ENVIRONMENT AND NATURAL RESOURCES COMMITTEE

Inquiry into energy services industry

Melbourne — 5 December 2005

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Ms M. Wheatley, Head, Business Development;
Ms K. Woolfe, Head, Best Practice Standards, Sustainability Victoria.
The CHAIR — I welcome Megan Wheatley, head of business development, and Katrina Woolfe, head of best practice and standards, from Sustainability Victoria and thank them for their time today. All evidence taken by the committee is taken under the provisions of the Parliamentary Committees Act and is protected from judicial review. However, comments made outside the precincts of the hearing are not protected by parliamentary privilege. Hansard will record all evidence taken today and we will send out to you a proof version of the transcript within the next couple of weeks. If you would like to start, we have got three-quarters of an hour.

Overheads shown.

Ms WHEATLEY — Thank you. I will start off with a little bit about what Sustainability Victoria does. As you are aware, we are a recently formed organisation that arose out of a merger between EcoRecycle Victoria and the Sustainable Energy Authority Victoria. We are working to deliver environmentally sustainable outcomes across a range of resources — namely, energy, materials and water — and we have a range of initiatives and programs that demonstrate energy efficiency across all sectors. We have also been one of the leading agencies in the development of the National Framework for Energy Efficiency, and one of my roles currently is chair of the National Framework for Energy Efficiency Steering Committee which is overseeing the implementation of the working groups that have been established to ensure a coordinated approach to energy efficiency across Australia.

In terms of the energy efficiency service industry, we see that as a service industry that delivers more productive use of energy. The services often have a contractual basis, and they are becoming core business to many large organisations. We are seeing a rapid expansion of these services in Victoria as a result of a range of initiatives that are coming into place. In particular in the residential sector we have seen a large expansion in the number of accredited house energy raters through the introduction of the 5-star minimum energy performance standards for new housing.

There is a range of challenges and opportunities facing the energy services sector. In terms of the opportunities, the sorts of things that we see as really stimulating the energy services sector at the moment are more government intervention — for example, introduction of the energy efficiency opportunities program at a commonwealth level, which is requiring large businesses to disclose what opportunities there are for energy efficiency improvements in their companies and to also disclose what actions they have taken to realise those opportunities.

The national rollout of a 5-star standard will see the expansion in services that we are seeing in Victoria replicated throughout Australia. The current discussions, happening at a multi-state level, are looking at the introduction of potential emissions trading and again will have an impact on the way in which energy services sectors operate around Australia.

There are, of course, a range of challenges, and I am sure a number of people have gone through those. Energy pricing in Australia is a challenge in that comparatively the price of energy in Australia is much lower than in some other areas where the energy services sector is larger — for example, I believe that in Italy the price of energy is three times more expensive than in Australia — and that does have an impact on the drivers for energy being a core focus for businesses.

In addition, and Katrina will talk more about this in the presentation, there is a lack of training in the area of energy efficiency — a lack of capacity out there to deliver energy efficiency services — and a perception that energy efficiency does not necessarily work. It is one of those things, that there are mixed understandings about how effective energy efficiency services are in a business or a company.

We see that government has four key roles. One role is creating demand, and that is through things like the minimum energy performance standards, such as 5 star. It can also be things like the commonwealth’s measure, which is about disclosure and making sure that companies disclose where there are energy efficiency opportunities, which is effectively forcing them to identify them. Government also has a role in capacity building, ensuring that the industry is able to deliver those energy efficiency services.

It has a role in compliance and quality control, making sure that the services that are undertaken meet minimum standards. We also see government as playing a role in terms of information and awareness. An example of that is that we maintain a register of accredited 5-star energy raters on our web site.

I will talk a little bit about the National Framework for Energy Efficiency (NFEE). It is established underneath the Ministerial Council on Energy through the energy efficiency working group. A range of committees has been...
established to undertake what we call NFEE stage one, which is the foundation work for a national framework for energy efficiency to ensure a coordinated approach to energy efficiency around Australia.

The committees, as you can see, range from appliances and equipment, buildings, industrial commercial, government energy management, consumer, training and accreditation, and also finance sector awareness. Katrina is chair of the training and accreditation committee and will talk a bit more about that in this presentation as well.

Ms WOOLFE — As Meagan said, one of the committees established under the National Framework for Energy Efficiency is looking at training and accreditation. This provides a little bit of a description of the type of training and accreditation activities that are currently happening through the NFEE process. For example, the NFEE commercial and industrial working group is geared specifically at the energy service sector looking at training and accreditation.

Also under the training and accreditation working group are a number of activities that are just about to commence looking at not so much the energy efficiency service sector but at other trades and professions which will help to improve how energy efficiency is dealt with by different trades and professions. The areas that have been targeted included engineers, electricians, facility managers and heating, ventilation and airconditioning designers and installers.

These operate in different sectors. You can see, for example, that engineers will be targeted from both the industrial and the commercial sectors. Electricians will span both commercial and residential. Whereas looking at facility managers and heating, ventilation and airconditioning designers and installers they are very much in the commercial space.

There are certainly some potential crossovers with the energy service sector itself. Engineers may also be providing energy efficiency services strictly under the energy service sector but may also be providing other services which are not strictly in that sector.

The NFEE buildings group is looking at energy rating assessors and training competencies. That is fairly much in the residential space.

I thought it would be worthwhile also pointing out some other activities that are happening alongside NFEE and feeding into that NFEE process. One is a training module which has been developed by Sustainability Victoria which is looking very much at providing a process to energy assessors working in the industrial space.

That is, looking at a collaborative approach to identifying energy efficiency improvements within industry. This was established out of an assessment that was conducted with a number of representatives from the energy assessor field and also industry, which is engaged in employing these energy assessors. There was a need to move away from a situation where energy audits were conducted; a great report was written but it just sat on the shelf and was not implemented. This focuses very much on a process of collaboration with the people who are purchasing that service so that they want to implement the recommendations that are contained within whatever it might be — a report or a presentation. That has been established as a training module, other modules will be built on to that, and it is now feeding into the NFEE process.

Megan mentioned the energy-rated training and accreditation through 5-star, and that again will be linked into the NFEE work. Some work has also happened in Victoria with energy smart electricians, a training course run by RMIT. We are looking at those courses and how that could be linked into that NFEE work. There is also Green Plumbers. These people are not so much part of the energy efficiency services sector because a green plumber will be providing plumbing work as well; they might be providing plumbing, looking at water efficiency one day and then providing advice on energy efficiency the next day but it is interrelated.

I will give a little bit of background about energy efficiency training in Australia. This work was developed through the NFEE training and accreditation community work that happened. We commissioned a piece of work looking at the current gaps within energy efficiency training in Australia, and we identified 112 courses that have the potential to incorporate some elements of energy efficiency. I stress that these courses are not always solely about energy efficiency but they will contain some components of it.

As you can see there are a number of courses for engineers, less so for heating, ventilation and air conditioning; hence that was chosen as part the NFEE course development. Even though the engineering component looks very
high — the courses that have been developed that include energy efficiency — it is not a huge part of the course. This also shows a bit of a breakdown between different states. Looking at, say, electricians, there is a fairly even number of courses between all the states. Looking at plumbers, certainly more course work is happening in Victoria compared to some other states.

This slide shows the different levels of education. ‘PD’ refers to continuing professional development, so this is post-qualification courses; there is also higher education, which is university courses, and vocational education and training — TAFE courses. There is a fair amount of activity in the TAFE sector, less so at the university level and a little bit of activity is going on in continuing professional development.

It might be worthwhile to look at not just the role of training and accreditation but also other aspects that contribute to the growth of the energy service sector — for example, 5-stars, because this involves not only training but some others activities that went on as well. There is the introduction of the installation standards in 1991, which set minimum requirements for insulating walls and ceilings of homes.

That was followed by the development of an energy assessment tool, now known as FirstRate, which looked at houses as a whole and did an assessment based on the interactions between different elements within the house — installation, glazing, draught sealing, the size of the house and a number of different combinations. That made it easy for industry to go out and do the assessment. That was then followed by training and accreditation for people who would use that tool. In the first year we started off with something like 36 people being accredited, and that is now well over 1000.

Following training and accreditation for energy ratings a demonstration project was set up with a number of leading builders. Those builders are committed to constructing homes that were at that time a minimum of 4 stars but a number of them went straight to 5 stars — for example, Henley Properties made the commitment to take all their homes to a 5-star minimum, so that demonstrated that it was possible for large builders to do that. Then a minimum 4-star energy rating for multi-unit homes was introduced under ResCode followed by the 5-star standard, which began to be phased in on 1 July 2004.

This graph shows the growth in the number of energy assessors, which has been large. The number of emerging energy efficiency services looks to increase in those sectors, one being commercial building energy assessors. The Australian Building Codes Board has agreed to the introduction of commercial building standards on 1 May 2006; so Australia-wide there is likely to be an increase in demand for engineers in particular, but it may also include architects, in providing those assessment services using energy assessment tools. We have also seen Australia-wide a growth in demand for home energy auditors.

A lot of this is more as a voluntary program, where a number of community organisations but more recently some private sector companies are setting up programs and businesses to offer energy auditing of homes. This is this to be separated from energy ratings. This is where people will go into homes to see where improvements can be made — for example, what is the current situation and where are the opportunities for savings. As I said we are seeing some interest in both the private and community sectors in offering those sorts of programs.

Sustainability Victoria is continuing to deliver its current initiatives to help develop energy efficiency services industries. Sustainability Victoria also has an energy saving campaign to promote energy efficiency in households. There is the green power campaign to increase the uptake of green power products. There is also the monitoring of emergency policy options, including options such as emissions trading. That concludes my submission.

Mr HILTON — Thanks, Megan and Katrina. Given that the price of power is relatively low in Australia and consequently it is not a particularly important consideration when people are choosing appliances, is the way forward to impose standards which have to be met and therefore to take the decision away from the consumer — it is imposed on the consumer because that is what has been the standard which has been set? If that is the case, is there a role for an efficiency services industry at all if it is providing advice?

Ms WHEATLEY — In terms of the first question, which was about how standards could be a major solution, particularly for the appliance area, we would see that standards have a very important role to eliminate worst practice — so that takes out one end of the product range. But there is another really important piece of work which is about devising even better practice and driving product innovation and development. An example of that might be labelling of appliances, so you eliminate the worst ones but you have a labelling system which shows which are the better performing ones, which then enables the consumer to make a choice. It might be a choice that
is based on the cost savings over time, but it might also be an environmental choice. There is a whole range of drivers for people making that decision, so standards have a very important role to play.

Another example in the industrial sector would be the introduction of the EPA’s standards. The EPA goes into businesses, identifies any energy saving opportunities that have a three-year pay back period and then insists that those are taken up. We would see that as eliminating worst practices; they are the things that should be done anyway. We are also working with businesses through the business energy innovation initiative, which is about demonstrating best practice — leading edge technologies, practices and approaches — so we are also driving the other end of the spectrum as well.

Ms WOOLFE — To answer the last part of the question looking at the role of energy services, if there are standards in place and information has been provided to consumers and there is equipment that actually meets minimum energy standards, there is also often the need to provide advice on how that piece of equipment is actually installed within the building. I am thinking particularly in regard to, say, commercial buildings where if there are worst performing appliances that are omitted and there is information provided, energy service providers can step in by providing advice about how that piece of equipment is integrated within the entire system. What is the best way given the design of that building, the orientation of those windows, the other parameters within that building, the heating loads of computers, to be able to provide them with the best possible advice on how to purchase and install that equipment. Certainly, particularly where we are talking about quite complex systems, there is a role for energy services providers.

Mr DRUM — It seems as though currently in Victoria we are just dancing around the edges with this whole issue. The fact is that, by definition, there is a golden opportunity when people lodge a plan to build a house to do something about fixing it. We have 5-star ratings, but we keep hearing from people who compare our 5-star rating to best practices. We saw first-hand in northern Germany that they have 10 and 11-star houses. Someone has to provide — and I am interested in your opinion on this — a service so that when people lodge a plan, that plan is commented on. It does not have to be mandated but surely it has to be advised. The people who are lodging this plan need to be advised. It might just be a reorientation, a rainwater tank, a solar hot-water service, tinted windows, a shade, an open plan of the house — it might be that if they opened up that part of the house they could save. But we do not seem to have an industry that actually gives advice.

We keep hearing from people at this inquiry, and during a very similar previous inquiry, that it is very hard to retrofit for any substantial benefit. People say, ‘If only we had been able to make these changes at the planning stage and at the building stage’. There are so many options and so many areas of improvement that are available, and yet people continue to make dumb decisions, effectively on the initial investment outlay. This inquiry is looking at the industry itself. Where can we actually impact and get the best bang for our buck, rather than look at ways that we can retrofit some energy efficient lights? In my opinion, we are just dancing around the edges. What is your opinion?

Ms WHEATLEY — In terms of the first part of the question regarding the time of the planning permit, yes, the 5-star standard by international standards is probably a bit lower.

Ms DUNCAN — It is modest.

Ms WHEATLEY — It is modest — I think that is a good way to put it — but it is a significant improvement on existing standards.

The FirstRate software comes up with a range of options and what the impact of those options will be. It is actually quite a dynamic tool in that it has a lot of flexibility about how people can achieve the 5-star standard and beyond. So there are definitely tools to enable that sort of discussion to occur at the time of lodging a planning permit. I think we have probably got to the point where we have got the 5-star standard in place and now we can start looking beyond minimum standards — what are the things we can do to drive greater performance. I think your idea about having that information at the time is critical, because you are enabling access to the sort of information that means people can make informed choices.

We are, in working through the national framework for energy efficiency, looking at disclosure of house energy ratings at time of sale and even at lease, so that is another area that we are looking at in terms of a nationally coordinated approach to that. We are also looking at minimum energy performance standards for renovations and
additions. Again, it is one of those big investment opportunities where a change can be made, but having access to the right information at those particular points is critical for those changes to be made.

**Mr DRUM** — I am just looking at the sheer practicalities of this. We have 80 municipalities in Victoria. If we were to employ one person to go out and have a site visit on every house that was approved in their municipality, they could physically do that. You are talking about 80 times a $100 000 wage and all the associated costs of car and phone. For $8 million a year we could do that for everybody who is building a house, and we could probably then replicate that into the commercial sector. For an $8 million investment — whether it be local, state or federal government — everybody lodging a permit to build anything could have a site visit and could see if there was a better, energy-efficient way of doing things. Yet for some reason that does not take place.

**Ms WOOLFE** — There are also the energy raters who are doing the assessment who will have the ability soon to actually do the assessment up to 10 stars. That is only looking at the building fabric, though. That is not taking into account appliances and lighting, but it is a very large component or way of fixing energy efficiency within the building.

**Mr DRUM** — The question is: who has to initiate the engagement of that person you are talking about?

**Ms WOOLFE** — Because all new homes require an energy rating as part of their building permit process, they will need to engage an energy assessor. They will need to go to an energy rater based on their current plans and get that assessment. A number of those energy raters are designers and architects, so they are in the position to actually build it into the design process. As I said, it is only looking at the thermal performance of the building but given that in Victoria the average home uses 58 per cent of its energy for heating and cooling, it is certainly a good way of fixing that energy efficiency for the lifetime of the home. With the energy rating increasing up to 10 stars, that will certainly help to push that envelope. I think there is also interest from builders and from developers in differentiating their designs. That can also be driven through that part of the sector as well — through builders marketing their homes as going beyond the minimum standard. I think there will be a combination of different approaches that can be taken.

**Mrs COOTE** — My question is about the graph you showed us about the training and what was happening across a number of sectors. Although it looks as if it is promising, it looks as if it is also very ad hoc. You gave details of every state, but I was concerned that there were whole areas — like glaziers et cetera — who have absolutely no interest at all. Where do you think the responsibility lies for getting these people to increase their knowledge and have it implemented into their courses and into their own standards? How quickly could we have a change around in the graphs that we have there?

**Ms WOOLFE** — It is a combination. I think both the industry and government could take a leadership role in assisting those industries to improve the training that they offer. That is why in some of those areas, I mentioned looking at electricians and facility managers, engineers and heating ventilation and air conditioning. That is a situation where courses and accreditation systems will be established in consultation with industry and with the aim that industry will take ownership of the training and accreditation.

**Mrs COOTE** — That is happening at the moment?

**Ms WOOLFE** — It is a combination. I think both the industry and government could take a leadership role in assisting those industries to improve the training that they offer. That is why in some of those areas, I mentioned looking at electricians and facility managers, engineers and heating ventilation and air conditioning. That is a situation where courses and accreditation systems will be established in consultation with industry and with the aim that industry will take ownership of the training and accreditation.

**Mrs COOTE** — That is happening at the moment?

**Ms WOOLFE** — Yes, it is just about to kick off. The reason that those particular professions were chosen is that there is significant potential for energy efficiency within the sectors they operate — so it is heating ventilation and air conditioning. If you think about the large buildings around the CBD, there is certainly a lot of potential to do that, and there is a lot of willingness in the industry as well. Those sectors were chosen on the basis of large potential to save energy, but also the industries are at a crucial point where they are interested in participating in these sorts of programs and are looking to drive energy efficiency out to their members.

**Mrs COOTE** — The other graphic you showed also was the areas in which people get this knowledge. I was surprised to see the small number of people who are getting it through higher education or tertiary education. Is that being addressed as well?

**Ms WOOLFE** — Yes. We are looking at combinations of both continuing professional development so that is for post qualifications for those people already out there operating within the industry, but we are also looking at opportunities to integrate into TAFE courses or undergraduate degrees. It is little bit more difficult at those levels because some of those processes move quite slowly. With TAFE courses, for example, training
packages are up for review every, say, four years, so it is a matter of timing it to get into those processes. Sometimes the quick wins are by offering continuing professional education rather than incorporating it into the courses, but at the same time we need to think about long term and ensure that those courses will incorporate those elements.

Mr SEITZ — Are you able to provide the committee with the market size and the characteristics of the industry itself, and profitability and capacity, with the composition, the range of service and technologies available and diversity of business models in Australia compared to other countries? Could you make just a few comments along those lines?

Ms WOOLFE — There was a study conducted by the federal industry, tourism and resources department, looking at national energy services industries. That has been completed quite recently. They studied 156 companies. This is looking at a more restrained definition of energy services rather than looking at home energy assessors and other professions. What they found is that about 76 per cent of these companies work within Victoria and about 29 per cent have their home office in Victoria. As part of the study they did not actually look at the dollar value of those industries. There are some older studies that have attempted to assess size of environmental firms, but unfortunately some of that data is just not available.

Mr SEITZ — One thing concerns me. If I travel in Western Australia, I see a lot of solar heating for hot water, yet here in Victoria we get industry competing for instant gas, which is the flavour of the month, so they are competing on that, but I do not see anybody doing the equal thing about solar heating in industry.

Ms WOOLFE — We have had a rebate available for five or six years, and under the rebate, about 9000 systems have been installed. The 5-star standard also includes an option to install solar hot water systems, so either new houses need to achieve a 5-star standard and either install a gas boosted solar, if they are in the gas reticulated area, or install a rain water tank. As part of that, industry has certainly been given a bit of a boost, and we are certainly seeing new products coming onto the market in the solar hot water sector.

Mr SEITZ — We did have a look at ones where they were experimenting about integrating solar hot water with instant gas because of our inclement weather here. Is there any product in that direction happening or is it just experimental?

Ms WOOLFE — No, I believe that there are those products on the market now. I cannot remember the exact figures, but I think we have several hundred products listed on our web site. I can find out the exact number for you.

Mr SEITZ — I am interested in whether we are progressing in that direction.

Ms WHEATLEY — It is probably worth saying as well that with the introduction of the solar hot water rebate, one of the first things we did was to assess all solar water heaters and only those that provided a minimum level of performance or a minimum amount of energy from the sun were able to receive a rebate. We also had a tiered rebate so the higher performing systems got more money.

We also put in a requirement that if you were replacing a gas water heater, you could not put in a solar electric system because that would result in a potentially perverse greenhouse outcome. You had to put in a solar gas, and as a result of the rebate, we have seen the introduction of quite a range of solar heating units on the market. There was really only one manufacturer who was manufacturing solar gas before then.

Mr SEITZ — Name them.

Ms WHEATLEY — Originally Solarhart had a gas product, but since then all of the manufacturers now have a solar gas product on the market and there have been investigations looking at the instantaneous gas base as well.

Ms WOOLFE — There is also some work that we have been doing with the Green Plumbers program which is run by the Master Plumbers and Mechanical Services Association. They provide training to plumbers in the installation of solar hot water systems, and in that time over 870 or more plumbers have been through that training course. That has covered not only metropolitan Melbourne but also regional Victoria, so there are certainly plumbers out there who are able to advise their customers on the installation of solar hot water systems.
Mr SEITZ — My last comment — and I would like your comments on this — is on overcapitalising your property and assets because of the transit society that we live in today, and people do stay in a house maybe five or six years and think they will not get their money back on the property because they are overcapitalised. What is your view on that, especially with the energy?

Ms WHEATLEY — My view is that I think if you are investing in your house and you put in a solar water heater, you are increasing the value of your home, so if you move out of it before it has effectively paid itself back, it does not matter because you have something in place that has increased the value of your home. I have no statistical evidence to back this up, but that is my view.

Mr SEITZ — The agents are telling me different. It goes on the address — the value of the property is really on the address and the land, not the house.

Ms DUNCAN — Part of the difficulty seems to be that because energy costs are relatively low and because this sort of energy performance is hard to measure, if people look at it as a financial equation, they may do nothing, and there are probably financial disincentives to do something. Is there another way that we can be adding to this? For example, if you look at the water campaign of recent times — and at least with water, you can see it, you can see empty dams, so I guess it helps raise people’s awareness — there has been a combination of rebates, standards, regulation, a whole lot of stuff which we hear is what is needed in energy. You cannot do just one thing, you need to do the lot, and I guess that is an example where I think we have done the lot and continue to do the lot.

When you look at the water savings, they are fairly modest and probably not getting as close to what we need to actually do. If we just keep looking at cost benefit and we are only looking at the cost of energy and not looking at the life cycle and the polluting elements of it, how do we overcome that? The thought that people think they have to put in a solar hot water service, but only if they are going to hang on to their house for the next 10 years, is Sustainability Victoria able to do anything in that regard?

Ms WHEATLEY — In terms of the water campaign, the closest parallel would be the energy saving campaign in terms of the target sector, in that we are looking primarily at the residential sector. There have been discussions about comparing energy and water and the challenge in starting from that base because water is a much more tangible and immediate crisis that Victorians were responding to, whereas energy is a more intangible space.

We are doing quite a lot of research into what people’s attitudes towards energy are; how they actually use energy in their homes to help support the development of this energy-saving campaign. There will be a whole range of drivers that will motivate a whole range of different people. These will include comfort, cost and environment, just to name a few. We are looking to develop a campaign that taps into, I guess, the biggest drivers to respond to incentives or change action. This is not just a short-term campaign. Like the water campaign we are looking at the longer-term and what needs to be done in terms of partnerships or incentives to not only continue to keep the messages going but also to continue to change the behaviour.

But there are also going to be different approaches in different sectors because in the industrial sector the dollar savings could make an investment worthwhile. We see so many investments — for example, the EPA program — that have less than a three-year payback period; they make good business sense. There are also a lot of activities we want to continue to push in that sector so that commercially sensible decisions can be made.

The CHAIR — I want to go back to where Damian left off — around the 5-star rating itself and the fact that we do not have anything that talks about orientation, yet we know that orientation will assist greatly. People are telling us that BASIX in New South Wales is a much better product, if you can call it a product; it fundamentally covers a lot more. Even though the housing industry has tried to blow 5-star apart economically, I think we still have to continue, firstly, to fight that argument, but secondly, to be looking at how we make 5-star a better option.

Is it that we paint 5-star as the minimum standard for all our housing stock when we really should be pushing forward to a 6-star or 7-star rating, however you do that? One of the things that really concerns me is this trade-off we have made between water and energy. You can trade away your energy saving on hot water by putting in a water tank. I have to say I find that a bit hit or miss; it does not really cover either.

I understand that these are all fundamental policy decisions, but can you give us some advice on where we should look and how we could go about changing or adapting 5-star to a better fit?
Ms WOOLFE — Looking at BASIX, for example, there is a system which is being developed through the DSE — I cannot think of its name at the moment. It is being developed as a voluntary sort of approach and it is on the DSE web site at the moment. Developers and builders can go to the site and enter all their information and get an assessment. I think it is called VicBest. Those sorts of options are being optioned, but as a voluntary tool at the moment.

Ms WHEATLEY — Our current strategy with 5-star would be to look at existing homes as being the next area of opportunity in renovations and additions, before looking at a 5-star standard for new homes. Our focus at the moment would be — there is commercial building work and there is also the work that is being done in looking at existing homes and renovations

The CHAIR — This is a number question. Katrina, you said 870 plumbers have gone through the sort of green plumbing, is that 870 out of 20 000?

Ms WOOLFE — I believe there are about 15 000 plumbers, but there are different types of plumbers. There are plumbers who specialise in one type of system and plumbers who cover other areas as well — so, yes, it is a small number.

The CHAIR — I just wanted to quantify what we are looking at.

Ms WHEATLEY — We have been talking a bit about the National Framework for Energy Efficiency, and I am aware that we have just put a very high level assessment here. If the committee would find it useful we will forward a bit more information on the working groups and what it is they plan to deliver, and that way you will have a better picture.

The CHAIR — Thank you.

Witnesses withdrew.