

## LEGISLATIVE ASSEMBLY OF THE NORTHERN TERRITORY 12th Assembly

## Committee on the Northern Territory's Energy Future Public Hearing Transcript

1.00 pm – 1.45 pm, Friday, 14 February 2014Litchfield Room, Level 3, Parliament House

Mr Gary Higgins, MLA, Chair, Member for Daly

Mr Kon Vatskalis, MLA, Deputy Chair, Member for Casuarina

**Members:** Mr Gerry McCarthy, MLA, Member for Barkly

Mr Gerry Wood, MLA, Member for Nelson

Mr Francis Kurrupuwu, MLA, Member for Arafura

Mr Jimmy Cocking: Director, Arid Lands Environment Centre Inc

Witnesses: Mr Alex McClean: desertSMART COOLmob Program Manager, Arid Lands

**Environment Centre Inc** 

**Mr COCKING:** My name is Jimmy Cocking, Director of the Arid Lands Environment Centre. We also have Alex McClean, former Program Manager of desertSMART COOLmob, and also the current manager of Arid Edge Environmental Services, which is ALEC's for profit consultancy arm.

**Mr HIGGINS:** I will through the formalities first. On behalf of the committee I welcome everyone to this public hearing into the key challenges and opportunities associated with meeting the Northern Territory's future energy needs. On the phone I welcome, to give evidence to the committee, from the Arid Lands Environment Centre Mr Jimmy Cocking, Director, and we have Mr Alex McClean, desertSMART COOLmob Program Manager plus the title you gave us before.

Thank you for coming before the committee. We appreciate you taking time to speak to the committee and look forward to hearing from you today. This is a formal proceeding of the committee and the protection of parliamentary privilege and the obligation not to mislead the committee apply. This is a public hearing and it will be webcast through the Assembly's website. A transcript will be made for use of the committee and may be put on the committee's website. If at any time during the hearing you are concerned that what you say should not be made public, you may ask that the committee go into a closed session and take your evidence in private.

I will ask you to state your names, and if you do that each time when you speak so when it is transcribed we can work out who it is. If you could state your name for the record and the capacity in which you appear, then if either of you would like to make a brief opening statement.

Mr COCKING: My name is Jimmy Cocking. I am the Director of Arid Lands Environment Centre.

**Mr McCLEAN:** My name is Alex McClean; I am here in my former role as Manager of desertSMART COOLmob. I am currently managing Arid Edge Environment Services.

Mr CHAIR: Okay. Would you like to make any opening remarks, Jimmy or Alex?

**Mr COCKING:** Yes, we would like to. Thank you for giving us the opportunity. We would also like to acknowledge the Arrernte people whose land we are meeting on today, and also the Larrakia up in Darwin.

We put in a submission in November. We are a community-based environmental organisation developing and delivering environmental sustainability programs in Central Australia for more than three decades. We played a strong role in the Alice Solar City bid, and we were also an active consortium member for the five years of that program running. We also were a founding consortium member of Alice Water Smart program which was a federally-funded and Power and Water-hosted water efficiency program that went from 2011 to 2013. We have the experience of three decades behind us, and that is the basis on which we have put together the submission.

A large part of it is we that consider the renewable energy future for the Northern Territory to be huge due to the abundance of the solar resource we have here, but also up the Top End looking at tidal and also regions of the Barkly the wind resource. We very much believe that renewable energy future is the way to go.

There has been report which we tabled in our submission called *Developing Alice Springs in Central Australia as a World Leading Solar Centre.* In that paper, which was commissioned by the NT government in 2011, it is detailed how Alice Springs can become a world-class solar centre.

We are looking at the opportunity that presents for an education hub, a demonstration facility of concentrated solar thermal power, the training of skills as part of a university here, and also having a really strong community uptake, both in the commercial and the residential sectors of solar power.

We are also - (and Alex will speak to this a bit) releasing the DesertSMART Roadmap, which is to be released in March. That is, essentially, a sustainability blueprint for Alice Springs looking at energy, water, waste, the built environment, transport, and food.

We would also like to put on the record that we have serious concerns about some of the other opinions that have been presented around the nuclear industry, including post-Fukishima, the issues of water use, waste, the radioactive legacy lives on, and also the really poor uranium price - we think it's a dead end. Also, we have some real concerns about the shale gas industry, and are looking at potential price increases and volatility of the issues, the impact that will have on consumer prices here, but also the ground water risks which will affect other industries such as the pastoral industry, and also the fugitive emissions.

Regarding the renewable energy future for the NT, Alice Solar City was a pilot program that was highly successful. There was no on-going funds for that to continue and build on the benefits of that program. But, the groundwork is laid and the community is ready for Alice Springs to be a world-class solar centre. The fact that there has been some economic downturn down here, we see the renewable energy resource provides a really great platform for rejuvenating the economy here, and also rebuilding the esteem of commercial entities here.

Looking also at the fact that the Uterne solar farm, which was built as part of the Alice Springs Solar City program, has recently put in an application for a 4 MW system, as opposed to the current 1 MW – 969 kW - so that is a really great demonstration of the fact that solar is growing and, without government investment, the company, Epuron, is investing locally in that.

The market is moving beyond the ambitious targets already set as part of Alice Springs as a world-class solar centre, and we believe now is time to be investing in renewables. As part of our paper we listed 28 recommendations on the back of that and, in relation to renewables, we ask the community refer to recommendations one to seven in relation to solar.

Mr McCLEAN: Alex McClean here. I will touch briefly on energy productivity, which relates to recommendations eight to 16 in our submission.

There are two key reasons why the NT should be looking at increasing energy productivity. Firstly, it saves money now. Secondly, and this is perhaps less discussed, increased energy productivity makes it much easier to meet any renewable targets that might be set by lowering the hurdle that we need to jump over. This is why energy efficiency, which leads to productivity, is often called the cheapest, most immediate renewable energy source there is. It definitely should be a big focus of the NT government.

In Alice Springs there remains demand for energy and water efficiency services in both residential and commercial sectors. The reason we are mentioning water here is we know water is one of the – pumping water for consumption is one of the biggest demands of energy production in Alice Springs. Being more efficient with our water use directly leads to increased energy productivity as well. As I say, we know there is demand here for energy and water efficiency services in both the residential and commercial sectors following on from the Alice Solar City and Alice Water Smart programs.

The NT government should be leading this by setting up an energy productivity unit, setting energy efficiency targets for buildings and transport across all government operations, looking at putting in place financial mechanisms to incentivise efficiency. These could include the kind of rebates we saw in both the Solar City and Water Smart programs or, more creatively, could include market-based mechanisms such as environmental upgrade agreements which are, essentially, a mechanism for creating low interest loans specifically for homeowners and landlords to invest in energy and water efficiency upgrade measures on their properties. This is certainly something that could be looked at and is a promising area.

Another thing we would recommend is the NT government publishes data on energy and water efficiency and consumption, particularly if it makes publicly available the marginal cost of supply or both energy and water, in order to open up the market and the possibility of more innovative ways of delivering water and energy as a service rather than just as a raw product.

**Mr COCKING:** I want to speak briefly on the issues associated with gas and the fact that 90% of the Northern Territory land mass is under exploration for gas and petroleum, and the fact that many of the communities in the Northern Territory are ground water dependent. The ground water is essentially our back up so we do not want to see that being contaminated and the impact of fracking.

We are also concerned about the regulatory environment currently and the fact the petroleum industry, as well as the mining industry, are exempt from the *Water Act* and the *Waste Management and Pollution Control Act*. We are also concerned the *Mining Management Act*, the *Petroleum Act* are essentially run by the Mines and Energy department, whose main role is to facilitate the industry. We think the EPA should have more of a role in carrying out inspections of well integrity and the impacts of the industry.

Also fracking, and any exploration for shale gas that involves fracking, should be subject to environmental impact assessment, and we would also like to see the government reinstate the Territory gas reserves and the Indigenous water reserves. We have some real concerns that, with the focus on the gas industry, it is really focusing on the short-term. It will increase the emissions and also, as we export more gas, will have significant price impact which will affect the end consumer, being Territorians.

Recommendations 17 to 23 in our paper refer to the recommendations on gas. Regarding sustainable development, we just have a couple there. We think if their job is to pursue the gas extraction that is going on there should be local offsets provided in the Northern Territory. Also, currently, in the absence of any climate change policy, the government look at mitigating the risk by developing regional strategies and involving the community in adaptation and mitigation strategies to deal with the changing climate. That refers to Recommendations 24 and 25 in the paper, which can be seen on page 14 of our submission.

Finally, the nuclear issue. It does not take much to have a look at the issues at Ranger that have been of late with accidents, spills, tanks being busted open, also the concern about Fukishima and what happened there - and that uranium from Australia was actually fuelling that disaster.

Also, at the moment, we have an unsustainable - or the uranium price is so low many of the uranium players, especially overseas - we just heard about Paladin which has just closed their mine in Malawi for now. We do not think there is any growth, and the risk of the nuclear industry, especially when it is transporting nuclear waste through to north of Tennant Creek, through to transporting materials that could end up in nuclear weapons, is catastrophic.

From our perspective, nuclear and fossil fuel are a dead end and renewable energy sources should be what we invest in. Recommendations 26 and 28 cover off on our recommendations on the nuclear issues.

In closing, ALEC ask the Committee to consider the long-term impacts of its decisions on ground water, climate, country, and the people of the Northern Territory. Sustainable development is not the sustaining of industry, but ensuring that future generations have equal or the same opportunities as the current. Clean water, clean air, and clean country are the essential ingredients for life. Fossil fuels and nuclear power are dead ends. Increasing energy productivity in renewable energy will ensure a strong energy future for the Northern Territory, and ALEC urges the committee to support the recommendations made in the submission on page 14. Thank you.

**Mr CHAIR:** Thanks for that, Jim. The first comment I make is Recommendation 21 that cultural water reserves are reinstated. You need to change that to be the Strategic Indigenous Reserve, if that is all right by you. That is the one I think you are referring to there.

Mr COCKING: Yes, that is fine, thank you.

**Mr CHAIR:** Okay. Can you provide a brief overview on the consultation and review process that informed the development of the desertSMART road map visions and recommendations?

**Mr McCLEAN:** Yes, Alex McClean here. I was responsible for managing the desertSMART project and co-writing the road map as the manager for desertSMART COOLmob.

The process we went through was in each of the six areas, we requested a number of interviews of key experts and industries, stakeholders, people involved in those sectors within Alice Springs and within the NT broadly, and certain areas of people nationally. We requested some 90 interviews and ended up with, I think it was 46 or 47 interviews that we were able to undertake. That formed the first draft.

This draft was then taken to three rounds of public consultations: (1) with a business community forum that was hosted by Desert Knowledge Australia; (2) with an open public forum at the town council. Those two together formed the second draft of the road map. That second draft was then taken to a further round of public consultation at the desertSMART eco fair in August last year. That feedback then made the third draft of the Road map. All the way along we have had an advisory committee of eight people taken from NT government, Alice Springs Town Council, local businesses - local architects, Desert Knowledge Australia as well - and they have been informing and feeding in on the process the whole way. We got significant feedback towards the end.

At the moment, it has just been editing a final proof copy, proofing stage, and that will be printed. That is, basically, the process starting from about March last year until now.

Mr CHAIR: When will the final report become publicly available, do you know?

Mr McCLEAN: Yes. We hope by the start of March - early March.

**Mr COCKING:** It is Jimmy here, just to inform that the grant funding attached to the EPA NT environment grants, the money that was given through that grant was to produce the report and we are currently sourcing funds and, hopefully, sponsorship to print and distribute the documents. We also offer to post, as soon as we have it in a hard copy, to all committee members.

**Mr CHAIR:** That would be good. There is a wide range of recommendations in there. Once that report is published how do you progress implementation?

Mr McCLEAN: There are two things to say around that. One, it was never the intention of desertSMART COOLmob or ALEC to hold ourselves responsible for implementing all of them, nor do we directly hold anybody else responsible for them. It is put into the public domain and the idea is to provoke discussion and debate and, hopefully, provoke interest in other organisations either taking forward these actions or partnering up with us to do it. To that end, we will be launching it publicly, we will be sending copies of the road map to a range of organisations, to parliamentarians, to interested parties within the NT government, and then it will be an ongoing activity of ALEC and desertSMART COOLmob to continue to promote the road map in public forums, in representations to the NT government or other organisations. An ongoing activity of ours is to promote and use it for lobbying.

**Mr CHAIR:** Your submission said demand side management strategies and energy efficiency measures play an integral part in increasing energy productivity. What types of energy efficiency programs and activities is ALEC currently involved in and how do you go about evaluating their effectiveness?

**Mr McCLEAN:** Since the Alice Water Smart program finished, the kind of energy or water efficiency activities ALEC gets involved in is essentially through Arid Edge Environmental Services which, as I mentioned, before is ALEC's for profit environmental consultancy arm. That is what I am currently running. We offer energy and water efficiency audits of homes, businesses and institutions and we find there is currently a demand, particularly within the real estate sector - we have been getting some good feedback from real estate about landlords wanting to make use of our services. We have delivered a number of these already.

We know that post both Water Smart and Solar City there are also a number of other operators in town offering these services as well - both private ones, such as a company called Solace, and also ecoBiz, which is the NT government's own energy and water efficiency service for businesses. That has also been quite a popular program and I understand it has had very good uptake from local businesses in Alice Springs. They are the ways we are taking it forward, and also there are some other areas going forward at the moment.

That being delivery of direct services, there are a number of other ways. One is ALEC has been lobbying for a while for the NT government to look at facilitating the introduction of an environmental upgrade agreement within the Northern Territory. This, essentially, would require legislative change within the Northern Territory to facilitate low interest loans being offered by approved institutions, to homeowners and to landlords in order to upgrade their premises in energy and water efficiency. So, potentially dealing with what is called a split incentive issue whereby landlords have no incentive to invest in improving energy or water efficiency because they can reap none of the benefits of it. If it tips it in favour of landlords and tenants and makes it interesting to lenders, the change in legislation means this environmental upgrade agreement loan can essentially be paid off through council rates. My understanding is this is a higher level of debt priority so it makes it a safer debt, essentially. It is a low risk loan with a safer level of return for the lender.

Mr CHAIR: What sort of advantages does that have over initiatives such as the ecoBiz NT program?

**Mr McCLEAN:** For a start, it is a market-based mechanism, so it does not require a handout or rebates or funding from government. It is government, essentially, facilitating changes in the marketplace to ensure that the market can provide incentive for energy and water efficiency. That is very important and quite attractive, I would say, to a lot of people. Also, it directly deals with this issue of split incentive, as I said. It is widely recognised that the split incentive is a serious barrier to be overcome in addressing energy and water efficiency. By directly addressing that, it is facilitating greater uptake of energy and water efficient technologies and retrofits.

**Mr CHAIR:** It is our understanding that the concept of EUAs is derived from the Residential Property Assess Clean Energy Pace Financial Scheme that operates in the States. Have you any examples of similar schemes that are currently available to householders anywhere else in Australia?

**Mr COCKING:** Currently in Australia, there are no examples of the environmental upgrade agreements being offered to residents. Largely, that has to do with the risk appetite, because both in Melbourne and Sydney they made changes to the *Local Government* Act that facilitated these tripartite agreements to be made between the building owner, the council, and financial institution. The risk appetite was reduced because what happened in the United States – and I think it was in 2009 – as part of the global financial crisis, some of the lenders at those times were quite concerned about the fact that people were up taking clean energy and loans through the scheme and, therefore, they were going to pay the loans and the debt as a priority, rather than to the other companies. So, those companies (Fannie Mae and Freddy Mac) ended up taking the PACE Finance program to court, and that

ended up losing because the company that was suing went bust as part of their low-income irresponsible lending program.

Therefore, the risk appetite for uptake in the residential program was reduced in Australia because people looked to the States and saw what was happening there at that time. At that point, the court case was being resolved. It did not get resolved until 2012. That is why we do not see any residential programs. We do not think that should be a barrier for the Northern Territory to be the first in Australia to introduce such a scheme.

**Mr CHAIR:** This morning, we had people from Bioenergy Australia and they were talking about the recovery of energy from landfill or sewage gas. Did you give any consideration to the development of biogas power plants similar to that operating at Darwin's Shoal Bay Landfill Facility as part of the roadmap recommendations and, if not, why not?

**Mr McCLEAN:** Yes, we did, particularly in relation to whether it was actually feasible to set a visionary target of 100% renewable energy in Alice Springs by 2033. We debated that quite a bit. There is some scope for using both sewage and landfill to produce biogas in Alice Springs. We were informed by Power and Water Corporation and also other people in the industry, that this has been looked into in the past.

It could be viable. The problem is the volumes are always going to be very small here, just because of the small volumes of waste and sewage we are talking about. It does not mean it is not an option, it just means it is always going to be a very small part of the mix here, particularly when you consider how much of a resource we have in solar here.

**Mr CHAIR:** Thank you for that. The other thing you had in your submission was suggestions that community-owned solar farms can play a key role in driving change towards renewable energy. Have you any examples of community-owned solar farms currently operating in Australia?

**Mr COCKING:** There are quite a number of small operators – and sorry, apologies to the committee that I do not have the names in front of me – but it is a growing sector. Numerous reports have been coming out, particularly at the end of the last year, saying community-owned renewables will play a big role in assisting with the increased deployment of photovoltaics. There are examples in Melbourne at (inaudible), south Melbourne from memory. There are also numerous examples in New South Wales as well. In fact, I can send some links to the committee about that. It is well-known it is increasingly playing an important role in increasing deployment but also increasing finance - increasing the community investment. People are putting in money - they may not necessarily want to buy the panels to put on their roof, but people are investing in companies to do that.

Also, the key with that is a lot of it is generally place-based. People are investing in renewable energy companies that are deploying that energy in their regions. It gets people more involved in where their energy comes from which, as a result, will also increase their awareness of their energy use and their energy efficiency. By increasing community involvement you are increasing the efficiency as well.

**Mr CHAIR:** That, presumably, is one of the advantages of a community-owned renewable energy initiative. Are there any other advantages in having a community-owned one as opposed to commercial or government owned?

**Mr COCKING:** Yes, having commercial owned also enables social financiers and other lending institutions to provide cheaper capital and cheaper finance for those projects. That is generally because if it is community owned there is ability for - whether it is a not-for-profit organisation or those that have charity status can still set up a company and be able to assess cheaper finance. That is one of the better reasons. The fact it is commercially viable means it is also a means for community organisations to produce a sustainable income for themselves and, therefore, become less reliant on government funding.

**Mr CHAIR:** We asked this question of the Environment Centre, but how would you rate the level of interest and understanding of energy efficiency in the wider community?

**Mr McCLEAN:** I would say, particularly post Alice Solar City and more than a decade of promotion of Alice Springs as a solar centre and what not, there is a fairly good level of educational awareness of energy efficiency. That does not mean to say more energy could not be saved. A great deal more energy could be saved. That is just around bridging the gap between people's awareness and understanding and their practices, and also people's ability to upgrade their properties, their hardware and their technologies to be more efficient and to get involved as more efficient technologies come out. A big sector where there is still possibility for big energy productivity gains despite a good level awareness is the institution level. Be that government or larger business, there is still an awful lot that could be changed by improved practices. I think what we have seen in particular is it is not enough just to do an energy audit and present a report. There really needs to be assistance for businesses

and large institutions to adapt their management practices and their governance practices to ensure they are meeting the efficiency targets they would like to see and the efficiency targets they could meet if they working efficiently.

There is still a big need to invest, by the Northern Territory government, in energy and water efficiency and this is to - the impact from projects like Alice Solar City and Alice Water Smart which were both, essentially, pilot projects. Alice Solar City was always called a national pilot project even though it was five years. The Northern Territory government really has an opportunity to lead here - to roll out the real deal following on from the pilot. I would say the fact we had a very educated public here is a firm base on which to work.

Mr CHAIR: I will hand over to Gerry McCarthy for a minute. I think he has a question or two for you.

**Mr McCarthy:** Jimmy and Alex, it a good opportunity to put on the record what you think government can do to sponsor and support our Environment Centres? In the essence of this inquiry, which is about the Territory's future energy reserves and its energy future, and relating to good policy development, what do you recommend the role for government and the Environment Centres?

**Mr COCKING:** It is Jimmy here. Thanks, Mr McCarthy, for that. One of the key things we need to ensure is we do not lose the momentum. While we talk about Alice Solar City and Alice Water Smart as two big projects down here that a large amount of impact, if you look back in history, from 2002 the COOLmob, formerly Desert Knowledge Australia and now desertSMART COOLmob, has been leading the way for these projects to be able to happen. The Top End has the COOLmob that works out of the Environment Centre NT there, and desertSMART COOLmob operates out of the Arid Lands Environment down here.

There are some significant concerns that we are going to lose a great deal of ground here if there is not continued operational funding of both of the COOLmobs to continue to make this work. There is the massive amount of both federal and Territory government's investment that has gone on in the community around education in energy and water efficiency.

That is one of the key ways we think we can continue to building on the learnings. How the NT government can lead on this? We have listed it in the recommendations, so we have been very much looking to establish an energy productivity unit within the Department of the Chief Minister. We believe it is really important for whole-of-government, from local government in all the shires and Alice Springs and the cities, through to all NT government departments, looking at how they use energy - whether it is about how they are using their cars, the demands of looking at different transport options for how NT government workers get to work, and we are looking at fuel efficiency targets and putting limits on the use of cars for government.

But, it is also important to look at the procurement strategies of government and how they choose the buildings they choose to lease, and putting on some standards there, in line with the National Building Code and also the energy efficiency ratings through NABERS. It is also looking to adapt, potentially, an energy efficiency rating for the Territory which would look at the arid environment, the semi-arid environment, and also the tropical environment.

The government can really take a strong lead here. If it comes down to the bottom line, there has to be looking at efficiency targets for the financials of government. They should also be very much looking at the energy and water efficiency of government operations.

Mr CHAIR: Okay.

Mr WOOD: Excuse me. Can I ask a question?

Mr CHAIR: Gerry Wood would like to ask one question.

Mr WOOD: The Independent.

Mr CHAIR: The Independent person.

**Mr WOOD:** Jimmy, you have on page 2 of your submission that electricity grids will almost always be backed up by fossil fuel power generators. You are referring to the high penetration of renewable energy. What form of fossil fuel are you talking about there, gas, diesel or LNG? Would you be looking at gas?

Mr COCKING: Thank you for the question. I believe it is highly dependent on what is actually going to be the most economically efficient method or product to be used in the community. I said that, not saying we should not

aim for 100% and should all be aiming to have some kind of solar thermal so with 40 hours back-up we do not need to actually have to use fossil fuels. In reality, for the foreseeable future, fossil fuels will be playing a role in energy generation.

I suppose, from the environmental perspective, we are looking to reduce that based on the carbon footprints. So, in towns where they have gas, I imagine it will be gas and, where there is diesel, it will be backed-up diesel unless there is a method of getting gas there cheaply.

The message we really want to get across there is we have to approach this on the basis of what is feasible and, looking at the cost efficiencies coming through with photovoltaics and renewable energy, it is important to be looking at when the highest peak loads are happening. During the day is when people are using their air conditioning and when refrigerators - also heavily important, as they are during the night - but making sure when the sun is shining we are generating kilowatt kilowatts and at night, if we do not have the luxury of battery backups and heat storage, fossil fuels are a backup and not the primary source.

**Mr WOOD:** Yes, I understand that and it makes good sense. In your report you mention concerns about fracking. We have been told the gas that comes into Alice Springs is from Santos in the Amadeus Basin and the gas extracted from there is by fracking. I have not been to Santos and we have just been told that is the method used. Have you looked at the process of extracting gas from that area?

**Mr COCKING:** It is funny you ask that. I rang Santos two weeks ago and am still waiting on a reply. I rang them to go out and look at the Palm Valley gas field so I can see what is going on. I have heard fracking has been going on out there since the late 1960s. Also, something which is not so much on the record is in the late 1960s or 1970s there was a significant leak there. That is not well publicised on the AAPEA or Santos websites. There is always a risk associated with that. What needs to happen with this industry is there needs to be stronger regulation to ensure we do not have the risk of contamination. If there is to be fracking we need to be sure the aquifer is safe and it is not just an industry proponent or authority who will seek to profit from that venture telling us it will be okay.

**Mr WOOD:** You might not want to use gas as you prefer solar, but if there is gas exploration do you have problems with conventional exploration of gas because there is that option as well of course?

**Mr COCKING:** We would hope the EPA and the Mines and Energy department take it on a case-by-case basis. From our perspective, the risks of fracking are significant in that we have seen some impacts of this starting to come out after over a decade of the high density of fracking happening in the Marcellus Shale Basin in the States, and also looking at the impacts fracking is having in NSW and QLD - coal there is quite different to shale. There are still the same issues in that if we are fracking and causing these fractures in rock and releasing the gas there will be subsidence issues and others which have not yet been considered. That is why we are really concerned about the fracking.

In regard to carbon emissions, we are also concerned about the normal extraction or so-called conventional methods of extracting gas. The issue we are seeing with fracking, largely the fugitive emissions that are coming through and penetrating different rock layers and entering the atmosphere, but also the pollution of aquifers as well. We are realists in that we do not see an end to the industry or anything like that, but we think the regularity environment is far too lax for the amount of exploration that is going on.

**Mr WOOD:** Could I ask you a political question, Jimmy? Environment centres are political from time to time, do you think our Environment Protection Agency, as it is written up today, is independent.

Mr COCKING: Do I think it is more independent than what it was, possibly. I suppose the challenge is I wonder who the EPA is accountable to.

Do I think it is more independent than what it was? Possibly. I suppose the challenge is, I wonder who the EPA is accountable to? While there is a minister who is responsible, when the EPA community consultation came here, it was not very clear who the EPA is actually accountable to.

**Mr WOOD:** Yes, my concerns are more that (1) there are people with dual roles on the Planning Commission back to the EPA and vice versa, and (2) it is part of a department, so it is, basically, the department of Environment, whereas in other states the EPA stands out by itself completely.

**Mr COCKING:** To add to that, they have a lot more of an authority function. That is why I would like to see the EPA be resourced to be able to do a bit more investigation and initiate its own environmental investigations. Currently, we have concerns that with the changes that are looking likely through the *Environment Protection* 

Biodiversity Conservation Act, with the so-called one-stop shop, whether the EPA is currently resourced to be able to handle the volume of work it may be faced with. Also, its independence from industry and also government. We would like to see it properly resourced to be able to actually be a bit more of a watchdog rather than a facilitator.

Mr WOOD: Okay, thank you.

**Mr CHAIR:** Okay, thank you, fellows, for that. We have run out of time. I point out that this committee is not a government committee, it is a Legislative Assembly committee. We have been saving some energy this afternoon, we do not have our two LED TVs on for the video link. Anyway, thank you very much, and I am sure we will be in contact again. If we are down in Alice Springs having a look at Santos we will look you up.

Mr COCKING: Please do, we would love to come along.

Mr CHAIR: Okay, thank you for that.

Mr McCLEAN: Thank you.

Mr COCKING: Thank you, Cheers now.