ENVIRONMENT AND NATURAL RESOURCES COMMITTEE

Inquiry into energy services industry

Melbourne — 14 March 2006

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Ms J. Nechwatal, Assistant Director, Environment and Planning, Housing Industry of Australia
GreenSmart Program.
**The CHAIR** — I would like to welcome Janine Nechwatal who is the assistant director, environment and planning at HIA GreenSmart Victoria. 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 the hearing, they are not covered by parliamentary privilege. Hansard is recording all our evidence today and you will receive a proof version of the transcript within a couple of weeks. We have half an hour for your presentation. Can you leave us some time at the end for some questions? Thanks very much your time today; we do appreciate it.

**Ms NECHWATAL** — Thank you very much for the opportunity to speak to this inquiry. Obviously the Housing industry Association has a significant interest in the outcomes of this inquiry. Firstly, a bit of clarification — I am representing the Housing Industry Association; GreenSmart is a program of the Housing Industry Association just like our other services which we provide to our members. GreenSmart is a service we provide along with other ones.

You have in front of you a copy of our submission. I will just go through it and mention some of the key points. My role in the Housing Industry Association is to provide planning advice to our members on Victorian planning issues. I also represent the Housing Industry Association on all state government working groups to do with planning reform and I manage GreenSmart, which is a program we will hear a bit more about.

The Housing Industry Association is a national association of builder members, developers and commercial members as well. Victoria is the largest of the regional offices of the Housing Industry Association and we have a membership base of 12 000 members. All of the top 200 builder members in Victoria are members of HIA. HIA members build over 90 per cent of Australia’s housing stock. The issues with this inquiry are of significant interest to our members because there is the potential for recommendations from this inquiry to affect housing affordability, which is a key platform of the Housing Industry Association which I will explore in a bit more detail.

In reference to the terms of reference, HIA has accepted the terms to include energy efficiency of the conversion, transmission and distribution of energy to Victorians where 70 per cent of the energy generated is used or lost through those stages as well as focusing on the end user through demand management. I sought clarification of the terms of reference and I felt comfortable in actually suggesting this should be a key focus area for the inquiry. We also think the committee should explore the greatest gains in energy efficiency, and that is certainly the higher order greenhouse gas generators.

We believe the residential building industry is a highly regulated industry. That is demonstrated by OHS, building regulations, building standards across the country and obviously, in the most recent period or the last decade in Victoria, energy efficiency regulations. We believe as a result of a whole range of levies, charges and fees demonstrated and transferred through not only state government but also local governments, they are having a significant impact on delivering affordable housing to Victorians and Australians alike. Certainly our housing affordability rating has gone down considerably in the last few years in Melbourne. We used to be a more affordable city but we are no longer because of a range of mechanisms typically generated through regulation.

We believe the escalation of compliance requirements and the expansion of the regulatory environment through the imposition of a plethora of controls on housing construction have been and continue to be major contributors to the deterioration of housing affordability. Increased regulation has a corresponding cost which decreases housing affordability, leading to a greater gap between public and private housing particularly affecting first home buyers. They are certainly the most vulnerable to rising material and construction costs stemming from new regulation. The residential sector actually only accounts for 11 per cent of final energy consumption versus transport at 39 per cent, manufacturing at 21 per cent and mining at 15 per cent. Residential energy use is therefore in the lower order of those sectors.

You might be aware that there have been significant inquiries into energy efficiency over the last few years, most recently the Productivity Commission inquiry into energy efficiency. They have commented that the current policy emphasis would only be justified if the marginal cost of abating greenhouse gas emissions was much lower for buildings than for other emission sources. They suggest there is no evidence that this is the case.

The housing industry does not seek to evade its fair and reasonable contribution to the national effort regarding energy efficiency — or in this case the Victorian effort — supporting 4-star regulation and advocates energy efficiency through its own GreenSmart program. More recently the Victorian government has led a plethora of
energy regulation imposed on housing in recent times despite much conjecture from independent and industry sources on the benefits and costs. Unfortunately public scrutiny has been sadly lacking.

In Victoria we have seen the continual ramping up of energy efficiency in homes through the 4-star plus or 5-star regulations in July 2004, measuring the building fabric of a home, followed by 5-star plus regulation which came into effect in July 2005. The decision to regulate these standards was made without proper analysis or understanding of the impact on housing choice to consumers and without a detailed regulatory impact statement. That was measured against another form called the regulatory information bulletin, which is a much less rigorous process compared to the typical RIS which building standards normally are measured against. The shortcomings of this approach have been the subject of the energy efficiency inquiry undertaken by the Productivity Commission and most recently by the Victorian Competition and Efficiency Commission inquiry.

The Australian Building Codes Board proceeded with 5-star regulation in the building code of Australia despite strong contrary evidence indicating that the alleged environmental benefits are doubtful. HIA’s submission will demonstrate that new housing has been contributing significantly to achieving energy efficiency in the residential sector and it is appropriate to consider energy losses arising from generation, supply of power to consumers from both renewable and non-renewable resources, the role of consumer education and pricing in reducing demand.

HIA notes that the federal government has in the past couple of weeks rightly agreed, as recommended by the Productivity Commission, to an independent inquiry into the effectiveness of energy regulation, including Victoria’s 5-star regulation.

It is important to note that housing does not generate significant greenhouse gas emissions. However, the residential building industry has been, and is continuing to be, the subject of disproportionate regulatory burden relating to energy efficiency through the uncoordinated nature of energy regulation and the confusion it creates for builders, manufacturers, suppliers and consumers; numerous state and local government schemes which have not been validated on a net benefit basis; a lack of focus of regulatory efforts on higher order greenhouse gas generators; the lack of public investment in infrastructure which could deliver more substantial environmental and economic gains; and pricing of energy which in many cases discourages efficiency measures.

In its submission to the Productivity Commission the Australian Building Codes Board (ABCB) acknowledged that many of its technical and policy decisions relating to 5 star have been made without useful energy data, and that much of the data is based on data that was generated by the Australian Bureau of Statistics in 1986. The environmental case for 5-star regulation rests on computer models which simulate energy consumption. The weaknesses of these models in predicting actual energy consumption is conceded by the ABCB. It is generally agreed that the models are incomplete.

Field studies have reported lower energy savings than predicted by thermal performance simulation. The purported energy savings for home owners arising from 5-star regulations are minimal and do not offset the far higher and immediate capital costs of more insulation and glazing. The most optimistic estimate from the Australian Greenhouse Office is that by 2020 mandatory energy efficiency standards under the building code will contribute only 0.8 per cent to Australia’s greenhouse gas abatement. The cost to home buyers in achieving this outcome is a staggering $31.5 billion. It is important to recognise that nearly all of this abatement would be achieved by 4-star regulations at a significantly lower cost to Australians.

The Productivity Commission calculated that 42 per cent of residential energy use is space heating and another 2 per cent is in cooling. The largest single source of greenhouse gas emissions in the residential sector is water heating — accounting for 28 per cent — with heating and cooling accounting for 14 per cent. This is influenced by the consumption of gas as the energy source.

Even with regulatory reform it is unclear whether the existing mandatory ratings for buildings deliver a net benefit to individuals. Furthermore, the installation of energy-efficient appliances and products that would make the operational energy use of a home more efficient, typically carry a premium price tag, which means it may take many years for the consumer to realise a financial benefit in the lifetime of a product.

With respect to the GreenSmart program — that is, HIA’s program — it is a program that was established some six years ago. It was established as a leadership program for our industry. In Victoria we had the first GreenSmart-accredited display village down at Innisfail at Point Cook. That was established three years ago and the 21 homes in that display village all achieved 5-star energy rating plus either a rainwater tank or solar hot water
service system. That display village is no longer a GreenSmart display village because that is the norm — that is, the regulation of 5-star plus. As of 1 July 2005 that GreenSmart estate was no longer a GreenSmart estate; it just became a normal housing village. Therefore, we have had to respond to that change of regulation.

Typically what we look at with the HIA GreenSmart program is a range of other criteria. We will have a look at that in a minute. I need to stress that GreenSmart is a practical, voluntary approach to building which focuses on educating builders, designers, planners, project managers, product manufacturers and consumers about the benefits of environmentally responsible housing which are more holistic than building regulations.

At the back of the submission I have attached a national GreenSmart brochure so you can see what GreenSmart is about. The second document is an article demonstrating some of the differences between 5 star and a GreenSmart-accredited home. The primary objectives of what we term ‘building the GreenSmart way’ are to develop, demonstrate and promote the technologies, design principles and practices that can significantly improve the quality of Australia’s built environment; to improve the uptake and adoption of best practice environmental management approaches and their integration into normal business practices; to facilitate change in industry approaches to housing while meeting community expectations with regard to housing types and costs; and to identify market-driven mechanisms to encourage the adoption of environmental innovations in the building industry.

How we do this: the program is supported through the participation of HIA members in a two-day GreenSmart professional training course, through production of a GreenSmart consumer magazine, distribution of quarterly GreenSmart newsletters to Victorian HIA members, creation and promotion of GreenSmart partnerships, promotion of GreenSmart professionals to consumers, and promotion of GreenSmart events and public exhibitions. GreenSmart concentrates on priority areas of energy and water efficiency, waste management and improved environmental site management practices.

The GreenSmart program encourages energy efficiency in the operation of the home by promoting passive solar orientation and shading in the first instance, passive ventilation which reduces the amount of cooling, construction and insulation practices that promote comfortable internal temperatures, energy-efficient appliances, and energy-efficient lighting dictated by household tasks. Promoting consumer choice is fundamental to the success and growth of GreenSmart. It needs to be recognised that the environmental features can incur additional costs and that the least-cost item or response should be promoted ahead of expensive solutions and will be dictated by consumer budget.

In the submission I have listed some examples of some least-cost energy solutions for Victorian homes. I stress this is Victorian homes as opposed to Australian homes, because the climatic conditions across Australia are so distinctly different that they require different responses; therefore, sealing drafts around doors, windows and vents, increasing insulation, allowing for passive orientation and passive ventilation, and maximising windows on the north side and minimising them on the south, east and west. A lot of those elements of the designing of a home are at minimal cost and usually included in the design response. Expensive solutions include the installation of solar hot water tanks, double-glazed windows, installation of photovoltaic cells, and the smart wiring and sensoring systems being installed in homes.

In conclusion, HIA firmly believes that the promotion of energy efficiency should focus on the big energy sector users — being transport, manufacturing and mining — and the huge energy loss in the conversion, transmission and distribution of energy to Victorians. HIA is strongly opposed to the introduction of ill-considered, unsubstantiated and costly energy regulations to the residential building industry.

HIA agrees with the Productivity Commission’s observation that there is little in the way of quantifiable analysis to substantiate that costs outweigh the benefits necessary to support new energy efficiency regulation. Indeed, there is some question regarding the basis for existing energy efficiency regulation. Adopting an unsubstantiated regulatory position is a significant future risk for governments as it commits the nation’s valuable resources to uneconomic and unsustainable objectives, not only in real terms but in terms of economic cost. Therefore, HIA agrees with the essence of the Productivity Commission’s draft report that it is timely to introduce scientific and economic rationalism into the debate in an effort to ensure that there is a compelling net benefit from energy efficiency regulation in the housing industry.

The CHAIR — Thanks very much, Janine.
Mrs COOTE — That was a terrific presentation and I do not have anything further to ask. Thank you very much indeed; it was very interesting.

Mr DRUM — We keep hearing that 5 star, while it is great, does not go anywhere near far enough.

Ms NECHWATAL — I think the previous witness was from Energex?

Mr DRUM — No.

Ms NECHWATAL — He mentioned that if we compare it to overseas standards, 5 star has not gone anywhere near far enough. There are very different climatic conditions.

Mr DRUM — We hear that here in Australia. This committee would hear that 30 times to your lone voice saying we are overregulated already. Maybe 5 star and FirstRate are not the right measuring tools. We understand they are far from perfect, but the concept that we are possibly overregulated is so far away from what we normally would hear.

Ms NECHWATAL — I suppose I would ask you, what other industry sector would you consider to be as regulated as the housing industry? I pose the question to you as a committee.

Mr DRUM — I am a builder by trade. If you gave us 2 or 3 minutes we could easily throw at you a whole range of industries which are heavily regulated in the way they go about their work. In fact, I agree regulation is a heavy impost on a whole range of companies, businesses and industries. However, the fact remains we are about finding solutions to our spiralling energy uses and our environmental impact and we need to find economically viable solutions. We do not believe the 5-star rating on houses is in any way impacting on the affordability of houses in our state.

Ms NECHWATAL — It certainly has in regard to cost. There have been lots and lots of studies done on the amount of additional expenditure required to bring a house from the previous 4-star rating system. In 1991 the early insulation levels came in. If you are a builder, you will recognise that. In 1991 insulation levels came in sufficiently to address the thermal temperature issues of a house. In 2003 the 4-star energy rating came in, or 4-star plus or 5 star. As a result of that, the Building Commission undertook a survey in collaboration with the housing industry which determined — I do not have these figures in front of me — that something like $6500 in additional requirements were being imposed on a house to bring it from the previous 3 star to 4 star and 4-star plus. The Building Commission is now bringing in results from a survey of bringing 4-star plus homes to 5-star plus homes. The cost is in the order of $1500 to $1800 because of the additional insulation levels.

What has been happening over the years in Australia, and in Victoria particularly, has been accumulating. We were the first state to have insulation levels done in 1991. We were the first state to do 4-star plus. We are the first state to do 5-star plus. HIA would argue completely that we believe 5 star goes far enough in the building fabric of the home. The situation is we believe there are a whole lot of other industries out there, and processes in the generation of power, that should be the target of this inquiry.

Mr DRUM — I have no doubt that these issues are there. But surely the impost we are putting onto people at the house-building stage will be repaid to them in spades by energy savings down the track.

Ms NECHWATAL — The situation is that the majority of new home buyers in Victoria, as in most states, are first home buyers. Probably many of us here live in old homes which are more than 20 years old. How many of those homes are insulated? How many of those homes have double glazing? How many of those homes are energy efficient?

Mr DRUM — Not many.

Ms NECHWATAL — Exactly. So why should one very small sector of the community, being first home buyers or new home buyers generally, pay for the benefits that all of the community will share?

Mr DRUM — Surely we have to start somewhere.
Ms NECHWATAL — And we have. We have through the 1991 regulations for insulation levels, through 4-star plus and now through 5-star plus. Now is probably a time when other industry sectors, as well as the generation and transmission of power, should take their fair share of the burden and contribute to energy efficiency.

The CHAIR — Thank you very much.

Witness withdrew.