### IN THE NORTHERN TERRITORY



#### **Darwin - NT Greens**

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Darwin Convention Centre, Darwin

Speaker: Paul Sharp

Paul Sharp: My name is Paul Sharp. I'm appearing on behalf of the ... representing the

Northern Territory Greens Party.

Hon. Justice Pepper: When you're ready, Mr. Sharp. Thank you.

Paul Sharp: We'd like to thank you for the opportunity for participating in this Inquiry.

The Northern Territory Greens support a scientific, evidence-based approach to public policy, and an open and transparent process of public consultation on more controversial matters, as the prospect of fracking in

the Northern Territory certainly is.

I think it's generally well known that our party policy is to oppose this industry's development, and in doing so, we're probably standing with most of the Northern Territory community. It's a long-held position. We took that policy to the last election as part of probably our lead issue in the campaign. I'll just briefly outline why we hold that policy.

Firstly, we would like to see an urgent transition away from carbon-polluting fossil fuels like coal and gas towards clean energy, so as to mitigate against the worst impacts of climate change. We do not support any new coal or unconventional gas developments. However, we do recognise that conventional gas, such as the offshore conventional gas that we've got coming into the Territory at the moment, that in the short term is needed to support the development of the renewables industry. Until such time further down the track we get cheaper batteries more widely distributed, and other storage options, we may still need a small amount of gas going forward, but that amount of gas would be decreasing.

The package we would support, as the development of the renewables industry across Australia, would include solar, wind, hydro, supported by battery storage, pumped hydro storage, and with demand management, smart grids, and reduced power technology. We would note that the Northern Territory Government has now released its Road to Renewables report and is talking in the media about having a solar farm, a big battery half way down to Katherine, supporting the development of a gigafactory in the Northern Territory, and we've got obviously examples of this kind of thing in South Australia, as a total package. So what we're saying is the

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Northern Territory Government itself, the audience of your final report, is already on that wavelength.

Secondly, there's the groundwater issue in the Northern Territory is particularly important as a local issue, as I'm sure you've heard many times. In particular, it's the main source of water outside of Darwin for all the rural population, regional population. There is no social licence for fracking in the Northern Territory, and this isn't just the urban people. In particular, the traditional owners in the zones where fracking is proposed are actually contesting fracking agreements, and protesting, and so on, as well. It's a local, regional, and Northern Territory-wide lack of social licence. We don't think, under the circumstances and given the history, that there's likely ever to be a social licence in the Northern Territory.

We also note that most of the other states and territories in Australia have already got fracking bans and moratoriums in place. It's not just the Northern Territory. It's actually in Australian culture that we're moving away from this industry.

There is no business case. The economic impact statement relies on one single well as evidence of the productivity and potential economic returns. You can't generalise from that, that a whole gas field will have similar figures. That's normal. In the mining and petroleum industries, you've got to assess your resource thoroughly before you can come up with a figure, and of course, it's different in every region. You can't just model it based on another location, which renders the rest of the economic impact statement as a hypothetical, and certainly not a scientific report.

The other side of the economic argument is now that renewables are cheaper. At the moment, it would seem certainly solar and wind are cheaper. The prices of those are coming down rapidly, continuing to come down. At the moment, you could argue that the cost of batteries is still high and not coming down as quickly, but in the foreseeable future, the next 5, 10 years, the whole package of renewables is likely to be clearly cheaper than going gas, gas by itself, that is.

Finally, we don't believe the Northern Territory, sadly, has the regulatory capacity to adequately regulate this industry. There is a history of a lack of political will in adequately resourcing the regulation system, and we're not seeing any progress with that at the moment with the current projects such as the McArthur River Mine. The Montara oil spill was reported after the Inquiry as having poor Northern Territory regulatory regime as being a contributing factor, and there's various legacy mines and so on. You've heard it all before. So, we don't think that proper regulation can actually be achieved at the moment. Maybe it's because we're too small a state. We just don't have that capacity to handle this level of technical environmental responsibility.

Now, I'll just go through each of the chapters, make a few comments about each one in order, keep it simple for you so that it all flows through in the same order as the report. On water quantity, obviously as you know,

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fracking is a water-intensive industry, and that the Northern Territory regional areas are groundwater-dependent. Those two things are in conflict. The question is how much water might be available. Last time I was here, I was suggesting possibly groundwater availability might actually be a limiting factor in how big an industry you might be able to create, because if you don't have the water to actually get the job done, you can't do it. You've pointed out it's probably not going to be economically viable to truck water in. You weren't going to build any dams for this situation, and so on, so it could be a key issue.

In the area Beetaloo Basin, where we're treating that as a case study, it's halfway in terms of rainfall and evapotranspiration between Darwin and Alice Springs, so it's actually quite limited, because if you subtract one from the other, you only get one or two hundred millimetres per year available. Alice Springs, in the dry area of course, relies entirely on a single non-replenishable source of water, and as I understand it, it's gradually being depleted, so I would suggest they can't afford to lose any groundwater.

The Northern Territory Greens welcome the recommendation of a comprehensive groundwater study, in fact it's essential, and an expansion of the water management district, and splitting it into the north and south, because there they've got different characteristics with rate of flow and so on, and a new water allocation plan that includes the people of Beetaloo area as its focus. This work must be completed before a final decision on the viability of fracking is made by the Government if the community is to have any confidence that the risks associated with available water quantity have been properly addressed.

We'd also be a little bit concerned about the industry investing large amounts in exploration only to discover, once the groundwater study is complete, that they can't proceed to production because of this limiting factor. We would see that as another one of your 'has to be done' before exploration activities. We would like to say that because this is a possibility, it should be explicitly stated in your report. That justifies, then, the delay that I am suggesting occurs. You'd have to state that in the report to justify it.

Moving on to water quality, leaks and spills continue to be a risk. Whatever the regulations, you've still got human error and so on. We've seen the Katherine situation. You can't fix, as far as we know, the groundwater aquifer, and once contamination occurs, then your domestic supply, your horticultural supply, etc., pastoral, if it's not going straight into humans, it could also be going through the food chain. This could be the radioactive materials, etc.

We also note that the well integrity failures and abandoned wells is ... Well integrity failures, you're talking about a 0.1% risk, which is one in 1,000. If you've got 1,000 wells, that's an impact that's likely to occur. In terms of abandoned wells, you say, "We don't know," but logic would suggest that steel will be corroded by salt, concrete will eventually break down in the long term. We don't know how long that would take, exactly, and as you've

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suggested in your report, that needs further investigation, but at this stage, it's an unmitigated impact.

Moving on to land, the land chapter, landscape amenity. The vegetation out there is fairly sparse in that part of the world. The drill wellheads stick up in the air. They're only two kms apart. Pretty much the whole area is going to be impacted from a landscape amenity point of view. It will be turned into an industrialised landscape, and there's no getting around that. That's an unmitigated impact.

The weeds problem, once it gets out of control, as we've seen with most of the weeds in the Northern Territory, you never get it back under control again. That's a risk that's unlikely to be mitigated. You can try and prevent it. You could have requirements for washing down vehicles going into the area, etc., but what we're seeing in real life is it's unlikely to happen. We'd also be concerned about the rehabilitation after the industry pulls out, but we'll assume that gets factored into the environmental management plans.

On greenhouse gases, you mentioned a Liberal National Party target for 2030. There could be a change of government within the lifetime of the project, with a higher target, likely. Certainly Labor's got a higher target. The Greens have got an even higher target. If we have balance of power, as has been seen before, we're likely to be pushing the target in that direction, so we feel that it should, I guess, set a higher target in your final report.

There are recommendations, you've got submissions on this, for a higher target being necessary if we are to transition towards the 2050 target of zero emissions, which is also part of our Paris Agreement, which isn't in your report. If it was, you'd see that finishing the industry in 2043, or after delays 2045, you're getting towards 2050, when we're still going to be producing, fracking gas at a time when we're supposed to be having zero emissions.

Moving on to methane, which has been a very technical topic, and their fugitive emissions. We really struggled reading that particular chapter, or that part of it. In particular, there's methane figures all over the place, and the scientists among us all agreed that we got confused, which is a bit sad. So, we're hoping that you tidy up that chapter so it's a bit more readable. If scientists can't understand it easily, laypeople have got no chance.

You tried to settle on an actual figure for the methane releases as a sort of estimate, which is a fine effort. We appreciate that your credentials in climate science on the panel are limited because that wasn't selected for in the first place, so we respect that struggle, and acknowledge that you've basically concluded that there is a big discrepancy between things like inventory methane, and field-tested methane, and so on, and it's hard to estimate, but if you could maybe pick up a higher-level figure based on the principle of ... Sorry, what is it?

Paul Sharp:

Precautionary principle. Of course, thank you. Then that would increase your estimate of greenhouse gas emissions. We'd also suggest that you bring the 100-year time frame down to a much smaller level. I would like to

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discuss that in more technical detail, that if you brought it down to the reality of the average Territorian's lifetime, it'd come out to about 2070, and it would effectively double your estimate of the global warming effect from methane emissions. Also, I've got more on that, but I'll save that for later, if I get a chance.

The final aspect on methane emissions is you've chosen the lower option on the three production levels. You've chosen the breeze option, which is lower. If you actually were going to be consistent with the economic impact statement's range of possible scenarios, you should actually be listing the methane potential of the lowest, medium, and highest category of production. If you apply all of those recommendations, times 2, times 2, times 10, perhaps you've underestimated methane by as much as 40 times, which is a huge contributor to upstream greenhouse gases.

You've already heard plenty of other people talking about having all your baselines and various other studies done before exploration rather than production. That includes on health and lots of other things. I'll come back to that, too. Under health, we think you've underestimated the psychosocial impacts. We're going to present you with a study in our written response that has come out more recently. I suspect you haven't looked at it previously. We also suggest that perhaps the U.S. studies shouldn't be dismissed quite as easily. Some of it can be applied. I'll skip that.

It's part of an economic impact, as well, and an impact on the local healthcare systems if you have a lot of fracking in the area, including the psychosocial aspects. These can be hidden costs that actually come out as externalities that the taxpayer pays for.

Moving on to Aboriginal people and impacts, we congratulate you on grasping and having a good understanding of the below-ground issues for Aboriginal people, but we suggest that more than one meeting with Traditional Owners would be needed in most cases to negotiate most of the agreements. We also compliment you on recognising the language issues make more difficult the difficulty of informing them adequately. What we suggest is that you factor in the exploration company having to provide funding so that the Aboriginal people can seek independent advice. We suspect the Aboriginal Areas Protection Authority people, while well intentioned and experienced in other areas, probably lack the specific industry technical advice, and it's yet to be tested as to whether they would have that capacity.

The negotiations with the Aboriginal people should be done without hurry. They have to consult with their own people quite thoroughly, because part of their culture is worrying about future generations' impacts. As I said before, there is no social licence to operate. Your quote of the overwhelming community opinion that you have seen being not safe, not trusted, and not wanted, isn't something that's going to be going away. It's actually an indication that these people are not giving any social licence to operate anytime soon.

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Okay.

Hon. Justice Pepper: Your time is officially up. It was a little while ago, but if you-

Paul Sharp: I'm sorry.

Hon. Justice Pepper: No. If you've got just a few more points to make, please make them. If not,

of course, you can always-

Paul Sharp: All right.

Hon. Justice Pepper: ... submit in written form.

Paul Sharp: Yes, okay. One of the economic issues is asset stranding if we get a

movement towards renewables more quickly than the lifetime of the project. Most of the unconventional gas in the world needs to be left in the ground. You've already had that from my other submission. I've mentioned the lack of political will, resourcing, or capacity with the regulations. As far as the independent regulator is concerned, we don't think having two different ministers in the same government being in charge of the two sides of regulation is independence. The EPA has a fairly poor reputation in recent

times, and there again, subject to a bit of government control.

We're suggesting the option of the independent statutory authority-type regulator as being necessary, but to start that from scratch, it will take years to develop the capacity. Then again, it's also subject to political expenditure.

We compliment you on your strategical SREBA we'll just say, the baseline assessments. However, it must be completed before exploration. We agree with that comment. Particularly in the case of methane, you can't have exploration go in there and contaminate the area. You ruin your baseline completely. It makes the whole thing pointless. As I said before with groundwater, you've got an issue with do you have enough, and again, from a baseline point of view, contamination.

One advice I have is, because you've got several stages going forward, I think a project management plan would be appropriate as a structure, and if you could do a Gantt chart, critical path analysis, so that you don't have exploration occurring starting before you've completed the necessary steps to actually make the regulation effective. If you actually work all of that out, by the time you've developed the whole regulatory system, you've done your SREBA, you've then gone through your exploration stage to figure out whether the thing's economic. This is assuming you've got enough water, of course. You're looking several years down the track, by which time you've probably lost your window of market, because the renewables will be cheaper and cheaper.

To just come to a few conclusions, when you add up the total impacts from all of the risk factors, that itself is a large amount. The totality is itself the largest impact and risk. Your conclusion about acceptability, the word acceptable, I know it's in the terms of reference, but there is a distinction

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between a scientific conclusion of acceptability and a political statement. Certainly we feel that your final conclusion is a political statement, and a lot of the individual components are effectively a political statement. Acceptability? You can provide politicians with facts, but if there's an amount of risk that is significant to some extent, that's a political decision.

We suggest you could go through the report and create two separate lists, something that you guys can sign off as scientists on acceptability, and the other bits that you're leaving to the politicians to decide. At this stage, there's a lot of unknowns still out there. You cannot make a scientific conclusion from an unknown.

Hon. Justice Pepper: Mr. Sharp, we do have people here from the NT Farmers who are behind

you.

Paul Sharp: Okay.

Hon. Justice Pepper: They are waiting. They've been waiting patiently.

Paul Sharp: That'll do.

Hon. Justice Pepper: We really do need you to wrap up.

Paul Sharp: Thank you very much for your patience.

Hon. Justice Pepper: Thank you. No, that's all right. If you do have a written document, then

please, if you haven't already submitted it.

Paul Sharp: On that, we would hope to get, but we'll definitely get that to you within

seven days.

Hon. Justice Pepper: Wonderful. Thank you.

Paul Sharp: It's a bit of a scribble at the moment.

Hon. Justice Pepper: Excellent. No, thank you very much. I've got one question for you, which is

that you, I think very early on in your presentation, you said that ... This is me paraphrasing, and please correct me if I'm doing you injustice, that conventional gas was effectively okay. It is an acknowledgement by you that we still need conventional gas. You referred to offshore, but I take it then, by conventional gas, you would also include onshore conventional gas.

Paul Sharp: yes.

Hon. Justice Pepper: I take it from that, then, that that would basically ... that includes the

conventional gas coming from the Mereenie fields.

Paul Sharp: Ah yes.

Hon. Justice Pepper: You know, of course, that almost a third of those wells have been fracked.

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Paul Sharp: Is there a question there?

Hon. Justice Pepper: I guess I'm asking you for comment. I'm just wondering where you draw the

line.

Paul Sharp: The concept, as I understand it, is that globally we need to leave most of the

gas in the ground along with the other fossil fuels. Now, if you have to leave some of it in the ground, and you need some of it temporarily, the best lot to leave in the ground is the unconventional stuff, for a couple reasons. One is it tends to be a higher cost, so less economically justified, and as we're seeing with this Inquiry, there tends to be a lot more impacts and risks from

it.

If you look at the Mereenie fields, which I'm not an expert on, and you're saying that there may be some issues with that, then you'd have to look at that individually. I've made a broad generalisation, just tried to do that on a conceptual basis, to make the point that somewhere we've got to draw the line on which resource bases to leave in the ground, and which to proceed with in the short term. Certainly, the fracking industry as proposed here in the Northern Territory fits into the leave it in the ground category.

Hon. Justice Pepper: I understand the submission. Any questions? Yes, Dr. Beck.

Dr. Vaughan Beck: Thanks for your presentation. Just one point of clarification. You mentioned

in regard to the greenhouse gas assessment that the reduction scenario that was considered was equivalent to the breeze case for the economic study. Just to reassure you that the production scenario considered for greenhouse

gas corresponds to the economic study of gale.

Paul Sharp: understand, thanks for the correction.

Dr. Vaughan Beck: All right.

Hon. Justice Pepper: Ok, again, thank you very much, Mr. Sharp, for your presentation. We look

forward to your written submission sooner rather than later.

Paul Sharp: Yes.

Hon. Justice Pepper: Thank you. All right, thank you.