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Hon Barry House; Hon Paul Llewellyn; Hon Shelley Archer; Hon Kim Chance; Deputy Chairman; Hon Norman Moore

MINERALS AND ENERGY RESEARCH AMENDMENT BILL 2006

Second Reading

Resumed from 29 June 2006.

HON BARRY HOUSE (South West) [7.37 pm]: At last we get to debate the Minerals and Energy Research Amendment Bill 2006, which has been around for a while. It was first introduced in the other place on 5 April 2006, transmitted to the Legislative Council on 27 June 2006 and second read in this chamber on 29 June 2006. I have lost count of the number of times it has been listed on the weekly order of business. It has featured regularly in it each week since the middle of last year. This legislation has been a bridesmaid many times, and now it is finally the bride!

Hon Ken Travers interjected.

Hon BARRY HOUSE: I should just sit down and say that the opposition supports it! The opposition does support this legislation, which is important in its own right. The bill amends the Minerals and Energy Research Act 1987, which established the Minerals and Energy Research Institute of Western Australia. The function of that institute is to encourage the development of minerals and energy industries for the benefit of the state by fostering and promoting all aspects of minerals and energy research. That is a very noble pursuit. The institute is funded from consolidated revenue and attracts industry sponsorship of research on a better than a two to one ratio to government funds. The government's contribution has been steady at about \$650 000 a year for the past 10 years. The Minerals and Energy Research Institute of WA has entered into partnership with institutions such as the University of Western Australia, Curtin University of Technology, PathWest, the Australian Centre for Geomechanics, the Commonwealth Scientific and Industrial Research Organisation and Murdoch University. Occasionally, it has gone into partnership with interstate universities such as the University of Melbourne and Monash University. Partnerships have also been entered into with the Botanic Gardens and Parks Authority. A variety of projects are put forward by researchers in those institutions. Those projects attract government funding and a better than a two to one ratio to government funds from the minerals and resource industry. One of the projects undertaken looked at the corrosion of rock reinforcement in underground excavations. It attracted \$80 000 worth of institute funding and \$270 000 from sponsors. The bang for buck was significant. A project entitled "Mine Seismicity and Rockburst Risk Management — Phase II" was undertaken at the Australian Centre for Geomechanics. It attracted \$120,000 worth of institute funding and \$657,000 worth of sponsorship money, which is an excellent ratio. In addition, according to the list that I have that refers to other research projects, institute funding of \$150 000 attracted \$787 720 from sponsors; institute funding of \$200 000 attracted \$669 000 from sponsors; institute funding of \$100 417 attracted \$260 000 from sponsors; and, institute funding of \$25 000 attracted \$95,000 from sponsors. The list goes on. The important part about all of this is that the results and findings are not confidential. The information obtained from the research is public information that benefits the whole state. That is the justification behind the state putting money into the industry.

The genesis of all this came about after the newly elected Labor government made changes in 2001 following the Machinery of Government Taskforce recommendations. Following those changes a report into this area was commissioned. The report, which is titled "Review of the Minerals and Energy Research Institute of WA and Five Year Review of the Minerals and Energy Research Act 1987", was prepared by Mr Chris Fitzhardinge for Hon Clive Brown who was then the Minister for State Development; Tourism; and Small Business. It was given to the government in March 2002. It is a very comprehensive report that traces the history of the Minerals and Energy Research Institute of WA and the history, relevance and importance of the minerals and resource sector to Western Australia. It reads —

The Premier's Science Council in their recently report on research identified "That the mining and mineral processing sectors comprised over half of the \$340 million spent on research within the State's business sector in 1999/2000." They also reported "less than 3% of research in State Government agencies is related to the mining and energy sector yet this sector contributes around \$25 billion to the State's Gross Product". Their recommendations included the State Government committing a minimum of \$5 million to research in mining and energy.

Mr Fitzhardinge's report went on to state —

In Western Australia each decade in the last forty years has seen the emergence of has seen at least one new internationally competitive mining or mineral processing activity . . .

Department of Mineral and Petroleum Resources . . . claim that Western Australia's growth prospects remain strong and that the State will be able to maintain its prominence on the international mineral scene.

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That was certainly an accurate prediction. The report states further —

In this environment of growth and uncertainty it is essential that there be significant investment in research and development.

MERIWA is unique in Australia in brokering partnerships for minerals and energy research as well as contributing funds to that research. Given the importance of encouraging cooperation and good science in this sector MERIWA's role should be critically examined.

That is what this bill does. It examines the role of the Minerals and Energy Research Institute of Western Australia and proposes some changes and additions. On a procedural basis, this bill specifies the background and experience of appointees to the board and the advisory committee. Board members will now have to comprise one from the petroleum sector, one from the minerals sector and one from the research sector. I believe that is in clause 7 of the bill. Those board members will be appointed by the minister, but they must be practising professionals and not retired. The bill also increases the number of board members from four to five and limits the consecutive tenure to no more than 10 years. I believe that had the unanimous support of the stakeholders. Mr Baker, who is the chairman of MERIWA, and had been for some time, was quite happy with that situation. Actually, it is so long since I had the briefing with the departmental people, they are probably retired by now anyway!

The bill makes the operation of the institute more relevant and flexible. It replaces the term "patents and registration of industrial design" with "intellectual property". It permits the acceptance of gifts that can be used to enhance the function of the institute. Perhaps in his response the minister would elaborate on that. What sorts of gifts are permitted? Obviously, the institute is in the business of leveraging funding from the private sector. I do not know whether that is counted as a gift, or perhaps there is some other gift in kind—it may be staff time or facilities. I am not exactly sure of what that means. The bill recognises the place of modern telecommunications technology—for example, videoconferencing—in meeting procedure and attendances, and defines the authority of and the expenditure limits for the institute itself.

The bill requires that the act be reviewed every five years. Six years have now passed since the review. A review is due even before the legislation is put in place.

Hon Paul Llewellyn interjected.

Hon BARRY HOUSE: No, it has five years written in the bill, and we need to review the legislation even before we have formalised it.

There are issues associated with all this. Most minerals research is done by large private mining companies in Australia and in the rest of the world, but, in the scheme of things, the institute retains a very valuable role for government, in entry-level research in particular, 98 per cent of which is done in Western Australia and in Western Australian institutions. The trend is for much of this research work to go overseas, with the funding and the implementation by large international companies. Unfortunately, that has led to a bit of a brain drain from Western Australia. It has also taken away from Western Australia and Western Australian institutions some of the critical mass of the attractiveness of science. Two \$10 000 scholarships have been allocated to support science research in this state. That is very good. However, clearly more needs to be done in this important area.

When I prepared my briefing notes on this bill, Western Australia's Chief Scientist was Dr Bruce Hobbs. Dr Hobbs retired about a week after this briefing —

Hon Ken Travers: So you had that big an influence on him!

Hon BARRY HOUSE: That had nothing to do with me. I think the government had something to do with that.

Western Australia's Chief Scientist is now Professor Lyn Beazley. I was told at the briefing that the Chief Scientist of Western Australia attended the meetings as an observer. I am not sure whether the current Chief Scientist attends those meetings; I assume she does.

The government appears to be in some confusion about its policy direction on research and science. There is an obvious need to support investment in research and science in our major areas of strength, such as the minerals and resource sector, agriculture and food, the marine industries, and medical fields. In all those areas, Western Australia has a healthy research and science environment, and a good reputation. Forestry used to be included as one of our research strengths, but that area has been deserted by this government. It would seem that not much urgency has been attached to this bill, because we have had to wait two years for this small piece of legislation to be moved up the notice paper. We have heard a lot of rhetoric from the government about moving to new replacement industries and technologies. We have also heard a lot about the term "beyond the boom". Everyone has paid adherence, and certainly lip-service, to that term. However, the reality is a little different.

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Last week, in my speech on the budget, I talked about the centres of excellence program. I referred in particular to the significant time lapse that has occurred between when applications were made and funding was granted. In one case, the applications were made in 2005, but the funding was granted only recently. I also alluded to some significant underspending in some of the budget allocations that were made in 2006.

I am told that a large part of the proposed structure of the Minerals and Energy Research Institute is already outdated and superseded. One of the principal architects of this bill was the former chief executive officer of the Chamber of Minerals and Energy of Western Australia, Tim Shanahan. Tim Shanahan has since moved on to the University of Western Australia. I understand that he is very keen to promote UWA as a centre for research into the minerals and resource sector. Traditionally, Curtin University has had a reputation for research into the minerals and resource area. It is heavily supported by federal government funding. Some time ago, I attended a briefing with a then member, and now chief executive officer, of the Chamber of Minerals and Energy, Mr Reg Howard-Smith, on a new concept that the chamber was working up at the time. That concept is known as MATRIX, or minerals and technology research institute of excellence. The aim of the MATRIX program is to focus on research and development in the minerals, energy and resources field. I understand that that institute could effectively absorb the current structure of the Minerals and Energy Research Institute of Western Australia. It is believed that that would promote a better chance of university collaboration, and also help to counter the fear that is held in some quarters that the other states are leaving Western Australia behind in this important area.

The chamber was seeking \$30 million from the state government and complementary commonwealth funding to set up this MATRIX program. I have not seen any updates on the progress of that request, and I do not know whether the minister will tell us in his response whether he is aware of any developments on the MATRIX proposal. They are the plans for the future.

It is very important that Western Australia continues to put research investment and effort into the minerals and resource sector, which is one of its most important. The Minerals and Energy Research Institute of Western Australia is one of the vehicles that does that. A lot of valuable research is done at mostly Western Australian universities, funded by a very good contribution from private industry to help with that research, the benefits of which come back to all of Western Australia because it is not exclusively owned by any individual company, institution or researcher; it is broadly owned and put into the arena for the benefit of all. With those few words, after a very long time, I am very pleased to support this legislation.

HON PAUL LLEWELLYN (South West) [7.56 pm]: The Minerals and Energy Research Institute was set up as a result of the Western Australian government Minerals and Energy Research Act 1987, but the world has changed a lot since 1987. I ask members to cast their minds back to that year when, on 20 October or so, there was a major stock market crash and people pulled their money out of investment and the world was quite a different place. To my recollection, interest rates were up around 15 per cent —

Hon Barry House: It was 19 October.

Hon PAUL LLEWELLYN: Was it 19 October?

Hon Barry House: Five days before —

Hon PAUL LLEWELLYN: Yes.

Several members interjected.

Hon PAUL LLEWELLYN: The world has changed, but this act has not really kept up with the changing realities of the minerals and energy industry. When this bill came up for debate quite a long time ago—it might have been a year and a half ago—I thought we would have a serious look at the policy and concept behind this piece of legislation. It is clear from its title that the Minerals and Energy Research Institute of Western Australia promotes mineral and energy research. If members look at the composition of the board, they will see that it was to be a person with minerals experience, a person with petroleum experience, and a person with research experience. Petroleum is meant to cover the energy portfolio in this whole formulation, but nobody can be expected to have energy expertise-petroleum, yes, but energy expertise, no. Has the world of energy not changed as to what is considered to be cutting-edge research? Members do not have to think for very long to ask themselves in which sector is the cutting-edge research for energy. Is it in petroleum? I would argue not. In fact, the cutting edge and growth industry is in renewable technology in the energy sector, not the petroleum sector. The petroleum sector is a mature industry sector. There are things such as start-up funding and focused development. Government has a place in funding emerging industries, but when that industry becomes a 10 000pound gorilla, it does not need any further corporate welfare. That is not the place where the government should be putting its sponsorship dollars, even on a one-to-100 basis. The government should be putting its research focus into cutting-edge areas in which it can make a difference.

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I read this bill with a fairly open mind. I was trying to work out why the Minerals and Energy Research Institute has not transformed itself into something that is more relevant to today. The industry is now completely mature and is confronted with very different challenges from those of 20 years ago. The challenges relate more to finetuning; that is, how to take products to market and how to be more efficient with mineral resources. That is where the challenging area of research should be taking us. It is clear from my previous comments that we need quite a different construction in the bill in relation to the energy level, given that it is 2008 and not 1987—21 years later.

The bill seeks to make relatively minor amendments to the Minerals and Energy Research Act. I believe major amendments should have been made to the rudder, or the thinking part, of the act. Most of the changes are effectively responses to the 2002 five-year review undertaken by the Minerals and Energy Research Institute. That was probably way out of sync then, but the review was for Hon Clive Brown, who at the time was Minister for State Development. The review was carried out by Chris Fitzhardinge, who reported back then on what the world might have looked like in 2000; not in fact in 2002, but what it looked like prior to that.

I contend that even in five years, we have seen dynamic changes in the minerals industry. The numbers I will cite later will bear that out. Those numbers suggest that in fact we are lagging in the way we have set this up. We wrote to the government asking whether we could put forward a minor amendment to slightly expand the direction of the bill, and to date we have not got a response. I find it extraordinary that the government did not have the common decency to respond to that proposition. I think the amendment put forward was fairly well-founded. The object of the Minerals and Energy Research Act is —

... to encourage the development of the minerals and energy industries for the benefit of the State by fostering and promoting all aspects of minerals research and energy research . . .

That is reasonably broad; however, as I said, I do not believe that it has kept pace with the changes that we are seeing in the industry. I will review what has actually happened. The Minerals and Energy Research Institute was first set up in 1987. In the calendar year 1988, in iron ore production alone we mined 38 million tonnes valued at \$830 million—or approximately 40 million tonnes valued at about \$800 million. By 2000 iron ore production had increased from 37 million to 156 million tonnes. That looks like a five-fold or six-fold increase since the commencement of the Minerals and Energy Research Act. The total value—I cannot even read these figures, as they contain so many numbers—is \$4 billion. It is interesting to note that—bearing in mind in 1988 it was at 40 million tonnes—by 2006 iron ore production was at 245 million tonnes. In that time turnover went from \$800 million to no less than \$14,246 billion. I would say that we should look very closely at the way the Minerals and Energy Research Institute of Western Australia was set up. A number of other measurable parameters should be looked at. The statistics indicate that the trend is almost identical for the gold, petroleum, iron ore and nickel industries; they have expanded exponentially. The challenges faced by those industries are quite different from the challenges they faced in 1986-87. Arguably some genuine research might have been required to work out how to charge up these pretty mature industries. Obviously the businesses did not need much help in doing that, as they were able to expand at that rate. Where, therefore, should the research effort and money be put? I argue that we should look at the characteristics of the industries.

Let us assume that this boom has had a significant environmental as well as an economic impact. The Minerals and Energy Research Institute does some environmental research, but it is minuscule compared with the technological and geological sides of its research budget. The interesting question is: should the Minerals and Energy Research Institute be looking at a broader range of issues to do with the minerals and energy sector, not just how to grow it faster, because it cannot grow it faster? I would argue that we have reached the limit of growth in terms of the physical capacity to dig out things and shift out things from the country. In fact we have reached an economic limit in that the economy is flooded—I have spoken about this regularly—and a lot of money is sloshing around. That is not where the research focus should be; it should be on the consequences of doing what we have just done—that is, upscaling an industry so fast that it has upscaled impacts on the environment, on the economy and, to some extent, socially. To see those impacts we need look only at fly in, fly out workers and all the issues that go with living in Karratha now and people not being able to afford housing. People are very lucky to find a house there that they can afford. The boom has created all sorts of social, economic and environmental impacts downstream. The research dollars should be going into looking at where the industry is actually up to.

Let us look, for example, at energy and greenhouse gas emissions between 1990 and 2005, when direct greenhouse gas emissions from the mining sector more than doubled from five million to 11 million tonnes. That figure came from a publication of the Australian Greenhouse Office titled "National Inventory by Economic Sector". According to the Environmental Protection Authority, new gas ventures in the north west are expected to increase state carbon emissions by up to 10 million tonnes. So, here we are, with the mineral sector increasing carbon emissions from five million to 11 million tonnes, the energy sector going up by 10 million tonnes, and the

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Premier's climate change action statement saying that by 2050 the 2000 level of greenhouse gas emissions will be reduced by 60 per cent, which equates to a reduction of approximately 26 million tonnes. That is what is in the Premier's statement. Unless the current rates of greenhouse gas emissions in the mining and petroleum sectors are turned around, this target will be impossible to achieve. Indeed, current trends indicate that the economy-wide target of 26 million tonnes per annum is likely to be exceeded by the mining and petroleum sectors alone. The reduction of 26 million tonnes in greenhouse gas emissions that we are supposed to make by 2050 is, in fact, the current amount of production in the mining sector alone. Should we not be researching that? I would argue that we should be putting money towards making the minerals sector far more energy efficient and closing some of the cycles in the petroleum sector and making its operations more energy efficient. Because we have given the resource away dirt cheap, those sectors are not inclined to be efficient.

Let us look at another parameter that is under-researched by the Minerals and Energy Research Institute of Western Australia; that is, water. The "State Water Plan 2007" deals with the minerals and energy sectors as one sector. At page 32 of the document, it states that as at 2005, this sector was estimated to use 600 gigalitres of water, or 20 per cent of the state's entire water use.

Hon Barry House interjected.

Hon PAUL LLEWELLYN: I will tell the member. The continuation of recent growth in this sector would result in an increase in demand from 1 000 to 14 000 gigalitres, and although 60 per cent of that water is brackish, 40 per cent of it is fresh. We might say that that is not much of that water, but 40 per cent of it is fresh, potable water. We are talking about big numbers. One could argue that water efficiency should be at the cutting edge of the minerals and petroleum sectors, because those sectors are using an enormous amount of that resource. Not only are minerals being taken out of the ground, but also the sectors are using an enormous amount of energy, creating greenhouse gas emissions, using water and clearing and rehabilitating land. Clearly, not as much land is cleared for mining as is cleared for agricultural purposes, but there is a significant impact from all these new operations. They often target places of high value. The area of clearing for mining activities is substantial. The Environmental Protection Authority's "State of the Environment Report: Western Australia 2007" indicates that between 1986 and 2000 approximately 162 000 hectares were disturbed by mining, but only 24 000 hectares were rehabilitated. When things are running fast, that is going to happen. There is the mineral resource, the energy resource, greenhouse gas emissions, water consumption, and land clearing and contamination, particularly of groundwater resources. The contamination of groundwater from tailings dams must be a major issue. That is the area on which we should be focusing if we have a genuine, long-term perspective for research and development in the minerals and energy sectors. Why are we giving corporate welfare to over-mature industries instead of a well-focused directive to look at the social, economic and environmental impacts of what they are doing and to have people on the board who make it their business to do that? That is the reason I took an interest in this bill. I thought that there might be some hope, but the government has decided, with a bit of tweaking from 2002, to rewire this bill along the lines of the 1987 legislation instead of considering whether government money should be used for this purpose. The point I am making is that the existing act seems to have outlived its usefulness and the government is trying to catch up with this bill. This bill would have been a good opportunity to have a close look at the situation.

Research now includes technical improvements to reduce greenhouse gas emissions through increased efficiency and greater use of renewable energy. That is the cutting-edge for new research. Other cutting-edge issues for Western Australia include an approach to minimising water use by increasing the re-use and recycling of water onsite; and construction and management techniques for reducing tailing dam leakage and contamination, which will leave a long-term legacy and, indeed, lead to biodiversity research. All of this is not exclusive to the way in which the bill is set up. Quite frankly, given that the bill has been on the table for some time, not enough forward thinking has been given to this issue. Not enough consideration has been given to providing an opportunity for the Western Australian Minerals and Energy Research Institute to modernise and clean up the sector in a way that would set up this state for the future. I imagine that that is what this bill should be about.

I did a crude count of the activities of the Minerals and Energy Research Institute by looking at the number of papers that have been produced for each area. In the area of minerals exploration there were 55 papers produced; hydrocarbon exploration, 33; mining and engineering, 35; mineral processing, 38; and rehabilitation of the environment, 42. The focus on what is required to be undertaken to set up this industry so that it will be sustainable in the future is on the front end and not the back end of the industry.

Quite frankly, recycling should be seriously investigated. Already people are arguing that the supply of oil will peak in five years, even though it appears as though it has already peaked. The capacity to refine oil has certainly peaked. The supply of coal will peak when the marginal rate of return from finding coal and digging it out starts declining. The supply of iron ore will peak. Already there is evidence of that occurring in the shift from the lump

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ores, which have almost disappeared, to the lower grade ores. The supply of iron ore as a general product will peak.

The Mineral and Energy Research Institute should be looking at where this state will go beyond the boom in terms of its capacity to retrieve, recycle and re-use the minerals in perpetuity, instead of just how fast they can be dug out of the ground. I know that the reality of the time is that we should have funded these institutes to work out how to do it faster and better. I suppose this is a particularly green perspective on it. We are not asking the government to put a stop to any of it but to have the foresight to see beyond this boom and to put a rudder on the institute that will guide it beyond 2015 or 2020, when the natural assets that are being mined start peaking and declining because we have not thought through the consequences or we have saturated the receiving environment. The receiving environment is the atmosphere, and it is evident in the contamination of water that we are losing the battle to reduce the growth of that saturation. That is where the cutting-edge research should be

If we are to have a genuinely forward looking Minerals and Energy Research Institute of Western Australia, we should have a member of the board who has expertise in the area of not only energy but also renewable energy and energy efficiency. We seem to be satisfied with business as usual because we are not looking further than the next election or the next term of Parliament. I believe that is an opportunity lost for Western Australia. The Greens have an amendment to the bill, which will see its scope widened to include renewable energy and other research functions. I hope that the minister will give it serious consideration.

HON SHELLEY ARCHER (Mining and Pastoral) [8.22 pm]: The amendments to the Minerals and Energy Research Act 1987 that are proposed by this bill appear to reasonably achieve the intentions of the government in giving effect to the recommendations of the 2002 review that followed the report of the Machinery of Government Taskforce. The Minerals and Energy Research Act 1987 established the Minerals and Energy Research Institute of Western Australia, which has an important role in fostering the development and growth of the state's vital minerals and energy sector, which is very important to those who live in the regions of the Pilbara and Kimberley in my electorate. These amendments appear reasonable to me in that they may improve the governance arrangements for the Minerals and Energy Research Institute and clarify the institute's objectives and role. Accordingly, my intention is to support the bill subject to giving consideration to any reasonable amendments that may further improve the governance or organisational capability of this institute.

HON KIM CHANCE (Agricultural — Leader of the House) [8.24 pm] — in reply: I thank all honourable members for their support and helpful criticism of the scope of the bill. It is, as honourable members have said, a very simple bill. I think Hon Barry House in particular took honourable members through the conceptualisation and logic of the bill, which is very simply, as Hon Shelley Archer has affirmed, to enable the Minerals and Energy Research Institute of Western Australia to perform its functions more effectively.

Hon Barry House asked a couple of questions, one of which related to the clause 5 reference to gifts. He asked what form those gifts might take. I really do not know, but the only thing I might say that might assist him is that the gifts are intended to be such that they can appropriately be used to enhance the function of the institute. To my mind, that would suggest gifts in the form of the use of research facilities, provision of personnel time and resources in that area, and anything else that could enhance the function of the Minerals and Energy Research Institute of Western Australia. However, it could also include real estate and buildings. There are a wide range of items we could think of as gifts that might appropriately meet that formula.

Hon Barry House also asked me to comment on the minerals and technology research institute of excellence. I cannot because I have do not have any notes to help me do so. However, during debate on this bill in the other place, reference was made to the institute's capacity to promote and assist research and development in cutting-edge areas of new and advanced technology, and that, in part at least, addresses some of the issues raised by Hon Paul Llewellyn. Two particular areas that were mentioned were subsidiary wellhead technology and clean coal technology. These include the range of sequestration issues that can be combined with the extractive process, and that goes part of the way to addressing the matters raised by both honourable members.

Hon Paul Llewellyn also observed that funding from appropriated funds for research and development should be more properly directed towards emerging and new industry technology rather than towards supporting research and development in established resource industries, even if such research and development is in a new field such as those areas I mentioned, including subsidiary wellhead technology. That is a very good point, but although I may well share Hon Paul Llewellyn's enthusiasm for accelerating research and development in these emerging industries, it is not to say that they are any more worthy than the development of advanced technology in the existing industries. I take his point that these industries are now mature, and his point about corporate welfare is well made and well taken. I regret that Hon Paul Llewellyn did not receive a reply to his suggestions; I cannot understand why that happened. I am sure Minister Logan also regrets it.

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Hon Paul Llewellyn identified an exhaustive range of areas involving sustainability and environmental research and development that he believes should be pursued by the institute. While I was listening to him go through those issues, it struck me that the areas he enumerated are areas that could form the focus for the institute in either its present structure or as reshaped following the passage of the amendments in this bill. There is nothing in the shape of this amendment bill or, as far as I am aware, in the enabling act —

Hon Paul Llewellyn: Except for the objects.

Hon KIM CHANCE: No, the objects do not exclude any of that research.

I listened particularly carefully when the member talked about potable water, and I absolutely agree with him—it is a very large volume of potable quality water. The mining and resource industries ought to be working in two aspects of that area. They should try to minimise the amount of water they are using, particularly quality water—I am not so concerned about brackish water. They should also be investigating ways in which that water, the result of dewatering from mining operations, could be put to more effective use. I know that mining companies are looking at that, and it is certainly an area of research and development that both the mineral and resource industries, and the research and development structure as represented by the institute, will be very keen to pursue. The comments of Hon Paul Llewellyn should not be taken to mean that those issues are isolated from the influence of the institute as a result of this bill. That is clearly not the case; we should all have a reasonable expectation that the institute will be focusing on all those areas.

I appreciate all the comments made. I know that Minister Logan will read them very carefully. I am sorry that we were unable to bring this legislation forward before this date, but I am delighted that we have finally got to this point. I welcome the cross-party support for the legislation.

Question put and passed.

Bill read a second time.

Committee

The Deputy Chairman of Committees (Hon Ray Halligan) in the chair; Hon Kim Chance (Leader of the House) in charge of the bill.

Clauses 1 to 3 put and passed.

Clause 4: Section 5 amended —

The DEPUTY CHAIRMAN: There is an amendment on the supplementary notice paper in the name of Hon Paul Llewellyn. I ask at this stage whether that amendment needs to be altered to show "line 24", instead of "line 14". Is that correct?

Hon PAUL LLEWELLYN: This being an amending bill, and not having a marked-up version, I will have to put my mind to this.

Point of Order

Hon NORMAN MOORE: My understanding is that Hon Paul Llewellyn is seeking to further amend the act, as opposed to amending the bill now before the committee. If he is seeking to do that, I seek your advice, Mr Deputy Chairman, on whether that is within the scope of the bill. If we read the member's proposed amendment, we see that it is not an amendment to the bill, it is an amendment to the principal act, which makes it an additional amendment. I would have thought, generally, that we were constrained to amending bills before this chamber rather than parent acts willy-nilly. I seek your advice on that, Mr Deputy Chairman.

The DEPUTY CHAIRMAN (Hon Ray Halligan): It appears that amendments must be within the scope and purpose of the bill, and of course the whole bill before us amends the principal act. Although the proposed amendment moved by Hon Paul Llewellyn does not amend the bill itself, provided it is within the scope and meaning of the bill, it is acceptable.

Hon NORMAN MOORE: I ask that Hon Paul Llewellyn explain how this particular further amendment is within the scope and meaning of the bill.

Hon PAUL LLEWELLYN: In actual fact this is a very simple amendment. It involves a slight changing of words that basically define the scope of operations of the Mineral and Energy Research Institute. I do not think we are asking for much. Although, currently, the emphasis in the bill is on the front-end of the mineral and energy sector, the Greens are asking something relatively simple; that is, to include improved economic, social and environmental outcomes among the things that it considers. I cannot see how it can be made any clearer. I do not believe that it in any way detracts from the way in which the institute currently works. It will merely give it a

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broader directive to investigate improved economic, social and environmental outcomes in light of the comments I made during the second reading debate. I cannot see how that can be problematic.

HON BARRY HOUSE: I am desperately trying to find exactly where Hon Paul Llewellyn's amendment is supposed to fit. The best I can come up with is page 4 of the principal act, which clause 5 seeks to amend. I am completely lost on this issue.

The DEPUTY CHAIRMAN: Before answering the questions put before the Chair, we will look at the principal act itself.

Hon Paul Llewellyn: Clause 4 seeks to amend section 5.

The DEPUTY CHAIRMAN: Having viewed the principal act, I suggest that the amendment proposed by Hon Paul Llewellyn is in order. Would members care for me to spell it out in a little more detail?

Hon Norman Moore: I would because I am not sure I agree with you, Mr Deputy Chairman; it is unusual.

The DEPUTY CHAIRMAN (Hon Ray Halligan): Section 5 of the Minerals and Energy Research Act 1987, headed "Function of Institute", states —

The function of the Institute is to encourage the development of minerals and energy industries for the benefit of the State by fostering and promoting all aspects of minerals research and energy research through —

It then goes into paragraphs. Hon Paul Llewellyn wishes to move to delete the words "the development of" and insert other words so that, if agreed to, the section would then read —

The function of the Institute is to encourage improved economic, social and environmental outcomes from the minerals and energy industries for the benefit of the State . . .

Hon NORMAN MOORE: I am not seeking to be argumentative but what this amendment seeks to do is quite outside the intent of the original act, which seems to concentrate the functions of the institute on matters relating to the development of the industry. To add the words "economic, social and environmental outcomes" broadens the functions of the institute in a way that was never intended by the original act. That is for the chamber to decide. I am not sure that this is within the scope of the bill. I accept your judgement, Mr Deputy Chairman.

The DEPUTY CHAIRMAN: As the Leader of the Opposition rightly said, the house will make that decision. Within the bill itself, further functions for the institute are being included and the words "the development of" are included in proposed paragraph (k), which states —

assisting in the development of the capacity in Western Australia to undertake minerals and energy research;

We have now reached clause 4, to which there is an amendment standing in the name of Hon Paul Llewellyn. I will invite Hon Paul Llewellyn to move his amendment.

Committee Resumed

Hon PAUL LLEWELLYN: I move —

Page 2, line 22 — To insert —

(a) by deleting "the development of" and inserting instead —

improved economic, social and environmental outcomes from

The bill sets out to modernise the Minerals and Energy Research Institute. My amendment seeks to expand some of its functions. This bill itself expands its functions somewhat. I cannot see how this amendment is inconsistent with that. I do not have the parent act with me; for some reason it is not in my file. We are asking that the functions of the Minerals and Energy Research Institute be expanded to include, but not without limitation, improved economic, social and environmental outcomes from the minerals and energy sector. I cannot see how that could be disputed. It would seem to me that any responsible institute would want to achieve optimal improved social, economic and environmental outcomes. It is simply not stated currently, and I think it should be

Hon KIM CHANCE: At first sight, Hon Paul Llewellyn's proposed amendment to the principal act does not appear to change the operation of the Minerals and Energy Research Institute of Western Australia. Its purpose is to provide a statement of functions that Hon Paul Llewellyn believes is more appropriate to the twenty-first century and is in keeping with the government's stated commitment to sustainability. The manner in which the amendments can be interpreted, however, is an issue of concern for the board of MERIWA and the government.

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Research in the minerals and energy industry by necessity covers economic, social and environmental issues and outcomes. That was precisely the point I made in my reply to the second reading debate. The government—and I am sure the board of MERIWA—agrees with Hon Paul Llewellyn that all the areas of activity that he nominated are important. The mining and resource companies also recognise that they are areas for which we must find better solutions through research and development. There is no debate about that.

Hon Paul Llewellyn interjected.

Hon KIM CHANCE: Those outcomes are already part and parcel of MERIWA's objectives. Our concern is that the amendment could be interpreted to mean that each research project taken on its own should consider economic, social and environmental issues. We are saying that those issues are not excluded and what the member is saying, in our view, is that they must be included in each case. That is our point of difference.

Hon Paul Llewellyn: Let us amend it now.

Hon KIM CHANCE: I have not finished yet. This amendment would effectively introduce a requirement for a triple bottom line assessment of each and every research and development project. It is a prerequisite of research that it be focused on a specific topic. It is simply not practical for researchers to address each of those issues as a project because they would virtually have to hire a research team that had that cross-field of expertise. Each project is part of a mosaic and the mosaic fits into the provision of improved economic, social and environmental outcomes for the benefit of those industries and the people of Western Australia. The board of MERIWA and the government are of the view that the amendment has the potential to change the manner in which the research is done if it were interpreted to apply to each project as a standalone set of requirements; that is, the triple bottom line set of requirements to each project. Additionally, it could restrict the type of research that could be conducted and that could be detrimental to the conduct of research and development in the minerals and energy industries. It could also result in lesser outcomes for the state without achieving any clearly identifiable offsetting benefit to the state, since all those issues can be dealt with within the current scope of MERIWA's activities, even without these changes. The board and the government believe that the current wording of section 5 provides for identifiable needs for the requirements of the government and the minerals and energy industries while addressing the economic, social and environmental issues that are applicable to each research project.

Hon Paul Llewellyn: Show us where that is explicitly stated in section 5.

Hon KIM CHANCE: That is the very point: it does not have to be specifically explicitly stated. If it were explicitly stated, it would mean that the triple bottom line approach must be applied to each research and development project. That is not what we want to do. It does not necessarily make sense to do that. I do not know much about MERIWA's work, but I know a great deal about the work of research and development corporations because agriculture is run by R&D corporations. No research and development corporations take a triple bottom line approach; however, they remain key funders in the area of sustainability because there is nothing to prevent them from working in the area of sustainability. When they try to solve the problem of flystrike in unmulesed sheep, we do not want them to do a social assessment on how that will affect the wheatbelt. That is exactly what Hon Paul Llewellyn is proposing. If there is a social impact around the wheatbelt, it has nothing to do with blowflies and mulesing, yet that would be enforced in each case. I cannot imagine how the Minerals and Energy Research Institute of WA's function is greatly different from that.

Hon Norman Moore: It is mainly technical and scientific research.

Hon KIM CHANCE: Yes.

By all means, I urge honourable members to support the way in which Hon Paul Llewellyn has sought to achieve something real—it is the right thing to do. However, following the methodology he has suggested will not provide the results that he is looking for. It could even have the opposite effect. If this amendment were passed, the research and development that needs to be done in sustainability in those areas could be impeded.

Hon BARRY HOUSE: The opposition agrees with the government. In our assessment this amendment is unnecessary. I had a list of minerals research projects. Unfortunately, I handed it to Hansard so I do not have it with me. From memory, the list of projects included the sorts of things that Hon Paul Llewellyn is talking about. Research projects have been done through the Commonwealth Scientific and Industrial Research Organisation, the Botanic Gardens and Parks Authority and several other organisations, all of which have embraced the sorts of things the member is talking about. The scope of the function of the Minerals and Energy Research Institute of WA already allows for what the member is seeking. It is unnecessary to include those specific words. In addition, other research and development bodies, such as those to which the Leader of the House referred, which work in food and agriculture, marine science and medical research have to undertake specific research projects. They cannot take a broader perspective. A host of bodies deal with things like climate change. I do not want to sound like an apologist for the government —

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Hon Paul Llewellyn interjected.

Hon BARRY HOUSE: I support the government on this occasion. On the subject of renewable energy, one of the five focus areas of the science portfolio is geothermal energy research, which is pure research and pure science. We cannot bring all the other factors involved in that science and research into the equation. I know that Hon Paul Llewellyn is trying to be all inclusive and that he wants to take a triple bottom line approach. However, the scope of the functions of MERIWA already allow for that. It is unnecessary to change the words in the principal act.

Hon PAUL LLEWELLYN: I have been given assurances from the opposition and from the Leader of the House that MERIWA is already able to do all the research and that my amendment will be unnecessarily restrictive. There might be some truth in the assertion that the amendment might imply that there needs to be improved economic, social and environmental outcomes in MERIWA's work on all accounts, but I do not think it says that. If the government had responded to the correspondence that the Greens sent to it, we would have worked out an alternative set of words that did not fall into this trap. In fact, it is not the Greens that have been trapped, but the government, in its negligence, has entrapped itself. All we are trying to do is put into code what the Leader of the House says is already in the bill.

I will read from a letter from Chris Tallentire, Director of the Conservation Council of Western Australia, to the government regarding the Minerals and Energy Research Amendment Bill. The letter states —

The Conservation Council of WA has recently been made aware of a proposal by the Greens WA to amend the *Minerals and Energy Research Act 1987* to change the object of the Minerals and Energy Research Institute of WA (MERIWA). The Institute would be altered to focus more on assisting the industry to meet modern sustainable development objectives, rather than only on industry development.

This person is the current Labor Party candidate for Nollamara, I think.

Hon Ken Travers: Gosnells.

Hon PAUL LLEWELLYN: Gosnells, is it? He is a recent recruit to the Labor Party. He will be the environment minister next time, I imagine. There is not much other talent around.

Several members interjected.

Hon PAUL LLEWELLYN: Woo hoo! I got straight on to dangerous ground there. We will go back.

Several members interjected.

The DEPUTY CHAIRMAN (Hon Ray Halligan): Members, we would like to progress this bill if at all possible.

Hon PAUL LLEWELLYN: We will progress this bill.

Hon Simon O'Brien: Do you reckon he'll be as good as that Peter Garrett bloke they got at the federal level?

Hon PAUL LLEWELLYN: I do not know where they got him from, mate!

The DEPUTY CHAIRMAN: Hon Paul Llewellyn has the call and I wish to hear only from Hon Paul Llewellyn.

Hon PAUL LLEWELLYN: Do not encourage him.

The Director of the Conservation Council stated that the institute would be altered to focus more on assisting industry to meet modern, sustainable development objectives, not to the exclusion of anything else. Our intention was not to go through the bill and nitpick, but to find a universal statement that would reflect our intentions in a simple way. As we sent that to the government months ahead of time, we expected to have due consideration given to it. However, because we have not had that, we are now having to argue the matter on the floor of the house.

Hon Norman Moore: Which is where we amend legislation.

Hon PAUL LLEWELLYN: We can spend the rest of the night doing this, or, if the Leader of the House is telling me that the government really wants to incorporate these principles, we can decide in good faith to go away, work this out and come back at some other time.

Hon Norman Moore: I think when you are the government you should bring in your own legislation.

Hon PAUL LLEWELLYN: We have actually brought in our own legislation, and we will continue to do that. Would the Leader of the House like to consider that proposition and answer the question about whether the amendment that we are proposing will in fact diminish the bill in any way?

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Hon KIM CHANCE: I have indicated that diminution of the capacity of the institute would indeed be possible were we to be as prescriptive in the legislation as the amendment seeks us to be. However, that was not my main point. My main point was that all the things that Hon Paul Llewellyn is looking for now can already be done without changing further section 5 of the principal act. I have already apologised, from the government's point of view, that for whatever reason Hon Paul Llewellyn has not received the government's reply on this matter.

Briefings are made available to members on all legislation. I think that the document to which Hon Barry House has referred—that is, the document that was made available to Hon Barry House and the opposition in their briefing —is the document titled "Minerals Project Statement". This document lists some \$10 million worth of projects that are being carried out by the institute. One of the projects listed in that document is M364, successful rehabilitation of species-rich heathlands after mining for heavy minerals, carried out by Curtin University and the University of Melbourne. Another project is M372, seed banking for conservation and restoration, carried out by Kings Park and Botanic Garden. Another project is M379, classification of Western Australian inland waters, carried out by Curtin Outback Ecology. Another project is M381, eco-hydrological characterisation of the natural and rehabilitation ecosystems at Newcrest's Telfer goldmine, carried out by the University of Western Australia. Another project is M399, whether susceptibility to Phytophthora cinnamomi and sensitivity to phosphate in native Australian plants is linked, carried out by the University of Western Australia and Murdoch University. The document goes on and on to list projects in areas that I believe and the resource industry believes—these areas are also certainly supported by the MERIWA board—are vital to the sustainability of what we do in Western Australia. Hon Paul Llewellyn has suggested that we need to change section 5 of the act to enable that to happen. That would not only be unnecessary but also would run the risk of impeding the capacity of the board.

Hon PAUL LLEWELLYN: I also have the list of projects that MERIWA has been working on. I have looked at that list not just in the past few minutes, but also several months ago, and I have analysed where the money has gone. If members would like me to, I can go into that.

The DEPUTY CHAIRMAN: Order, Hon Paul Llewellyn! We are talking about the member's amendment. Unless the member wishes to speak to his amendment in terms of the amendment as written —

Hon PAUL LLEWELLYN: I just want to address the issues that the Leader of the House —

The DEPUTY CHAIRMAN: Order! Just one moment. When I am speaking, I would prefer that the member listen to me, rather than the other way around. I would suggest that to talk about moneys, and where those moneys have been spent, is not necessarily in keeping with the member's amendment. I therefore ask the member to desist from going down that path.

Hon PAUL LLEWELLYN: I understand that, Mr Deputy Chairman. I just wanted to respond—it will not be at length—to the notion put by the Leader of the House that MERIWA is doing all this stuff. I suggest to the Leader of the House that given that we have put a proposition on the table, and given that the Leader of the House has agreed with the principles that we have put forward, there must be some workable way in which we can deal with this matter. We can either work it out here and now and find an amendment that is suitable, or do it outside the chamber. This bill has been on the books for some time. If the Leader of the House and the minister had only responded to our correspondence, we would have been able to work this out some time ago and talk about the specifics of my amendment. Is the Leader of the House ready to work this out here and now, or does he want to stop this debate and go out of the chamber and do it?

Hon Norman Moore: Come on! Just get on with it!

Hon PAUL LLEWELLYN: I am getting on with it.

Hon Norman Moore: I indicated that this bill would take about 10 minutes. I am trying to assist the government to get its legislative program through. We now know where the delays are!

Hon PAUL LLEWELLYN: If the minister and the Leader of the House had responded to the correspondence that we sent to them, this could have been sorted out weeks ago. Without that, I think we should work this out right now. I am asking the Leader of the House whether he would like to try to move another amendment that will actually be a remedy for his concerns. Is a solution available?

Hon KIM CHANCE: I think I have been clear. I have said that the government does not believe—it is supported in that view by the board of the Minerals and Energy Research Institute of Western Australia—that section 5 of the principal act must be amended to achieve the aims that I am sure that government, Greens (WA), opposition and Independent members of this place believe are highly desirable. I think we are arguing about something of no consequence. All members agree on the outcomes we are seeking. The government and the

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opposition are stating that we do not need to amend section 5 of the act to achieve that end; we are already achieving that end.

Amendment put and negatived.

Clause put and passed.

Clause 5: Section 6 amended —

Hon BARRY HOUSE: The minister will recall that when I spoke earlier I asked a question about gifts. I hope I did not miss anything —

Hon Kim Chance: No, you haven't missed anything, but I need to consult with my adviser for a moment.

Hon BARRY HOUSE: Proposed section 6(2)(e) states —

to accept any gift or other payment if it is absolute or subject to conditions that the Institute would be able to satisfy.

What sort of gifts?

Hon KIM CHANCE: Hon Barry House is quite right; it seems as though I have partly misinformed him. It seems as though things such as research facilities' personnel time would be deemed in-kind support, rather than a gift. I am informed that a gift in this context refers to the other part of my answer, which is real property; that is, cash, buildings, land etc.

Clause put and passed.

Clauses 6 to 14 put and passed.

Title put and passed.

Report

Bill reported, without amendment, and the report adopted.