CORRECTED VERSION

ENVIRONMENT AND NATURAL RESOURCES COMMITTEE

Inquiry into energy services industry

Melbourne — 14 March 2006

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Mr A. Forster, President; and
Mr S. Bhattacharya, Australian Institute of Energy.
The CHAIR — I would like to welcome Tony Forster, who is the president, and Sankar Bhattacharya from the Australian Institute of Energy, Melbourne committee. All evidence taken by the committee is taken under the provisions of the Parliamentary Committees Act and is protected from judicial review. However, if you make comments outside the precincts of this room, they are not protected by parliamentary privilege. Hansard is recording our meeting today and you will be provided with a proof version of the transcript within a couple of weeks. We have half an hour, so if I can hand over to you for 20 minutes or so for your presentation and just leave us 10 minutes for questions, hopefully that will see us through.

Mr FORSTER — Thank you very much for the opportunity to appear today. The Australian Institute of Energy is a professional organisation with about 1400 members around Australia. The mission of the Australian Institute of Energy is to promote the understanding and awareness of energy issues and the development of responsible energy policies in Australia. It is a broad group, encompassing a wide range of views, which includes coal, renewables, uranium and others. This diversity of views is one of the strengths of the Australian Institute of Energy.

In the area of sustainability we have endorsed Sustainability Victoria’s integrated energy improvement program, which is a program to educate consultants in providing advice on energy efficiency. By the way, as one of the things I do, I am lecturing in energy efficiency at RMIT as part of the master of engineering (sustainable energy) degree.

Our web site has a number of resources available to the community on energy efficiency, including a number of fact sheets and other pieces of information. It is targeted particularly at secondary schools because we see them as a major driver for social change.

There are two significantly different categories in energy use in Victoria. The residential energy market is highly dispersed. The other category of stationary energy is the industrial and commercial market, which has large energy users, has a much more concentrated use of energy and has been used for more targeted interventions. Residential energy use is approximately one-third of the stationary energy use, and the other two-thirds are commercial and industrial energy.

The residential market has been targeted by public information programs over at least the last 20 years. Most notably, Sustainability Victoria has had that responsibility from the government. It was previously known as the Sustainable Energy Authority of Victoria and, before that, Energy Efficiency Victoria. Unfunded community groups have a major role in informing the residential market. Just to name a couple of them, there is the Australian Conservation Foundation and the Moreland Energy Foundation. That is not to pick them out particularly; there are large number of community groups that form the market.

The industrial and commercial market for energy efficiency has been driven by government policy. There have been a number of programs, starting with the SEC’s demand management program in the 1990s, followed by the Department of Primary Industries enterprise energy audit program and the Greenhouse Challenge. More recently, the rules have shifted a bit with the EPA’s SEPP (AQM), which has had mandatory implementation. It has changed it from a voluntary to a mandatory process. A similar program to the SEPP (AQM) is taking place in New South Wales under the auspices of DEUS. There is also a commonwealth EEO program, which works more on a basis of voluntary implementation but mandatory public reporting, where people will be effectively shamed into implementing energy efficiency measures.

Throughout all these programs there has been a problem of a low level of implementation of identified recommendations. Australian standard 3598 was developed as an attempt to rectify the problem where energy efficiency advice would be to a particular standard — and it specifies level 1, level 2 and level 3 energy audits. There has been a move towards level 3 energy audits, rather than level 2, as a response to poor levels of implementation of energy efficiency measures. I will hand over to Sankar to talk about issues in residential efficiency.

Mr BHATTACHARYA — There are a few issues that we think are quite important. Firstly, there are issues relevant to residential customers. We recognise that in Australia — and it has come out very clearly in the Productivity Commission’s report which was commissioned in 2004 — over the longer term, the trend in efficiency measures adopted in the residential sector is gradually improving. There is no doubt about that. But, at the same time, there is also a distinct lack of information that is being provided in a concerted manner to residential
consumers. That is our first point — consumers or residential customers often do not know what conservation and efficiency improvement measures are available to them privately and to what extent they are cost effective.

Secondly, there is still an information asymmetry between consumers and the suppliers of energy efficient appliances, equipment and building services, some of which have been identified by the previous presenters from the AGGA. There are some measures that have been taken — and it is ongoing — to compile relevant information in a credible manner and to present it to the consumers. One example is the information that is available at www.energyrating.gov.au. For experts it is quite easy to access that information — we know that; but to common residential customers and consumers, it is not very — they often do not know that. To that end, I think there are opportunities to package this information in a much more concise manner and then disseminate it to residential consumers. We have identified a few ways that that can be done — one is in the form of distribution in the form of leaflets with the utility bills that people get on a regular basis. But it has to be done on a regular basis; it cannot be done just on a one-off basis and then assume that everyone has been informed. It can also be done in the distribution of leaflets and relevant fact sheets. To that effect the AIE will be very happy to facilitate the distribution of them through our newsletters, journals and web site. Thirdly, we can also look at advertising this in the print and news media, including the various community newspapers. Finally, I know that the Victorian multicultural organisation provides funds to various ethnic and community organisations. Through them we can also channel our distribution of those leaflets and fact sheets.

The second issue is training, which essentially relates to part of point 5 of the terms of reference. We believe that as technical advances are made in the development of appliances and various technologies, at the end of the day it has to be a constant exercise to communicate it to the consumers. Therefore this has to be a constant and ongoing effort. In order to sustain that effort over a longer term it is very important that we train our graduates, especially those from science and engineering backgrounds. We need to train those graduates in energy conservation measures. At various universities there are subjects offered on a fragmented basis, but there are no subjects offered, to our knowledge, specifically in the energy conservation measures. So we think that it is a very important area.

The Australian Institute of Energy, in conjunction with various other authorities and the universities, will be quite happy to facilitate the introduction of energy conservation as one of the subjects. Those subject, we believe, should be formulated and delivered largely by industrial practitioners, rather than by pure theoreticians.

**Mr FORSTER** — I will just mention one more point on residential energy. Sustainability Victoria used to have a schools program. That was discontinued a few years ago. Sustainability Victoria wanted to concentrate on big-ticket items. I thought that was a particularly good program because, if you can get schoolchildren aware of the message, they bring that message home. I think it would be good to see a schools program reinstituted by Sustainability Victoria.

Moving on to industrial-commercial use, there are a few problems with the industrial-commercial market. One of the problems is that governments create boom-bust cycles. As I said before, the energy efficiency industry is very much driven by government subsidies and government regulations. Unless government programs are phased in gradually over time they will create shortages and surpluses of capability. As an example, the mandatory renewable energy target — and no new target has been set beyond the current one; I have forgotten which year it is — means that a lot of capacity for installation of wind turbines has been built up and then suddenly there is no market for that capacity. Similarly the state SEPP (AQM) legislation required all of the action plans to be put in by a certain date, which created a big rush to get the action plans in and then not much happened for a period after that. Had that been phased in, possibly through tiers of larger companies to smaller companies, an intelligent, well-trained industry for both consulting and implementation would have been developed.

The second issue is that the government has created effectively an ‘audit, implement, report’ model which has been repeated by the demand management program, the Greenhouse Challenge and the SEPP (AQM). A problem with that is that it is a one-pass program — the advice they get it is right up front. There is a problem, which has been identified, if recommendations are not implemented. The Australian standard for energy audits was an attempt to correct this, but what has happened is that there has been a push towards higher levels of energy audit, whereas what they need is multiple interventions from the consultant who has the information, rather than one intervention up front. Sustainability Victoria’s IEIP program recognises this — it is one model which allows solutions for energy efficiency to be developed collaboratively between the consultant and the industry.

One other thing I want to mention is that businesses are united in the view that the reporting requirements for the various programs should be unified. Currently industries are reporting for Greenhouse Challenge and SEPP
(AQM), and they will be reporting for the EEO. For the New South Wales ones, you can replace SEPP with the DEUS requirements. If they can be unified across the various jurisdictions, that will make it a lot easier and a lot more effective for industry. Thank you, and we are very happy to take questions.

Mrs COOTE — Thank you very much indeed. You spoke of education, which I thought was particularly good, because I agree with you: younger people today are going to have a greater impact on energy efficiency. You spoke about advertising and the distribution of material. What you did not speak about — and I am interested to know your opinion on — is financial incentives. Do you think they should be implemented? Do you think they would have a profound effect across all the areas that you have spoken about?

Mr FORSTER — There is the issue of mandatory labelling, which has already been discussed and is quite effective. There are also minimum energy performance standards, which are also quite good. Financial incentives are expensive. They are probably difficult to implement in the residential sector because they are small projects. There is a history of financial incentives under the SEC demand management program. Yes, I think they have quite effective. When you look at an overall environmental perspective, they are probably not that expensive compared to the environmental effects that they are mitigating.

Mrs COOTE — In your experience would a financial incentive, if it were able to be implemented, have a more profound effect than perhaps advertising and distribution of material?

Mr FORSTER — I think information flow is the key. The marketplace has to be informed. Whether it is the industrial marketplace or the residential marketplace, it has to be able to ask the right questions, and it has to have the information available to it that is easily understood.

Mr SEITZ — What are your thoughts on the emissions trading scheme?

Mr FORSTER — It depends on what the emissions trading scheme is. The externalities of energy use — in other words, the environmental damage from the energy use — is often thought to be not costed. An emissions trading scheme would cost those externalities. There is talk about whether it would be grandfathering the existing emitters. I think that has an effect on whether energy prices rise. Often low energy prices are quoted as being a reason there is not much implementation of energy efficiency in Australia, too.

Mr SEITZ — Following up on that, what are your thoughts on the Victorian renewable energy targets? The commonwealth has some mandatory renewable energy targets, and Victoria has some as well. How do you see that?

Mr FORSTER — Are you referring to the Victorian government’s 15 per cent target?

Mr SEITZ — Yes.

Mr FORSTER — That is raising awareness quite effectively in the community. I have been involved in local governments and education targets — that is, a community that is becoming energy literate. Fifteen per cent is not a large amount of reduction in greenhouse gas emissions, but it has a very big effect on changing community perspectives. With regard to the commonwealth, were you talking about the mandatory renewable energy target?

Mr SEITZ — Yes.

Mr FORSTER — That has been largely concentrated on the wind turbine industry. It has been effective in what it has done, but I question the wisdom of creating a fairly large capacity for the installation of wind turbines and then not providing any incentives beyond the current MRET target to allow that industry to continue.

Mr SEITZ — With regard to the smart meters that are being talked about now, where people can go outside and see how much energy they are using at different times, should they be introduced in a greater hurry? Should they be developed further? Do you see it as being effective or not?

Mr FORSTER — The smart meter is more about the maximum demand control, so it does not do anything for greenhouse gas emissions. It does defer the need to build more generation capacity. I would guess if residential customers were reading their smart meters they would be looking at a peak use of airconditioning on summer days, if that was combined with a pricing signal from the electricity retailer. Smart meters have been operating in industrial and commercial places for quite some time now.
Mr SEITZ — But I’m wondering whether it would lead to a behavioural change in the households?

Mr FORSTER — Yes, it would, but that behavioural change would relate more to energy costs and peak demand rather than to greenhouse gas emissions. So they might increase the energy literacy of the community as people start going outside and reading their meters.

Mr HILTON — You mentioned that it has been suggested that the lack of improving externalities in the cost of power is one reason as to why there has not been a particularly large uptake of energy efficiency services. What is the view of your members in relation to that?

Mr FORSTER — The Australian Institute of Energy has a very broad membership base, covering all the energy industries, and I cannot give you an Australian Institute of Energy view on whether or not externality should or should not be costed. If we were to survey our members, we would get a range of perspectives. I can only give you my personal view which is that — yes, the externalities ought to be costed.

Mr DRUM — While I agree with you that the awareness of all of the energy savings is a major issue, I am not quite convinced that we will get the behavioural change that we need with just making people more aware. Do you think we need to actually have mandatory disclosure issues and so on, which we heard about before? Do you agree that we need to go further than just awareness programs in this?

Mr FORSTER — Part of awareness is mandatory reporting. I think the hip pocket nerve is probably quite an effective control, where people will start making changes. The payback periods on energy efficiency are often quite low, but because energy is invisible, they are not easily identified and acted on.

Mr DRUM — And you also mentioned in your presentation that the low cost of energy is a prohibiting factor in getting this change up and running. So cost alone will not do it either.

Mr BHATTACHARYA — It has to be a combination of both. The awareness should be the starting point, which is already there in some sectors of the residential community, there is no doubt about that. But unless someone is made aware of the choices available and therefore the financial savings that can be generated out of the adoption of those choices, then people will not change. Therefore we believe that the awareness has to be the starting point, and then awareness of what is available, as well as the financial savings, can be generated. Both should go hand in hand.

Mr DRUM — Just one more thing: it seems that when there is a relationship between, say, the home builders and the actual builder himself, or a tenant who is getting a commercial development built specifically for him or her, when that is established prior to building there is a very good chance that energy efficiency will be taken into account. I think we have a separate issue altogether when developers are building for prospective users where there is no relationship formed.

They then simply worry about the cost of getting flash-looking apartments or commercial premises up and running and built without any relationship with the prospective tenants. They are the ones for whom we really should look at putting in place higher standards.

Mr FORSTER — If the new building came with an energy star rating sticker just like you get on your refrigerator, people would then start asking questions of the builders, and an inefficient building would be hard to sell.

Mr DRUM — Sure.

The CHAIR — Just one question from me, and it is around the availability of energy efficient technologies in Australia. Do we have the same suite of products available to us as they have in Europe and north America?

Mr FORSTER — Energy efficiency is not rocket science. The measures are simple. We might be lacking some of the capacity that Europe has, but I think the technologies are easily available; but the information is in short supply.
Mr BHATTACHARYA — And also, it is not from the residential consumers perspective, but from the large industry perspective. The technology for more efficient power generation from coal–based power stations is availability in Europe and US, and they are very slow to be adopted here in Australia.

The low emission technology development fund from the commonwealth government, and the Energy Technology Innovation Strategy (ETIS) from the Victorian government certainly is a step in the right direction which will facilitate the introduction of those here in Victoria and in Australia generally.

The CHAIR — Thank you very much.

Witnesses withdrew.