



**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

TUESDAY, 28 APRIL 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).

WITNESSES

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Amended 21 January 2009

The committee met at 2.01 pm.

SAVERY, MR NEIL, Chief Planning Executive, ACT Planning and Land Authority

THE CHAIR: Good afternoon, and welcome to this public hearing of the Standing Committee on Climate Change, Environment and Water, inquiring into ACT greenhouse reduction targets. This afternoon we are privileged to be receiving a briefing from the ACT Chief Planning Executive, Mr Neil Savery, on ACTPLA's sustainable future program. We understand this will also be covering aspects of the territory plan and the national capital plan that are relevant to reducing greenhouse gas emissions and adapting to climate change.

Mr Savery, we appreciate that you regularly appear before Assembly committees. Would you please confirm for Hansard that you understand the content of the privilege statement that is before you?

Mr Savery: I do.

THE CHAIR: Thank you. Mr Savery, welcome, and we will hand over to you for the presentation.

Mr Savery: Thank you. ACTPLA welcomes the opportunity to present to this committee. I understand that the minister with responsibility for the Department of Environment, Climate Change, Energy and Water is going to present to you later on with a whole-of-government position, so I have specifically tailored this presentation to focus on the activities of the ACT Planning and Land Authority. I am not covering issues like the weathering the change strategy, although I think it is important to note that the work that we are involved in does respond to and deliver on some of the recommendations of that particular strategy. As you have indicated in your opening remarks, I have endeavoured to pick up on some of the particular issues that you wanted me to talk about—the national capital plan et cetera.

The outline for this presentation covers a range of very important projects and processes that operate within the territory. I want to start off with the statutory environment in which we operate, then turn to the broad strategic spatial plan that has currency in the territory and then drill into some of the more detailed issues around some of the strategic programs that we are currently involved in. I want to conclude by talking about statutory process, but matters that are not solely in the control of the ACT government or the ACT Planning and Land Authority.

I will note up-front that in relation to the Council of Australian Governments there are things I know that I cannot talk to you about because they are confidential. I would suggest, however, that we may all become the wiser after the 30 April COAG meeting, when some of the matters that are of interest to you are potentially going to be discussed.

Turning to the national capital plan, I think it is interesting that there would be many members of the ACT community who do not necessarily appreciate the role of the national capital plan or some of its content. The national capital plan is the pre-eminent strategic plan for Canberra and for the territory, inasmuch as the PALM

act, which creates the National Capital Authority and the need for a national capital plan, effectively says that the territory cannot do anything that is inconsistent with the national capital plan. The national capital plan, unlike the territory plan, contains the metropolitan structure plan. So the metropolitan structure plan is the strategic plan for Canberra. It has a pedigree that dates back to the early 1960s, heavily influenced by transport planning and transport engineers. Whilst a lot of people obviously refer to Canberra as being the genesis of Walter Burley Griffin's plans, Walter Burley Griffin's plans did not go as far as the current development of Canberra as we see it on the ground, and certainly did not envisage the spaghetti junctions and the major highways that go around the circumference of the city. That was heavily influenced by the planning of the 1960s and 1970s.

Contained within the national capital plan are a number of matters of national significance. These are issues that the territory has regard to when it is undertaking its strategic planning work. But, probably more importantly, when the territory goes to the National Capital Authority and says, "These are some of the things we would like to do," the National Capital Authority will have regard to these principles. We can go through those, but probably the critical one for the purposes of this committee is the last one, the development of a city that both respects environmental values and reflects national concerns regarding the sustainability of Australia's urban areas.

It is also useful to note that the commonwealth review of the National Capital Authority does include possible revisions to the national capital plan and the interoperability of the national capital plan with the territory plan, but they are matters for down the track.

The territory plan is a subservient document to the national capital plan. There is a requirement by law that there be a territory plan, but the law does not prescribe what the policy content of the territory plan is. The territory plan is subordinate legislation. The existing provisions of the territory plan in regard to issues of sustainability relate to these two statements, which are derived from its strategic directions. These were written into the territory plan in 2008, when it was introduced as part of the new Planning and Development Act:

Planning processes and decisions will be focused on the combined achievement of economic vitality, community wellbeing, and environmental quality.

So there is a triple-bottom-line approach. The statement continues:

Broad community involvement will be a key element in the pursuit of sustainable development, as will complementary regional strategies and agreements.

To that end, the way that the new territory plan is structured is very much policy derived, in the form of codes, which I will talk to in the next slide. But the intention is to engage the community in the development of policy, to the point where, once the policy has been signed off by way of variation to the territory plan through the Assembly, the community has less engagement in the application of that policy through individual development applications. That is the fundamental principle of the operation of the new development act and the leading practice model—that the community is engaged in policy but less engaged in the individual development

applications. In other words, policy should not be re-debated through individual development applications.

The second statement reads:

Planning policies will seek to ensure the efficient use of all resources and to reduce consumption of non-renewable resources. Waste minimisation, reuse and recycling will be encouraged, whilst energy-rating and conservation measures will be applied wherever appropriate, particularly in transport, subdivision planning, and building design and construction.

As I work my way through this, you will see that not all of those issues are necessarily subjected directly to policy within the territory plan. For instance, transport planning is largely driven by policy that resides in other parts of government, but we apply it through individual development assessments. Building design and construction is not managed through the territory plan; it is managed through the Building Code of Australia. So there is an interoperability of a number of different pieces of legislation, policy, codes or other documents.

In relation to some of the key elements of the territory plan, water-sensitive urban design was introduced by way of a variation a couple of years ago, with the aim of reducing mains water consumption as well as reducing stormwater quantity and improving its quality. The overarching measure contained within the territory plan is a 40 per cent reduction in mains or potable water use over 2000 levels. That is at a subdivision level as well as at an individual house level. That will not be achieved entirely through the design of a subdivision or the design of a house. It includes the use of the Water and Sewerage Act and the requirement for AAA-rated fittings as part of the construction of any new houses.

Also, the rules for waste management, erosion and sediment control, in a general sense, are part of the overarching zoning framework for residential, commercial and non-urban areas, and the provision for density, height, setbacks adds to this. So there is now an overarching framework within the territory plan derived from the Canberra spatial plan, which I will talk to in a moment, which does promote higher density development, reducing the spread of the city and therefore seeking to achieve a more compact urban form.

Having said that, that immediately puts it at odds with the metropolitan structure plan within the national capital plan, which is still framed on a 1960s approach to the planning for Canberra, which sees it spreading further and across the borders into New South Wales, particularly to the north, past Gungahlin, out to Sutton and Gooroo and Majura. So we are in liaison with the NCA to eventually amend the metropolitan structure plan. We do not have direct control over that.

With respect to energy, I will refer to the subdivision code and the Building Code of Australia. Many of you may be aware that the planning authority is undertaking a review of the policy content of the territory plan. This is something we were not able to do at the time of its introduction in 2008. There was an approach adopted at the time which was known as policy neutrality. Now we are committing ourselves to the policy content review, which is essentially in the form of reviewing the development tables, what uses are permitted in what zones, whether there is a need to revisit any of

the zone boundaries, the development codes—the development codes relate to the land uses—precinct codes, which relate to concept plans and the state development plans in new development areas, and general codes, which relate to things like car parking. Water-sensitive urban design is a general code; it is not a land use code.

The priority codes that we are working on over the next few months are subdivision, residential, multi-unit and community facility. The subdivision code is already the subject of fairly intense analysis, with the intention of improving design of subdivisions, not only so that they can reduce their energy footprint through improved solar access and solar orientation of blocks, but also to ensure that individual houses, which, under the Building Code of Australia, have to satisfy minimum performance standards for energy, can actually achieve that. If we design subdivisions in a way that does not enable a house to maximise its performance from solar orientation, we are making it harder for someone to achieve the minimum requirements of the Building Code of Australia.

Residential is inter-related, obviously, to subdivision, but it is then looking at the size of houses with respect to the size of blocks. I think I am correct in saying there was an article on the front page of the *Canberra Times* on a Sunday a couple of weeks ago. Something that is not strictly within our control but is nonetheless of concern to us is that, as we have progressively reduced the size of individual lots, for a number of reasons, some of it relating to housing affordability, some of it to reducing the waste of land and those sorts of things, we are not seeing a corresponding flexibility in the construction sector producing different products for those lots.

What we are also seeing, of course, is a reduction in household size. Canberra is around 2.1 to 2.3 people per household, coming down off 2.8 to as high as three from only 20-odd years ago, yet we are living in bigger and bigger houses. And many of the rooms in those houses are often unoccupied or rarely occupied, yet they are being heated or air-conditioned et cetera. So there is a very inefficient use of space and materials. The residential code would look at achieving some responsiveness from industry to different products, but essentially it is looking at setting the minimum standards by which a house could be exempt from development approval.

Going to multi-unit products, again, looking at the variety of different multi-unit products now—dual occupancy, triple occupancy, multistorey, multi-unit development—is it possible for us to set a suite of minimum standards by which it would be possible to say, “In these predetermined locations, provided a multi-unit development satisfies these minimum requirements, it is effectively exempt from the need for development approval”? If you like, that is the opportunity for the private sector to present to government what it believes is an appropriate set of standards by which multi-unit developments can be examined, enabling them to be considered for exempt development.

Community facility is an important code that we are reviewing, particularly from the point of view of sustainability—not focusing entirely on the issue of climate change and the environment as part of the equation, but looking at community, society. Community facility land is quite a rare commodity or an increasingly rare commodity, particularly in the inner north and the inner south of Canberra but also as part of the planning of new suburbs. We want to identify what are the appropriate land uses that

should be permitted on community facility land but also be able to provide government and the Assembly with a better level of understanding of what is an appropriate provision of land for different land uses.

If a church was to come to the government and say, “We would like a piece of land in this location,” is it appropriate that we set aside 20 hectares of land when the church may need only two hectares? If you look at past practice, we often have not been sufficiently rigorous in examining the amount of land that is allocated to some of these uses, so we come along later and say, “Are you really using all of this land, because we have other pressing requirements?”

So that would be part of our analysis of those codes. I have just given you an example of the codes and in effect their key role within the territory plan, which enables us to potentially permit certain uses to be exempt from the need for DAs or, where they cannot meet a set of minimum thresholds, say what those triggers are to require them to be assessed for development approval.

All of that, though, is being informed by the Canberra spatial plan, which was adopted in 2004. Whereas I said with the national capital plan that it is the strategic plan, I have deliberately used the words here that this is the planning strategy for Canberra and the territory. The reason why I am emphasising that is that, under the Planning and Development Act, we created the need for there to be a planning strategy. In other words, it was a compulsion upon the government of the day to have a vision, a plan, for Canberra—as opposed to the statutory strategic plan, which is in the national capital plan. We believe as planners that it is important that any government, whatever its flavour, has a strategic vision of Canberra. If it is at odds with the national capital plan, we can go to the National Capital Authority and say, “For all these reasons”—it could be for climate change; it could be because some new technology has appeared that causes us to reinvent the design of Canberra—“we believe you should be revisiting the metropolitan structure plan contained within the national capital plan.

As it stands, the Canberra spatial plan is the planning strategy. I think an important feature of that, even though it is hard for you to be able to read the bits on the side, is the sustainable transport plan. That is, if you like, a companion document to the Canberra spatial plan. Whilst there are other documents that have been developed and adopted by the government around transport delivery, transport provision and transport infrastructure, the targets and the general relationship between land use planning and transport planning are enunciated in the sustainable transport plan.

In other words, both documents are working on the basis of a more compact city, on the basis of increased population densities within 7.5 kilometres of the city centre, and working on the premise that we are ultimately working towards a new public transport network. What that network ultimately is is the subject of other work and analysis by the Department of Territory and Municipal Services, which has the office of transport in it. But this is, if you like, setting the overarching planning framework for those decisions to be taken.

The Canberra spatial plan operates in tandem with the Canberra social plan and the economic white paper, which themselves have been subject to review. The Canberra spatial plan was reviewed in 2007 and will be subject to review again in the next few

years. But the important thing is that, when we are talking about sustainability and climate change, the Canberra spatial plan foreshadowed some of those issues. It deliberately sought to reduce the spread of the city by making it more compact and, whilst there is disagreement, it deliberately sought to increase density because it believes—and as planners in this jurisdiction we believe—that higher density is an appropriate response or one of the many responses. It also sought to maximise the investment in infrastructure that exists within the city, much of which is underutilised, be it sporting infrastructure, social infrastructure, schools, hospitals, pipes under the ground or roads on the surface. All of that is pertinent to the consideration of the metropolitan planning of Canberra.

This slide is simply to say that we are doing what most other cities are doing. We are all involved in strategic spatial planning for our cities. Some of them are slightly more recent than ours; some of them have a slightly longer vintage than ours. At the moment, there is quite a significant interest and drive across all of the states and territories to ensure that their strategic planning instruments are contemporary and in that respect are also cognisant of issues of climate change, if not for mitigation then for adaptation. We have got issues, obviously, with disaster mitigation, primarily flooding and bushfires. In Sydney, Melbourne, Perth and Brisbane, there are issues about flooding associated with storm surges and rising sea levels. Further north, there are cyclones. It is those sorts of issues. The reasons for responding to climate change will vary depending on the climate zones of different jurisdictions.

I will move to a bit more detail. The Canberra spatial plan recommended the development of Molonglo valley as the next corridor for Canberra. To be quite frank, there are only two corridors left available for Canberra: Molonglo and, following Molonglo, Kowen. I tend to describe Kowen as north Queanbeyan; its geography is essentially north Queanbeyan. After that, there really is nowhere Canberra can grow other than upwards. It will be constrained for a number of reasons: nature reserves, water catchments, environmentally sensitive land; and the cost of providing infrastructure.

I was at a presentation in Melbourne last week looking at its strategic plan to accommodate another two to 2½ million people by the middle of the century. They were quoting figures that every thousand new homes built on the fringe of the city cost an extra \$300 million over what could be provided for through higher density development within the city. They amortised that over time. I cannot remember the precise time frame, but they are saying that in that time frame, if you look to the two million people, if we put all of that on the fringe of the city, that is going to cost us an extra \$110 billion in infrastructure. That is not to say that it is not going to cost you nothing to put them in the city centre or in established areas, but they are saying that you can make a significant saving as a result of making your cities more compact and higher density.

I think you are familiar with Molonglo valley. This is just a diagram showing geographically where it is. It is quite strategic, because the Canberra spatial plan identified this due to its proximity to Belconnen town centre, the Woden town centre and the city or Civic. That means that most of it is within that 7½-kilometre radius of achieving the compact urban form.

You may also be aware that there were two other elements to Molonglo. One was known as central Molonglo, the other western Molonglo. Central Molonglo would have been about where the word “Belconnen” appears on that drawing and west Molonglo was further off the photograph. They have both been dispensed with. Certainly central Molonglo has been dispensed with altogether. That is not to say that there is no planning to occur for that area, but it is not intended to be developed for urban purposes. Western Molonglo, which is a relatively small area, is still zoned broad acre and therefore has the potential to be developed for some purposes. We have to revisit that in the future as to what we think would be appropriate.

The land is generally degraded, a lot of that due to the effects of the fire in 2003. The river corridor is also extremely depleted and eroded. It is also, obviously, then quite critical to the planning of this area. Just because it is degraded does not mean that we are ignoring the environmental values of this land.

These are just some of the artistic images that have been prepared, which indicate a relatively compact urban form. Despite the fact that that shows a large water body down in the bottom left-hand corner, that is still the subject of an environmental impact process. As I say on all occasions when I do these presentations, it just so happens that the work we have done to date suggests to us that a lake is the most appropriate stormwater management option, but it is not the only one and it will be subject to very rigorous analysis.

With the Molonglo valley urban development, we are looking to ensure that it is a level above the planning for Gungahlin, as Gungahlin was intended to be a level above the planning for Belconnen and all the predecessors. To that end, we have probably got a better understanding of issues to do with climate change and sustainable design than the planners for Gungahlin had. Even though it was touted as a sustainable community and a sustainable town, I do not think that at the time practitioners necessarily had a comprehensive understanding of what was meant by the language. We have had the benefit of 10 or 15 years to better understand how to design suburbs since then.

I have already mentioned the fact that we are looking for higher density. That will occur primarily around the group centre and the local centres, along the primary transport corridors, but generally even the standard suburban housing will be of a marginally higher density than elsewhere. Let me put it in these terms. On average, Canberra would turn off around 11 to 12 lots per hectare; we are looking at up to 15 lots per hectare for Molonglo. That will give us a land yield for about 30 to 40 years based on current estimates, but that can all change if population growth exceeds current projections, which would mean that Kowen would need to be investigated earlier than is currently projected.

There are peri-urban uses in this area which are important to the ecology of the adjacent land. There are significant and important environmental flows associated with the river corridor. We have been planning for the edge treatment associated with bushfire. Obviously, we are extremely cognisant that fire came through this particular corridor. That is one of the reasons why to date a large water body has been regarded as a suitable option under the analysis, because it provides a useful buffer, but again that has all got to be examined.

It also enables us to better utilise existing infrastructure. Sewerage and water infrastructure is in this area, but it would need to be augmented. It also gives us the ability to look at third-pipe options associated with the Molonglo treatment facility. That is being actively investigated by Actew and ActewAGL at the moment in terms of its cost and its practicality.

There are existing woodlands and grasslands, some of which have resulted in the exclusion of central Molonglo, but there are some remnant areas in what will be known as east Molonglo, which is the area being developed.

In regard to movement networks, we are designing the primary arterial transport network in a manner that will have a rapid transit capacity built into it. Whilst we would anticipate that at the early stages of development you will get a regular bus service—and we want that established from the outset—the design has the capacity to take a busway or, alternatively, light rail if that was ultimately to be supported by a future government.

Stormwater management is quite critical and is the subject of an EIS. There is a group centre, not a town centre, because its location was designed to take advantage of the established town centres. There is a considerable shared path network for bicycles, pedestrians and equestrian activities in this area. For instance, there are underpasses under the Cotter Road that are of a height which would enable horses and their riders to negotiate without having to dismount. There is significant connectivity between the Mount Stromlo facility and the arboretum as well as protection of the banks of the river corridor which will be accessible to members of the public.

We are also looking at the design of individual neighbourhoods in a way that sets them apart from predecessors. Coombs, Wright and North Weston have effectively been designed at a level that we do not normally go to when we are doing territory plan variations, but the level of consultation that we did with the Weston Creek community, in particular, caused us to go into a lot more detail. We have effectively already designed the water quality control ponds near the Defence College off Cotter Road. The neighbourhoods are all designed to be walkable so that, in theory, you should be able to catch a bus within 400 metres of where you are living.

I have talked about the open space corridors. You can see them more clearly or more graphically on that diagram. Solar access has been a feature so that, whilst the territory plan's current subdivision code requires 75 per cent of all houses to be oriented to capture the sun, or maximise solar orientation, we are looking at a figure of 95 per cent now. I am sure we would all like to think you could achieve 100 per cent, but sometimes there are awkward blocks in the subdivision arrangements that are very difficult to design to maximise solar orientation.

There are activity nodes beyond just the group centre. There are local centres. There are also facilities associated with the arboretum, with the Mount Stromlo facility and there are some remnant features of previous occupation, such as the former CIT site, which are going to potentially be features of the new design.

I have talked about shared path links, local centres and the riparian rehabilitation. It is

not just a case of coming in and building in this area but also rehabilitating the remnant natural environment. The river corridor is a key feature of that. How we do it still depends on the ultimate stormwater treatment that is adopted for this area.

I have talked about the road transport networks. They are designed primarily to connect the suburb into the Tuggeranong Parkway but also to connect through to Belconnen and Woden. There is also a connection across to Lady Denman Drive, to enable people to go across to Curtin and areas such as this.

We are looking to ensure that the suburbs are designed to be child friendly. That was a matter that the Greens had raised through their arrangements with the government.

East Lake is a very different project. East Lake has been talked about quite a bit. Again, some people think it is probably just an extension of Kingston. That is not the intention. All the planning work we have done to date, I hope, would demonstrate to people that that will not be the case. That is not to say that there was necessarily anything fundamentally wrong with Kingston, but it was designed and built as part of another generation of planning. We are now one step further advanced, I hope. East Lake is, for us, the demonstration project of how we can mitigate the impacts of the built environment on the climate and how we can design a suburb to better adapt to what is already likely built into climate change scenarios.

From a mitigation point of view, I am sure you are familiar with these figures: the estimates are that anywhere between 23 and 25 per cent of all greenhouse gas emissions come from the built environment. That includes transport. In the ACT it could be as high as 60 per cent, maybe higher, because we do not have agriculture and a manufacturing sector which, in other cities, are major contributors to greenhouse gas emissions. The built environment is an extremely important contributing factor to greenhouse gases in the context of the ACT. That also includes the waste cycle of the built environment, not just the demand side of energy, water and other issues.

East Lake, from the outset, was conceived to be a carbon neutral community. That is an ambition but it will not be achieved because the technology simply does not exist at the moment for any community, other than a completely subsistence community, maybe in New Guinea or somewhere, to achieve carbon neutrality. We believe that, by having set that ambitious target, we can move a long way from where we are today to where we can be in the future. In doing so, we can set some benchmarks for Molonglo and Kowen, wherever, and, hopefully, nationally and internationally, because we believe this can be a showcase development.

It is not just about the physical form which, again, is reflected in nice and pretty drawings that show urban vistas, connectivity paths, density and those sorts of things; it is actually in the spatial arrangement of land uses, the density of development, the mechanics of the transport network but also, importantly, the behaviour of individuals who will live here. What we are trying to do from the outset is encourage a certain pattern of behaviour through the physical form that we build, which is not an easy thing to do. Others have tried it, with varying degrees of success. What that means is that, if you have built in the technology and you have provided the opportunity for people to walk, because other activities are in relatively close proximity, and you have provided for their day-to-day needs or they can work from home, then you have

created every opportunity for them to modify their behaviour accordingly.

That is why East Lake, in the context of Canberra, is unique. We do have the proximity of a CIT campus; we have the fresh food markets. That is not to say that everything that is sold there is grown within the ACT but it can still reduce the overall transport footprint as a result of people walking and shopping locally for what will no doubt have some local produce component contained within it. We have got a mix of housing. We have got social housing, affordable housing and some high-end housing associated with this as well.

We also have the only rail corridor in the whole of the ACT. We see an opportunity, not that we are going to be able to take the rail corridor into the city, to create a transport interchange here that can convert—again, it might be buses at the start—to light rail down the track. There is the potential for there to be possibly up to five light rail corridors in the ACT: Gungahlin to city; Belconnen to city; Tuggeranong to city; East Lake to city, which would have the potential to combine with Queanbeyan coming in along the railway line; and then out to Kowen if Kowen was ever to be developed, which would include the airport and those sorts of things.

That is not government policy. I am just saying, as a planner, we are planning that there could be five rapid transit corridors, whatever technology is used. We do not want to do our planning in a way that compromises the ability for that to be delivered. That is how East Lake is being planned; that is how Molonglo is being planned.

We are looking at a community here of up to 9,000 residents, compared to Molonglo which could be up to 55,000 people. There would be anywhere in the order of 3,000 jobs in the local area, some of which already exist. There would be an opportunity for new jobs to be created. There would be a wide mix of uses contained within here.

The other important thing about this project is the partnership with the CSIRO. The CSIRO brings research, academia and science to a project. We bring the practical knowledge of regulations, statutory environment and what can and cannot work from a market point of view. It has been really interesting to see them acquire, if you like, the sanguine approach that we adopt to projects like this and for us to learn from them, which is: do not be constrained by what you have always known to be practice when there are all these other things that you could potentially do.

One of the things they are looking at designing for is a development assessment tool, because the territory plan is not necessarily self-sophisticated in being able to measure the environmental performance of different types of development. We need a more sophisticated tool, which has a different set of metrics and which is an interactive tool, to be able to determine, when the projects start to come in for East Lake: are they achieving the performance measures that we have set? That is what we will do. We will set a series of performance measures. Developers will come along and have to demonstrate to us that it is not the traditional, “You said I could build a multi-unit building; here it is; it meets the setback, it meets the height; give it the tick”. No, it has to achieve a different set of performance measures.

In concluding on East Lake, I think one of the other key attributes of the project going

forward is how we procure the project partners. In other words, we want a developer or developers to share the vision and be committed to the outcomes in the way that we are—we being the government, the planning authority et cetera.

Sustainable future is a relatively ambitious project. I think it would be fair to say we did not necessarily know when we conceived this exactly what the outcomes would be but what we did feel was imperative was, in reviewing the territory plan, in reviewing the Canberra spatial plan and in developing better policy, a different way of engaging with the community so that it was not just planners or some other group within government going ahead and producing policy but that there was a way in which we could bring a new level of expertise and a new level of understanding to the discussion on policy development for planning.

This is the vision of the sustainable future program, which will go over the course of three years. It is also tied in with the weathering the change and the people, places, prosperity programs. Key drivers are: to build resilience and responsiveness to changes like mitigation and adaptation; to provide insurance for the future by minimising the redundancy of the built environment and maximising the adaptability of the built environment; to take action that abates the causes of climate change; and foster a consciousness of sense and responsibility to community, place and self. That is very much about changing the behaviour of people and, in doing that, being cognisant of the culture of the place as well.

The program, since 2008, has involved five workshops. There is one to come, in May. You can see from that that they are quite broad ranging. I think the most interesting one to date has been the discussion on culture and knowledge, because we really did not know what we were going to be talking about. We talked about things like population; we talked about Indigenous relationships to land and how that can then inspire our own understanding, as well as a post-settlement or post-European view of Canberra. All of those are absolutely essential to knowing how we move forward on those key objectives and drivers of change.

I think the testing one will be economics and the administration of sustainability. We initially had a different title for it, which was the economics of sustainability. The conjecture is that, if you go down a path of climate change management, it is going to affect the economy of the country, of cities, of regions. We need to know more about that because we are not experts in it. We do not know whether the policy settings we are going to create are going to have an adverse impact on the economy or not.

With each of these workshops, we have invited five very eminent experts from within Canberra and external to Canberra to come and present their views. We then had up to 70 people from the various interest groups, industry groups, community groups and NGOs at the meeting so that they could debate the issues that the experts had raised.

What we are then doing is, despite the fact that an issues paper is produced at the end of the workshop and is posted on our website, producing a discussion paper. That discussion paper will then be posted on our website and will be circulated to many people who have participated. Our intention then is to engage the broader community. We have had the experts; we have had the interest groups; now we want the whole community to get involved in understanding the issues that we are debating and come

back to us so that we can go to government to discuss what policies it wants to take forward.

There will be a public meeting towards the end of the year. Public comment is open until the end of the year as well. What we intend to do is inform policy. Those codes that I was talking about before will be informed by much of this discussion.

We are in the throes of engaging a number of consultancies to give us another level of analysis on issues like solar orientation, transport and access, economics and affordability in urban principles, because we think that they are fundamental principles. They may ultimately end up changing the principles within the territory plan. How we are approaching this is multifaceted. It is as embracing of the community as we think we can, even though we would like in the future to be able to use technology such as this to engage with the community.

We do have a very modest sensory planning technology capability within the planning authority. Some of it is the result of negotiations with the National Capital Authority, where we are sharing technology. In some of these images you can see there is a credit to the National Capital Authority. They have developed some of this. The intention in the future is that we could accept development applications in a three-dimensional form which not only allows us to interrogate those development proposals in a different way but members of the public can have a better understanding of what the physical dimensions of a proposed project are.

Sensory planning technology also enables us to interface that with our development assessment tools so that, for instance, if we, as a result of East Lake, had this new capacity to understand the energy performance of a building, we can plug that into the three-dimensional aspects of the building as well. Then we have got the interoperability of technology to better assess buildings or proposals.

Interactive planning technology also enables us to better engage with the community. Whilst we do not have the technology available to us now, it does exist. This is an example. It is called MetroQuest—it is being used in Canada and elsewhere, but this is an example from Canada—which would enable us at the end of, say, the review of the Canberra spatial plan, or during the review of the Canberra spatial plan, to go to the public in three years time, when we intend to do this work, and say: “This is what we plan to do. These are the changes we intend to make. We did sustainable future. We involved you in that conversation. These are the things we now believe need to be modified in the spatial plan.”

We then say, “The purpose of this technology is to say: ‘Put yourself in our shoes. You are now the planner’.” Most people are armchair critics of planners and the work that we do. It is very simple to sit there and say: “Just focus on the environment. Fix the environment. Forget about development,” or “Development at all cost. Forget about the environment. It is all about the economy.” We sit in the middle and we have to balance all of these issues.

What this does is create a series of fields. You can see those where it says “making choices”. If you are living in the inner south and you do not particularly like the idea of higher density development, you tick a box which says, “No multi-unit

development in my area.” The response will be, “Okay, more development will happen on the fringe of the city.” “But I don’t want development on the fringe of the city because that is damaging the environment.” You are suddenly put in the position of what we have to do in trying to work through the various trade-offs and all of the contributing issues to the planning of the city: transport, energy, water, population growth, economy, trying to diversify the economy et cetera. Using more intelligent technology to undertake consultation, we think, will be a very effective way of reviewing the spatial plan when we get to it in five years time.

Moving towards the end of the presentation, the last two slides, if you like, are about the national environment. In regard to the Building Code of Australia, the ACT is party to the Building Code of Australia and, I should mention, the Plumbing Code of Australia. It does not get as much prominence as the Building Code of Australia but they are both relevant documents when we are talking about climate change. Being party to that process and the intergovernmental agreement means that you should not—the IGA does not say you cannot—be doing things unilaterally in relation to building controls and building standards; they should be done as part of a national framework.

Most jurisdictions do have some variations or departures from the national code but there is actually an active strategy across the jurisdictions to reduce the variations from the code. If it was not for the fact that we brought forward the adoption of the bushfire standard this year, we would have had no variations. When the 2010 edition of the building code comes out, it will catch up with the new standards so that there will not be any departures in the ACT. That, if you like, is driven by the economic side of the equation. Industry wants a common and consistent set of standards across the country, but there is always local pressure to create departures from the code to respond to the immediacy of issues.

Energy is a good example of that. There are pressures mounting in all jurisdictions, typically from a local government level, to up the energy rating of buildings in the Building Code of Australia. At the moment, the national setting is a minimum of five stars, under NatHERS, which is the national chrome energy rating scale. That is for class one and class 10 buildings, which are your typical houses. For multi-units, it is an average of four stars. You could have one unit that is one star and one unit that is 10 stars; it averages out. Class nine buildings, which are your typical commercial buildings, have a performance measure which is the equivalent of—and that should read—3.5 ABGR, which is the Australian building greenhouse rating, which sits under a thing called NABERS, the national Australian built energy rating system.

There is a good prospect that those current standards will need to be revisited after COAG on 30 April but I cannot give you a commitment to that. If COAG were to decide that they wanted the standards increased, a lot of work would have to be done within 12 months because the amendment process for the BCA 2010 is a minimum six-month project to do the regulatory impact statement to consult with industry et cetera. I cannot speculate necessarily on what the new standards would be but you would anticipate they would be higher than the ones on that particular slide.

There are deemed to satisfy provisions within the Building Code of Australia. That will enable someone to come up with an alternative solution to those that are

prescribed in the standard. The minimum standard of five stars still has to be achieved. I skipped over the first dot point. That is all about taking into consideration the different geographic conditions where a building may be located. It is not one size fits all and has to have regard to some of those features.

The last dot point on that slide indicates the fact that the BCA, under the last IGA negotiated three years ago, for the first time included sustainability. It did not include sustainability until then. That is quite a difficult feature for the building code because the building code is quite strict in that it deals with what can be constructed. It is about bolts and structures. It is not really about what we describe as societal issues where we place value judgements or where there are subjective issues as opposed to something being very objective. That makes it difficult for the building code because it has to then find a way of quantifying something in order to create a standard to be put into the building code.

What the Building Codes Board has said is that there are only four areas in sustainability that it can look at: energy, which it already has some measure on; water; materials; and internal air quality. It has started work on all of those but energy has been the primary focus to date.

The acronym at the end, NCC, relates to another anticipated COAG process or decision which has already been identified through communique. I am not breaking any trade secrets here. It is called the National Construction Code. The objective is to wrap the Building Code of Australia together with the Plumbing Code of Australia and down the track look at whether or not it is possible to do electrical and information technology standards and wrap them all up into a national code.

In regard to my last slide, I am going to be less obvious in what I can tell you here. There are a number of COAG bodies that are looking at issues to do with climate change and sustainable design. Rather than go through the work that they are all doing, because that is where it is difficult for me to talk, I have listed a good number of the groups.

There is the Local Government and Planning Ministers Council. I am one of the senior officials of the planning officials group which does a lot of the work for the ministers council. There is the Building Ministers Forum, which the Building Codes Board reports to. I am a member of the Australian Building Codes Board.

There is the Ministerial Council on Energy which has two officials groups. The senior officials group on energy efficiency has largely been responsible for developing the national strategy for energy efficiency, which we hope to hear more about in the near future. The energy efficiency working group, which is called E2WG, has been working on the national framework for energy efficiency, which is more on the regulatory side, the licensing of energy providers; whereas the national strategy for energy efficiency, if you like, is setting new benchmarks and targets for energy efficiency.

There is a raft of other senior officials groups. This is only a sample but a sample that is probably more relevant to us. There is the climate change and water working group. There is an infrastructure working group. There is a housing working group. The

housing working group, for instance, has been involved in working with the planning officials group on looking at new streamlined development assessment practice across the country; whereas the infrastructure working group has been looking at the environmental impact processes to see whether they can be streamlined.

Then there is Infrastructure Australia and the major cities unit. The major cities unit, while it is all relatively new, is particularly new and is interested in looking at projects nationally that might enable a new approach to city development that can reduce the impacts of climate change gases. Then there is COAG itself.

All of them report up to COAG or require COAG decisions in order for certain things to be prosecuted back down. It is department down, down and up sorts of arrangements. It is pretty hard to follow sometimes and keep up with it. That said, hopefully that gives you some insight into what we are doing.

THE CHAIR: Thank you very much, Mr Savery. That was a very interesting presentation and also quite inspiring in what ACTPLA is attempting to do. I would like to start with a few questions and also get a greater understanding of how things work. You have talked about the Building Code of Australia and how in the ACT we have pretty much stuck with that code, with very few variations. At the moment I understand we have only one variation—

Mr Savery: That is right.

THE CHAIR: to do with bushfires and that the next review of the code will catch up with that. You talked about bolts and nuts and those sorts of things. Does it go down to the design? I am wondering why in the ACT, where I think we are a jurisdiction quite in front of the game around understanding climate change and the built environment and so forth, we would still be building houses that have no eaves and with black roofs. Does it connect to the building code or is it something that we could look at locally?

Mr Savery: It does not. The reason you can build a house without eaves is a demonstration that five stars simply is not adequate. In theory, we should have a standard in the Building Code that makes it difficult for you to build a house without an eave. I cannot tell you that if we went to six stars next year, or whatever the next standard is, that is going to be enough to cause you to build with eaves, but clearly houses are still achieving five-star ratings, without eaves, so I think there is enormous capacity for us to move the standards.

We know now that if we were to use NatHERS and apply it in Europe it would be a minimum 7.5; that is where a lot of Europe is at. Interestingly, under BASIX, which is not five star and is not part of the Building Code of Australia—it operates under the planning system—the way that they have structured their performance measures results in a need for most houses to be designed with an eave.

One of the pieces of work that I have been involved in that I am hoping will get some take-up after the current round of revision of the standards is that we move away from star ratings. Star ratings are a useful way of communicating to the public the fact that we are gradually ramping up the requirements, but it is what sits behind the star rating

that is critical, and I think there is a way in which we can revisit the whole structure of the building code to introduce specific performance measures. It is a performance-based code but it is performance based in as much as, if we have set the standard at five stars which says that you have to have certain thermal comfort, that certain materials have to be used and you have to have certain insulation, the performance measure is that I have achieved those five stars or I have used some of the methodology to get to the five stars.

I am talking about performance measures that say at a minimum you must achieve a 50 per cent reduction, or whatever the figure is, in greenhouse gas emissions, which then correlates to: I have to change the design of my building to make it perform in a more efficient way. That requires a reworking of the structure of the building code. You would have to design a number of metrics that perform differently for a house versus a multi-unit development versus a commercial building. But I think we already have the lead for this because the commercial building measure within the building code is a performance measure. It is a very low measure at the moment but it is a performance measure. That is the bit that says that the building code is probably set at a level that is enforcing people to build an eave, but we can set it at a level that would force them to build an eave.

The other alternative is that through the territory plan the policy relating to, for instance, residential buildings can require an eave. What we want to ensure is that the planning system is not duplicating the building system. There has to be a clear delineation. Up until the new territory plan, there were energy measures in the territory plan. We took them out because we said: “No, there is a building code. That is a variation or a departure.” Again it is about ensuring that industry knows that the building code is set in one set of rules and the planning system is set in another, because the residential codes have the ability to assign certain values to the overarching design of the building, including things like solar access.

I should just mention while we are on that subject that we do not believe there is a need to legislate for solar access. We believe it can be featured as part of the codes in the territory plan, which is subordinate legislation. Through the design of the subdivision code and the design of the residential and the multi-unit codes we should be able to enshrine solar access, and that is what we are working on through the sustainable future project. That was just getting away from my response.

What we are saying with the residential code is that there are certain aspects of the, if you like, architectural design of a house that we want people to achieve that can complement the energy performance measures in the building code, and if you decided in this way it can be exempt; if you want to depart from it, it is probably going to have to be assessed.

In terms of roof colours—I do not know if the regulation has come in yet; you might test my memory here or have a better memory—one of the regulation changes for exempt development has removed the prescription for muted roof colours, which has been in the territory plan since it was established. We have removed it. You can have light colours, you can have reflective colours and, even better, we do not want to know about it. We do not want you coming in and applying for a DA, because all that happens is that we notify the next-door neighbour, the next-door neighbour complains

that it is reflecting into their house, and we end up in the middle of a neighbours dispute. We have got to reduce the urban heat mass; part of that is the reflectivity of roof material.

THE CHAIR: Does that also mean that people can continue to have black roofs because there is no longer any standard or—

Mr Savery: They can. It does not prohibit it. It just says that roof colour is not our issue; we are not interested.

THE CHAIR: What role does the planning authority have, or does it see it has a role, in educating the community around building design and how you can achieve energy efficiency which over a lifetime makes it more comfortable to live in, saves you costs and—

Mr Savery: Very significant. We have publications. The one that relates to housing was prepared in conjunction with the Australian Greenhouse Office before it became part of the department of the environment. That is available on our website. There are also hard copies available. They are quite rare and often difficult to get hold of. They were known initially as the blue books and there was a series of them. They became very popular with building designers and do-it-yourself people. They have just recently been reviewed and updated. The other thing we do is where a particular product such as rainwater tanks has certain statutory requirements for installation, or there may be health requirements, we have prepared publications that are available from our customer service centres and they can be downloaded. We have also worked with one of the hardware chains—I am not going to mention its name as I am not sure which one it is—to have those available next to the rainwater tanks. I think we are trying to work with the other hardware stores to make it available to them as well.

THE CHAIR: That is the connection with the public. I am assuming also that you have good connections with the building industry—

Mr Savery: Really good connections.

THE CHAIR: because, although you are talking about changing the building code and having higher standards—those sorts of ways of regulation, if you like—some of it is also going to come down to voluntary action or movement by builders and so forth to change designs, to get into the 21st century and looking at how we need to be designing our buildings now. Are there good connections and conversation/dialogue between ACTPLA and the industry in the ACT?

Mr Savery: Yes, there are. We routinely meet with the MBA and the HIA, in particular, and also with the Property Council and the Green Building Council of Australia. You made the comment before that in many cases we are a leading jurisdiction. I think we are because we have the ease of accessibility to some of these groups and, whilst we are not experts in everything, one of the reasons, for instance, why we rely so heavily on the Building Code of Australia is that we do not have a building department that has the in-house expertise. We invest heavily in the building code office to do that work for us.

We routinely meet with those industry organisations. They allow us to publish material in their newsletters and we also run forums for building design professionals, builders, plumbers, electricians, building certifiers. That is just part of the regular suite of things that we do, with varying degrees of success. It is not related to this line m, but with all the exemptions that have been introduced recently we are still finding that building practitioners are lodging development applications in merit when they are exempt, yet there have been workshops and education sessions. It is quite difficult sometimes to get the message through.

Going back to one of my earlier comments about the lack of responsiveness to coming up with different building products: we are just not seeing industry change, if you like, the tooling of its factories to come up with more energy-efficient designs for its houses. Some of the technology within houses is changing and there is an important group that it might be worth your committee noting called BPIC, the Building Products Innovation Council. They have been given, I think, about \$3 million, by the commonwealth, over three years, and this is probably the second year of funding, to come up with new standards for energy efficiency and water efficiency for products that could potentially be adopted by Standards Australia, which will then lead to industry converting to new technology in building products.

THE CHAIR: You said that we are linked to the Building Code of Australia. Is this a good way to go? When you are looking at a national code, sometimes it does not allow for, as you were saying earlier, maybe a more timely response to a local issue that is going on or whatever. Is it flexible enough to take in different places in Australia, different climates—those sorts of things? Are we just aiming for the lowest common denominator sort of situation with having a Building Code of Australia, or do you think we are well served by being part of this process?

Mr Savery: It is always a risk with a national code that you have the lowest common denominator, which could be us one week, Tasmania the next week, depending on what the minimum standard is. But I think the national building code has served industry extremely well. I am speaking from a slightly different perspective in terms of the efficiency of design, the cost of working in multiple jurisdictions. Clearly that was one of the main reasons for setting up the building code and nationalising standards. It is often held up as the leading example of national cooperation on standards. It is certainly lauded by industry, HIA and MBA. They have their frustrations with it but by and large they would hate to see the abandonment of the Building Code of Australia. And I would make mention of the fact that I think it was in 2006, but it could have been one year earlier, that the Productivity Commission did a major review of the building code and concluded that it was a very worthwhile exercise and should be continued.

Your point about lowest common denominator I think is always there because it is a minimum standard; that is what the building code is and that is what regulations generally are—minimum standards. But the piece of work that I referred to earlier, and if I had the diagram I would show it to you, shows the way in which, for the purposes of issues around energy efficiency and climate change, you can transition to a different way of structuring the building code that is still a minimum standard but it is not necessarily the lowest common denominator. In other words, we determine that the minimum standard is higher than what the worst case is offering at the moment.

In order for that to work, you need a national policy setting of what is the target we are aiming for. We all know what we think the 2050 target is—a 60 per cent reduction. You work back from there and you say, in order to incrementally achieve that position we have to ramp the performance measure up. This diagram is very useful to illustrate. If you have time, I might be able to show it to you.

THE CHAIR: It is probably going to cover off my next question, which is around a view of what sort of targets. Obviously this inquiry is looking at an ACT target. So, from the planning authority's point of view, what needs to be put in place or is achievable, particularly with your comment around, as we know, the majority of greenhouse gas emissions are coming from our buildings here in the ACT, followed by transport? Does the authority have a view around the targets that should be set here in the ACT or what is achievable?

Mr Savery: I will need to stand up and describe this diagram. This diagram intends to achieve a number of things. One of the objectives nationally with the building code is to create a clear delineation between planning and building, because at the moment they are duplicating each other and that is causing confusion and cost to industry. It is particularly pronounced in jurisdictions that have local government. It is much easier for us. But you can imagine in some local governments, where at a constituent level they are being lobbied to increase standards, they cannot influence this so they are using their planning systems to put those standards in, which are at odds with this, even though nationally all states have signed up to this being the minimum standard.

So, bearing in mind that it works differently for our jurisdiction, that delineation is part of this. But what this is showing is that you can start to identify which are the things to do with climate change that belong in the planning system and which belong in building. So energy, water, internal environmental quality, materials—those things I talked about before—can be grouped into the building system, whereas more spatially related issues—air pollution, stormwater management, transport—are part of the broad spatial planning arrangement, as would be subdivision of land because you cannot control subdivision through this.

Having said that, we then, whether it is a planning system or a building system, set minimum standards. That is the minimum standard—arbitrary for the diagram, but that is the minimum standard. In all cases, the maximum is zero—zero carbon emissions. So what lies between the minimum standard and the maximum is voluntary. You will have industry leaders—Lend Lease or someone often fill that space, not up here, but they are operating in here. They set new benchmarks by which traditionally we have then moved these. The minimum standard incrementally increases and then best practice is always slightly above. Obviously, if we ever get here, we have done extremely well.

Under the proposal that I am talking about, if we have a national target so that we can set a new minimum performance measure, at the moment someone can oppose us for setting the minimum measure here because they can argue that that is not the minimum; that the minimum is down here. But if we have a national target and say that, in order to achieve that national target, the minimum measure has to be here—that is too low; it has to be here—we can make a quantum leap. Of course, all of that

has to be costed, but it is a justified way of moving from the traditional arrangement that we have at the moment to a more sophisticated way of doing it.

In terms of what those targets are, we have not done that work. This is where to some extent we do rely on these national forums. We are part of work that ASBEC is doing, the Australian Sustainable Built Environment Council. We are involved in work that the Green Building Council is doing, and we are involved with the building codes board, because we just do not have that resident expertise. But that is largely our idea as a jurisdiction, so we move the thinking forward and then need expertise to help us populate the idea.

THE CHAIR: Moving on to some other things, you touched on transport with respect to East Lake and that there was already some existing infrastructure, for instance, around maybe future light rail. It did link to transport corridors. Have we clearly identified the transport corridors across the ACT?

Mr Savery: Yes, we have, in that the territory plan contains some dedicated public transport corridors. As to whether or not they are the ones we would still want to pursue, because they were established at the time of the National Capital Development Commission and they have followed through, and as to whether or not we would want to be slaves to those particular corridors, that was part of the work that we had started looking at with the busways project. So the first project that we looked at was the Belconnen to city busway, which did realign the route quite significantly. Twenty or 25 years on, we were looking at where the new spatial pattern of development had occurred. We were cognisant of where the Canberra spatial plan was heading. We were looking at park 'n' ride opportunities, which were not necessarily in the grab bag of good ideas back in 1980 or whenever it was. So I think we would need to respond to that. Obviously, Kowen and the airport corridor had not even been envisaged. That is why I made the comment before that our view would be that whilst there is a whole new network that would have to feed off that, which would be, in my view, a hub and spoke approach, there are principally five corridors.

MR SESELJA: With respect to the redesign of the Belconnen interchange, there has been some discussion about whether there has been space left if there was a future light rail corridor in that area. Are you able to comment about what is being done? Is there the potential to integrate light rail, if light rail is pursued down the track, into the Belconnen interchange redesign?

Mr Savery: The Belconnen interchange was designed on the back of the Belconnen to city busway, which itself was designed to take a light rail vehicle, but it was initially designed for a busway. I cannot be precise as to whether or not the light rail vehicle can get to the new bus interchange, but, with respect to the intention, I think you are familiar with the decommissioning of the existing interchange and putting four key bus stations—they are sort of super bus stations—along Cohen Street or College Street. The intention was that the light rail vehicle would interface with those. I know with a high degree of confidence that the light rail vehicle would get to the University of Canberra. As to whether or not it can get to the new bus interchange on Lathlain Street, I cannot say. I know that the planning was done with a light rail vehicle in mind.

MR SESELJA: You mentioned the Molonglo valley development in your presentation. Where are we up to with that? There have obviously been some delays, and we saw the issue with central Molonglo. Putting that aside, where are we up to with the studies? You took us through some fairly detailed planning there. There is no planning delay anymore; is it simply a land release issue?

Mr Savery: No. As you said, all of the spatial planning has been done and the concept plans have been produced. So the bulk of North Weston is literally ready for release; Coombs and Wright have some more detailed design work to occur. The main issue is clearing the environmental impact process, which we are heavily ensconced in at the moment. It includes EPBC legislation, because there were some controlled activities triggered through that process. The trouble with an EIS is that you cannot be precise about how long it is going to take. We had anticipated that we might be able to get some land out before the end of this financial year. That has not been possible, so it will be in the next financial year.

MR SESELJA: Does that EIS apply to the whole area? Are North Weston and Coombs all part of that EIS? Does it apply to all of it?

Mr Savery: There are multiple EISs, and there is also what is called a strategic assessment under the EPBC legislation. We have structured it in a way that would enable us to proceed with North Weston, Coombs and Wright in a time frame that is not constrained by the broader EIS for the balance of the land which is outside that diagram, to the north. The other EIS is for the stormwater management option along the river corridor. We are very close to completing the EIS process for Coombs, Wright and North Weston. The strategic assessment is also across the entire area.

MR SESELJA: The 95 per cent solar orientation that you were talking about as a goal, that is the existing plan; you would expect those new subdivisions would be able to achieve 95 per cent?

Mr Savery: That is what we are designing them for. We are also anticipating that. With respect to the new standard within the subdivision code, which is obviously still to be reviewed and has to go through a variation process, and the Assembly and the committee will be involved in it, we would like to think that its new figure will also be up around 90 to 95 per cent for any subdivision.

MR SESELJA: What has been the primary change in the design of subdivisions that has allowed you to get up to that 95 per cent figure? I know that before there was a goal of around 75 per cent.

Mr Savery: It was 75 per cent. I think it is just a growing awareness and consciousness of it. When that previous standard was inserted into the territory plan, which goes back many years, it was not uppermost that you had to achieve solar orientation for blocks. It was not that you could not do it through good design.

MR SESELJA: Sure, but apart from the intentions, what technically has changed here as opposed to previous subdivisions?

Mr Savery: Technically, it will result in literally a re-orientation of road layouts and

distribution of open space so that you can, if you like, turn your blocks at different points in different geographic areas within Canberra, to create greater access to passive solar.

MR SESELJA: Getting more into planning-speak, is it about the nature of the streets now? We have moved away from various models of street design. Broadly, you are talking about new urbanism in terms of the way streets are laid out and the like. Has that had to be modified much in order to achieve these targets and, if so, in what way? What are the different street layouts that we will see as a result of these changes?

Mr Savery: I would describe it as a variation of new urbanism. What preceded new urbanism, which, if you like, is a reinvention of traditional neighbourhood design, with the more grid-oriented pattern of design, was the spaghetti design, where you had circuitous roads and cul-de-sacs, which really inhibited your ability to optimise solar orientation, apart from completely disorientating you when you went into the suburbs. Then new urbanism comes along and creates a scripture that is very regimented, and that itself had problems because the regimented regime meant you could not necessarily tweak the access because it all had to be 90-degree angles. It is literally a variation which still seeks to retain some of those key neighbourhood principles of having a neighbourhood within a 400-metre walk to a shop, facilities for public transport et cetera, and still creating intersection alignments every 90 to 100 metres, so that you start to create greater permeability within the suburb, but not being fixated with this 90-degree angle.

MR SESELJA: So that is the fundamental change to street design—we are seeing oblongs instead of squares and rectangles?

Mr Savery: Yes. Well, we have not actually seen too much of it yet. I might be wrong but I think Forde is starting to introduce some of this design, and Harrison.

MS PORTER: I want to go to another subject. You talked about the series of workshops that you held, and you talked about the bush city one. With respect to that one, what kind of feedback did you get about what you were discussing?

Mr Savery: I am more than happy to circulate copies of the issues papers that have come out. With respect to the bush capital, there was a very confronting proposition from us to the group: can we afford a bush capital? In a climate change scenario that suggests that our rainfall is going to be significantly less than it is now, can we sustain it? It is an interesting equation because it is not just the bush capital in the sense of the hills, ridges and buffers, with these large areas of open space in between the town centres. It is also the garden city value within the suburbs. You can see the health of the trees as you move along the streets. Some of it is related to age but a lot of it is the stress of lack of water and because of heat.

With respect to some of the responses, in most of them you do get a dichotomy. There were those who were cognisant of the potential implications of climate change, yet there was a total lack of preparedness to concede that we would give up any of those values, as against others who would be prepared, for instance, to contemplate that you put some development in some of those green corridors. I am not suggesting in any way that this is government or planning policy, but with respect to one of the

challenges, if we want these public transport corridors, do we put high density along the entire length of the corridor? You can do that in Melbourne or in Brisbane, but in Canberra you get a large area of nature reserve in between the town centres where we cannot put development, which reduces our ability to value-capture, to pay for the infrastructure along the corridor. It reduces our ability to put density along the corridor. We can only put the density at the bookends of the corridor.

Are we prepared to give some of those things up? Some people at these presentations say: “Yes, we’ll do that; that’s the way we’ve got to go. That’s part of adaptation.” Others say: “No, hands off. You can’t touch nature reserves. That’s sacrosanct.” And there are other downsides, obviously, if you start intruding into nature reserves, such as the impact on habitat, habitat corridors and those sorts of things. So it is the full spectrum.

MS PORTER: From those workshops you were then developing a discussion paper?

Mr Savery: Yes.

MS PORTER: That is going through the various stages that you went through on the slide, and the public is going to be involved to an extent in that.

Mr Savery: They will be invited to—

MS PORTER: There will be a public meeting?

Mr Savery: Yes.

MS PORTER: I would have thought we would be better off having several public meetings.

Mr Savery: We have not resolved what it is.

MS PORTER: Some form of public meeting. You also talked later on about those other documents. In answer to questions from Ms Hunter about documents that can inform the public, builders et cetera, you talked about the popularity of those. I am concerned that it is very difficult for us to get the message out. How many times have you been to a meeting where people have said: “I’ve never seen that before. I didn’t know that”? It has been around for ages and I have known about it and you have known about it, but the people you are talking with, even though it has been a publicly available document, have never seen it. They just say, “We were completely ignorant of it,” and that the government or ACTPLA have been derelict in their duty in that they have not enabled the public to get this information. That is the message that you often get. So now that this very important work is being done, my concern is: how do you make sure, within the limited budget that you have, I presume, for advertising et cetera—and also having regard to there being opposition to government advertising, and advertising from statutory authorities—that we get that very important information out and engage the public? With respect to that bush capital thing that I was referring to, just as an example, I get that all the time from people: “Isn’t this terrible what’s happening in Civic? Right in the middle of Civic, this is destroying our bush capital.” It is just down there in Bunda Street, not in the middle of an area where

there is a national park or something.

Mr Savery: It is always a difficult equation for government departments. We would not be on our own in that regard. You have to employ different techniques for different projects. That one I showed you in terms of the interactive technology would not be terribly useful in all circumstances.

We deploy newsletters; we use the papers for advertisements. We have recently introduced the publication the *Zone*, which was initially targeted for industry. Given its success, we have now created a sister publication, the *Community Zone*. That is subject to subscription and it is all online; it is not a printed document. By word of mouth we are hoping that members of the public will want to subscribe to that publication, which is a monthly publication. I do not know if you have seen it, but it contains a wide variety of things that we are working on. With the website, we are hoping to get some money through the budget process that will enable us to improve the navigation and the look and feel of our website.

I am always conscious that there are many members of the community who do not use computers or who are intimidated by computers, so we often produce publications that can go to the libraries and people can get them through libraries or through customer service centres. Short of that, it is pretty difficult.

THE CHAIR: Also picking up on those workshops, another one was around a culture knowledge workshop, which you said had some quite interesting outcomes around it. The one I was particularly interested in was your comment around population. That is because, when you are talking about compact cities and you are talking about sustainability, you need to have some idea about what population over what time you might be working towards and what that means for the sustainability of the ACT and also the built form. They are all pretty important questions there. What came back from that workshop around population?

Mr Savery: It is interesting. I do the introductions to the workshops. I introduced that particular one because there was a lady—I cannot think of her name, but she is from Tasmania—whose topic was on population. I introduced it by saying that the Canberra spatial plan, and therefore the framework which the planners of today are working within, is a population of 500,000 people by 2030 or thereabouts. The response—not an immediate response—after I finished was that someone walked up to me and said, “Why do you have to work to a population of 500,000?” I said, “I don’t have a say in that. That is the government’s population target.” It is in the economic white paper and it is in the Canberra plan; therefore it is in the Canberra spatial plan. I think that was interesting that someone who is not tied to something—I am; I have to do work that relates to that—says, “Why does it have to be the case?”

Again, there were a variety of views. There are clearly a number of people in the community, nationally and locally, who do not believe that there should be any more population. They believe that we have already exceeded the carrying capacity of the land. There are others who believe that it is fundamental that we grow our population to sustain our economy, to sustain a population demographic that is ageing, so there are going to be fewer people engaged in the workforce to support more people out of the workforce. It is a very difficult dynamic. I know that it is the subject of an inquiry.

THE CHAIR: I believe also that, because Noosa is now so overdeveloped, there is some work being done in Noosa looking at how they can sustain their economy on their current population without a growth in population. It would be interesting to have a look at what work may be going on around the country.

Mr Savery: I would prefer to comment in that inquiry on this subject. As a planner—as a planning professional, not as a government spokesperson—I think that internationally the paradigm that we grow ad infinitum, that growth will solve the problems of growth, is not necessarily a sustainable scenario. It has got to be something that is seriously looked at at some point as part of the whole climate change sustainable agenda.

THE CHAIR: Moving to another thing that Ms Porter touched on with her question around one of the workshops, I want to ask this: with the territory plan, do the high conservation value areas and also the ecosystem connectivity areas overlay the territory plan? Are they integrated with the territory plan in some way or are they on different systems? How does that operate?

Mr Savery: They are integrated, but that is not necessarily to say that they are current. The basic overlay is the hills, ridges and buffers overlay, which is imported from the national capital plan. You then have the open space network. The nature reserves are not necessarily hills, ridges and buffers; they are potentially part of the open space network.

Then there is a finer grain within the land use policy arrangements, which are now zones—they are not called land use policies; they are zones—where certain areas are excluded from development because there has been a level of analysis. Then there are all the developed areas. You exclude those, even though there may be some remnant areas of importance. What sits in between is typically future urban and broad acre. It is in those areas that, as development proceeds, we refine what is of environmental value and should be retained and not developed and what areas are developed.

We have pretty much completed the suite. We have done the southern broadacre; we have done the western broadacre. The northern broadacre is essentially the EIS that was completed for Gungahlin 15 years ago. And you would be aware that we are doing the eastern broadacre at the moment. That piece of work has not yet gone to cabinet. After it has, the intention is that it will become public and go through consultation. But essentially, when we have completed all that, we believe that we will have identified at a relatively superficial level the balance of land that should be removed from being considered for development.

But, as you have seen with Molonglo, we did the spatial plan, we did land suitability, we did land capability, and we still put central Molonglo in there. Then, through the public process, central Molonglo was removed because it was seen that it had significant environmental values. We had arrived at a position where we felt that parts of central Molonglo—not completely, but parts—could have been developed.

All I am saying is that, even at a relatively significant level of analysis, we can still end up at a point where we as planners think that some land can be developed and

others will argue that it is too environmentally significant. Even in that diagram there, with the enormous amount of work that we have done on Coombs, Wright and North Weston, there are still some members of the public arguing that there are some remnant areas of environmentally significant land which should not be developed—which is part of the EIS process. As far as we are concerned, there is no question—I have said this before: when you develop land, you change the environment. You will damage it. You can do some remedial activity to limit that impact. In some cases, you can rehabilitate it. I think we have the opportunity here to rehabilitate the river corridor; it is disgraceful in its current form. Nonetheless, we think that the bulk of land in that area can be developed. There are others who argue that that is not the case.

THE CHAIR: I have a bit of a grab bag of things I want to go back to. One of them is around energy efficiency ratings. One of them is around whether there is an intention to extend them to commercial properties and rental properties. That is one question there. And there is another one around the current system where energy efficiency checks are done after a house is built whereas under the old system, I believe, it was something that was done before you built the house so that then they did not come in and say, “You’ve failed that one” or “It hasn’t reached this rating; you now have to go back and retrofit.” It is that idea of whether we are going to go back to the system where an energy simulation is built into the DA process or a process at the front of building a house rather than the current one where it is at the end.

Mr Savery: In the first question, you said commercial—and what other properties?

THE CHAIR: And rental.

Mr Savery: There already is an energy efficiency measure for commercial buildings; it is known as section J in the Building Code of Australia. That is the one where I made mention of a 3.5 ABGR measure. That measure is part of NABERS, which is a proprietary brand; it is equivalent to NatHERS. My expectation is that that 3.5 will be increased. It is all very complicated, but that of itself then relates back to green star under the Green Building Council of Australia rating. That measure will clearly be increased. It will continue to be a performance measure based approach, but I cannot tell you what it will be.

In terms of rental, it is very problematic. There are proposals to do rental. I know that it is also part of the discussions between the Greens party and the government. Part of the difficulty with rental is about when you measure. Tenants of buildings, particularly commercial buildings, have a great capacity to modify the performance of the building through fit-out. If the requirement is that every time a tenancy changes on a rental basis you have to do an energy assessment, it starts to get extremely expensive and it is very difficult to monitor and manage the whole exercise.

That is not to say that it cannot be done, but the logistics of doing it are far more difficult than a straight-out situation where a building is built and someone comes along and assesses it and tells you whether or not you have achieved the mandatory requirement in the Building Code of Australia.

You might want to come back to that, but it leads on to your second point. I do not know if you have heard something that I am not aware of, but there is no intention to

go back to having the energy assessment done at the time of the DA. That is because so many of the developments now are exempt from the need for a DA that it has got to happen at the building approval stage. Anyway, it is the building certifier primarily, with the energy auditor—and often they are one and the same person—who is doing the energy assessment.

What tends to happen at the planning approval stage—putting subdivision to one side, because that has no relationship to the building code—is that we may raise an expectation that a certain level of performance is going to be achieved over and above what is in the building code. The 3.5 ABGR relates to 4.5 green star. Generally we are encouraging all commercial developments to achieve a minimum of five-star green star, but it is not a mandatory requirement because the BCA sets the minimum standard.

Again, it really defaults to the building process—which is the role of that diagram earlier—to determine the achievement of certain energy performance requirements.

In that question, you also made the observation about the role of energy assessors and the way in which that system operates. We are in the process—and it was interrupted for almost a year because the person we recruited left us and it was very difficult to recruit another person—of setting up a licensing regime for energy assessors. We license plumbers, builders and electricians; we are setting up a licensing regime for energy assessors so that we can then audit their performance.

The analysis that we have done is interesting. I know that there is commentary from other people in the community about this, but not all of their observations are necessarily correct. Suppose someone buys a house and it has been rated five star, because a new house is meant to be five star. When they come to sell it a year later, it is 4.5 or three. What has happened?

There are two things that we are identifying. One is that sometimes there is a poor performance by the energy assessor. It could be the first assessor who should never have given it a five or it could be that something has transpired and the second assessor has made a mistake. But the more likely scenario is that the occupant has modified the building and, with the modification of the building in that year or two years, the two assessors have actually given accurate assessments and it is the modification that has caused the reduction in the energy performance of the building. I should make the point that ACTPLA does not regulate the EER report; that is regulated by consumer affairs. If someone complains about their energy assessment, that is a consumer affairs issue. But, under this licensing regime, once established, if it relates to the performance of the auditor we will be able to take action.

THE CHAIR: On those efficiency ratings, when we were talking about commercial tenants and so forth, it was also around residential—private rental and tenants.

Mr Savery: Yes. Again, it is problematic. We have also got mandatory disclosure for residential properties. The suggestion has also been made that you have mandatory disclosure for rental properties. Does that suggest that, every time the tenant of the property changes, you do another mandatory disclosure for rental properties, just as, every time you come to sell a property, you do a mandatory disclosure?

MR SESELJA: With respect to density, you discussed before the bush capital issues and the like, and whether people would be happy to build on nature reserves. Focusing on the town centres, what is it that is currently holding back greater density in our town centres? It would seem, on the face of it, that certainly there is scope to build high rise. We have seen it in Phillip; there is a proposal in Belconnen. Why is it, from a planning perspective, that we have not seen far greater development around our town centres? Using Tuggeranong as an example, there really is not much, even though now there is employment there; there are the sorts of things that would attract people to live there. But we do not have much more than about three or four storeys down there. Are there aspects of the planning laws that are holding things back or are there other factors, in your opinion?

Mr Savery: I think there will always be an element of what the planning laws are, because we typically set heights in town centres. Tuggeranong is about the only one that has a very strict height limit. Also, the city centre has the RL617, which is under the national capital plan. I refer to Belconnen and Woden, and to an extent Gungahlin. We have revisited most of those over recent years and have introduced more liberal height restrictions, so you have got residential towers being proposed in Belconnen. Obviously, there is Sky Plaza, and there are other proposals in Woden. I would not want to suggest for one minute that planning laws do not have a role; I think they do. I do not think they are overly restrictive at this stage, but if people feel that they are they are more than welcome to raise them with us. Tuggeranong has been raised as an example.

I think it relates to the disposition of people to live in high rise in Canberra. It is not something that they are familiar with. There is a reticence on the part of the broader community to support high-rise development. There is also the matter of industry's appetite to construct it, because they want the security that there is a market to sell their product to. If they have not got that, they will not build the types of buildings that you might be contemplating.

Having said that, and again referring back to the meeting I attended in Melbourne last week, where we discussed how to accommodate another two million people and the cost of building on the fringe, they were saying that, apart from the occasional high rise above a railway station, which has some sensible reasons associated with it, they can accommodate two million, without expanding the urban footprint, in buildings no higher than eight storeys, in town centres and along their transport corridors. So you do not actually have to promote high rise. If we look at places like London, Paris and Berlin, their densities are up around 200 or 300 per hectare; we are at 18 per hectare or less. And they are not building high rise everywhere; they are typically six or eight-storey buildings. How we respond to it does not necessarily mean that we have to build—and I know you were not necessarily suggesting this—

MR SESELJA: No, I was not. I suppose the constraints here are different from many of those cities. You touched earlier on the idea that, if you think of Woden to Civic, for instance, there would be far more opposition to building along Adelaide Avenue, quite aside from the National Capital Authority and all of those issues, than there would be to building in Woden town centre in a serious way. That is the challenge that you are facing.

Mr Savery: It is a challenge. Obviously, you are referring to some examples that you are aware of. Those examples, involving six storeys, are modest in scale, yet they do attract a lot of resistance from the community. If you describe them as high density, I suppose they are high density in the Canberra context, but they are medium at best. There is huge capacity in our town centres. We are starting to see signs of that. The permanent resident population in the city centre is about 1,600. Our aim is to get that up to around 20,000 or 25,000. Look at all the facilities that are here, and the place shuts down at night.

THE CHAIR: Moving on from that issue of density, because there are obviously some good arguments as to why you would increase density in a number of different ways, right across the city, rather than keep moving out on the edges, when you are increasing density, it might involve a six or seven-storey building, or you might release smaller blocks of land to get something like 15 blocks per hectare, as I think you said it was at some point. Alongside that, is there a plan around public space and the importance of that, particularly when you are talking about higher density and medium density? You spoke earlier about community facilities. You say that community land has become more scarce, particularly in certain parts of Canberra, such as the inner north. What is planned for the future? If we are talking about building density and we have a scarcity of community-use land for that community amenity, how do we solve that issue?

Mr Savery: I just want to pick up on open space first. I think planners, as a profession, have, over the last few years, failed in delivery of quality open space. I apply that to the ACT and elsewhere. If I look at some of the suburbs being built, here and beyond, the quality of the public open space is very low. In some respects the drought gives it the appearance of poor-quality open space, but even if it was raining, it was green and the trees were thriving, with respect to the way it is located, its relationship to pedestrian movement corridors, houses overlooking, giving surveillance and an increased sense of security, where you locate park benches, where you locate playgrounds, it is not as good as it used to be. I think we have to, as a profession, in conjunction with allied professions and designers of suburbs, lift our game in the design of public open space.

I was down in Geelong over Easter and on the piece of open space close to where the house was—and I have not seen an example as bad as this—everything was completely vandalised. You could not use any of the playground equipment. There was broken glass everywhere. I looked around me, and this was literally just a piece of leftover space. Every house that backed onto it had a two-metre-high paling fence, so there was no passive surveillance. There would have been five corridors in to this and they were literally just the bits of space that they could not utilise effectively. So it is a waste ground. Understandably, the end result is what I have just described to you.

We are very conscious that, in the design of these new suburbs, and in the balance of suburbs in Gungahlin, of which there are many, the open space network and the design of both passive and active recreation space has to be integrated fundamentally with the design of the suburb, the movement corridors and the surveillance of housing. The correlation with higher density development and compact lots means that you are

reducing the amount of private open space available to people, so that it is even more incumbent upon us to make sure that that public open space is accessible—that is, walkable—and that when you get there it is usable and it is not leftover space.

With the community facility land, apart from the fact that we are going through an exercise at the moment of identifying underutilised community facility land to determine whether or not there is a way in which the landowners, the lessees, can be encouraged to either use it or work with another provider to use it, we are also reviewing the provision of community facility land in the design of new suburbs so that we have got a better appreciation of what the demands are. As part of that, we also have to be a little bit more sophisticated about multiple use of community facility land so that it is not the exclusive preserve of one community group. As an example, there are now so many religious denominations and, if they all want their own exclusive piece of community facility land, we are not going to be able to keep up with the demand. They have to be more flexible about how they use it.

As an example, I am not expecting that a church is necessarily going to be used by both groups, but two churches could share the car park in between—something like that. The car park, in turn, could be used by the local shopping centre.

THE CHAIR: A smarter use of space.

Mr Savery: Yes.

THE CHAIR: I have a final question, about reporting. Obviously, if we do have a legislated greenhouse gas reduction target here in the ACT, there will have to be reporting systems to show that we are achieving that target. One of the things that will be coming in is the replacement of hot-water systems with more efficient hot-water systems over time. Does ACTPLA collect any of that information—for instance, if solar hot-water systems are being put into new buildings and so forth? Is that information being collected now so that it could be part of some sort of reporting system?

Mr Savery: The collection of information is dependent on the adequacy of the private certifiers, because most of the activity you are referring to is undertaken through private certification. The regime in the ACT is that a lot of that work is privately certified by building surveyors or other practitioners. Our function is an audit function, so we can only gather the data that is given to us. I think that increasingly, however, we will be in a position to gather that data because of the information that we are requiring from those practitioners. But I would not suggest to you at the moment that we are necessarily gathering all of that information. So, if you asked tomorrow how many solar hot-water systems have been installed, we would probably turn to the retailers and say, “How many have you put in place in recent times?” Because we are increasing our audit function, it still may be an extrapolation, but I think we will have a better idea of what is happening. The same is the case with photovoltaic cells being installed.

There was just one observation I was going to make. With solar hot-water systems, that is another part of the review of the Building Code of Australia and the plumbing code. Whilst I am very cognisant of the matters to do with the Greens’ agreement with

the government around solar hot-water systems, I am very conscious of the fact that we do not necessarily know what performs best at the moment. There are some potential downsides with solar hot-water systems. I am equally cognisant of the fact that some of the planning we are doing for these new suburbs is looking at district-level energy systems as opposed to domestic-level energy systems, because of the potential advantages through economies of scale. So it might be a biomass facility; it might be a solar collector system. We need, as part of our design for future suburbs, to set land aside, as we have with public open space and schools, for a local energy generating facility.

THE CHAIR: Thank you very much for presenting to us this afternoon, Mr Savery. A copy of the transcript will be sent to you.

Mr Savery: Thank you.

The committee adjourned at 4.05 pm.