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ENVIRONMENT AND NATURAL RESOURCES COMMITTEE

Inquiry into energy services industry

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Mr P. Harrington.
The CHAIR — I formally declare open this hearing of the Environment and Natural Resources Committee’s inquiry into the energy services industry. I note that the Honourable Wendy Lovell is an apology for today.

The committee welcomes Phil Harrington, the deputy secretary, infrastructure from the Department of Infrastructure, Energy and Resources in Tasmania. Phil, you presented to our previous inquiry so you know that all evidence 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 the hearing, they are not protected by parliamentary privilege. Hansard is recording all evidence taken today, and you will receive a proof version of the transcript within the next couple of weeks. Could you please make your presentation and leave time for us to ask you some questions.

Mr HARRINGTON — Thank you very much. To begin with, thank you for the invitation to come and address the committee. I have prepared a submission, and I apologise for it being late. My submission is made in a personal capacity, and reflects my past experience in a number of positions to which I make reference within the submission. I am a former head of the national energy efficiency program for the Australian government, a position I held in the mid-1990s. I was then a senior executive manager for the Australian Greenhouse Office where I was responsible for sustainable energy, which included the energy efficiency area. I then went on to be the division head of the energy efficiency policy analysis division of the International Energy Agency in Paris. I think all of those positions are relevant to the terms of reference of your inquiry.

I propose that we walk through my submission as that might be the quickest way to make the presentation. Then, if I may, I will guide your reading. Again, I apologise that you have not had a chance to look at my submission prior to the hearing.

Perhaps we could skip to the heading on page 2 ‘Energy Services in Context’. I will come back and use the summary as a finishing point. Under this heading I guess I am pointing to the importance of the energy services industry in making a successful transition to a sustainable energy economy. Some of the rationale for that is covered in the bottom paragraph. Essentially consumers are not interested in purchasing energy; they are interested in purchasing services, which may or may not use energy. These services might be for entertainment, such as when you go and buy a TV, or for comfort, such as the purchase of an air conditioner, for example. Often the consumption of energy, let alone any environmental emissions associated with that consumption of energy, is a very long way from the thought process that is involved in acquiring a TV or an air conditioner.

Some of the decisions consumers make might include the design of a house. That house may stand for 50 or 100 years. The quality of the decision-making process and the decision made can get locked in for 50 or 100 years, or for 10 years if it is the purchase of white goods. These decisions can have significant flow-on effects for greenhouse gas emissions and energy use for decades to come.

Because of that, on page 3 I highlight that energy services is a just-in-time product. If you are an installer of ceiling or wall insulation and you offer that service while a house is being constructed, you may well have a ready buyer. If you offer that service a week later or after the house is finished, you will not. It will not be cost effective to install that wall insulation. That has ramifications for the quality of service that the energy services industry needs to be able to provide, and also for the design of government policy.

In my submission here I stress that information is a critical tool to support the development of an energy services sector. But information on its own is something we have been providing around this energy efficiency space for decades without significant impact, and I am arguing that what is needed is something more than that — it is what I would call a packaged service, or an option for achieving change, which is precisely what an energy services professional can offer to a consumer. So it is more than information; it is solutions. The nature of policies that are generally required to achieve this type of energy service industry are generally known as market transformation policies, and that is something I will come back to and describe.

Perhaps if I skip to the terms of reference that I am able to address — they are nos. 2 and 4 through to 7. On page 4, I address your term of reference no. 2, which talks about the range of services and technologies and the diversity of business models in Australia as compared to other OECD countries.

In the second paragraph I say that I think it is fair to say that the market for energy services is well developed in only a handful of countries in the OECD. This is not something where the norm is good and we are terribly bad.
The norm is pretty poor, and there are one or two exceptions. Austria, Germany, Switzerland, Sweden, Japan and France would probably like to have a guernsey there, and parts of the USA — notably California — are leaders in the field. I will come back to some examples of their policies as we go through.

Your question with respect to the technologies available is a difficult one to answer, because some technologies are generic in their application and others are much more situational and contextual, and therefore the presence or absence of a particular technology is not a strong indicator. Nevertheless, there are some technologies that are very international. I have picked just as an example here high-performance windows — double glazed, triple glazed, and low-e coated.

In this section I illustrate that where Australia sits relative to these other OECD countries is that that type of high-performance product is stuck in a niche. Essentially you have low volume because the demand is not high, and the demand is not high because the product is not required to meet energy performance standards for buildings as a whole, and there is no particular government initiative to stimulate demand. As a result of that, there are relatively few suppliers in the marketplace; as a result of that, costs are relatively high, and because costs are relatively high, it remains a niche market. This is a classic sort of conundrum often facing new, innovative or high-performance products and is not restricted to energy-using products or energy-efficient products, and it is the classic circumstance in which market transformation strategies should be considered for application.

Just as a quick example — this is probably unfair, but it is also true — in 2003 I was at the World Sustainable Energy Days in Wels, Austria and saw triple-glazed windows with a u-value, which is really how well they insulate from the inside out, of 0.6. That is just meaningless, other than being compared with the u-value of the best-performing window I could find of any Tasmanian supplier, which was 2.4 — that is to say, four times less good than the Austrian product. The price of those four-times-less-good products in Tasmania were about four times that for the equivalent-sized conventional window. This is the sort of standard offering that the marketplace has. Admittedly, Tasmania is not the centre of the universe; much higher-performance windows are no doubt available at a price, but if the price is so high that they are not demanded, then they are effectively not available to the mainstream.

I give another example of not just a particular technology like windows but of the very high-efficiency houses that are known as passive houses, originally out of Germany and Austria. These are tightly air-insulated and thermally-insulated buildings that use mechanical ventilation units which have very high-efficiency heat recovery, which effectively takes the place of either heating or airconditioning, even in quite extreme climates in northern Europe. That whole suite of technologies is essentially not available in Australia; again, it would be available if you were prepared to pay a very high price.

By the way, I heard recently that Alan Pears noted that the performance of a passive house on Australia’s star rating system would be between 8 and 11 stars, to give it some comparison to the 5-star benchmark in Victoria.

In terms of business models, at the bottom of page 5 I indicate that I believe that a diversity of business models and service providers is an important indicator of a healthy and robust marketplace for energy efficiency services. There is no one single or dominant or preferable business model. As I quip at the top of page 6, ESCOs range from large multinationals to community groups, and I think that is how it should be. We have models where purely a service such as heating is provided. This is like district heating in northern Europe and Canada and what are called “chauffieres” in France. This is basically a service where you purchase heat in the form of reticulated hot water. When you rent an apartment in Paris, that technology, the heating system, is owned and maintained by the service provider; you simply purchase the heat. This is one business model.

Other business models that are perhaps more conventionally known as ESCOs, or associated with ESCOs, are where the company itself provides the capital, or facilitates access to the capital from a third-party financier, to install the energy efficient product. The return of that investment is then derived from the stream of energy savings that result. This is a model which transfers costs and risks from the energy user — which is where they normally stand when you buy a fridge or something like that — back to the ESCO and/or a financing company. As a result of that risk transfer, these are relatively high-cost business models. They do work in limited applications, and the US is probably the bastion of this business model. The reason that it is believed to be more successful there than anywhere else is that the US has a ready supply of project finance and most other OECD countries struggle to provide project finance on similar terms to the United States. Notwithstanding that, I ran a conference on this topic in Milan in 2003 and the experts in this field from around the world pointed out that the model is quite narrowly
available even in the United States. It tends to be restricted to institutional buildings like hospitals and schools, government offices, things that are in a long, fairly static commercial environment — patient commercial players.

Point 4 talks about the main barriers and the drivers. The barriers are probably well known and I will skip through them fairly quickly. I have stated and I do believe that the most important barrier is, on the one hand, the fact that we have an ever expanding range of typically lower cost energy consuming products and services — airconditioners would be a good example; I would imagine they have probably dropped to a third of their price of a couple of years ago. There is a ready availability of energy consumption on the one hand, typically at a lower price; on the other hand there is a virtually complete invisibility of the environmental damage caused by those energy using devices, primarily in the form of greenhouse gas emissions. There is generally a very low level of awareness of these sorts of issues in the general populace and, even where there is such awareness, that awareness does not always translate into a change in consumption behaviour, hence the importance of things like point-of-sale information and other information policies.

Related to that is an inherent difficulty, because these are very highly distributed decisions we are talking about. Energy use is something we all do every day and we all make decisions about every day. On the other hand energy supply tends to be concentrated, decisions made once in every couple of decades by very sophisticated project developers who can afford to spend a lot of time and money studying the decision and getting it just right. Certainly that does not characterise energy and use decisions — often they are made on a whim and the consequences are not transparent. This is a fundamental inequality between energy supply and energy demand, and it is one of the key drivers for policy intervention. I have talked about a third barrier being the poor price and availability in the marketplace, which characterises high-efficiency products on the wrong side of the market transformation process, and I will come back to that point.

I did point out that the essential problem facing both renewable energy and high efficiency equipment is typically the same — that is, they have a higher upfront capital cost offset by either lower lifetime running costs or avoided fuel costs for renewal technologies; so they basically present financing problems. It is just a transfer in time that is the issue. Hence the importance of things like green mortgages and third-party financing as policies to overcome this inter-temporal barrier. Drivers are environment friendliness and life-cycle cost effectiveness, understanding that most people do not use life-cycle criteria when they make purchasing decisions.

I point to other drivers which characterise specific efficiency products — for example, high-performance windows offer extremely good sound insulation. High efficiency light bulbs are sold primarily to the commercial sector — these are the compact fluorescents — on the basis of their longevity because it has been discovered that the avoided costs of not having to have people replacing conventional light bulbs is a much greater saving than the energy cost savings. Sometimes it is these other characteristics that are important for the marketing of eco-efficient products.

In point 5 on training, accreditation and performance guarantee arrangements, I point out that each of these are important measures. Each of them form a part of a broader strategy of market transformation and should be seen in that context. They should not be taken on their own and done as a stand-alone policy measure; you should not expect many results. I point out, with respect to performance management, that this is actually a major hurdle to the energy services industry — for example, measuring energy savings is damn near impossible and much more difficult than measuring the output of a renewable energy generator because they tend to be metered and it is a pretty straight-up-and-down problem.

I give the example, picked out of the blue, of an energy performance contract that might be done for replacement of a lighting system in a commercial building. You would think that that would be pretty easy — you would measure before, you measure it afterwards, and the difference is the energy saving. But in reality the original installation may well have been over-lit; the new installation will meet the current standard. There is a saving there that is not really attributable to the technology but to a change in lighting levels. Who owns that saving in a commercial sense? It is the stuff of lawsuits in the US, let me tell you. What if the building were a 5 days a week, 8 hours a day operation which moved to a 7 days a week, 24 hours a day operation? Obviously lighting energy consumption will rise notwithstanding the installation of more efficient luminaires. The question is: who pays? What is the share? Are the savings gone? Is the contract null and void? In the US they have developed sophisticated contractual models to try to deal with these sorts of circumstances, but contractual sophistication means legal disputes and additional costs. That is one of those other factors that militates against this as a business model.
In the middle of page 9 I point to the International Performance Measurement and Verification Protocol, developed by Lawrence Berkeley Laboratory in San Francisco, as an attempt to overcome these sorts of measurement difficulties. That is a generic product available free online but requires adaptation to particular markets, and that is something that would be a worthwhile policy initiative.

Turning to term of reference 6, the measures to promote the energy efficiency services industry, I argue that the most important measures are those that stimulate the demand for energy efficiency. It sounds obvious, but they are things like strict building standards, strict appliance and equipment standards, fuel efficiency standards for vehicles. These are the sorts of things that have led to significant market transformations in other countries. I gave the example of Californian use of windows during my windows example. The only market transformation strategy that was used there was tough building standards — and it worked.

I refer also to a fairly experimental but potentially significant policy measure known as mandatory energy efficiency targets. They are something akin to the mandatory renewable energy scheme in Australia, generically referred to as ‘white certificates’ schemes because green certificates are renewable and black certificates are carbon; white certificates refer to energy efficiency.

There is relatively little experience with this at the moment. Italy was the leader in this with France following along close behind. Both of them are struggling to make their schemes work, as we speak, primarily because of this measurement difficulty problem. Once you set a legally binding target, the problems of being able to measure accurately become very germane. I also note that such schemes, while they are very attractive in concept, look very much and operate very much like emissions trading schemes, and you may not need both. I will talk about emissions trading later.

I have talked before about the importance of just-in-time information, labelling, disclosure of energy performance. These are things that are currently used on just a handful of products in Australia. In Canada and other places they are used on 50 to 100 product classes, not just products. There is clearly another object for policy there. The need for credible and authoritative information, preferably certified by some credible authority — not necessarily government, but often government — is important for a fledgling industry such as energy services.

I describe on page 10 market transformation policies and measures. They take a wide variety of forms and we could spend a long time talking about them. They range from upstream measures, research and development, measures to help with the development and deployment of new technologies. Sweden was the pioneer in this field and used very effectively both competitions to develop new technologies and then collective purchasing agreements to provide a ready market for products which met a performance specification beyond that currently available in the market. They have major public housing developers in Sweden, for example. They would band together, with the help of STEM, the energy services or government agency in Sweden, and agree that if a developer could bring together a product like a compact fluorescent lamp and that met a performance requirement, say, 25 per cent more efficient than anything else available on the market today, we would guarantee to buy 10 million of them. Effectively that is how it worked, and there was a process, a competition; if a product could meet that, then the market was guaranteed.

There are examples in Australia of what others and myself call eco redesign. In this very city you are privileged to have Alan Pears, who works at RMIT, who has applied this with respect to things like the Dishlex dishwasher. These models have not been replicated due to resistance from product and appliance manufacturers in this country. Some assistance to overcome that resistance would be an extremely worthwhile investment. I give an example where in the United States market transformation strategies have been used to overcome non-price barriers using the example of compact fluorescent lights again. Compact fluorescent lamps, as you might remember, used to be not very compact at all. They were about this long. The problem with that is they would not fit into many conventional light fittings, so the US DOE ran a program, again a competition, with guaranteed markets to develop what were then called sub-compact fluorescent lights, which are the ones we know today and which fit into conventional light fittings. The market exploded thereafter. Mind you, we should also thank China for that where I think something five out of six compact fluorescents are now manufactured — in other words, the price collapsed at the same time, so it is bit hard to separate those two effects.

I talk about targeted market transformation measures, citing as an example the motor challenge in the US where you combine targeted information, labelling, promotion, competition, reward and recognition, and these sorts of strategies to transform particular markets. I think what is unique, and in Australia’s context challenging, about this
policy model is we have to focus both on the producer and the consumer, and at the same time. A focus on either one risks this problem of developing a demand for a product that does not exist, on the one hand, and they get quickly frustrated as consumers and go elsewhere, or encouraging suppliers to develop and market products for which no market exists. They also quickly lose a lot of money and never go there again. The secret is to develop market transformation strategies that take the market — the end users — and the suppliers of that market through a process in lock step so that that vicious circle is simply circumvented.

I am getting very near the end. The final reference point was to do with the roles of state and federal governments. I note that the Australian government, particularly as a signatory to the framework convention on climate change and the Kyoto protocol, albeit a non-ratifier, is best placed to introduce internationally compliant instruments, such as tradable emissions permits and economic measures, be they emissions trading or carbon taxes. There are significant constitutional barriers to that happening at the state level although those barriers have been tested, including here in Victoria.

Other devices, such as labelling and accreditation schemes and energy efficiency standards are again best handled nationally, simply to avoid confusing both consumers and producers. That is the way they are handled now, albeit on a lowest common denominator basis. State governments are able to use many very important policy measures quite apart from those. I cite the fact that energy and energy use markets are quite strongly differentiated in Australia by state. Of course Victoria has the highest greenhouse gas intensity of electricity supply of any state and therefore measures that focus on electrical energy efficiency are likely to be particularly effective from a greenhouse gas point of view. Training, accreditation, certification, provision of highly targeted information as part of the market transformation strategy, promotion of eco redesign, targeted research and development, deployment and commercialisation programs are all things that are very approachable at the state level.

I note a particular example where Victoria has taken a lead in 5-star residential buildings. We have a situation in Australia where no-one is taking the lead currently on the performance of commercial buildings, and perhaps an opportunity exists in Victoria to also offer leadership in that area and drag other jurisdictions and the industry through a performance upgrade in that very important energy sector.

Finally, I refer to emissions trading. In short, what I say about emissions trading is that emissions trading essentially is a mechanism to internalise the externality associated with greenhouse gas emissions in some way or form. What that effectively translates to is a change in the relative prices between energy on the one hand and energy services equipment on the other in favour of the latter, which is a good thing. Generally speaking you would expect some boost towards the energy efficiency services industry, albeit that I talk about some second-round effects whereby, because energy is more expensive, there is a general depression of that whole part of the economy.

In short, however, I say that while emissions trading clearly benefits the market for energy services — I refer to the bottom of page 11 — it should not be expected to overcome all of the non-price barriers that I have been referring to in this submission. Energy utility bills typically are between 3 and 5 per cent of the disposable income of an OECD household. Quite frankly you can make significant changes in those bills without shocking consumers into taking any particular action. You will cross a threshold where they will, but until you cross that threshold, no. Non-price barriers still exist even in the presence of emissions trading.

I have argued in this submission essentially that a comprehensive policy approach is required. The overall aim should be to transform energy using markets to the point where the norm or the default outcome is an energy efficient one. Measures that stimulate both the demand and the supply of high-efficiency products in a coordinated way will achieve such a market transformation outcome. I cite briefly, although I can talk about it a little bit more in questions, the economic, employment and investment benefits that occur from that. This green paper you may have seen from the European Union, Doing More with Less, on energy efficiency that was released in August this year, I think has some very interesting evidence in it about the economic and energy security benefits for Europe of a move in favour of energy efficiency and not simply the environmental benefits. It includes significant jumps in employment and what they call quality jobs. With that, I would be pleased to take any questions that members of the committee may have.

Mr Hilton — Phil, you mentioned that some European countries — I think you cited Austria, Germany and France — have a far more developed energy services industry than we do. What are the characteristics of that industry, and how did it get established?
Mr HARRINGTON — I would say they are more developed, not far more developed. I did qualify my comments by saying that there are really few examples of very well-developed energy service markets in the OECD at the moment, perhaps because of some of those market barriers I referred to.

The characteristics of the energy services markets — let’s take Germany and Austria — are such that they have a regional focus on improving energy efficiency; they have regional institutions that have, essentially, market transformation as their goal. They take a very targeted approach; they look at what suppliers of particular products are available in their region. That might be high-performance windows; in Austria, for example, they specialise in very high-efficiency combustion of biomass which is used for hot water as well as space heating. They essentially work to develop the markets.

That might involve working with the producers to improve the quality of the product, if it is an early-stage product, with reliability problems or to increase the commercial attractiveness of the product. They then work with consumers and with collective purchasers, using promotion campaigns to expand the market for those products, and this of course has the impact of increasing the economies of scale and driving down prices for what are typically expensive products. Effectively they are the sort of front-line initiatives. Behind that stand things like strict building codes that are performance based and tend to be ratcheted up on a pretty regular basis. That has demand-pull-through effect.

In characterising energy services I would say that they vary by country, but typically they are smaller businesses; smaller and medium-sized enterprises distributed out in a geographic sense, creating a lot of employment in often depressed regions — and that is a transparent policy objective of many European governments. In Germany and in Japan they tend to have a preference for bigger business and higher technology, and it is a different service model. As I mentioned, the energy services market in France is poorly developed, with the exception of heat.

The Scandinavian countries, for example, Denmark, Sweden and Finland, have well-developed energy services sectors, starting around district heating. They are also driven by high standards for buildings, pulling through high-performance componentry, and I cite their very high-efficiency heat recovery and ventilation units. These are the sorts of technologies that are commonly used in these countries and are not available here.

Mr DRUM — Thank you for your presentation, Phil. With the services efficiency industry, how do we ensure that when it is just the right time, all of the products are visible? When a consumer wants to renovate or do whatever they want to do, how do we then ensure that happens, because you have said that if it is a week too late or a week too early the products miss out?

As a second question within my first, are you in favour of what we saw in Europe — that is, a mandatory housing energy efficiency audit upon the sale of a house — a bit like a roadworthy on a car?

Mr HARRINGTON — We have those less far away than in Europe; we have them in Canberra. Just-in-time information is not easy. As I mentioned earlier, simply running off sheets of information about high-performance lights or a similar product really does not do the trick because they are simply not available at the time and not available in a form that will influence consumption decisions.

There are some good examples in Australia of people trying to shape expectations. That is basically by thinking, ‘Where do people’s expectations in this area get formed?’ Often they come from lifestyle magazines and lifestyle TV shows. The Australian Greenhouse Office at one stage developed a thing called “Your Home, Your Lifestyle, Your Future” in a format that someone used to buying lifestyle home magazines would instantly recognise. It had lots of colour pictures, but also lots of quality information. The message was not primarily, ‘Do this because it is good for the environment’, but rather, ‘Do this because these are quality lifestyle choices’. This is the sort of smart marketing that is needed.

We need things like labelling and point-of-sale information which we typically do not have available. Labelling is only available on a small sub-section of energy-using equipment in this country — why not all, as a target, or at least on anything significant? As an energy services industry grows and you have accredited service providers that are seen as reputable in the marketplace, the information they make available comes to influence decisions. During a market transformation strategy you target key decision-making and value-forming points; for example, exhibition homes, lifestyle TV programs, the suppliers of after-market retrofit equipment, the Bunnings and whatever of this world. These are the places where consumers’ decision are influenced, if not made.
In answer to your second question regarding mandatory audit programs, yes, I am in favour of them. Mandatory disclosure is the term that I use, and that can be something that is applied not only to residences but also to other types of energy-using equipment. If we believe in market-based economics, markets are supposed to work on the basis of information. If that information is not available, as it often is not — for example, about the energy consumption of an existing house that someone may be considering buying — then you really have no opportunity to enable a market response to work. That is two things. You may choose an energy-inefficient house, not knowing that it is inefficient, and as a result neither you as a new purchaser nor the previous owner would have any incentive to upgrade the performance of that house.

Houses, as I mentioned before, endure a lot longer than their current owners, and there is a sort of collective interest in the performance of the building stock; and this really is woeful in Australia in comparison with other OECD countries. You need to target those just-in-time points — and there are really two of them when it comes to houses; one is when the building is being sold or let, and that is the opportunity that comes with mandatory disclosure; and the other is when it is being refurbished or knocked down and rebuilt, and that is another market we can talk about. That is actually an easier market because people spend a lot more when they refurbish than when they buy a first home which is a time when they often go for the least cost.

There is a lot more that could be said about that. People buy homes for reasons hugely remote from their energy efficiency. They buy them for location, location, location, and they basically take the energy efficiencies they are given. That is a huge barrier that you need strong measures to overcome.

Mrs COOTE — Given what you have said about where we fit in Australia, particularly in comparison with Scandinavian countries, in your opinion, how many years would it take us to get to a similar level to those countries?

Mr HARRINGTON — I cannot answer that directly, but it is probably not less than five years with a concerted policy effort. We are starting from a low base. I do not know exactly how low; I am hoping that others may be able to give you a stronger, quantitative picture of the energy services industry, particularly in Victoria. That I cannot do, but it is clear that it is not unique to the energy services. When you start with a small sector — renewable energy would be another good example — you do need to be careful about overstimulating that sector and generating higher costs and perhaps the entry of shonky operators rather than an improvement in the quality and scale of the industry. As I mentioned before, a well-designed market transformation strategy would be paced to carry and build the capacity of the industry as it goes. It would not go slower and it would not go faster. This is where detailed market knowledge, differentiated by sector, is probably what is called for. Some sectors may be able to go a lot faster than others — commercial buildings, for example, have bigger players with bigger pockets and better technology, and you could probably stimulate that sector and it would respond much more quickly than residential where you often have smaller players with lower technology and perhaps more price conscious buyers. So a differentiated market transformation strategy is probably what is called for.

Mrs COOTE — I am interested because if you look at the political cycles being what they are, you need some continuity and a sustainable agreement along the way to make certain that these things can actually happen and be implemented, so to get some handle on what time frame we are looking at is I think very helpful, given that it is obviously in your opinion manageable within a 10-year cycle.

Mr HARRINGTON — I think one of the important things also from that perspective is that market transformation measures tend to push at the top edge of performance and expand the availability of high-performance products. What is coming along at the other end is ratcheting up of minimum energy performance standards, be they buildings or equipment, and it is important for a lock-in and a democratisation, if you like, of high-performance products, that the standards do ratchet up, and they tend to then of course be locked in and not terribly subject to political cycles — and there is some advantage in that.

Mrs COOTE — Not that I expect to be out of government for 10 years!

The CHAIR — You are joking!

Mrs COOTE — I do not expect to be out of a job in this state!

Mr SEITZ — I refer to the competition between the states. Some of the countries you quoted have different regulations and issues happening. It is dearer to build a house in Sydney than in Melbourne and cheaper in
Western Australia, and all that sort of thing. Do you see a need for a national accreditation body in setting the standards, where people actually have to get accredited for it — that is, all those in the energy industry, whether it is for commercial or domestic building? In particular, I want to finish up by saying that in Victoria we go in for a lot of basic upgrading and modifying of old houses — building extra units so you get a house in the front or you get two more units on it — and the old houses have to be retrofitted to meet all those new standards. There could be some accreditation for the town planners or building architects. It depends what university they graduated from as to what attitudes they come with in life. I would like your comments on that.

Mr HARRINGTON — Yes. I touched on this on the way through. Maybe I spent too long in Canberra, but I am generally in favour of national approaches. Industry is generally in favour of national approaches as well, unless it thinks it can stop an approach at all, because there is that market aggregation effect — if there were 5-star requirements all over Australia there would be greater economies of scale, not only in technologies but in the design, and you would have a more rapid market transformation likely to occur.

I think the situation we have now is a bit of a hybrid where at least we manage to agree on things like star rating schemes, but then we disagree about whether we will have 5 here, 4 there and 3 there. With things like housing that is not as important because houses do not get up and walk; they are not tradable across states. Service providers move, and I have mentioned there would be an advantage there. When it comes to things like motor vehicles, refrigerators and industrial equipment where they have global and national markets, then you certainly do not want differentiated measures by state to the extent possible. There is a tension there but, as I said, there are regionally and locally differentiated markets. There is a risk of a lowest common denominator approach if you wait always for the national government to move, and there are plenty of examples — I hasten to add in Victoria — where movement by one state ends up in leading the other states forward and indeed the national level of government. I think some sort of balance between the two is quite feasible.

Ms DUNCAN — Philip, I was at a conference a couple of weeks ago and one of the things they were talking about was the Productivity Commission’s report on energy services. What are your comments about that report?

Mr HARRINGTON — We are on record, so I am not allowed to swear!

Ms DUNCAN — Yes, you can! You are protected.

Mr HARRINGTON — I think it was very disappointing. It betrays the difficulty that, shall we say, neoclassical economists of the type that inhabit the Productivity Commission have in dealing with very simple concepts like an external impact. When that external impact is climate change and risks to wreak great economic and social, quite apart from environmental, damage, I do not think it is good enough that we continue to place them outside the circle of things we are interested in, which is basically what the Productivity Commission has done. I argue in this submission that until such time as we redraw that circle and internalise these sorts of impacts, one should not expect leadership in this field from an institution like the Productivity Commission.

A lot of good evidence was presented to the Productivity Commission about opportunities for energy efficiency improvement. A neoclassical economic model — and I admit to being an economist — rules that such improvements are not possible by definition, and therefore for any neoclassical economist to admit that energy efficiency gains are possible is to admit there is something wrong with the neoclassical model. They will not do that lightly, so one should not expect leadership in this field from an institution like the Productivity Commission.

The CHAIR — Thank you very much for your submission around this third-party finance. You go through and talk about the US model, but is it useful? New South Wales has now got a scheme up, and I am looking towards proving to DTF officials that there is real money to be saved in driving energy efficiency. I am particularly interested in that model. Is there a problem that it might only work when governments step in and look at how we run hospitals more energy efficiently, how we run TAFE institutes and those larger institutes — is that a problem?

Mr HARRINGTON — No, it is not a problem. It is the market niche that best suits that type of business model. As I mentioned, third-party financing can mean a lot of different things. I can go and take out a personal loan to buy a more efficient refrigerator. There is nothing to stop me from doing that. But typically where it is used where the loan is effectively provided by an energy services provider under the condition that the loan will be
repaid by the energy savings, you are, as I said, doing two things: you are transferring a lot of cost and risk from the energy user to third parties; and you are using a defined revenue stream to repay the loan — and that is basically the characteristic of project financing. Australia is very weak at project financing; the US is strong; Europe is weak; Japan is weak, which is why the business model is struggling there.

The hospitals, government offices, the patient, longer-term sorts of institutions, if you like, are those best suited to that type of contract, because typically a minimum of seven years or sometimes longer is the term required to repay the loan effectively from the stream of energy savings. Problems arise where the building — it is typically a building — changes hands during that time. There are two things to mention. One is the opportunity to improve energy efficiency, and that is quite independent of the financing mechanism, and perhaps other mechanisms can be used to really highlight how large that opportunity is.

Third-party financing then comes over as a smaller problem, which is: how do you finance change once you decide a change is necessary? That model will work well probably only in that type of institution, of which we have many, and the government — even if it were only government — is a major energy consumer in Australia and a major property owner and therefore has a significant opportunity to roll out that particular model, if you like, off balance sheet with respect to the government’s budget.

The CHAIR — Thanks very much, Phil.

Witness withdrew.