# T R A N S C R I P T

## STANDING COMMITTEE ON THE ENVIRONMENT AND PLANNING

### Inquiry into unconventional gas in Victoria

Torquay — 13 August 2015

#### Members

Mr David Davis — Chair Ms Harriet Shing — Deputy Chair Ms Melina Bath Mr Richard Dalla-Riva Ms Samantha Dunn Mr Shaun Leane Mr Adem Somyurek Mr Daniel Young

#### Participating Members

Mr Jeff Bourman Ms Colleen Hartland Mr James Purcell Mr Simon Ramsay

<u>Staff</u>

Secretary: Mr Keir Delaney Research assistants: Ms Annemarie Burt and Ms Kim Martinow

Witness

Mr Campbell Walker (affirmed), Campaign Coordinator, Friends of the Earth.

**The CHAIR** — I welcome Cam Walker from Friends of the Earth. Cam, if you can begin with a brief submission. I note that your organisation's submission is no. 466, and we will then ask some questions.

**Mr WALKER** — Thank you very much. Thank you for the opportunity to present today, and I also want to acknowledge the work of the committee. This is, as you know, a very emotional issue for many. It has got a lot of community concern. There have been a lot of submissions put forward, and I just appreciate the time that you are putting into this, particularly going out to the regions. Thank you very much.

This is a watershed moment for our state. I am not intending to go over our submission. We have made it fairly clear that we believe there are many problems with the industry, and we want to see an outright ban. I do want to cover four things very quickly. The first thing is the issue of tight and shale gas; I will say 'shale', but I am referring to both here. The reason for this is just that after the release of the water reports a lot of the conversation has refocused around the suggestion that tight and shale gas will not be as bad or as risky as coal seam gas. We do not believe that is the case. The argument from the industry goes that because the well will be so far below ground there is very limited possibility of groundwater contamination, yet as was pointed out in the state government's interdepartmental report, which is separate to the water reports, they identified that there are still risks associated with both these forms of unconventional gas.

I would generally expect a departmental report to be fairly cautious in terms of claims, and it is interesting to note that they do spell out exactly the same concerns that we hold and have outlined in our submission. So it is not just a position of the environment movement; these are concerns that are held by the state government itself. We think it is very significant that in their report the government identifies that there are nine risks, but also significant gaps in knowledge in terms of both tight and shale gas. These are outlined quite clearly in their report.

Despite the suggestion in the attached water reports that the threat to groundwater supplies will be low with tight and shale gas, we do know that drilling operations for both of these forms of gas tend to consume large volumes of water, and that will no doubt put them into competition with other groundwater users. If anything, it is our belief that that question of water use is understated in the two water reports.

Industry uses the argument that the depth of the gas deposits is so low that there is less risk to groundwater compared to CSG, which obviously exists closer to the surface. However, we point out that the deeper wells, if anything, are more likely to fail than coal seam gas wells due to the greater pressures required to fracture shale and tight gas — sandstone and shale — compared to fracturing coal seams. The greater pressure that is required places the well infrastructure under greater strain and therefore increases the chance of failure of the well casing.

The shale and tight gas wells must also pass through aquifers. We believe that well failure can lead to contamination of these water sources, particularly over time, and because these wells are generally much deeper — several kilometres, as we know — and sometimes involving horizontal drilling, they are much more complex. The greater the complexity, the greater the chance of failure. A number of US studies have implicated shale gas in the contamination of groundwater with heavy metals, salts and gas.

Additionally, while only a proportion of CSG wells need to be fracked, the vast majority of tight and shale gas operations will require fracking, which will require chemicals of course. We would finally point out on that issue that there is also the question of geo-contamination — not so much what we put in, but what we take out with the recovered water. Our submission outlines some of those particularly naturally occurring radioactive materials, volatile and semi-organic compounds and high concentrations of salt. You have got the same contamination issues of course with CSG. So it is very difficult to see tight and shale gas as a safer version of unconventional gas.

The second issue is the question of regulation. I know that a regular narrative from the industry — and having sat through many of the consultations around the previous investigation — is that regulation will deal with any issues that arise. We would point to the fact that there are many well-documented cases of contamination from tight and shale gas, particularly in North America. Now when these are raised, industry here says these are legacy issues; they are things that happened previously, under less rigorous regimes than we have here in Australia; and also that the technology has come a long way, so we do not expect to see those problems in Australia. I wish I had quite that level of faith in our ability to regulate this problem. Obviously if we have a contamination incident in an aquifer, that is very different from having a water spill in a pondage next to a

service station or something. We know it is going to be impossible to contain a serious contamination incident that might happen in an aquifer.

I find it hard to have faith with something like this, where there are so many unknowns, that we will actually be able to regulate our way out of the problem. We would point out the news from this week, which was the fact that an underground coal gasification plant managed by Linc Energy at Chinchilla, west of Brisbane, has already caused 'irreversible' damage to strategic cropping land up there. We would just point out, even though underground gasification is different to CSG and unconventional gas, that even in places like Australia with very vigorous monitoring and regulatory regimes, no system is perfect, and we are actually gambling with the future of our agriculture.

The question of benefits of gas to the state is a really key one of course, because if there is a new industry, it is going to bring royalties, it is going to bring jobs, and that potentially looks good. If you drill into this, it starts to look ever more sketchy. One of the things we have learnt from this inquiry is the fact that we know so little. Despite decades of research, we still do not even know if there is going to be a commercial industry, even if we decide to open the gates to it — and that is not through lack of looking. Lakes Oil, I saw yesterday, was reported as saying they had spent \$80 million on exploration already in this industry. Our argument would be that if, having had decades of research — and the fact remains that we do rely on state electricity commission datasets in terms of coal seam gas; we have got decades worth of information — we still do not have any commercial production here. If the resource was so great after decades of exploration and millions of dollars, you would think there would be some commercial production somewhere in the state prior to the moratorium being put into place.

I have not met anyone from industry who is prepared to sketch out how big they think the industry will be based on the resource they know is there. At best they talk about nodes of production, perhaps around Seaspray, perhaps around the Timboon area in from Port Campbell, but it is pretty clear we are going to have a small-scale industry because the resource is marginal. So if your decision or recommendation was to open the gates to this industry, we have still then got the problem of assessment. If you go back to the state government submission, it says it is going to take five to seven years from lifting the moratorium to any commercial production, simply because of assessment and approvals. I think we know that with any government with an issue like this that is so contested, no-one is going to fast-track it; no-one is going to move things through quickly. It would have to be a very rigorous assessment process. We would probably also have to deal with the harmonisation of the two key acts, the MRSDA and the Petroleum Act, because obviously we have got unconventional gas covered by both of them.

So we would argue that with that time frame and the fact that it is going to be a marginal industry, it is not going to provide any short-term benefit to consumers, be it domestic or commercial, in the state in any foreseeable time frame. We would argue that in the medium-to-long-term time frame we need to have shifted away from looking for new sources of fossil fuel anyway, so we just do not see it as any sort of benefit. In our submission we talk about the EROI, the energy return on investment, which we think is really significant: how much energy, how much diesel, do you need to actually frack the gas to release it from the seams to bring it to the surface? There are some formulas there that I think are entirely unknown and really significant to this conversation.

I will just finish on that point by saying that at some point we might have a localised industry operating in different parts of the state at a very small scale. So just putting our economic hats on for a minute, it is likely a lot of those jobs, because of the nature of the industry, will be for outside workers — they will be fly-in fly-out workers. That has been the experience, I know, of the industry in terms of East Gippsland. There have been very few jobs from the exploration, and when they frack they often bring crews in from interstate. That was prior to the moratorium. The royalties — it is hard to imagine they are going to be very large, so in terms of what is coming into state coffers against what might go out in terms of loss of agricultural output, I just think it becomes a really risky proposition.

The committee might have received this morning the Melbourne Energy Institute report, which looks at energy shifting. I commend that report to you. It has some really interesting information around how we can substitute gas, and it is starting to look at the hard issue around: how do we substitute gas in the large industrial users as well, because that is really significant.

Then of course there is the question of social licence. I am almost finished, by the way. I have worked with Friends of the Earth for 25 years, and I have been involved in many grassroots campaigns, and I can honestly say — and I am sure you are aware of this — I have never seen anything like this before in my life. This is a remarkable campaign. It is a remarkable groundswell. It cuts across voting intentions, it cuts across everything. It is around regional centres. It is around farmers. It is an unprecedented movement. I would just like to point out that this campaign has sustained itself for several years now. We have been working on this issue for five years. It has been in full flight, if you like, for four years, and it has sustained itself. It is clearly not going away while there is a threat of unconventional gas.

We have already had, as you know, 62 communities declare themselves coal and/or gas field free, and Arawata in South Gippsland is going to be 63 at the end of this month. It is important to understand the scale of the organising that has led to those declarations, because a declaration means you doorknocked every house in your community or your postcode. There are many, many thousands of houses that have been knocked on. In some instances groups have taken 18 months to doorknock their whole community. So you have got incredibly committed people, and in my experience they are not usual suspects. They are not actually people like me, a professional activist; they are people who have never been politically active before. It is a phenomenal movement, and it is a movement that certainly is not controlled by groups like us. I think it would be a grave disservice to suggest that that is actually the case. These are people who — in spite of what industry says about them, that they are misinformed — are doing their own research. They are looking to Queensland and New South Wales and what is already going on up there in terms of impacts on communities, and they are making up their own minds that they do not want this industry.

It will not receive social licence to operate in the areas where production is likely to occur. It needs to be understood that this is not about nimbyism, and I have been amazed by what I have seen of people in this campaign. They start by worrying about the local, but now they are cooperating across the state, and they support each other. That is a remarkable thing. It shows it is not nimbyism. I just point out that it is not just about defending their patch; it is about defending their landscape, their businesses, their families and also their communities. They are not going to back down. And any government that gives the go-ahead to unconventional gas in any form will face sustained resistance the likes of which we have never seen in this state.

I also hope you understand the mental stress that is being placed on communities. Just yesterday I had a phone call from a farmer in the Seaspray area who was talking around the impacts on her neighbours. They are just sick of this. This has been going on for years: 'Will it?', 'Won't it?'; the companies saying, 'Oh, we're on the cusp of commercialising. We're almost there. We just need to do a little bit more testing'. People are really over it. Frankly, they are feeling really stressed, and it is starting to impact on their lives. Prior to the current moratorium people were saying to us, 'I can't go on holidays because what happens if the drilling starts in Seaspray while we are away?'. This is really playing on people. People are on the phone and actually crying to me. And these are not people who normally get on the phone and cry; these are just really good, solid hardworking people.

So I would really urge you, given the resistance, given the lack of social licence, given the very real risk of contamination, the other known negative public health and climate change impacts and the potentially negligible economic impacts of such an industry to our state, to make as a recommendation the suggestion that we ban the industry. The key thing that will do for those communities is remove the uncertainty they are facing in their lives, and it will allow them to get on.

Finally, can I just point out that on the question of bans a number of MPs have said to us, 'We don't like the notion of banning a whole sector because it sends the wrong message to industry'. We would point out that there is a very good precedent here to ban this sector. We are not saying no to offshore gas, because of course that is really important to our current supply, but we would point out that there is a whole of range of jurisdictions overseas — and we have listed a lot of them — that are banning either outright unconventional gas mining or fracking. They are actually doing that, and there is no push back because it is so powerfully supported in the community.

Of course here in Victoria we have already legislated to ban an entire sector — which is, the nuclear industry. We cannot explore or mine uranium here. That was a good move. It was well supported at the time, it has worn the test of time — it has been a couple of decades now — and Victoria is still open for business. So we will still be open for business if we ban this industry. It will be very well received by the community, and it will be

received with heartfelt relief by the communities in the production zones. Thank you very much for listening. I really appreciate your time.

**The CHAIR** — I thank you, Cam, for your presentation and also for the submission, which I think is a very thoughtful one. I have two questions. One goes to what you have alluded to — and this partially comes out of our earlier hearing down in Sale. It may be a difficult set of questions, but I think the community has a right to understand the linkages between Friends of the Earth and Lock the Gate and all of those other groups because we need to understand at this committee level, but more broadly, the veracity and the linkages that are there.

Mr WALKER — Yes, sure.

**The CHAIR** — It would be helpful if you were to put on the record the funding sources and an understanding of how the links between Lock the Gate and Friends of the Earth operate.

**Mr WALKER** — Sure. In the first instance, in terms of our organisation's capacity, we are putting more into this issue in Victoria than any other issue. To be very up-front about that, I spend as much time as I can on this issue. Obviously I am the campaign's coordinator, and I am paid by Friends of the Earth. We have two community organisers, one who works in Western Victoria and one who works in Gippsland. They are Friends of the Earth employees. They are also Lock the Gate spokespeople for Victoria. But I think you need to understand that Lock the Gate is an umbrella, and there are 75 active community organisations that I am aware of that are active under the Lock the Gate umbrella.

**The CHAIR** — Can I be quite clear there. The two Lock the Gate spokespeople are paid employees of Friends of the Earth?

**Mr WALKER** — They are, yes. We have absolute transparency with our communities about that, and if you get an email from either of them, you will see the affiliation is there in the footer. So the community is very mindful of that. A number of MPs have sought to make that appear sinister in some way, and I would honestly suggest that anyone who wants to go to Seaspray hall on a Friday night to the meeting and suggest that they are being duped by environmentalists will get a pretty unpopular reception. We are very transparent in what we do, and we facilitate and work with and support communities, but we do not drive what those communities do, and we do not drive what those hundreds of volunteers do with their time.

**The CHAIR** — But let me also just continue this to understand it. I am from a political party, and all political parties have some things in common — the organising and rounding up of people to present information and to assist with campaigns is part of that process. The paid coordinators from Friends of the Earth actually are the spokespeople but also perhaps perform a political role of assisting with organisation, booking a hall or other matters of that nature — presenting documents and research.

**Mr WALKER** — The local groups drive themselves, and they meet regularly through two regional groupings. One is called Protect the West, and one is called the Gippsland Alliance. That is facilitated by the groups. We do not control that. So we are there. We have experience in this industry, of course. We have experience in terms of activism and political campaigning, but I think it is necessary to understand that we are one player on the team. We are not the coach. We are not the captain. We are simply one player on the team and really do not overstate our role amongst all the activity of the local groups.

The CHAIR — So let me just understand this. Are there any other paid staff who have that role?

Mr WALKER — In this campaign?

The CHAIR — As spokespeople or otherwise.

Mr WALKER — No, not that I am aware of.

**The CHAIR** — That is all right. The second point: if I go to, perhaps, a continuum, Friends of the Earth is not opposed to offshore gas.

Mr WALKER — This campaign is not about offshore gas, no.

**The CHAIR** — No, I am just trying to get a continuum here. Is Friends of the Earth opposed to onshore conventional gas?

Mr WALKER — Yes, we are.

The CHAIR — So that is where the line falls.

Mr WALKER — Yes.

The CHAIR — As soon as it comes to the sand, as it were, or the 3-mile line or the 12-mile line.

**Mr WALKER** — Yes. And can I just explain that. As I say, we have been working with communities up to five years now, so we have developed very robust relationships with people. The first time we go to communities we say, 'Here's who we are. We are an environmental organisation. We believe that climate change brings imperatives which means that we need to transition as rapidly as possible away from fossil fuels and into renewables. We're pro-wind farm, but we are not going to talk about any of that. We are here to work with you, and where you agree with us we will work with you'. That is why this campaign is about unconventional gas.

**The CHAIR** — So just to understand on gas, gas certainly until relatively recently was thought by many in the environmental movement to be a transition fuel and would play a role.

Mr WALKER — Yes.

The CHAIR — There seems to have been a shift in that position.

Mr WALKER — Yes.

The CHAIR — Does your organisation reject the role of gas, leaving the source aside, as a transition fuel?

**Mr WALKER** — Our reading of climate science is that there is no environmental space left for fossil fuels. We do not see gas as a bridging fuel, so we are not like Environment Victoria, which has shifted its position to hold the one we hold. We have held that for well over a decade. We do not believe it is a bridging fuel, but at the same we want to see our economy keep moving. We understand that there is a very strong offshore gas industry, we understand that it has got supply at present and we are not campaigning against that in any way, shape or form.

The CHAIR — I appreciate your frankness.

**Ms SHING** — Thank you very much, Cam, for your presentation and for talking to the submission which you have provided to the committee and the inquiry. In the course of your contribution this morning you have referred twice to 'a number of MPs'. You have referred to 'a number of MPs' in the context of a position taken by 'a number of MPs' that a ban would send a bad signal, to paraphrase you, and in the second instance 'a number of MPs' who have tried to make something sinister out of the affiliation between Friends of the Earth and Lock the Gate and/or other links within the continuum.

Mr WALKER — Yes.

Ms SHING — Could I ask you to tell us who those MPs are?

**Mr WALKER** — To be honest, I could not tell you off the top of my head. They are Nationals party MPs, and I am basing that on media reports, primarily in western Victoria, that have happened over the last number of years. From memory it was a mix of state and federal MPs that have suggested there is a perhaps inappropriate connection between our organisation and the farming communities and that in some way, shape or form we were seeking to dupe farming communities to adopt our position.

Ms SHING — Okay. So you do not have any specifics?

**Mr WALKER** — I could easily find some. I actually do not know if it is material to this. It is just that there has been an attempt to suggest that there is something untoward, and we would just say that rural communities are very pragmatic, and they just want to get on with life. They are happy to work with people whom they can

see eye to eye with, and we are seeing eye to eye with a lot of these communities, so they have been very prepared to put aside any issues that might exist there and to collaborate with us as partners. I can provide media clips if useful.

**Ms SHING** — The only reason I am asking that is because this is an issue where as a committee we need to rely upon evidence, and we need to have primary sources or empirical data to underpin those sorts of things.

**Mr WALKER** — Okay; understood. I would be happy to provide some media clippings, if I can find them, on those statements.

Ms SHING — That is all right. We can get secondary source material, but, again, it is just an observation.

**Mr WALKER** — All right. The statements around regulation have come through one-to-one meetings when we have been having lobby visits. That is probably not appropriate to name names on.

Ms BATH — I have three questions.

Mr DALLA-RIVA — A good Nationals party person.

**Ms BATH** — A very good Nationals party person and am new to the role. I guess my concern with one of the points you raised there — Harriet's question was 'and past MPs'. I think you have to be careful when you speak now in the present. As Harriet said, we are gaining information at the present day, and we have 1600 submissions and all ears listening. You have to be careful not to put people into a basket and shut the lid, and it felt like that is what you were doing.

**Mr WALKER** — I am sorry. I did quite mindfully not name names or parties for that reason. I did not want to put anyone in a box in that sense. We acknowledge, for instance, the fantastic shift forward in the VFF position on this issue. I was very disappointed five years ago at the position of the VFF, and they have come light years since then. I would suggest that The Nationals have come light years since then. We are not party aligned, we want a good outcome from this and we want to see consensus across the parties for a ban. So it is not in our interest to criticise anyone, and it is in our interest to acknowledge — our policy is always that if someone does something good, you acknowledge it and you give it credit, so that is what I am seeking to do.

**Ms BATH** — That was a preamble question. Thank you. The other question is — just on this spectrum, you were saying that offshore gas is important; we need fuel, and it is an industry that is currently running. Friends of the Earth are against onshore conventional gas. Can I have a feeling about onshore drilling for offshore gas, because that is almost a middle zone, and there is a situation that there is a possibility of doing that?

**Mr WALKER** — Yes, I am aware of the ones in western Vic. We would tend to say, 'Let's just not go down that path of any onshore drilling'. Whether technically they are going offshore through horizontal drilling, we would say, 'Let's just not have any'. We would argue that the offshore gas supplies at present mean that Victoria will remain an energy exporter into the coming decades. We do not think that any new onshore fields are used, and regardless of the technicality, if the well is onshore, we would suggest that regardless of where the actual gas field is we should not be drilling it.

**Ms BATH** — The other question, or comment, was: yesterday we heard from Dr Mike Forrester around potential illnesses relating to produced emissions, we will say. In your submission, on page 3 you mention and discuss — whilst it is a very comprehensive one, I just want to pull out one detail on it — 'Fugitive emissions are a significant concern in all types of UCG mining'. You discuss some of the methane as an emission, and then you mention:

A fundamental problem is that we don't really know how much methane leaks out during the fracking process —

and we need to look at figures. Could you walk me through the first line in that and then maybe some background or some evidence that you have for that, please, Cam.

**Mr WALKER** — I am sorry, I do not have a printed version of our submission there. The reference that that refers to leads you to a really interesting chain — thank you. I will just check that I am actually correct in my statement. There is in there — actually, I may have to find it. The Cornell study is the one we relied on, which

in turn then led to a whole range of conversations where the methodology was challenged, and then there was follow-up research into that.

The problem is that because methane, as we know, is odourless and colourless, it is very hard to track. The more data that is gathered, the more it appears that there are multiple points of fugitive emissions in the production chain, and there will be a legacy issue of methane release from the ground which no-one is monitoring. We would argue that the experience overseas tends to be that they will come in and they will do a test, rather than having ongoing monitoring; but the wellhead is not the only place where the methane is produced. You are going to have the waste pond where the recovered water is. You are going to have the pipelines. You are going to have the pupping station and the compression stations. You are going to have multiple points in the chain where it is likely you are going to get fugitive emissions, so we would argue that to monitor on a real-time, 24-hour basis all possible points of fugitive emissions in the production cycle is going to be massively expensive.

The experience overseas tends to be that they cut corners and do time monitoring, which may not capture release because fugitive emissions are not at a steady rate. There might in effect be a bubble of gas come to the surface. You might test it at one point and there is nothing; you might test 5 minutes later and there will be a really dangerous level. The tendency to go for localised testing points rather than whole-of-cycle testing points and the potential for not 24-hour testing means that it is likely the fugitive emissions will be far beyond any stated and recorded levels. Does that answer your question?

Ms BATH — That is fine, and I might research the Cornell report.

**Mr WALKER** — Yes. There are people who challenge their methodology, but then there is a subsequent bit of work that is actually worth reading. You can kind of follow the links back and be able to find it.

**Mr LEANE** — Cam, I was pleased when you said in your presentation that you have actually met with industry, because the evidence we have had from individuals and groups that have a similar submission to yourselves is that they have had practically zero interaction with industry, which puzzles me. Can you expand on the interactions you have had with industry around this particular exploration?

**Mr WALKER** — We, in the early days, liaised very closely with ExxonMobil. That probably ended about two years ago. I think both parties realised it was not helpful for either of us. We have always made a point of talking to industry reps, and we have gone to industry conferences simply to understand what industry thinks. We want to talk to all stakeholders here. We do hold a view; but we also understand that what we need is a community-wide consensus. We are not interested in unnecessarily having blues with people; we want to find common ground where we can, so we have sought to engage with the industry.

The CHAIR — Do you want more?

#### Mr LEANE — Yes.

**Mr WALKER** — There were formal meetings with ExxonMobil in the early days to just talk around engagement and to talk around information sharing. We have spoken on many occasions with Lakes Oil, and we have sought to engage with a number of the other smaller unknown operators. There is a company that has been investigating a thing called biogenic methane enhancement as a way to release coal seam gas. We attempted to engage with them. We have put through many phone calls to a considerable number of the industry operators that have been involved particularly in coal seam gas investigation, and generally that has not been reciprocated. So we have sought to contact them; we have had most direct contact with ExxonMobil and with Lakes Oil.

**Mr LEANE** — Just a supplementary on that direct contact. You mentioned risks and unknowns. Someone mentioned yesterday about ticking boxes. In relation to all those risks and unknowns mentioned by you and other individuals and groups that have similar submissions to yourself, was there a process of industry going through that with you and trying to alleviate your concerns in each individual sector?

Mr WALKER — Industry has always sought to allay our concerns. We have always of course been very nervous about being consulted —

Mr LEANE — I understand that.

**Mr WALKER** — and having that community consultation box ticked, which is why we had informal meetings rather than formal meetings.

**Mr DALLA-RIVA** — You mentioned in your introduction something about Lakes Oil spending \$80 million?

Mr WALKER — That was reported, I think, in that article in the Australian yesterday.

Mr DALLA-RIVA — Was it? Okay, so I can see that.

**Mr WALKER** — I can give you that link. It was just reported yesterday. It was a report on this inquiry, so it is definitely worth reading if you have not seen it.

Mr DALLA-RIVA — Yes, I would like to see it.

Ms DUNN — To find out what we are doing?

Mr WALKER — Yes, indeed. They seem to know what you are doing.

The CHAIR — Give us the information about what we are up to today.

**Mr DALLA-RIVA** — I just do not for the record recall a figure being provided in their evidence, but I may be wrong.

The CHAIR — They may or may not want to provide that information.

Mr DALLA-RIVA — Yes, but it would be nice to let us know rather than the media.

**Mr WALKER** — Yes, I tend to agree, and in my presentation I actually did a cut-and-paste. The words from the *Australian* article yesterday are 'Lakes Oil say they have spent \$80 million in exploration'. For that I just did a CTRL-C and a CTRL-V. So yes, that is as per the article. It is a very large figure, which is quite surprising.

**Mr DALLA-RIVA** — Okay. I have got to be frank. I am very pleased that you are being frank in the discussions here. I think there have been general views on a range of issues that have raised my concerns, and you have allayed some of those concerns here. You have admitted that you are an activist and that you have been involved in this for a long time, and being an ex-copper I have done a search and found that you have been very active. It is interesting. How was Risdon?

Mr WALKER — Risdon was an experience.

**Mr DALLA-RIVA** — I was just really wanting to say thank you for your contribution because it was a detailed submission and you have provided very good evidence. As people would know, I am usually cross-examining people a bit harder; but on this occasion you get away with it.

Mr WALKER — For good behaviour.

Ms SHING — Is that a question or just a comment?

Mr DALLA-RIVA — No, it is a statement about people.

The CHAIR — Moving on, we are going to try to get ahead of time.

Mr DALLA-RIVA — We are in the love moment here.

**Mr WALKER** — Can I just urge you not to overestimate our role in this. It really would be a disservice to the communities. I can honestly safely say I have spoken to several thousand people during the course of the last five years, 98 per cent of whom are not members of our organisation. They are not classic environmentalists, but they are deeply concerned about this issue. So please do not think that simply because we are providing a bit of capacity to this, we in any way, shape or form running this campaign. That would be a grave disservice not

only to truth and the facts of the matter but also to the communities that are working really hard to protect their patch and their community.

**Ms DUNN** — Thank you, Cam, for your submission. We have heard as part of this inquiry submissions around energy security of the state and demand for gas and already existing gas resources. I know when you spoke to us earlier this morning you said in the medium to long-term that we should be moving away from fossil fuels. I am just wondering if you are aware of work being done in terms of the energy security of the state in relation to its capacity for renewables?

**Mr WALKER** — To take Melina's point, we acknowledge a shift in parties. We have been delighted to see the shift that has happened within the coalition on renewables in the last year. Unfortunately the coalition, when it was in power, shut off the state's renewable energy through wind energy, and now I am delighted that you have a shadow minister for renewables, David Southwick. The ALP has been really good on this and reopened the state to wind energy, and the Greens have long supported obviously renewable energy and a shift towards renewable power.

We believe we are on the cusp of putting Victoria back into the spotlight in terms of being a renewable energy powerhouse, as we used to be up until about 2010. There is fantastic capacity here. We have the Carnegie wave energy project, which is just moving to commercial stage. We have incredible developments in battery technology and stored energy and particularly compressed energy. Victoria should be front of the game globally on renewable energy, with the resources we have and the infrastructure we have, and the smarts that we have here in terms of new and emerging technologies.

So we have no doubt at all that Victoria could easily get to 100 per cent within a decade or so with a little bit of effort. We would also point out that the whole shift in the kind of base load power debate has come a long way since the 1990s and renewables are now able through solar thermal technology and others to provide base load energy. We look forward to that day coming as soon as is possible, and we are really heartened by the way the state is moving at present.

**Ms DUNN** — I note in the submission that you provided there was a lot of detail around the value of the agricultural industry in Victoria. Through the submission process there is clearly an interplay between that industry, our landscapes and tourism and how precious they are. I am just wondering if you are aware of all or any areas that may have a similar mix of agritourism and high-value landscape where unconventional gas has become part of that landscape and the implications and consequences of that.

**Mr WALKER** — The two logical ones of course would be the Hunter Valley, which has a very mixed agricultural economy, everything from raising horses to viticulture and the rest of it, and the north coast of New South Wales. Inland in Queensland the Darling Downs of course has more broad agricropping and broad agrigrazing, but northern New South Wales and the Hunter show us where we would go if we did open the gate to this industry, and it really is not pretty. In New South Wales today I believe that Parliament is voting on the legislation that has been put up by the Greens to stop unconventional gas drilling in the state or at the very least to create some no-go zones and extend a moratorium to five years. That again has been driven from the ground up and that has been because it is not just environmentalists concerned about this. In the Hunter it is the large horse stud operations and the large winemakers that are getting active here. They are the two places we should look to in terms of the impacts of this industry, and where it does happen you do get sustained and very powerful opposition.

**Mr RAMSAY** — For the record, I am a farmer and in fact was president of the Victorian Farmers Federation — but six years ago, not five — so I am not sure if I am associated with your comment!

Ms DUNN — That is lucky. That could have been awkward!

#### Mr WALKER — Sorry!

**Mr RAMSAY** — I actually do not remember the discussion around unconventional onshore gas exploration through the organisation at the time. We did have discussion around the proposed CPRS and ETS certainly at a national level, and I do remember some briefings from the organisation, which I know is connected with GetUp! and Yes 2 Renewables as well and Zero Emissions. But my question actually goes back to a similar question posed by the Chair. Environment Victoria in its evidence was talking about the fact that — and they

did finally get to that point — they are not supportive of any sort of gas use in the future because of the greenhouse gas emissions it produced. I note that the industry I represent and the rural constituency across Victoria use a lot of natural gas through the dairies, the milk processes and the beef processes et cetera and also for heating because they do not have capacity to have access to other sources. We come from an issue around environmental, which really was the basis of my constituency's concern about the coexistence of onshore and conventional gas to maybe a more philosophical view about the dangers of the use of gas for climate change and greenhouse gas. I am just asking you: do you see an opportunity for a transition? I am happy to have the argument another day with you about our policy on wind farm development during our time in government, which actually I think had 1000 permits that were current, live and active. But in relation to that transition phase where our industry is actually dependent on gas and gas use, as against your sort of philosophy that it is bad for the greenhouse effect, bad for climate change and we need to look for renewables, can you — —

**Mr WALKER** — Are you familiar with the Eureka's Futures project, which is a green manufacturing project in the eastern suburbs of Melbourne that is making solar hot-water systems? Are you familiar with that one?

Mr RAMSAY — Not specifically, but like projects.

**Mr WALKER** — They are seeking to work with the dairy sector. They see that as their main growth sector because of the large volume of hot water that is required in dairy production. They see locally produced hot-water systems with a booster which is solar powered as a great solution to wean dairy off the hot water and gas connection. There is also of course heating and cooling, which we understand. But we suggest a nuanced approach. We are not fundamentalists in any way, shape or form. We can see the need to transition but we are not interested in people sitting in the dark having a bad time in a cave. We want to see a measured and meaningful transition plan.

#### Ms DUNN — That is a relief!

**Mr WALKER** — We look to those models such as Eureka's Future where there are opportunities to get fantastic climate change outcomes through shifting to solar and away from gas in the dairy sector while creating local jobs, and that is actually a social enterprise that wants to then put its profits into programs for youth at risk. We see that as ticking basically every box that is possible.

We would see a whole range of ways that would see shifts in the way gas is currently used. To be quite frank, I was very disappointed by the Australian Paper submission to this inquiry, which I think was about three pages. As I understand it, they are one of the largest gas users on a commercial scale in the state, but even they are shifting to a very strong reliance on unfortunately biomass at this point out of native forests or at least so-called renewable technologies. So we would argue that once work is done sector by sector — manufacturing, commercial, agricultural, domestic — there are solutions across all of them, but there is no one size fits all. We are aware of the research that is being done by the Melbourne Energy Institute, which particularly drills into this sector by sector, so rather than me spending 5 minutes telling you the little bits that I do know, I would refer you back to that report.

**Mr RAMSAY** — Can I also for the record state the VFF's position is not the position of Friends of the Earth. The VFF's position is for a five-year moratorium because farmers would like to veto. Your position is distinctive. It is a ban on onshore unconditional gas exploration, so there is a difference.

**Mr WALKER** — Yes. I am sorry: I was not suggesting it was the same. We are also very clear on the question of the right of veto. We believe an individual right of veto will internalise conflict in communities because there is always someone who is kind of desperate enough that they will sign the deal. We support the right of community right of veto, but our preferred position is an outright ban.

**The CHAIR** — Cam, thank you for your submission and for the submission from your organisation, and for your frankness.

Mr WALKER — Thank you very much.

**The CHAIR** — I acknowledge in the audience Andrew Katos, the member for South Barwon, the local member. I note conversations last night and indeed before the election period where Andrew expressed various strong views on unconventional gas in his local area.

#### Witness withdrew.