measure assessed	Baseline assumptions
Refrigerators, freezers	MEPS recommended (1993) Continuation of mandatory labelling recommended (1999)	Increasing efficiency, but declining efficiency if mandatory labelling and MEPS abandoned (1999 RIS)
Dishwashers	Continuation of mandatory labelling recommended (1999) MEPS rejected (1993, again in 2001)	Increasing efficiency, but declining efficiency if mandatory labelling abandoned (1999 RIS)
Air conditioners (domestic)	Continuation of mandatory labelling recommended (1999) MEPS rejected (1993), then recommended (2001)	Increasing efficiency, but declining efficiency if mandatory labelling abandoned (1999 RIS)
Clothes washers	Continuation of mandatory labelling recommended (1999) MEPS rejected (1993), recommended (2001); overtaken by water efficiency labelling	Increasing efficiency, but declining efficiency if mandatory labelling abandoned (1999 RIS)
Clothes dryers	Continuation of mandatory labelling recommended (1999) MEPS rejected (1993), recommended (2001) but has not proceeded	Increasing efficiency, but declining efficiency if mandatory labelling abandoned (1999 RIS)
Water heaters	MEPS recommended (1993) – widening scope of MEPS to more sizes and types recommended (2003) Labelling option as part of MEPS	Static efficiency if MEPS abandoned, because suppliers had already made changes in anticipation (1999 RIS) Static efficiency (2003 RIS)
Electric motors	MEPS recommended (2000)	Increasing efficiency even without MEPS (2000)
Air conditioners (commercial packaged)	MEPS recommended (2000)	Increasing efficiency even without MEPS (2000)
Fluorescent lamp ballasts	MEPS recommended (2001)	Increasing efficiency even without MEPS (2001)
Electricity distribution	MEPS recommended (2002)	Declining efficiency without MEPS (2002)

transformers		

We have also had occasion to review our prior projections of the impacts of labelling and MEPS in the light of actual data collected later. Of seven appliance categories reviewed in detail (see following table) the projections of energy reduction trends proved fairy accurate for three products, underestimated for two products and overestimated for two. All of the post-monitored trends were of course 'with measures', but given that they matched the 'with measures' projections reasonably well, it is reasonable to assume that the 'without measures' projections were equally accurate. Other data collected on the labelling program confirmed that it was influencing consumers and suppliers. All in all, we suggest that the reliability of the impact estimates for energy labelling and MEPS is probably higher than for most areas of government action.

2001 review of 1993 projections of changes in appliance energy efficiency, 1993-99

	Measures applying	Correspondence of actual 1993-99 trends with projections made in 1993
Refrigerators – single door	Mandatory labelling, MEPS	Fairly accurate
Refrigerators – cyclic defrost	Mandatory labelling, MEPS	Fairly accurate
Refrigerators – frost free	Mandatory labelling, MEPS	Efficiency improvement underestimated in 1993
Freezers	Mandatory labelling, MEPS	Efficiency improvement overestimated in 1993
Clothes washers	Mandatory labelling	Efficiency improvement overestimated in 1993
Clothes dryers	Mandatory labelling	Fairly accurate
Dishwashers	Mandatory labelling	Efficiency improvement underestimated in 1993

Source: *Projecting the impact of energy programs: how good were the estimates.* Paper by George Wilkenfeld for the Collaborative Labelling and Appliance Standards Program (CLASP) Asia Regional Symposium on Energy Efficiency Standards and Labelling, Bangkok May 2001.

Discount Rates

The Draft Report states (p88) that:

> Regulatory impact assessments of energy efficiency policies typically use an NPV criterion with a discount rate that is never above 10 per cent, and in most cases is lower (chapters 7 and 8). It could be argued that the discount rates used are far too low and hence the cost effectiveness of energy efficiency improvements is significantly overstated.

In the eight RISs that we have carried out, we assessed cost-effectiveness at a discount rate of 8% in the first, and 10% in the other seven.

We do not agree with the proposition in the Draft Report that discount rates in regulatory impact assessment should be based on the high subjective discount rates used by some consumers. For mandatory energy labelling, the testing and labelling costs imposed on consumers are very low, and their effect is to enable those consumers *who wish to do so* to make more efficient purchases. If no consumers or suppliers notice or act on the information the measure will not drive energy use below the baseline, and so will have no benefit (other than a better-informed community). However, surveys indicate that well over 90% of consumers entering a showroom notice the energy label on electrical appliances and many will change behaviour in response.

The discounting of expected future energy cost savings by different consumers (or the same consumer at different times and for different products) is certainly very wide, and almost impossible to ascertain. Some who notice the label will ignore the information altogether. Some will make limited use of it (eg to compare only the models displayed in one place rather than widen their search) even though they could benefit significantly from seeking out more efficient models. These two groups employ high subjective discount rates. Conversely, some consumers will use the label to purchase a *more* efficient model than appears to be cost-effective, ie they employ very *low* subjective discount rates. This has actually been observed among buyers of dishwashers, for example.

There is no reliable way of estimating the average subjective discount rate used by consumers for different appliance purchases. Therefore it is necessary to base judgements about appropriate RIS discount rates on other factors.

The decision to implement a mandatory energy efficiency measure is taken by the community's representatives (in this case, the Energy Ministers) on behalf of the community as a whole. The decision is taken in light of the range of alternatives available, and the costs and benefits of each alternative.

The demand for energy services in Australia has increased almost without interruption over the last century and is projected to continue increasing for the foreseeable future. (The extent to which distortions in energy price or other market failures contribute to the growth in demand can be put aside for the time being).

The main options for meeting growing demand for energy services are to expand energy supply, increase the technical efficiency of energy supply or increase the technical efficiency of energy consumption – in practice all three are required, and all are in essence substitutable at the margin. From a social viewpoint, capital will need to be invested in any of the options, and if the outcomes are of equal certainty then the investment criteria should be the same.

Mandatory energy efficiency programs targeting electrical appliances are directly equivalent to the construction of new generating plant infrastructure or the refurbishment of existing plant to increase its efficiency. Where generation is constructed or refurbished by public authorities, the discount rate used to assess alternative options would be that used for all public works, which in Australia generally ranges from 5% to 7%. The capital cost would ultimately be recovered from energy consumers and/or taxpayers (given that almost all taxpayers are energy users and vice versa, there is a high degree of overlap).

In effect, governments can choose to avoid or delay the construction of supply infrastructure by forcing the beneficiaries (consumers) to invest directly in increasing end use efficiency. For well designed MEPS programs the reductions in energy demand are predictable and certain. The risk is similar to that of building more generation - in many cases less risky, since energy reductions become available progressively while supply is lumpy, and energy efficiency carries no carbon risk. Therefore similar discount rate should be used to assess both types of investment. If the infrastructure is constructed by private capital the discount rate could be somewhat higher to reflect the fact (or perception) of

greater risks. Hence a 10% discount should cover any reasonable risk premium where outcomes are as predictable as for MEPS.

Energy users can be directed by government decision to either invest a dollar in energy efficiency (paid to the supplier of the equipment) or a dollar in expanding supply (paid to the energy supplier/s by way of the tariff, and returned to the private or public investor/s in the supply infrastructure). In most cases the transfer payments (taxes and markups) on both energy using equipment and on retail energy prices are similar, so carrying out the analysis from the perspective of the end user is valid, and has the advantage of simplicity.

This approach has been developed and confirmed over a period of years, with input from the Office of Regulation Review.

Labelling

The Draft Finding that 'energy-performance labels are not a major determinant of which appliances householders buy' appears to suggest that energy labelling is not effective in prompting behaviour change. This is incorrect. The implementation of mandatory, universal energy labelling has raised 'energy running cost' and 'energy-efficiency' factors from about tenth priority in appliance purchase before the program was introduced in 1986 to second by 1999, behind purchase price but ahead of factors such as brand name, appearance and reliability.[1] The mandatory energy labelling program has been highly effective in transforming the appliance market, and this should be acknowledged in the Report.

The Draft Report states (p.114) that 'the Commission therefore considers that an effective labelling scheme does not necessarily have to be run by a government.' To support this conclusion, the Draft Report gives the following 'examples of labelling programs that are not run by governments.'

- the Heart Foundation's 'tick' label for heart-friendly food;
- labels for primary products associated with the Landcare program;
- the Window Energy Rating Scheme;
- the Marine Stewardship Council's eco-label for sustainable fishing; and
- labels for organic food (such as that managed by the National Association for Sustainable Agriculture Australia).

In addition, a private sector organisation — the Australian Gas Association — has historically had primary responsibility for gas appliance labelling. Consumers can also obtain information about appliance energy efficiency from private sources, such as the Australian Consumers' Association's *Choice* magazine (p.114).

None of these examples are comparable in scope or effectiveness to the mandatory energy rating label, the strength of which is that it is uniform in appearance across all products, gives a comparative rating to assist selection between products that otherwise look

[1] ABS 4602.0, *Environmental Issues – People's views and Practices*, March 1999, Table 4.19.

identical, and uses indicators that are immediately comprehensible (eg star ratings, as well as kWh per cycle or per annum).

The Heart Foundation, Landcare and Marine Stewardship Council marks are not comparative labels but endorsement marks which require the user to recognise and trust the sponsor, and to accept that the criteria for endorsement (whatever they may be) are valid. As for organic food labelling, *Choice* (October 2004) reported that:

> In Australia there's no government regulation that defines 'organic' food. By default, the industry is in effect regulated by the Australian Quarantine and Inspection Service (AQIS). Exported organic foods must meet AQIS's National Standard for Organic and Bio-Dynamic Produce, and AQIS has accredited a number of organisations as qualified to certify that particular foods are indeed 'organic'.

Consequently, there are six distinct logos recognised by AQIS as valid for exports and which are also used within Australia (including the NASAA's). There are also other logos with the word 'organic' that not recognised by AQIS. This arrangement means that (a) government *is* involved, but inefficiently, and (b) the regime of multiple logos and brands is confusing for consumers and far less effective than the energy label.

Of the other examples, the Window Energy Rating Scheme was set up with assistance from government and deliberately uses a label similar in form to the star rating label, otherwise it could not have achieved even the limit degree of recognisability that it has. The energy ratings published in *Choice* are in fact the results of the standard energy label tests (developed with the support of NAEEEC) and often carried out by the ACA under contract to NAEEEC. It is questionable whether they would appear without the resources of the labelling program behind them. The Australian Gas Association is no longer able to draw on the quasi-regulatory powers of its gas utility members, now that thy are no longer government-owned, and has recognised its declining ability to manage the gas labelling program on its own – hence the current transition to a mandatory scheme similar to NAEEEP.

In fact, there is no evidence in the Draft Report to contradict our view that *only* governments are in a position to undertake the long term management of the energy labelling program in a way that ensures its continuing high effectiveness.

MEPS

The Draft Report has some minor inaccuracies on the scope of MEPS in Australia. The performance standards which all gas appliances had to meet under the AGA-run product accreditation scheme contain minimum combustion efficiency requirements, but these are not true MEPS. Most were set decades ago, have never been subject to cost-benefit analysis and even the least efficient model on the market now exceeds them by a wide margin. One of the objectives of the new mandatory program is to systematically review the minimum gas efficiency standards using the same criteria and methods of analysis as for electric appliance MEPS.

The Draft Report also reproduces without comment a statement by the Institute of Public

Affairs that 'MEPS targets products that account for only 2 per cent of Australia's total greenhouse gas emissions' (p.122). This is not so. The energy used in products covered by MEPS in the residential, commercial and industrial sectors accounted for about 70 Mt CO_2-e in 2002, or about 13% of national emissions – about the same as all of road transport.[2] In aggregate, MEPS represents the largest mandatory greenhouse gas reduction program in Australia, and the projected impacts are in the order of 1.5 to 2% of national emissions.

The Draft Report also states (p.122):

> In addition, MEPS-related increases in energy efficiency could lead to a 'rebound effect' in which the use of appliances increases. This would make the environmental benefits of energy-performance standards lower than otherwise.

While the energy reductions from some energy efficiency programs might be eroded by 'rebound effect' to some extent, MEPS gains are least likely to be eroded. Unlike labelling, where consumers make a conscious choice to purchase a more energy-efficient product, and so may choose to use it more (although this is only likely for heating and cooling equipment), MEPS are largely invisible to users. MEPS-compliant models are usually indistinguishable from the non-compliant models removed from the market. Although energy bills will be lower than otherwise, it will be hard for most consumers to detect the effect over the normal seasonal variability, let alone attribute its cause.

Multiple measures

The framing of the Draft Report's Draft Recommendation 7.1 implies that energy efficiency measures such as MEPS, mandatory comparative labelling, voluntary endorsement labelling or mandatory dis-endorsement labelling are mutually exclusive alternatives. This is not the case. Just as each product market needs to be analysed on its merits to assess whether there are market failures that justify external intervention, the optimum mode or modes of intervention may be different in each case.

MEPS and energy labelling programs (whether mandatory or voluntary) share a common technical basis and administrative structure. There has to be a standard energy test, participating products have to be accurately tested to the standard, and the data has to be conveyed in a consistent format to the user. In MEPS programs, the 'user' is the regulating agency, and the information may not be made public at all. For labelling programs the 'user' is the intending purchaser, and the data are made available either on a physical label, in product brochures, supplier websites, a central website or all of these.

There must also be a compliance framework. Even for purely voluntary labelling, some agency (whether the ACCC, an industry association or competing suppliers) will need to check from time to time on the accuracy of claims, or supplier and consumer confidence in the program will decline.

Once the technical basis and administrative structure of the energy efficiency program are established, the marginal costs of using the information for MEPS and/or for different types

[2] *National Appliance and Equipment Energy Efficiency Program NAEEEP): Coverage of the Residential, Commercial and Manufacturing Sectors*, George Wilkenfeld and Associates for AGO, August 2004.

of labelling are very low. The main objective in designing a package of measures is to maximise the benefit of the overall package, by using the basic information in a range of ways to address different market segments. For example, in the refrigerator and freezer market:

- The presence of labels ensures that all consumers entering a showroom are alerted to the significance of energy in the lifetime ownership cost of a refrigerator, and informed (visually and quickly by the star rating scale) that there are differences in models;

- The fact that the labels are mandatory enables consumers to avoid inefficient models if they wish - these models would not be labelled if the programs were voluntary;

- Consumers who wish to quantify the cost-effectiveness of alternative purchases can do so on the basis of the stated kWh/yr values;

- Consumers who do not enter a showroom, or who wish to widen their search, can make the above comparisons on a website established by government for that purpose;

- Consumer research indicates that there is a growing segment of consumers who restrict their search to the most efficient segment of the market, irrespective of whether prices in that segment are higher than for less efficient products (ie they employ *low* subjective discount rates). There are voluntary endorsement labels (eg TESAW) to assist suppliers to communicate with this group;

- A significant proportion of refrigerator purchases are made by intermediaries such as owners or operators of rental property (both residential and commercial) where the running costs are passed on to residents.[3] These groups are less sensitive to running costs and tend to prefer the low-efficiency, low-cost models excluded by MEPS. They would most likely also be indifferent to 'dis-endorsement' labelling.

The above example illustrates the intricate interdependence of program elements, impacts, costs and benefits. Elements are not simply interchangeable: each element addresses a different market segment and adds value to the program as a whole.

Draft Recommendation 7.1

The Inquiry's Draft Recommendation 7.1 is that

'*The National Appliance and Equipment Energy Efficiency Committee should adopt procedures to ensure that future regulatory impact assessments of appliance minimum energy performance standards (MEPS) include a more comprehensive analysis of:*

- *why consumers — with guidance from an energy-performance label — are not best placed to judge what is in their best interests;*
- *whether a voluntary standard, such as the Energy Star program, would be more cost effective;*

[3] Incidentally, tenants of furnished rental accommodation are among the main beneficiaries of MEPS for refrigerators and for day-rate electric storage water heaters. As these are among the lowest income groups, it contradicts the assumption in the *Draft Report* that MEPS are necessarily regressive.

- *what proportion of consumers would be prevented from buying appliances that are more cost effective for them;*
- *the extent to which consumers would be forced to forgo product features that they value more highly than greater energy efficiency;*
- *the distributional impacts, including the extent to which MEPS are regressive;*
- *whether MEPS would reduce competition and how this would affect prices and service quality; and*
- *whether a disendorsement label would achieve a more cost-effective result.*

The framing of the recommendations implies that all previous RISs on MEPS proposals have been seriously deficient and that the elements listed have not been considered. This is not the case (with the possible exception of distributional issues, where I acknowledge that more work needs to be done). All previous MEPS RISs have been prepared in accordance with the *COAG Guidelines*, and certified accordingly by the Office of Regulation Review.

It would be helpful for the Inquiry to expand on how the draft recommendation concerning 'the extent to which consumers would be forced to forgo product features that they value more highly than greater energy efficiency' are to be given effect in RISs. The introduction of MEPS for refrigerators has had no discernible impact on product diversity or on the rate of introduction of new features (eg stainless steel cladding, new door/drawer configurations, multiple and variable temperature compartments etc). Many of these highly-featured models are also relatively energy-efficient. If not, the negative energy impact of the feature is indicated by a lower energy rating. It is possible that suppliers of some low-cost models would incorporate some of these features but the models would then fail MEPS but this is entirely speculative. There do not appear to be refrigerator features available in countries without MEPS that are not available in Australia. If a more comprehensive analysis than this is required, some guidance would be helpful.

Finally, a number of the draft recommendations refer to 'cost-effectiveness' as the ranking criterion for alternative options. This is inconsistent with the COAG *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies,* Council of Australian (2004), which states that the determining criterion is magnitude of net benefit, not the ratio of benefit to cost ('cost-effectiveness' – assuming of course the ratio is 1 or more):

> Under the net present value rule, a regulatory activity should only be undertaken if its net present value (ie benefits minus costs) is positive. Accordingly, CBA [cost-benefit analysis] a valuable tool for decision makers when assessing the issue of whether a particular proposal is appropriate. If comparing a number of options, the alternative with the highest positive net present value would be preferred (COAG 2004, p27).

Home Energy Ratings

I do not have time to comment on other parts of the Draft Report, other than to correct an erroneous statement concerning a study that my firm prepared. The Draft Report states:

> A government-sponsored study of the ACT home energy-rating scheme was

> conducted in 2001 (Wilkenfeld and Associates, Artcraft Research and Energy Partners 2001). But that study assumed that the scheme would be effective in increasing residential energy efficiency (p.136).

This is not the case. Mindful of the major differences between the dynamics of appliance and housing markets, I undertook the analysis with an open mind (as indeed I try to do with all our projects). did *not* assume the scheme to be effective beforehand, nor indeed conclude that it *was* effective once the review was complete. I quote from the Executive Summary:

> There is evidence that as awareness of ratings increases, householders are more assured of recovering the costs of thermal improvements (and perhaps a further premium reflecting the value of expected future energy savings) in the resale price of their home.
>
> However, it was not possible to establish:
>
> - The proportion of existing homes or new home designs where MEPD [Mandatory energy performance disclosure] -induced improvements were made;
> - The nature of the actions taken (although in existing homes it appears likely that the most common action was to install ceiling insulation sooner than otherwise);
> - The value of additional investment in measures to improve thermal comfort;
> - The savings in energy costs and/or the improvements in thermal comfort that may have resulted from such actions (p.3).
>
> …
>
> There are no conclusive data on the additional investments made in improving the thermal performance of either new or existing dwellings as a result of mandatory disclosure, or the resulting benefits in terms of energy saving or greater thermal comfort. It may be years before such information becomes available, and only if efforts are made to collect it (p.6).
>
> …
>
> Given the lack of cost-effectiveness for MEPD projected for some jurisdictions, and the sensitivity of cost-effectiveness in all jurisdictions to assumptions about the value of thermal comfort and other factors, we cannot make an unqualified recommendation for the implementation of MEPD in other jurisdictions at this stage. This conclusion may be reviewed once more information about the operation of MEPD in the ACT is collected and analysed (see preceding recommendations) (p.9)

I would therefore appreciate correction of the record concerning the above study.

I hope that these comments are helpful, and I look forward to the Inquiry's final report.

Yours sincerely

George Wilkenfeld