



**LEGISLATIVE ASSEMBLY FOR THE AUSTRALIAN CAPITAL
TERRITORY**

**STANDING COMMITTEE ON CLIMATE CHANGE,
ENVIRONMENT AND WATER**

(Reference: ACT greenhouse gas reduction targets)

Members:

**MS M HUNTER (The Chair)
MS M PORTER (The Deputy Chair)
MR Z SESELJA**

TRANSCRIPT OF EVIDENCE

CANBERRA

WEDNESDAY, 13 MAY 2009

**Secretary to the committee:
Dr H Jaireth (Ph: 6205 0137)**

By authority of the Legislative Assembly for the Australian Capital Territory

Submissions, answers to questions on notice and other documents relevant to this inquiry that have been authorised for publication by the committee may be obtained from the Committee Office of the Legislative Assembly (Ph: 6205 0127).

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Privilege statement

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Amended 21 January 2009

The committee met at 2.01 pm.

CORBELL, MR SIMON, Minister for the Environment, Climate Change and Water and Minister for Energy

PAPPS, MR DAVID, Chief Executive, Department of the Environment, Climate Change, Energy and Water

FARNSWORTH, MS PENNY, Acting Executive Director, Department of the Environment, Climate Change, Energy and Water

BUTT, MR DAVID, Director, Policy, Department of the Environment, Climate Change, Energy and Water

THE CHAIR: Good afternoon everyone and welcome to this public hearing of the Standing Committee on Climate Change, Environment and Water inquiring into ACT greenhouse reduction targets. This is our second public hearing with the minister and officials. The first was for the annual reports inquiry. We look forward to hearing more about the ACT government's policies and programs in the crucial area of climate change and greenhouse gas emission reductions. I would also like to give a special welcome to David Papps, the new head of the department. We look forward to hearing from you today; no doubt we will have other encounters with you.

Thank you, minister, for lodging a substantial submission on behalf of the ACT government.

Before we proceed further I would like to place on the public record the committee's intentions regarding our reporting from this inquiry. As everyone would be aware, climate change and emissions reduction is a dynamic policy space for all levels of government. The inquiry has only been running since January this year and our terms of reference ask for a report by 30 July 2009. The committee will be seeking from the Assembly an extension of our reporting date to August when the Assembly next sits, as of course the Assembly does not sit in July.

When first speaking, could you please confirm to the committee and for *Hansard* that you understand the content of the privilege statement before you.

Minister Corbell, do you have an opening statement?

Mr Corbell: Thank you, Madam Chair. Thank you for the opportunity to provide evidence to this public inquiry today. I note that the committee has received and published the government's submission. I would just like to make a brief opening statement and then I and my officials would be very happy to try and answer the committee's questions.

I would like to start by stating that the government does believe that there is a need to show leadership in setting an ambitious target for greenhouse gas emissions reduction and to move quickly in responding to climate change locally and globally. The committee would be aware that scientific evidence shows that human activity is changing the earth's climate, and many of the previously estimated worst-case scenarios for climate change are beginning to be realised or exceeded. Yet, even as this threat is becoming clearer and the need to respond more pressing, Australia is continuing to increase its output of greenhouse gas emissions.

The immediate challenge for the ACT government and for all Canberrans is to arrest our continued growth in greenhouse gas emissions. We know that the ACT emitted more than four million tonnes of greenhouse gases in 2005 and the latest preliminary analysis of the ACT's greenhouse gas emissions indicates that our emissions have grown at an average rate of 1.7 per cent per year since the year 2000.

With around 70 per cent of the ACT's emissions arising from the consumption of electricity and gas and around 20 per cent from transport, the impact of addressing climate change will be far reaching and will touch on every aspect of the way we live our lives. The challenge is to manage these impacts in a manner which is both effective and socially equitable and which causes minimal long-term disruption to the community and the economy.

The ACT government's submission to your inquiry sets out the government's views on the urgency with which climate change must be addressed and its decision to adopt a goal of zero net greenhouse gas emissions for the ACT. Zero net emissions, otherwise known as carbon neutrality, means reducing emissions to every extent possible and offsetting residual emissions by investing in carbon offset projects. Embracing the long-term goal of zero net emissions will focus the efforts of the government, businesses and the people of the ACT on where we need to get to.

While the goal of zero net emissions is a major challenge, the ACT is not alone in aspiring to the target. Several governments and private organisations around the world have already adopted a goal of zero net emissions. For example, the city of Sydney achieved zero net emissions for its own operations last year, while countries such as New Zealand and Norway, cities such as Brisbane and Copenhagen and companies such as News Corporation have all committed to a zero net emissions goal.

The government and I recognise that not everyone will welcome this announcement. There may be some who view it as unrealistic and overly ambitious. Equally, there may be others who view it as meaningless without the accompanying detailed targets setting out the percentage decreases and the time frames by which they will be achieved. My answer to both of these criticisms is that there is a role for ambitious targets in inspiring, motivating and galvanising change. A good example is the no waste by 2010 policy. Whilst having been the subject of some criticism of late, the fact remains that by setting that goal we were able to achieve as a community a very remarkable level of improvement in recycling rates, from 42 per cent in 1996 to 74 per cent in 2008.

The government also acknowledges the role of interim or milestone targets and agrees that legislating these will be important in helping the ACT move towards a zero net emissions outcome. Indeed, it is the government's thinking that it is appropriate to hear what the committee itself says in relation to interim targets to reduce emissions before setting out a clear pathway to achieving a zero net emissions outcome.

The government's view is that we should not pre-empt the work of this inquiry. The government respects the role of this committee and values the input of both the broader community and those who have made submissions. There have been quite a large number of submissions and I have taken the opportunity to look closely at a

large number of them.

I would now like to turn briefly to the government's submission, which is divided into three sections. Section 1 describes the nature of the climate change problem, the ACT's greenhouse gas emissions and the impacts of climate change in the ACT in terms of our local environment, social equity and health issues. Section 2 of the submission covers issues relating to why and how the ACT should and can address climate change. This includes a discussion of the role of governments in correcting the market failures that lead to climate change, ACT and other Australian jurisdictional targets and approaches for achieving these targets. Section 3 considers the issues surrounding the practical implementation of greenhouse gas reduction targets. Key issues discussed include the nature and enforceability of legislated targets, the relationship between the ACT's targets and the Australian government's carbon pollution reduction scheme, and monitoring reporting and review processes.

The government has also provided in its submission two attachments, one which outlines and provides an update on the implementation of action plan 1 under the government's climate change policy, weathering the change, and two other attachments which provide information to the inquiry in relation to the sustainable transport plan and issues around sustainability of buildings.

I would like to briefly expand on a number of the issues in the government's submission, first of all in relation to legislative models. The government is currently examining options for a legislative model that will support the achievement of agreed targets and be appropriate to the ACT's unique circumstances. For example, South Australia and Tasmania have legislated to reduce greenhouse gas emissions by 60 per cent from 2000 levels by 2050. A key consideration is whether legislative interim targets should be enforceable or are simply a statement of intent on the part of the parliament.

The second issue is the trend in the ACT's greenhouse gas emissions. The ACT's emissions profile is distinctly different from the national emissions profile, and I note that the committee has received evidence on this matter already. This is, of course, largely due to the fact that there is no significant heavy industry or intensive agriculture in the ACT. As a result, stationary emissions represent a significantly greater proportion of total emissions in the ACT, 72.2 per cent, than the national percentage which is only 50 per cent. Agricultural emissions are negligible, whilst they are, in fact, the second-largest source of emissions nationally at 16 per cent.

My department has engaged the consultants pitt&sherry to develop an ACT greenhouse gas inventory for 2005-06, 2006-07 and 2007-08. Preliminary analysis of this inventory for the 2005-06 year indicates that the ACT's emissions increased by 2.6 per cent between 2004-05 and 2005-06. The ACT's emissions in 2005-06 were estimated at around 12 tonnes per capita. My department will continue this work with consultants to improve the accuracy and completeness of our greenhouse gas inventories for the years I have mentioned. It is anticipated that the inventories for 2005-06 will be completed by the end of this month and the inventories for the 2006-07 and 2007-08 years will be completed by the end of this year.

Turning to the issue of local impacts: climate change poses significant risks to the

ACT's local environment, including threats to biological diversity in our national parks, reduced water availability and decreases in water quality. It will also have significant social equity and health impacts. The fundamental problem in tackling climate change is that the benefits of reducing emissions are shared globally yet the costs of reducing emissions are borne locally. The ACT government strongly believes it is necessary to think globally and for the ACT to play its part in the global effort to combat climate change. A long-term goal of zero net emissions will mean that the territory will internalise the social and economic costs associated with those emissions.

We have already outlined our plans to date by releasing the weathering the change policy which all committee members would be familiar with. This roadmap for tackling our emissions will initially seek to halt the increase in the territory's emissions and then move towards the longer-term goal of zero net emissions.

To inform our decision-making, my department will continue to work with experts to gain a deeper understanding of the sources of emissions within the ACT and the most effective opportunities for achieving reductions. This includes the development of the greenhouse gas inventory which I mentioned earlier. Secondly the government will be reviewing its current targets of limiting 2025 greenhouse gas emissions to year 2000 levels and reducing 2050 emissions by 60 per cent from year 2000 levels. As I have indicated, in setting revised targets the findings of this inquiry will be important.

The third major aspect of our roadmap for the future will be to bring forward the second action plan for weathering the change. Weathering the change and action plan 1 are currently scheduled for 2012-16. This second action plan will focus on the pathway to achieving interim and longer-term targets. We will need to engage in significant consultation with stakeholders to develop strategies and plan approaches to a transition towards zero net emissions, draw upon specialist expertise to provide high-level and technical advice including a cost-benefit analysis to inform future policy and program development.

Decisions on measures to reduce greenhouse gas emissions will be taken in an economically and socially responsible way. All measures to reduce greenhouse gas emissions will need to be as efficient and effective as possible. The regulatory and compliance costs for activities such as information collection, reporting, monitoring, compliance and enforcement will also need to be minimised.

The government is already engaged heavily in improving energy efficiency and exploring the appropriateness of low emission and renewable energy technology. The government is currently preparing an energy strategy for the ACT that will reflect the ACT government's long-term zero net emissions policy goal. This strategy will explore ways in which the ACT can reduce its emissions from energy use by increasing our reliance on low-emission and renewable technologies, moving towards greater diversification of energy supply and increased self-reliance and facilitating improvements in the energy efficiency of appliances and buildings. Of course, there are economic benefits to taking such an approach. We know that there is the potential to build a green industry in the ACT as a result.

Finally and in conclusion I would just like to address briefly the issue of the carbon pollution reduction scheme. The ACT government has considerable concerns about

the Australian government's CPRS, including that the CPRS cap is not tight enough and concerns that the CPRS could impede the ability of the ACT government to reduce national emission levels. The government has made three submissions along these lines to three separate Senate inquiries that are currently underway into the CPRS. These submissions were made prior to the most recent announcements by the Commonwealth government.

It is noted that the Australian government has recently announced changes, including that it will lower the CPRS cap by the amount of accredited GreenPower sold above 2009 levels. That is a welcome change and coincides with the decision the government has taken to provide an additional \$3.2 million here in the ACT to increase our purchase of GreenPower for government operations to increase the total share from 23 to 30 per cent of our power purchase.

We have also made it easier this year for GreenPower to be the product of choice for consumers by requiring electricity retailers to first offer to any new or reconnecting customer an accredited GreenPower product. So, while the inclusion of GreenPower in the CPRS cap is a step in the right direction by the commonwealth, there are several other individual measures which are not included in the CPRS cap, notably energy efficiency measures taken by individuals and organisations. For that reason I will continue to raise with the Australian government and my counterparts our concerns about the implications of this element of the CPRS on the ACT's policies and actions.

Madam Chair, that concludes my opening statement. Thank you for that indulgence and I am happy to try and answer your questions, as are my officials.

THE CHAIR: Thank you, Minister Corbell. I just wanted to start off with the timing of the targets. You had spoken about waiting for the outcome of this committee but obviously your submission right up-front has adopted the visionary goal of zero net greenhouse gas emissions. I am just wondering what sort of work has already gone on and what sort of policy work, looking at some of the options that could be included in that plan. You have noted in your opening statement around the city of Melbourne, the city of Sydney, and I am wondering what sort of work you have looked at that has gone on interstate or in those cities—what sort of policies, programs? What are we looking at here? Has work been undertaken?

Mr Corbell: You mean in relation to time frames to achieve that outcome?

THE CHAIR: Time frames and sorts of initiatives.

Mr Corbell: The time frame issue really does depend very much on what the committee itself determines, what it recommends as interim targets—and then, obviously, what the Assembly ultimately decides in terms of a legislated target. The government has deliberately said, “Look, we think this is the outcome we should get to. This is the outcome we should aim to achieve as a community.” How long that takes will depend very much on the short-term and medium-term targets which the Assembly agrees to in legislating a target.

I have been quite open about saying, “We really need to see what the debate in the

Assembly is going to be.” The first step is for this committee to make a recommendation. Then the government will respond to that and put forward its own view, which may or may not coincide with the committee’s recommendation. Then it will be up to the Assembly to decide. We are going to keep an open mind on this matter and allow this inquiry to run its course.

In relation to the measures that should be adopted, I think these are broadly well understood in terms of the general fields, although the absolute technological solutions and other measures obviously become a lot more complex. But in many respects they are the issues that the government has outlined in its submission—for example, moving towards a decentralised energy future, moving towards the generation of power at a local or district level through renewable technologies—combined heat power plants, solar, minihydro and so on—to reduce our reliance on power transmitted via the grid largely from, at this point in time anyway, fossil fuel powered power stations.

As to energy efficiency measures in buildings both in commercial office buildings and in residential homes, the government took some positive steps to facilitate that both in the commercial and the residential sector in the last budget. The switch your thinking program provides a significant amount of money for the provision of rebates and assistance to householders to improve energy efficiency as well as water efficiency. In the most recent budget, we have also announced a program to assist commercial building owners to improve the performance of their buildings.

There are also regulatory approaches in relation to buildings and requirements for minimum standards. Those are outlined in more detail in the attachments to the government’s submission. Also there are issues in terms of behaviour change, improvements in public transport provision and so on.

I think we understand the broad range of options that are available. The real challenge is tailoring them and getting practical runs on the ground in the ACT. That still remains a significant challenge.

THE CHAIR: I also wanted to clarify—I think the submission did outline this, but just for the record—that when we are talking about zero net greenhouse gas emissions you are not saying that is just for the government; it is for all of the ACT and the community?

Mr Corbell: No, for the territory. For the territory.

THE CHAIR: At the moment we are sourcing a lot of our power from over the border. How might that operate? I know you have talked about some of our own power generation, but obviously there is going to be that transitional time. Has some thinking been put into how that might work as well?

Mr Corbell: Those are issues that are being explored as part of the development of the government’s energy policy at the moment. That is developing very well. That policy is not yet complete, but the energy policy will be a key document in outlining how we achieve security and sustainability of energy supply for the city over the long term. There will be a range of policy options put forward as part of that document

which will outline the direction that we can take.

But there is a very significant challenge for the territory, because we do import our power from other places. We generate a tiny amount of electricity locally; it is very, very small. Therefore, a lot of our emissions actually occur somewhere else. So we need to have regard to changes that are going to happen in the national electricity market. We need to have regard to the fact that the commonwealth government's mandatory renewable energy target is going to increase significantly, and that is going to increase the level of supply of renewable power generation into the grid. That will have an impact on our emissions over time, but in and of itself it would not be sufficient to achieve zero net emissions; therefore a range of other measures will need to be adopted.

THE CHAIR: On the energy policy, you have said that it is being developed at the moment. What is the time frame on when that will be released? Obviously that is quite a critical document for these deliberations.

Mr Corbell: Yes. The second half of this year is the time frame at this point in time. I think this is an emerging area of policy development for the territory. We as an administration have not previously done a lot of work or thinking on energy policy. It would be fair to say that we are really having to do a lot of work that other jurisdictions have done a long time ago in terms of security of supply and sustainability of supply. So we are coming from behind in that respect. It will be the first time the territory has ever had an energy policy. It is taking a longer period of time than all of us originally anticipated. But it is a real priority for me. My department certainly knows that, because I keep bothering them about it and having fairly lengthy meetings with them about it. I can assure the committee that it is well underway.

THE CHAIR: Just to pin that down a little bit more, the second half of this year?

Mr Corbell: Yes. Probably the third quarter of this year would be a good estimate.

THE CHAIR: Will that be the draft interim policy?

Mr Corbell: Yes, that will be a draft policy for public comment.

THE CHAIR: Ms Porter?

MS PORTER: With regard to the ACT targets and the commonwealth CPRS, you mentioned it towards the end of your presentation, and it is mentioned quite a bit in your document and also has been referred to by numbers of people who have submitted to us, talking about the relationship between it and the targets that we might set. You say in your submission that we have to give careful consideration to how we legislate targets and how we interact with the Australian CPRS—notwithstanding, of course, that there have been the changes that you referred to.

A lot of people have said to us that they want the ACT to show leadership and they think that the ACT has a good opportunity to do that because of the different situation as far as our emissions are concerned—you also refer to that—but they also recognise

the challenges we have in importing our energy. However, having said all of that, they also are concerned that the commonwealth scheme may, in fact, impede, and you have said that yourself. How do we show leadership on one side and juggle that other challenge?

Mr Corbell: I think these are ultimately matters for judgement by the Assembly and the government about to what extent we should go beyond measures that are being adopted at a national level, even though they may potentially not have any impact on Australia's overall level of emissions. As Ms Hunter said at the beginning, this is a constantly changing area of policy. Even if the CPRS does establish a regime which does not take account of individual actions or individual jurisdictions that choose to go beyond the targets established by the government nationally—number one, that situation probably will not remain: it will not be a constant; it will change over time. Indeed, I think targets will change over time as our understanding of the science continues to develop.

And, No 2, there are real benefits anyway from improving energy efficiency, from reducing reliance on certain forms of energy and so on. So there are risks sometimes as well which we have to have regard to, but there are real constructive benefits for individual householders, individual businesses, individual building owners and the city overall. We have to have regard to that broader public good as well as this abstract framework that we are putting in place to deal with this matter nationally through the CPRS. It is an abstract framework; it will evolve and develop over time. Our obligation is to have a policy setting which is right for the long term but which also ameliorates short-term costs that may be imposed on different parts of the economy, different parts of the community. That is the balancing act that we have to adopt rather than being too hung up on what the abstract framework is at the CPRS at this point in time.

THE CHAIR: Mr Seselja?

MR SESELJA: I would like to return to the zero net emissions target and pin down some questions around that. The first, I suppose, is the obvious one. Broadly, what time frame are you envisaging in relation to achieving zero net emissions for the ACT?

Mr Corbell: As I said before, the government has deliberately not established a time frame on it at this time. The reason for that is that the time frame will be heavily dependent on what short and medium-term time frames are recommended by this committee and agreed by the Assembly in relation to greenhouse gas reduction. How far along we go in reducing emissions will ultimately have an impact on at what point we are able to achieve zero net emissions. As I said at the beginning, I do not want to pre-empt this committee inquiry process and the debate that will be had in the Assembly. The government will outline its position on short and medium-term targets in response to this committee's inquiry. I think that is the right way of going about things.

MR SESELJA: Okay. Getting to a more manageable target in terms of zero net emissions, then, you mention in the submission that the city of Sydney achieved zero net emissions in terms of its operations. What is the goal in terms of the ACT

government achieving zero net emissions for its operations?

Mr Corbell: That is an objective that is already set out in weathering the change. Weathering the change already indicates that government departments should move towards carbon neutrality in their own operations. There is a good summary in the submission that outlines how we are going in relation to that particular measure. I just draw your attention to that; I saw that earlier today when I was looking through it. It varies from department to department in terms of progress, but I think what will be happening out of stage 2 or bringing forward action plan 2 of weathering the change is—I want to tie down and give a much stronger time frame for government agencies in relation to achieving carbon neutrality in their own operations.

MR SESELJA: Do we have an estimated cost for what it would cost the ACT government to achieve that goal?

Mr Corbell: No, we do not have an absolute cost at this point in time. What is happening, and what is outlined in the submission, is that there is a process being undertaken by government agencies to identify how they can achieve that target, what measures are involved and then, obviously, the costs associated with those. There is a bit of detail in the government's submission.

MR SESELJA: Chair, if I could, I have two more on this area.

THE CHAIR: Certainly.

MR SESELJA: You have now set the goal of zero net emissions but you do not have a time frame yet until we can get a medium-term target. Obviously, some work must have been done to say, "Here we are, the ACT, in 2009. This is how we get to work. The transport sector is roughly 20 per cent. This is how we use energy in our households, which is about 70 per cent. We are primarily car based in terms of transport." How different would Canberra look with zero net emissions? Would it mean people not having private car use? Would it mean that they were all hybrid cars? In the household sector, what would look different?

Obviously some work must have been done to envisage, if we have a goal, what it is going to look like to actually get to that goal? It is obviously pretty significantly different from where we are now, where we all travel to work in our cars, get on the bus and use coal-fired power to heat our homes. It is a significant change. What modelling, what work, has been done to look at how Canberra will look different?

Mr Corbell: I think there are two responses to that question. The first is that, in setting the goal, it is really about saying that we need to galvanise ourselves to action—not view this problem in terms of incremental, bit-by-bit change but understand that there is a really big picture that we need to be heading towards. That is the first thing. Related to that is that I do not think there is any city or any country in the world that is able to spell out clearly how it is going to get to zero net emissions, even though a number of cities and counties in the world have said that this is the objective they want. This is really unknown policy ground generally across the world.

It would be no surprise to you for me to then say that there is not an absolutely

crystal-clear picture about what it would look like for us. We do not know. I do not think any city in the world really knows. I do not think any country in the world really knows. But we do know that there are enormous gains to be had on that journey. We do know, for example, that our level of public transport use could be significantly higher than it is—much higher than it is. We do know that our energy efficiency could be much higher than it is in residential buildings, commercial buildings and so on.

In setting that long-term target, what we are saying is that there are very significant gains to be had before we start to get to the really difficult end of what then become wicked or intractable problems that take a lot more policy effort. By setting the target, what we are saying is “Let’s go and make those really big gains in these really obvious areas, because that is what we need to try and do as a community.” That is really what the government is thinking in setting this long-term goal.

MR SESELJA: One more question, if I could, chair. On page 27 of your submission you are critical of the Australian government’s target in terms of the five to 15 per cent below 2000 levels. As far as I can tell, that target is stronger than what you have in your medium-term targets at the moment. Are you able to talk us through what is the scientific change or the piece of evidence that led you from a position where you had that target, which is stabilising by 2025 at 2000 levels, to a position where you will be moving to a stronger target than what the Australian government has put forward?

Mr Corbell: It is fundamentally a recognition on the part of the government that the community expects stronger targets. We recognise that there is an obligation on us to respond to that view, and that is why we are outlining the position we are.

MR SESELJA: So it is not in relation to any change in scientific evidence or understanding over the past 12 to 18 months?

Mr Corbell: Previously the government took the view more strongly that we should work within a national framework. The approach that we adopted was consistent with the national framework in place at that time. You have got to remember that weathering the change was released when there was a different government in place federally, with very different views about what could and could not be achieved and what the framework should be. It was released at a time when Kyoto was not even being ratified. A lot has changed in the last 12, 18 or 24 months in terms of the political environment that we are operating in locally and nationally. The government’s position is recognition of that. As minister, I feel very strongly that we have a very strong moral obligation to future generations to adopt stronger and more visionary targets. Indeed, that is what the government’s submission reflects.

MR SESELJA: But that moral obligation is not reflected in weathering the change.

Mr Corbell: I have just answered that question. Weathering the change was released at a different time in a very different political environment, both locally and federally—in particular, in an environment where the federal government was not even proposing any sort of carbon pollution reduction measures at a national level. There was no national scheme being proposed. There was no ratification of Kyoto. It was obviously a much different context from the one that we are operating in now.

THE CHAIR: Mr Rattenbury, did you want to ask a question on targets?

MR RATTENBURY: Yes, thank you. My first comment is this: I would like to congratulate the government on your submission. It is a vast improvement on some of the material in weathering the change and it is a rather more thoughtful document than the earlier versions. Thank you for that. But I just want to come back to the time line around the zero net emissions target. At the moment, in weathering the change, we are talking about 60 per cent by 2050. Where do you see it fitting with that kind of time line?

Mr Corbell: Again, I am not going to pre-empt this committee's conclusions on that matter. There is a range of views out there about what our interim target should be, both by 2025 and by 2050. It will depend on the conclusions the committee reaches, the government's response to them and ultimately what the Assembly legislates. They will all influence where we end up—at what point we can end up with zero net emissions. I am not trying to be deliberately evasive here; I just think that it is a very practical and obvious point: unless we know what our medium and long-term targets are, we do not really know at what point we are going to get to that ultimate goal of zero net emissions or what is a realistic time frame to view that in.

It is just a recognition that we are in a process and some key decisions have not been made. Until those key decisions are made, we are not really in a position to talk about what a time frame is in terms of final destination. It is certainly feasible that the government's own operations can achieve carbon neutrality within a much shorter time frame, but that is really a leadership position on the part of the government. It is not a particularly dramatic impact on the territory's overall level of emissions. The territory government itself is not one of the largest contributors to emissions in the territory. Nevertheless, it is an important leadership position for the territory to adopt—and to then use the work that goes on within agencies in achieving carbon neutrality to demonstrate to other parts of the community what can be done and how it can be done.

MR RATTENBURY: Just on the issue of government departments' carbon neutrality, I was unclear from your answer before whether any government department has a time frame for achieving that carbon neutrality.

Mr Corbell: I might ask David Butt or David Papps if they can give a bit more information on how that process is happening at the moment. There is quite a detailed process that government agencies are embarking upon there and I do not have the detail for individual agencies.

Mr Butt: I have read the privilege statement and I understand it. At this stage, no departments are working towards that. It is part of the planning processes that are being put in place. It is part of the process of making agencies identify where their energy use and greenhouse gas generation are occurring before we can then start to scientifically approach what the causes are and what the cost-effective options are in addressing each one of them. We are at the start of that process.

Mr Papps: Could I add something to that? I have read the privilege statement and I

understand it. The minister has already made the point about the government taking a leadership role in its policy setting. The other observation to make is that the government's creation of a separate Department of the Environment, Climate Change, Energy and Water has also been a quite deliberate strategy for us to exercise some leadership within government, in terms of both assisting other agencies and demonstrating our own leadership in that regard.

MR SESELJA: What are some of the practical ways in which the department of climate change is doing that?

Mr Papps: As my colleague indicated, we are funding a number of studies that are part of this broader process in terms of the roadmap. We are also providing information and advice on very practical issues such as, for example, government accommodation and the sorts of energy efficiency savings that government could be achieving in those areas, and transport, building on work already being done in terms of private vehicle transport and also looking at what policy initiatives might be available. There are things like differential stamp duty, things like policies within government about purchase of fleet vehicles and the like. I think the minister referred to them before; there are a lot of relatively easy and quick gains that we are looking at in some detail.

THE CHAIR: Mr Papps, does that also include the ACT government looking at an accommodation policy, like the one that the federal government has, around—

Mr Papps: Yes.

Mr Corbell: Yes, it does. I noted in the most recent commonwealth government budget that was released last night that there are now a whole new suite of measures that the commonwealth government has agreed to fund around energy efficiency and performance standards in commercial and residential buildings. That is really going to drive a lot of activity and be very complementary with the policy settings we are trying to pursue here. So that is going to have a major impact on what we do here.

I think the real challenge for us locally is to make sure that we do not duplicate effort. We can run little programs and the commonwealth can run bigger programs and they are both trying to achieve the same thing. We need to make sure that we are not duplicating. If the commonwealth is running a big program that is having an impact on the ground then let us let them do that and let us use our resources to do other things that need to be done that are not being funded by anybody else. I think that is one of the real things that I am very conscious of as the minister. We do not have an enormous pot of money to do everything and we need to use our resources as effectively as possible.

In terms of accommodation policy, there is actually a COAG process underway to try and achieve a nationally consistent standard in relation to accommodation policy. To date, the government's position has been to try and work within that arrangement in setting our own accommodation policy, to make it consistent with the COAG process. I have to say that I was getting a bit frustrated with that approach, and I indicated to my department that, if the COAG processes were not able to resolve the matter soon, we should set our own standards. Given the announcements in the budget yesterday, it

looks pretty clear now that the commonwealth is going to seek to resolve discussions and conclude discussions on that matter, and I hope that will allow us to implement a nationally consistent policy.

MR SESELJA: Just on the department of climate change, what is the green star rating of the building that you are occupying at the moment?

Mr Corbell: The executive at the moment sits within Macarthur House, which is an extremely old building. I do not think it has been rated using the green star methodology. That office building in the past has undergone quite a range of treatments to improve its energy performance in particular. Certainly, its lighting systems have been upgraded. It has, I think, a small amount of PV on its roof, if I recall correctly.

Mr Papps: That is right.

Mr Corbell: It also has had significant work done in terms of its insulation. I would say that the building is not too bad, considering its age. But I certainly would not suggest that it is an exemplar of office accommodation.

MR RATTENBURY: No, and it points to interesting evidence that the Property Council gave when they were here a few weeks ago about the relative costs of retrofitting older buildings versus demolishing them and starting again in terms of embedded energy and the like.

Mr Corbell: That is right. For that reason, the government has funded the tune-up Canberra program in the most recent budget here in the ACT, which provides dollar-for-dollar assistance up to particular thresholds for commercial building owners to retrofit. My department also provides assistance in the area of water for commercial office buildings, and we similarly have a dollar-for-dollar type program for retrofitting water efficiency measures into those buildings.

Mr Papps: As well as the things the minister has already mentioned, the car park lighting at Macarthur House is solar powered. We have just commissioned the installation of smart metering in the building so that we can make some more informed decisions about energy and water use. The department runs, for example, a bike fleet to try and encourage our own staff to use pushbikes and, indeed, public transport wherever possible.

MR SESELJA: Is there any way of measuring, and have you done so, the reduction in emissions as a result of those energy efficiency savings and measures?

Mr Corbell: I think that has been done and I would be happy to provide that to the committee.

THE CHAIR: You were mentioning that, being a small jurisdiction, obviously, it makes some sense to be looking at what is going on at the national level, the federal level, in order to piggyback or to lever off that. I was looking at the OSCAR reporting system, which has been developed at the commonwealth level and is being used in the ACT. Minister, I am assuming that the data or information that is logged through that

process by departments would then show up in annual reports. Is that where it will be reflected, to show how things are going as far as the—

Mr Butt: Yes. The material from OSCAR is part of the suite of information that agencies are now required to report in their annual reports. That is going to form the basis of data that we will be able to go and look at. I go back to my point which may be a typical economist's point: if you can't count it, you can't take measures to address it. So we have got to use that data to identify what is going on and then it will give us some of the options to address what is happening.

THE CHAIR: Mr Butt, whose role will it be to pull all of that data together, to then be able to go to a certain agency and say, "You're flagging behind," or "You're doing really well," or whatever it happens to be, and then to provide the guidance or support? Will that be with the department of environment or does the Commissioner for Sustainability and the Environment have some role to play? I am just wondering how it will all be pulled together in one place so that we can have a sense of what is happening across the territory.

Mr Butt: The initial response will be that each agency has the carriage of that itself. The data will be looked at by DECCEW, the Department of the Environment, Climate Change, Energy and Water. With respect to the process for doing that, an IDC has been established to work across government. That IDC will not only be involved in drawing together a whole-of-government response built up on individual agencies' reporting, but also it will be working to identify opportunities for agencies to learn from success stories in other agencies, not only in the ACT but in other jurisdictions, and then to be able to bring that into their own conduct. It is all part of moving the whole process of the public sector towards incorporating a decision process that sees reduced energy and water use as part of their normal way of business, and measuring what they are doing.

Mr Corbell: I think this reinforces the point I was making earlier. We want to bring forward the development of action plan 2 of weathering the change, to really tie down these issues in a lot more detail than has occurred before. So it is a matter of setting some very specific and clear time frames for action by government agencies as well as broader community-based activity that we need to see happen to reduce emissions.

The first challenge for the city is to stabilise our emissions. We are not even doing that at the moment, so that has to be our first task, and that is what action plan 2 will allow us to do, and give us a very clear framework for doing that. That will occur later this year, once this committee has reported and once the energy policy is released and so on.

THE CHAIR: Is it intended that that learning that will go on will also be shared with the private sector? You have set up the Climate Change Business Academic Roundtable.

Mr Corbell: Yes.

THE CHAIR: I am not completely clear how many times it has met.

Mr Corbell: It has met about four or five times.

THE CHAIR: I am assuming that some of that learning will be shared. I understand it is an advisory group that will also provide some advice to government. But it is also a matter of sharing information here, isn't it?

Mr Corbell: Yes. Certainly that information will be shared quite widely. When the business academic roundtable was first established, it was established to try and find ways through which business could take actions themselves to address their emissions. It is not so much advisory to government, although it has become a bit more like that in recent months. I am looking at the future role and functions of the business academic roundtable. I want to see it maintained and strengthened.

We really need to go back and look at why it was initially established. It was initially established not just to provide advice to government, although that is valuable, but to actually work out how the private sector and leaders in the private sector can get the private sector to do work themselves, in their own businesses, in their own buildings, in their own activities. I am very keen to see a renewed focus on that, because this is a policy area where direction by government is not sufficient. It is necessary, but it is not sufficient.

THE CHAIR: But it is important to have champions out there in the private sector as well.

Mr Corbell: Absolutely, yes.

THE CHAIR: With the roundtable, there are similar sorts of bodies. Probably, as you were pointing out, this one may evolve into having more of an advisory role. In other states, it does have more of an advisory role to government. With respect to the information that is coming out of that committee, is it going to be publicly available? To date, those documents have not really been publicly accessible and I was wondering whether there had been some discussion within that group around whether they would be. A couple of other states might have set up a bit of a web page to put up papers that they might have developed, communiques or whatever. Is there an intention to open that information up more?

Mr Corbell: To be honest, that is not something that is being considered, but if the committee wanted to make a recommendation to government along those lines, we would consider that favourably.

MS PORTER: You said it is important for us to have champions. Of course, it is very important, and I guess that is what people have been saying to us as they have been appearing before us. They see the leadership by the ACT government as one way of it being a champion in this whole area—across the nation, in fact. We have also heard from members of the public who have appeared before us, from community groups, saying that they do get disheartened from time to time when they do not know how we are progressing. They are paddling away like little ducks, trying to have short showers—that is water, I know—

Mr Corbell: Yes, it is energy as well.

MS PORTER: They cut down on that and do their very best but they do not know what the big picture is and they cannot see how we, as the ACT, are showing leadership or if what we do is going to have any impact in a very significant way. Is everything they are doing for naught? I was wondering how we get out there this information about what we are doing with our government departments, how we are making changes ourselves, what gains we are making. I know this is something we will not be able to do in this regard but those signs along the road that used to say we have used this much water today and this is the target have been, I think, very successful in changing people's attitudes to water and giving people some feeling of being affirmed when they are trying.

Mr Corbell: Doing the right thing, yes.

MS PORTER: Is there some way we can let people know what it is we are doing so that they feel more encouraged to continue with this very real work that we are all going to have to participate in, as you have rightly pointed out?

One thing that troubles me on a daily basis is that, as I come to work, I see the number of people that drive to work in their car by themselves, just the one person in the car. We would like them on the buses in the first instance but at least, if you are going to be in a car, make it more than one person. I think that whole thing about community education and encouraging community should be considered. I think the very good example and very practical example that you showed about the bike programs in the departments is one that is growing, I believe, and more departments are going to take that on.

Mr Corbell: Coming back to the issue of information and giving the community information on how we are tracking in terms of emissions, it has been a very patchy picture in the ACT, generally speaking. There is really no concrete data before 2000 that we can draw on and there is not even any sources that we can go and dig up to make some sort of assessment with any real accuracy. That has been one of the issues for the ACT with 1990 versus 2000. There is just nothing to mine to get the data out of.

THE CHAIR: And this was a point you raised in your submission.

Mr Corbell: And that is dealt with in the submission, but we are now—

THE CHAIR: Could I just say that, along with that, you have then highlighted that, because that is the case, it would not be unreasonable to be looking at a higher target to compensate.

Mr Corbell: Yes, to compensate for that, and that is the way of addressing that issue. But since that time, since the year 2000, we have started to do more work and, as I indicated in my opening statement, the government has now gone and commissioned the consultants pitt&sherry, who are a nationally recognised firm that deals with climate change issues in particular. I note they have just absorbed the work of a Dr Hugh Saddler, who is well known in Canberra from his energy strategies, to do the work on a greenhouse gas inventory.

Regular inventories will now need to be part and parcel of our work and an important information base for policy development. And those inventories will be made public so that people will be able to see what our emissions are by sector and overall. That will prove, I think, to be very useful. The first couple of inventories probably are not going to be very encouraging because they are going to show our emissions have gone up but they will also confirm the need for action. And that will be a positive.

THE CHAIR: And you have mentioned, I think, that the first one had been or was about to be completed. Was that right?

Mr Corbell: Yes, completed in the next couple of months, I am told.

THE CHAIR: And then that will be made public?

Mr Corbell: And I will be happy to make that available to the committee and certainly I intend to make it public.

MR RATTENBURY: On the question of these baselines, I was interested in, on page 26 of your submission, the discussion on the data for 1990 and your sense that it is not possible to use that data. Yet when I go back to the graphs that are contained in weathering the change, specifically at page 23 of weathering the change, there is a specific data point recorded in the graph of the ACT's emissions history. I am interested, therefore, in where that data point comes from.

Mr Corbell: I am looking at the wrong one.

MR RATTENBURY: I am looking at the actual document, not the action plan but the strategy itself.

Mr Corbell: I may need to defer to Mr Butt on that, if he can answer that. It was a bit before my time.

MR RATTENBURY: I have seen that number somewhere in my history—I cannot put my hands on it today—but there is a number that defines the 1990 baseline. Yes, I am asking the question, Mr Butt.

Mr Butt: I am not the whiz-kid on this. That is the caution in my answer. I understand that was extrapolated back to arrive at a 1990 figure and I think the reason behind that was that at the time everything was working around Kyoto. I think the data that we want to use is data that we can actually have faith in, and really that is since 2000. The experts can take it back and they can create some of this stuff. The level of faith you might have in it, I think, would be questionable. But that is my caution. Minister, I would like to take a detailed answer on notice.

Mr Corbell: Yes, provide a more detailed statement.

MR RATTENBURY: If you have some of the calculations that were done to create that data point, because I am interested that it was okay to put it in weathering the change in 2007 but now we are dismissing it. I would be interested to see the

calculations.

Mr Corbell: I stress that weathering the change actually set out targets by year 2000 levels, and this is one of the reasons why. We were consistent in that regard. I take your point about what is demonstrated on that particular graph. Nevertheless, weathering the change did establish targets based on year 2000 levels. I think what the government is trying to do here is say, “There are some reasons, some practical reasons, why we believe that year is more appropriate.”

But as the government’s submission also indicates, there are ways that you can compensate for the lack of data at an earlier point in time or an unreliability of data at an earlier point in time by adjusting your targets accordingly, earlier. And that is the point that is made in the submission.

THE CHAIR: The committee would appreciate that information.

Mr Corbell: We can try to give you a more definitive answer as to what the reasoning was in relation to that particular graph.

MR RATTENBURY: Back on the issue of the carbon neutrality we were talking about before, are you able to provide the committee with any information on how Sydney City Council actually reached their point of carbon neutrality?

Mr Corbell: Yes, we can do that. It is all publicly available. Sydney City Council have actually published a large number of documents publicly in this regard. What I would say about Sydney City Council is that, whilst they are the council for the city of Sydney, No 1, they do not have a huge number of residents and, No 2, they do not run the sorts of operations that the ACT government runs. They do not run hospitals; they do not run schools; they do not run public transport; they do not have housing trust homes; they do not do any of those sorts of things.

I think their task is of a different magnitude. I just put that qualifier in. It is easier, I think, for the smaller councils. Whilst they are the city of Sydney, they are still a small council in the scheme of things and their operations are of a different nature. But we can certainly provide you with that information.

MR RATTENBURY: In terms of measuring data, I am interested in appendix A of your submission. It goes to some length on completion. It highlights the completion of a large number of items from the weathering the change strategy. Particularly on page 40 there are various progress reports for completed actions. I note that only one of those that I can see actually records the amount of greenhouse gases saved. I wonder what measures the government is taking to measure the efficacy of its programs, given the lack of data in this table.

Mr Corbell: Yes, sure. It would be fair to say, I think, that a number of those other measures do have analysis associated with them that can demonstrate the reductions that are achieved in relation to their implementation. For example, we know what the reduction will be in relation to greenhouse gas emissions associated with natural gas buses versus the previous fleet. We will be able to demonstrate that.

Equally, we know what reductions have been achieved in relation to take-up of green power, because there has been a significant increase in the number of people taking up green power. We can demonstrate reductions of emissions in that regard as well.

Some of them are less tangible. That is true. Certainly, differential stamp duty for low-emission vehicles is more difficult to quantify because it depends on exactly what sort of vehicle was being replaced and how long it was driven for and so on. It is more complex. But I think it is important that we have more detailed inventories of our emissions and how we are travelling in terms of reduction or increase in emissions. And that is the work the government is doing at the moment.

MR RATTENBURY: For example, with the switch your thinking program, which the government is funding in the budget, are there any targets attached to that as to kilograms or tonnes of CO₂ emissions to be saved as a result of that expenditure?

Mr Corbell: There will be measures put in place to measure performance for that program. That program has just been funded and the department is now developing the parameters and the detail of implementation. And obviously we will need to build in measures as part of being able to monitor and demonstrate performance. That is the intention.

MR RATTENBURY: Thanks.

Mr Corbell: I should say that it is more than a website.

MR RATTENBURY: For \$19 million, we trust so.

THE CHAIR: Thank you for clarifying that, Minister.

Mr Corbell: \$19 million is a lot for a website. I can assure you that we are not spending \$19 million on a website. The web presence is important to be able to access all that information at one point but the bulk of the money goes—

THE CHAIR: But it is also going to include some very practical assistance.

Mr Corbell: A large amount of money goes actually on the cost of rebates, subsidies to households and the installation of the measures. That is why it costs so much money.

THE CHAIR: Of course, there are those who will be employed to assist people to find their way through the maze of—

Mr Corbell: Yes, there is additional staff and ongoing staff that need to be funded as well.

THE CHAIR: I want to go back to the link between what we are doing here in the ACT and what is going on at that federal level—COAG, for instance. I think we had touched on some of the working groups, of which there are a number. I am sure there is no-one in Australia who knows exactly how many there are or who they are. But we have obviously touched on the one that is dealing with things like building codes and

so forth. There have been some measures that have been announced and some changes made.

I want to follow up on the working group on climate change and water who were looking at working on a document of shared understanding and looking at that issue of the complementary measures between federal and the ACT, looking at how that all works and providing some information. Are you able to shed any light on where that is up to or discuss any of that work?

Mr Butt: That is the one group that we are not working on in the area that you have mentioned.

MR CORBELL: Could you outline our COAG involvement?

Mr Butt: On our COAG involvement, we are involved in the climate change and water group. We primarily have been involved in energy efficiency, the renewable energy and the water areas. The document of shared understanding, I am aware of. I cannot go any further than that. It has been another agency that dealt with that one.

Ms Farnsworth: I could expand.

THE CHAIR: Another agency within the ACT, could I just clarify?

Mr Butt: Yes.

THE CHAIR: Okay, thank you.

Ms Farnsworth: Somewhat outside of the COAG sphere, we have been working with the commonwealth department on aiming for complementarity of measures. As you are aware, they just made some further announcements in their budget last night and we will be conscious as we continue to roll out and design our switch your thinking program to ensure that through both jurisdictions we get the biggest bang for the buck across the community. So we have been working at agency level outside of the COAG sphere anyway with that specific objective in mind.

THE CHAIR: Am I able to just clarify which ACT agency is involved in that?

Mr Butt: Chief Minister's Department.

Mr Corbell: The Chief Minister's Department. Chief Minister's would take carriage of some of those activities simply because they represent a whole-of-government position. Some of those working groups deal with whole-of-government positions rather than specific agency expertise.

The committee adjourned from 3.11 to 3.31 pm.

Mr Corbell: Madam Chair, before the break we were talking about COAG working groups and the different working groups that exist. I am happy to provide to the committee on notice a summary of the different working groups that the territory is involved in and represented in and the work that they are doing. We will provide a

summary to the committee that will perhaps help clarify the range of COAG working groups that exist in this area.

THE CHAIR: Thank you. That would be helpful. I wanted to start with a question. A few weeks ago, Dr Richard Denniss gave some evidence to the committee. He was talking about the expected impacts that the CPRS would have on things like raising energy costs and so forth and how that, of course, would be passed on and have an impact on the ACT budget. He was talking first in reference to community organisations who had managed to put a case to the federal government around getting some sort of relief around those increased costs that were going to happen.

I think it was Mr Seselja who put the question to him asking him how much he estimated it would cost to the ACT government. He estimated around \$26 million. Mr Seselja, I think it was you that went on to ask him should the ACT government be putting a case or had he heard of this happening. He said no, he had not, and he was quite perplexed as to why state and territory governments were not taking up this particular issue with the commonwealth. Do you have any comment to make on that?

Mr Corbell: I have certainly heard that view from Dr Denniss and discussed the matter with him previously. I think the point is well made, but the possibilities of it being agreed to by the commonwealth I think are extremely small. So I think, whilst in principle he is right, many other sectors are being compensated for the increased costs of energy and the implementation of CPRS more generally. There is an argument for governments to be compensated. I think, however, that the suggestion would be given short shrift by the commonwealth.

THE CHAIR: Okay.

Mr Corbell: Now that the committee has raised that, I will certainly give further consideration to whether it is worth raising with the commonwealth, but I just have to say that I think the chances of the commonwealth agreeing are extremely small, to be quite realistic about the chances.

THE CHAIR: Mr Seselja.

MR SESELJA: Thank you, Chair. Minister, in the submission it talks about the government giving consideration to the recommendations of this committee in relation to targets.

One of the challenges, certainly for me personally—I cannot speak for other members of the committee—has been that we have heard a lot of evidence in relation to the need to act. We have heard a lot of evidence about people’s desire for a strong target, but we have not heard much definitive evidence about what a particular target would mean, how it would play out practically, what kind of impacts it would have to, say, a 40 per cent target, a 30 per cent target—whatever it might be.

Given that we have this Department of Climate Change, I know there is a bit of chicken and egg here in terms of us making a recommendation and the government coming back, but the Department of Climate Change is presumably looking at what would be the impacts of various targets. I would be interested certainly personally—I

don't know whether other committee members would be—to hear from you about what the various medium-term targets would mean economically and socially—what kind of changes would be needed to reach various targets. To be frank, we are a little in the dark in the sense of the practicalities of some of these targets and what they would mean.

Mr Corbell: The government has done some analysis in relation to the targets that exist already in weathering the change. I can certainly look at what advice I can provide to you on the background papers and work that was involved in doing the assessment of the targets that are in weathering the change. That will hopefully perhaps give the committee some indication of the sorts of issues that are at play and the relative costs.

In terms of targets moving forward, I think the government's view is that the Greens and the Liberal Party both put forward a clear view as to what the target should be at the last election. You both said that it should be at X level, based on X year and you, Mr Seselja, have even introduced legislation to that extent. So our view is that, well, the other parties in the Assembly have a view. We have got this committee process. We will wait and see what the committee says because, presumably, you came to a conclusion about your targets based on some evidence and I look forward to seeing what you recommend.

MR SESELJA: Yes, but that does not quite answer the question, minister. The committee is looking at this issue and we have got this new department that has been set up to look at some of these issues. We certainly based our policies on evidence, but this committee is undertaking a separate process and we could be considering potentially a 40 per cent target, certainly a target that the Liberal Party did not take forward. In many ways, that is irrelevant; so to go those extra steps, any evidence, any research which has been done by the department I think would be certainly very useful in order for us to determine what is a reasonable target, in terms of something that can be reached and also what is financially responsible.

Mr Corbell: Sure. As I say, the government can certainly provide you with information relating to the assessments that were done for the targets that are outlined in weathering the change and what the implications are, the costs and so on, and the impact on the economy more broadly. But I can also say to you quite clearly that the government has not undertaken any detailed assessment of possible targets at this point in time. In fact, we intend to do so once we understand what the considered view of this committee is in relation to what it feels is an appropriate target. We will then do analysis on that recommendation and obviously on a range of other options and then present the government's position.

THE CHAIR: I would like to go back to page 12 of the submission, where there is an emissions trajectory in figure 1. I was wondering whether this increase in emissions takes into account the population growth in the ACT and what sort of level of population growth is it based on.

Mr Corbell: That is a good question. You mean in terms of the trend line?

THE CHAIR: Yes.

Mr Corbell: I do not know, but I can certainly find out for you.

THE CHAIR: Okay, thank you.

Mr Corbell: I would assume that there is a base case that they are working from, but I do not have the detail of the parameters that have been used in that, but we can certainly provide them to you. Mr Butt makes a point, and we will confirm this with the committee. The advice I have is that it would appear just to be a straight correlation of the existing levels of emissions at points in time and then just trending them out; so it looks at the population at that point in time.

This is exactly why the government has commissioned work on more detailed inventories, so that we have a much better understanding of our emissions. I have been quite up front with you in saying this is an area of policy where we need to improve our capacity. That is one of the reasons this department has been established and the ministry established. The government has now commissioned much more detailed assessments to allow us to have a better evidence base.

THE CHAIR: Also the submission talks about Australia having a competitive advantage with a highly educated population. Of course, the ACT features highly on that. I am wondering what the ACT government intends to do around harnessing the engagement that you could be doing with the university sector in that next climate change plan that you are talking about, the undertakings that might be useful to really build and develop the advantage of having these researchers and academics in town. We have touched on today the climate change business and academic roundtable, which obviously is one place where that sort of exchange can go on. But I would suspect that there are a lot of other ways to engage, particularly, minister, when we are talking about looking also at maybe establishing green industries or that sort of economic activity.

Mr Corbell: Yes. I think there are two things there. The first is just drawing on the general base of academic knowledge, intellectual knowledge that is available because of the institutions that are here in the city. My department does have very well developed links with a whole range of academics, particularly from the ANU, in a whole range of policy area—particularly water and, to a lesser degree, energy. That is improving, certainly in nature conservation and a range of other areas. For example, organisations such as the Fenner School of Environment and Society, I think it is, at the ANU is particularly a school where we have very close—

THE CHAIR: Sorry, minister. I think Mr Butt still has—

Mr Butt: It is an inquiry.

Mr Corbell: That is right. So we have strong links with those academic institutions and also with the University of Canberra, in the work that they do on water, for example. Those networks are well established. Your question, it seems to me, is really leading towards the issue of the spin-off of intellectual research, academic research, into commercialisation, industry development and so on. The ways to harness that are by having the right policy settings in place that encourage people to take advantage of

opportunities that the government is putting forward. I refer, for example, to the solar farm initiative. We know that there will almost certainly be local expressions of interest, including from companies associated with research at our universities in relation to that proposal. That is a very good way of connecting the research with implementation and economic activity. That is one good example.

Other examples are things such as the work that is occurring on energy policy more broadly. We know that, if we have certain policy triggers around things such as decentralising of energy supply, district or individual building based technologies, that has advantages for certain industries and certain research here in the territory. I think the real way that we galvanise it is not necessarily through direct subsidy or direct projects, although there is a role for that, but in fact through the broader policy settings about how we are going to build this carbon-neutral, zero emissions future for our city. What are the energy policies going to be that create that and how do those institutions get opportunities out of that?

It is the same with water, even though it is not specifically related to your inquiry. How do we have good water policies that provide those opportunities? How do we have good waste policies that provide those opportunities? I think the most powerful tool the government has got is not subsidies or paying for particular things but putting in place the regulatory measures and the policy measures that mean that certain technologies have to be adopted, which will be an inherent strength of particular parts of our research institutions. That is the way I like to view it.

I intend also to make sure that we enhance our linkages with organisations such as the Australian Solar Institute at ANU, which Professor Blakers leads. The Fenner school is doing some interesting work on water policy and on environment sustainability policy more generally. So there are some real opportunities there that we will be engaging further in.

MS PORTER: In your submission you talk about increasing the ACT's reliance on renewable energy sources. We have talked about solar with a number of witnesses as we have gone forward and there has been mention of other types of renewable energy sources, wind being one that will not be effected in the ACT. Do you see that solar is going to be probably the major route that we are going to go down in that regard, as far as renewable energy is concerned, or do you think there may be other things that we can use as well?

Mr Corbell: I think solar will ultimately be the dominant technology in terms of energy production in Australia and globally. But it will not be in the short to medium term. We have just seen the commonwealth announce nearly \$2 billion for the establishment of very large-scale solar production plants, which is a fantastic initiative. These plants will be the biggest ever built in the world, which is fantastic. They will be connected to the grid, so we will all be able to access that power.

For the ACT, there will be a range of technologies that we will need to draw on. Solar will be one of those, but our capacity to host large-scale solar plants is quite limited within the territory itself. At most, we will have maybe one or two large-scale facilities, from what I can tell. The technology may change and different models of generation may come along, but that is as best I can tell at the moment.

There will be a range of other technologies that we can also draw on. For example, there will be opportunities for cogeneration. Opportunities for dealing with waste and creating energy as a result I think are particularly interesting for the ACT in helping us to deal with our waste issues as well as our energy needs. There are a range of technologies, gasification technologies and so on, that allow us to deal with two problems—waste, and to create energy as a result. There is natural gas itself and gas-fired power generation, which I note is one of the technologies that the city of Sydney is proposing long term in their plan—to move towards gas-fired turbines as a transition technology.

There is certainly the scope for gas-fired power in the ACT. It is not renewable but it is cleaner. There are some opportunities for that to be used in conjunction with renewable technologies, particularly in dealing with inadequacies that currently exist in terms of peaking and so on for certain types of renewable energy. Those are the types of technologies that the focus will be on in our energy policy. Solar, yes; other forms of renewable energy which are suited to the city; as well as transition technologies that help us to reduce emissions and make the transition to clean renewable energy.

MR RATTENBURY: On that question, minister, I note that in the submission you do not really comment on geothermal as a potential technology for electricity generation, but we have heard from Actew that there may well be potential for geothermal to play a role in the ACT through heat transfer. It can be used for heating and cooling. Is the government investigating possibilities as part of the energy strategy for the role of that kind of geothermal technology?

Mr Corbell: We are now. I was not actually aware that Actew had done work on that until I had seen their submission, but I saw that in their submission the other day and I am drawing my department's attention to that and we will make the connection with Actew about that.

MR RATTENBURY: I think there is a common sort of sense that there is geothermal—that is, hot rocks out of the ground—but we have got the AGSO building out at Symonston which is using the more appropriate technology for the ACT region. I think we have got an opportunity to use it.

Mr Corbell: Yes. I think there are some opportunities to allow, for example, existing mechanisms, such as the feed-in tariff and others, to connect up with some of these technologies. Obviously, they need to supply power to the grid in some way, so geothermal may or may not be relevant. I do not fully understand the technology but it seems it is not strictly, as I understand it, a power supply mechanism. But there are other technologies, gasification technologies for example, that do generate energy, do generate power, and that is something which should be considered as part of a widening of the feed-in tariff regime. That is something that the government is looking at right now as we develop stage 2 of the feed-in tariff.

MR RATTENBURY: I was interested in your comments about gas as a transition technology. What sort of payback period does the government work on for investment in gas infrastructure?

Mr Corbell: We do not own gas infrastructure.

MR RATTENBURY: No, but clearly, in taking it on board as part of your perceived transition strategy, you must have some concept of how long the payback period is for private investors in gas infrastructure.

Mr Corbell: We would have a general understanding of that, but that is really a commercial decision for the owners of infrastructure. The government's interest is more in the relative efficiency of the technology compared to coal-fired power generation. I guess that is why we see it as an option that must be kept on the table. It is cleaner than coal-fired generation and we have to consider that. I understand where your question is going because you are saying that if Actew build a gas-fired power station somewhere, they are not really going to be interested in other technologies because they have sunk all of this investment into a gas-fired power station.

MR RATTENBURY: My question is, in fact, worse than that. Companies like Actew work to a 40-year payback period. If they build a gas-fired power station next year, that gas-fired power station will run to 2050, by which time we are talking about, even under your old target, a 60 per cent emissions reduction in the ACT, which, for a 500-megawatt gas-fired power station, would essentially involve shutting it down if we were to reach that target. Actew will demand compensation for shutting down that gas-fired power station because they are working to a 40-year payback.

Mr Corbell: I think this comes back to issues about how the target operates. I guess this is one of the issues the committee needs to consider: how are targets enforced? It would be ActewAGL, not Actew—

MR RATTENBURY: Yes.

Mr Corbell: but if ActewAGL were to build a gas-fired power station, they would be doing so on the basis that they are supplying power to the grid, to the national electricity market. So they will be operating in that national regulatory framework and they will make decisions about whether or not it is appropriate to invest in that technology based on how the national electricity market operates and what the federal government, or all governments, agree are the national rules. It is a matter of all jurisdictions agreeing on what are the rules and the objectives for the national electricity market. So they will make their decisions on that basis.

But your question raises the point, which is why I mentioned it, about how a target works in practice here in the ACT. If it is an enforceable target, how is it enforced and what does it mean in terms of those technologies? This is the issue that other jurisdictions in Australia are still coming to grips with. They have legislated targets but there is no enforcement mechanism.

MR RATTENBURY: The discussion about that on page 34 of your submission is very interesting.

Mr Corbell: This is one of the challenges for us. We can have a legislated target, by all means, but what does it actually mean? Okay, it is in an act of the Assembly, but

what does it actually mean? I think that is one of the big structural issues for the government, for the committee and for the Assembly to come to grips with. I do not have a clear answer on that, but if you say it is enforceable and you require facilities to shut down, that raises some interesting legal questions about what could possibly be viewed as acquisition of property and so on. So we need to think about those issues.

MR RATTENBURY: Yes, it is a question also perhaps of whether we want them to set up in the first place. I interrupted you before; I found your discussion about this on page 34 of your submission very interesting where you talk about some of the challenges and then you note that “the establishment of a non-binding target would effectively avoid these considerations”. I found that to be a very interesting observation. You basically said, “We can put a target in place but then we won’t enforce it so we don’t have to worry.”

Mr Corbell: I think it comes down to what the purpose of the target is. There are ways of achieving emissions reductions through a whole range of regulatory mechanisms. You can require that all new homes must meet certain levels of performance in terms of energy efficiency. At a national level, for example, you can require that cars achieve a certain level of reduction of emissions. You can require certain levels of energy to be from certain types of renewable energy, particular percentages and so on. So the target itself is not the only tool available to enforce compliance. There is a whole range of mechanisms that sit in different pieces of legislation and in the ambit of different government agencies to enforce compliance—building control, purchasing policies of government.

MR RATTENBURY: Renewable energy targets.

Mr Corbell: Renewable energy targets, which are national mechanisms. There are all these sorts of things that exist. The target itself may not need to be technically enforceable to still achieve a good outcome. That is the point the government is trying to make in its submission. It is not saying, “Let’s have a target and work out ways of getting around it.” It is saying, “Well, no, there’s actually a whole range of ways of enforcing compliance rather than saying it has to be through the target legislation itself.” Quite frankly, this is a multifaceted, multiportfolio policy area and you have to use all of those different mechanisms that are available in all those different portfolios and in all the different regulatory elements of government activity.

MR SESELJA: I was interested in your comment before in relation to Actew. What role is Actew having in development of the energy policy?

Mr Corbell: Actew has no role in the development of the energy policy but—

MR SESELJA: Not even in terms of advice?

Mr Corbell: the point I was making, Mr Seselja, is that they have flagged in their submission that they have done some research on particular types of technologies, and I will be asking my department to talk with Actew about that research and see if it can be made available to us.

MR SESELJA: So there have not been previous discussions with Actew about what

they are doing?

Mr Corbell: Not that I am aware of, no.

THE CHAIR: The committee also has got on to Geoscience Australia, to get some information on the building out at Symonston as well, as part of our inquiries. I have a question around regional development and how we sit within our region regarding what is going on. But I want to move on to the whole issue of carbon offsets because that is obviously an important part of what you are putting forward here in your submission. What has been going on at a regional level with policy development in climate change as far as mitigation and adaptation are concerned? How are we working with our regional partners?

Mr Corbell: The Commissioner for Sustainability and the Environment has been fostering a dialogue with regional governments—local governments in the surrounding region—about sustainability issues more generally; and climate change is obviously a key consideration. In the last six months, she has been fostering some workshops with regional governments. Government has been represented in those discussions at an officer level.

I think it would be fair to say that achieving regional coordination is extremely difficult and slow. That has certainly been the experience in a whole range of policy areas. It has been in relation to land use, planning, transport and managing population growth and settlement patterns. It is a similar issue in relation to energy and climate change more generally.

There has not been any explicit engagement by the ACT government itself with the region on matters outside the normal issues around growth, land use, population and transport. It is an obvious area for further work, but I really feel that the priority for the territory in the first instance should be that we need to get our own house in order much more than we have. That is the main focus of my department at the moment.

THE CHAIR: If we could move on to the issue of carbon offsets, we have spoken about the Actew submission around the geothermal issues that they put in their submission. The other thing they had that was quite interesting in their submission was quite well developed, good criteria around offsets. They were saying that, if we source offsets, we are not going to be purchasing any foreign offsets, there is a preference for local offset programs, they would require permanence and there has to be additionality. Basically, the abatement must not otherwise have occurred; it had to be something new.

Mr Corbell: Yes.

THE CHAIR: I was just wondering whether, in developing the ACT energy policy, the government has given thought to the criteria it might establish in regard to offsets. Has there been work done in that area around your criteria?

Mr Corbell: There is a need for criteria, and I think there is an emerging consensus around what are legitimate forms of offset. The criteria that Actew cite are the ones that are commonly recognised now as the criteria for determining legitimate forms of

offset. The energy policy itself does not intend to look at offsets particularly, because it is more about energy supply and energy efficiency whereas offsets are more about greenhouse gas emission mitigation—dealing with the levels of emissions and controlling them.

What the government has done is develop quite a large body of work in relation to sequestration possibilities in the territory and to what extent our urban area and vegetation outside the urban area contribute to the sequestration of greenhouse gases. That study has just been completed and it provides a very good analysis of the relative merit of the different vegetation types in the ACT and how they contribute to locking up carbon.

I will be making that report public shortly and outlining what the government will be doing next in relation to that. But that is a body of work that has just been completed with the ANU—coming back to your earlier question about the engagement of academic expertise. That is going to prove very valuable for us in understanding where we achieve the greatest levels of sequestration, for example, through vegetation in the ACT. The results are quite surprising.

THE CHAIR: I am glad to see that you raise that report, because it was raised with the committee during the annual report hearings.

Mr Corbell: Yes. Mrs Dunne raised the question. I remember.

THE CHAIR: I am pleased to hear that. We can get a copy of that report?

Mr Corbell: Yes. I can make that available to the committee before your report.

THE CHAIR: Thank you.

MR RATTENBURY: Do those sequestration studies take account of the impact of the 2003 bushfires?

Mr Corbell: Yes, they do. In fact, they were done post 2003. They have only been completed in the last year. They have taken full regard to the change in the vegetation type as a result of the fires.

MR RATTENBURY: That will be very interesting.

Mr Corbell: Yes, it is.

THE CHAIR: Were there other questions from people around offsets?

MR RATTENBURY: Not on offsets, no.

THE CHAIR: Okay.

Mr Corbell: Just to fully answer your question, I should say where that sits in the policy sense. It sits in action plan 2 of weathering the change and ultimately an updating of weathering the change when we get to that point in time. That is where

those sorts of policy considerations will be dealt with.

THE CHAIR: We have touched on the renewable energy target this afternoon, but I just wanted to check to see if the government could foresee any problems if the ACT was to set a higher renewable energy target that was above the national target that was set.

Mr Corbell: I pause in answering that because I am just trying to get my head around the relationship between the CPRS and increases in the amount of renewable energy. I might refer to Mr Butt. He may be in a better position to discuss what the implications are.

Mr Butt: I think the implication comes back to the cost and efficiency, the impact on the community and then all of the various aspects that that carries through, such as equity issues. The commonwealth is looking at a 20 per cent renewable energy target. If we went for a higher target than the commonwealth selects—if we went, for example, to 30 per cent—then it would become a policy question of what are the implications of that as well as how it is going to be delivered. It will raise the price of energy. It will raise the cost of electricity. That is not necessarily a bad thing of itself, but you then need to work that through, and the government needs to take a whole-of-government policy decision about where it is going with that.

THE CHAIR: Thank you. I guess there is also a connection there. We know that, regardless of whatever, the costs of energy are going to rise; it is just a matter of fact or a fact of life. There is a connection there with the sort of energy efficiency programs that have been rolling out. We have seen quite a large injection, also, under the economic stimulus packages rollout through public housing and so on and also the measures announced through the ACT budget and so on. Progress nationally on energy efficiency has been slow, and trying to get sign-on from all the states is likely to continue to be slow. Is the ACT expecting to go ahead of the national pace around how we are going to be moving forward on energy efficiency measures?

Mr Corbell: In implementing the commonwealth funding?

THE CHAIR: Yes.

Mr Corbell: The commonwealth funding, as I understand it, in relation to energy efficiency, is largely in the form of direct assistance from the commonwealth to householders—for people who own their own home. There is no direct role for the ACT government in that, because it is a direct subsidy program operated by the commonwealth and provided to householders for insulation. That is the way I understand it operates. The energy efficiency measures that are funded through the stimulus package that relate to rental properties are, as I understand it, in the public housing sector. In relation to implementation of funding for the public housing sector, yes, we are well advanced in that in our negotiations with the commonwealth on those matters. I do not think that we will have any problem meeting the time frames in terms of rollout of those commonwealth funds.

THE CHAIR: And there will be a continued commitment from the ACT government, outside those commonwealth funds, to continue a range of different programs or

whatever—whether it be continuing to upgrade public housing or continuing to provide some sort of advice or support service for people who want to do it with their homes?

Mr Corbell: The commonwealth funding for public housing mostly relates to new development.

THE CHAIR: It does, and the ACT had its own program in place before the commonwealth program.

Mr Corbell: Yes. In relation to new development, I understand the federal housing minister is saying that she expects a high level of energy efficiency in those new dwellings, and they are imposing conditions as a consequence of funding there. Because of that, we will get good-quality public housing in terms of energy and water performance. ACT Housing runs its own program of retrofitting and improving the energy efficiency of dwellings. That is targeted at people who are clearly demonstrating problems with paying their electricity bills and paying their other bills to Housing. There is a dedicated and ongoing program of providing assistance to those households—improving the energy and water performance of those dwellings and reducing their costs. Obviously, that has good equity outcomes as well as good energy efficiency and water efficiency outcomes. That program is continuing.

The switch your thinking program will again allow us to provide a range of rebates and assistance to households on water efficiency and energy efficiency. They are for private households, not the public sector. As Ms Farnsworth has indicated, the focus there is around complementarity with what the commonwealth is providing. If the commonwealth is providing rebates and assistance in relation to insulation, we will do things that complement that. It might be draught-sealing, dealing with issues around reducing heat loss through windows and those sorts of examples. That would be the approach around switch your thinking—complementarity with commonwealth programs.

I know that there was a question raised about whether or not the commonwealth's insulation rebate would be made available to Canberra households or not, given that they are saying that you had to have less than a 0.5 rating in insulation, I think, to be eligible. Basically, it was targeted at homes with no insulation. I doubt that there are many Canberra homes that have absolutely no insulation.

THE CHAIR: I think I have lived in a few of them.

Mr Corbell: By that, I mean that even a bit of foil in the ceiling counts as insulation, I think. This is a matter I am wanting to pursue further with the commonwealth, to make sure that homes that have less than the required level of insulation are also eligible. That is important in our climate.

THE CHAIR: That is right. Obviously, there has to be some connection to the climate you are living in, I would have thought. The other part of energy efficiency was around appliances and also incandescent lighting. I was just wondering how we are going around improving that or enhancing the minimum performance standard for appliances and also phasing out incandescent lighting.

Mr Corbell: In relation to performance standards for appliances, that is a matter that is being dealt with through COAG processes. Mr Butt has been our representative on those matters, so I will defer to him.

Mr Butt: Minister, the ACT's role here is actually carried out primarily through the Ministerial Council on Energy and the energy efficiency group under that. The ministerial council has, in my view, been effective and is increasing its focus on the MEPS area. It is identified as an area of getting fairly low cost, real gain in energy performance. It has taken initiatives such as a decision for one-watt standby in electrical items, and I do believe it was the Chief Minister a couple of years ago who was the first sign up to this. It was identified that that, as a program, if it had full application across the economy, would deliver something like 10 per cent energy efficiency. That is all about of the items sitting in your house or on your desk—the computer, et cetera—just being made a one-watt standby.

There is a quite aggressive, and increasingly aggressive, program of energy efficiency under MEPS which will be coming forward through the ministerial council. Indeed, I signed off on something the other day which went down to the air-conditioning units that are used in computer centres. They identified all the greenhouse gas savings and gaining better efficiency out of those quite specialised pieces of equipment.

The other thing under MEPS is that they have just agreed to revamp the way MEPS is measured. It almost goes back to the 1990 figure. They are changing the baseline of how this now works. Appliances that you bought up to recently would have had a MEPS rating of up to six for energy efficiency; the new ones coming out will start again with a new number, so there will have been a step change. That is simply because industry is responding to the pressure that is out there for this sort of thing.

Finally, there is also some work being done through COAG in one of the working groups. And there is discussion going on about the most effective way organisationally to carry out energy efficiency programs with appliances—whether it stays with the ministerial council or moves somewhere else. That is a fairly high-level decision that is yet to be made.

MR RATTENBURY: We of course had the ACT budget last week. Was there any analysis of what impact the ACT budget would have on the ACT's greenhouse emissions?

Mr Corbell: No. No, there is not—not at this point in time. As you would know, the issue of greenhouse impact statements is a matter that the government has signed up to as a result of its agreement with you. That work is being progressed by the Chief Minister's Department as a whole-of-government issue. Obviously, that is a point we would like to get to in relation to our budgets, but no, not for the most recent budget.

MR RATTENBURY: Okay. I want to ask about the community service obligation which is referred to in your submission. Currently, it is at a level of \$194.87 or something like that.

Mr Corbell: Yes.

MR RATTENBURY: Do the government anticipate that they would review this with a view to increasing the rate, perhaps directly linked to the increasing cost of energy?

Mr Corbell: We will need to review the community service obligation. It has not changed for a number of years now. It is necessary that we look at the future operation of the community service obligation. In particular, I think it is desirable that the government give consideration to an indexed mechanism so that, as electricity prices on average rise, so does the CSO. That has not been the way the CSO has operated to date. It is funded at a fixed point in time and there is no automatic adjustment to it. It is necessary that we review that.

The CSO is administered by the Department of Disability, Housing and Community Services but, given the very strong linkages between the CSO and energy policy, which is the responsibility of my department, we are looking at closer cooperation between the two agencies in developing policy options for review of the CSO. That is a body of work I would like to see progressed over the next 12 months to deal with the issue of how the CSO operates. It is also a matter that Commissioner Baxter from the ICRC has raised in his most recent determination on electricity prices and he has raised it with me directly as well. So short answer is yes, it will need to be revised.

THE CHAIR: Minister, you are here giving an across or an all-of-government submission?

Mr Corbell: As best I can, yes.

THE CHAIR: As best you can. I just wanted to touch on the sustainability in schools program. I am not sure if you will be able to answer these, so it may be they will be taken on notice. Are you able to give some detail on the monitoring and evaluation of progress on this program? What professional development is being provided for teachers? What has been raised with us through a submission has been the need for a dedicated position in the ACT Department of Education and Training to promote sustainability in schools in order to support the many teachers across the ACT who are trying to put this into the curriculum, embed it in the curriculum and so on. Also, will there be increased funding for green vocational education and training? It is quite a list of questions and I am not sure whether you will be able to answer all of them.

Mr Corbell: I will give it a shot. The government administers the AuSSI program—the Australian sustainable schools initiative—which is a joint funded program between the commonwealth and the ACT. That program encourages schools and provides support and some funding to schools to implement sustainable technologies and practices in their schools. That is supported by a dedicated team in my department. There is a dedicated resource that works with teachers and schools to give them information, assistance, guidance and direction on how to implement sustainability measures in their school. It would be wrong to say that there is no dedicated resource assisting schools in this regard. There is, and there are a number of people in my department who do that work full time. I saw that in the parents and citizens council submission, I think it was, they raised this issue.

In terms of professional development for teachers per se and whether there should be

a curriculum development resource within the department to deal with this matter, that is not really something I can comment on. You would need to direct that to the department of education or we can take that on notice and provide it to you. I would need to get their advice. It would be wrong to say that there is no direct assistance provided to schools in terms of advice and information on practice, procedure and ways of developing a sustainability curriculum in schools because there is, mostly through the AuSSI program.

MS PORTER: Interestingly, the P&C submission also raises the issue of the importance of schools establishing baseline data so that they can report too. That was an interesting point that I thought they made in that submission.

Mr Corbell: This matter is dealt with in the government's submission, as I think you will see in our update. Action 11 of weathering the change is to assist schools to become carbon neutral. Ninety-six of the 144 ACT schools are involved in the AuSSI program that I mentioned earlier. We have the best take-up rate of any jurisdiction in the country. Eight of those schools have undertaken energy audits. Thirty have environmental management plans in place as a result of the AuSSI initiative and those plans address energy consumption through the curriculum and school operations.

The AuSSI team in the ACT has engaged the home energy advice team—or the HEAT team, as it is known—to conduct energy audits in schools. That consumption is recorded on a central database. Schools receive accreditation based on their reduction of energy consumption and we have seen some schools record a 25 per cent reduction in their energy since their audit. We have quite a detailed program to assist schools in that regard.

THE CHAIR: Is that the mechanism that is used for monitoring and reporting against—improvements, evaluating?

Mr Corbell: Yes. That is used mostly by the AuSSI program itself to reward performance and to demonstrate performance back to the commonwealth as well—that we are achieving results in this program. It is a monitoring and performance measure.

MS PORTER: Of course, these children are great ambassadors when they go home, so it has a flow-on effect.

Mr Corbell: They certainly are.

MS PORTER: You have experienced this, minister?

Mr Corbell: I did. Yesterday I had the pleasure of meeting Master Thomas Powles from Chapman primary school.

MS PORTER: His poem was in the paper today, I noticed.

Mr Corbell: He is 10 and he was the Earth Hour ambassador for this year for his poem that he wrote about Earth Hour. He was a very bright, engaging young man.

MR RATTENBURY: Speaking of the need for ambassadors and picking up on your earlier comments, Ms Porter, about the need to get fewer people travelling by car by themselves, I went to a lunch at the CIT at lunchtime, and one of our colleagues from the ACT Assembly drove there—from the Assembly to the CIT. I think as the Assembly we have a—

MS PORTER: Just down there, you mean?

MR RATTENBURY: Yes, less than a kilometre from this building. We have a little bit of work ourselves to do as ambassadors for a better future.

Mr Corbell: They may have been going somewhere else afterwards.

MR RATTENBURY: No, the member drove back. As I walked back I saw the member driving back.

Mr Corbell: That is very poor.

MR RATTENBURY: We have work to do ourselves. I wanted to come to greenhouse accounting, if I could.

THE CHAIR: Yes, Mr Rattenbury.

MR RATTENBURY: The submission points out that the Kyoto accounting method only identified emissions at the point of source, so the ACT has only calculated transport emissions and not those that we use in terms of electricity consumption. I think that is reasonably well understood. Do you know whether there are any implications due to the fact that our electricity emissions are not accounted for under the Kyoto rules in terms of how the CPRS might operate?

Mr Corbell: No, I do not, off the top of my head, I am sorry, but I can seek some advice on that.

MR RATTENBURY: Thank you. That would be very interesting in terms of considering how we account for and credit the various emissions that we have and the implications of that at a national level in the context of our internal efforts.

Mr Corbell: How do you think the matter should be addressed—if I can ask you that question?

MR RATTENBURY: This is an interesting discussion to have because we have an issue, I think, in the ACT of embedded energy as well as being a relatively high-consuming jurisdiction. We are responsible for the importation of a large number of greenhouse emissions, which other jurisdictions are currently accounted for. The question is: how do we tackle those? I do not have a good answer at the moment either. I was wondering whether the department, through your discussions with the commonwealth, had any insights into some of those issues.

Mr Corbell: Not that I am aware of, but I will seek some advice.

MR RATTENBURY: Thank you.

THE CHAIR: Minister, I am hoping to pop one more question in, in the next minute, and then hoping that we will be able to send any other questions through to you as questions on notice.

Mr Corbell: Yes, that would be fine.

THE CHAIR: I understand estimates are coming up and that is a very busy time of year. I do not think we have a huge pile of questions, which you may well get from the estimates committee, but because of our time lines we would appreciate it if you could get them back within 10 working days. As I say, we will not be flooding you with questions on notice.

Mr Corbell: We will endeavour to do that.

THE CHAIR: I just had one and it came up during a presentation when evidence, I guess, was given by ACTPLA. It was around the fact that there is a connection to reducing greenhouse gas emissions and so on by increasing the density of our city in certain places. Do you know of any work that is being done on reviewing the land zones or the land use zones, particularly along transport routes and corridors, with a view to increasing our urban density?

Mr Corbell: There is some information from ACTPLA included in the attachments to the government's submission that deal with green building initiatives, but your question relates to land use transport planning. My understanding is that there is, that ACTPLA are looking at the existing—I am just trying to remember its name now; it has been a while. The public transport corridors that exist between our town centres and Civic are well established and identified. There has been quite a bit of planning work over the last six to a dozen years on the sorts of densities that are possible along those corridors.

The existing statutory controls are those outlined in the territory plan, but the planning authority will be looking at revisions to the territory plan to promote improved levels of density, higher levels of density along those public transport corridors, where appropriate. Obviously, it is a fairly complex task as you need a site specific approach but, nevertheless, I think ACTPLA recognise that there are opportunities to increase densities at key strategic locations along those corridors. That was certainly work that was commenced—I am aware from when I was minister—in relation to the Belconnen to City bus-way project and the densities that may be possible at some locations along that corridor as well.

MS PORTER: I think the Property Council also makes reference to the potential for more brown fields development to increase density in some—

Mr Corbell: It is important to stress that there are some interesting debates about the relative energy efficiency of dwellings as densities increase and there are a range of views about this. I do not think it should necessarily be viewed as an absolute.

MS PORTER: No.

Mr Corbell: The higher a building goes, the more energy it needs to operate, particularly in terms of lifts and reticulation of water and waste and everything else. It needs to be powered by something.

MS PORTER: There are definite downsides.

Mr Corbell: There are issues with that and there are some interesting pieces of research that look at this issue but, as long as those factors are taken into account, you can get good outcomes, I think, through those higher densities.

THE CHAIR: Thank you very much, Minister Corbell, and the departmental officials for this afternoon. It was quite a long session and we thank you for your time. As I said, we will hopefully pass on a few questions on notice and we look forward to the responses. The hearing this afternoon is adjourned.

Mr Corbell: Thank you, Madam Chair.

The committee adjourned at 4.33 pm.