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Lewis G. Weeks medal—Bob Laws



Mr Bob Laws receives his award from APPEA Chairman Dr Agu Kantsler.

At this stage we are going to look back and recognise individuals who have made distinguished contributions to the industry. We will do this by announcing the winners of the Lewis G. Weeks Memorial Gold Medal and the Reg Sprigg Medal.

Then we will look to the future and honour two individuals who APPEA sees as potentially making a major contribution to the future development of the industry. We will announce the winners of the K.A. Richards Scholarship and the Tony Noon Scholarship.

The Lewis G. Weeks Memorial Gold Medal is given in recognition of an outstanding contribution to the development of the petroleum exploration and production industry in Australia. The medal commemorates Dr Lewis Weeks whose pioneering work in Bass Strait as well as in relation to a number of other international exploration achievements typifies the contribution recognised by the award.

The award was first made in 1982 and this is the 20th time that APPEA has presented the gold medal.

The task of deciding the winner of this medal is never easy, but this year it was particularly difficult because of the high quality of the field of nominations we received from companies, tertiary institutions and governments.

We were looking for a person who has materially stimulated or encouraged the climate for exploration for and production of oil and gas in Australia.

It might have been by the successful application of exploration techniques. It might have been by the development of improved exploration or production methods. It could have been via substantial contributions through teaching and administration.

The winner of this year's medal has, over the past 40 years, been both an innovative explorer and an innovative administrator.

After attending school in Sydney and gaining a BSc degree majoring in

geology at the University of Sydney, he joined Reg Sprigg's Geosurveys of Australia Pty Ltd as a geologist and worked in Australia, New Zealand and Turkey as a field and well site geologist and progressed to the position of Chief Geologist.

He then went to work for Australian Aquitaine Petroleum and worked in the Timor Sea, the Bonaparte Gulf and in the Cooper, Perth, Surat and Taranaki Basins.

He was involved in the discovery of the Tern and Petrel gas discoveries.

In 1983 he decided he should try a new career path and moved into government where in a number of positions he demonstrated innovative approaches to government administration of the upstream petroleum industry.

Three of his achievements were a new Petroleum Act which is leading edge legislation in terms of regulatory theory and promotion of sustainable development, brokering a ground breaking native title agreement and becoming the first jurisdiction to provide ready digital access to petroleum data.

He has been an active member of PESA and was its Federal President from 1991 to 1993.

This is a brief glimpse at a very distinguished record. It is with much pleasure that I announce that the winner of the Lewis G Weeks Medal in 2002 is Mr Bob Laws.

Bob, would you please come forward and accept the medal.

—Dr Agu Kantsler
APPEA Chairman

Acceptance speech of Mr Laws

This is a very proud but humbling moment for me. To gain this award and join the list of those who previously received it is quite

unexpected but extraordinarily pleasing.

Lewis Weeks was a great geologist and a fantastic oil finder. The story of how, in 1960, he influenced BHP to explore in the Gippsland Basin is truly inspirational. A great man.

It's the first recipient of the Lewis G. Weeks award back in 1982, the late and also great, Dr Reg Sprigg, who was my first employer and mentor.

Working for Reg for nine years was an adventure punctuated by regular surprises, and it taught me a lot. I have many reasons for thanking Reg.

I'd also like to thank Elf Aquitaine, for whom I worked for 12 years. Despite British propaganda to the contrary, the French are a marvellous and friendly people who treat their staff very well and give them all the opportunities they could reasonably wish for.

And of course there's the SA Government who spent 18 years teaching me the regulatory, promotional and data management side of the industry. Working in the public service has been a joy.

I'd like to thank APPEA, a very professional and effective repres-

entative of the petroleum industry. I have particular fondness for APPEA as it was at the 1962 Conference in Sydney that, as a callow young graduate, I approached Reg Sprigg and promptly got my first job in the industry.

Then it was at the 1971 Conference in Melbourne that I did likewise to Michel Carval, Manager of Aquitaine and got my second job.

It's certainly true that Lewis Weeks was the person primarily responsible for the discovery of the fabulous wealth of the Gippsland Basin, without which Australia would be a lot poorer country. And we need to find more Gippsland Basins, or we will be a poorer country.

However it's not often possible to find the one person responsible for new ideas or for new discoveries, particularly nowadays. It's usually the result of team work and a fusion of ideas and in the end it's hard to track down how the concept evolved—mainly because it's an amalgamation of many people's ideas and hard work.

There's some old advice in this regard, which I'd like to read out. It's the instructions given by Sir Joseph

Banks to the scientists on board Flinders' Ship, the Investigator. In South Australia, we've just finished celebrating the 200th anniversary of his meeting with the French explorer, Captain Baudin off the coast just south of here in early April 1802 and I quote:

'Their Lordships require that all persons so employ'd do on all occasions conduct themselves peaceably, quietly and civilly to each other, each readily assisting the other in his respective department, to the utmost of his ability, in such a manner as will best promote the success of the public service in which they are jointly engag'd, and unite their individual endeavour into one general result ...'

It's people working cooperatively together that brings results. I'd like to thank all the people with whom I've worked over the years, not least the very fine people in the Petroleum Group of what used to be called the South Australian Department of Mines and Energy. Their support, dedication and competence was invaluable.

Finally, I'd like to thank Glenys, my partner of 34 years. Her support and love is the most important of all.

Reg Sprigg Medal— Rick Wilkinson



The Reg Sprigg Medal is the second matter of recognition of service that we have this morning. This award was first presented in 1989. It was renamed in 1995 in honour of Dr Reginald Charles Sprigg AO, a remarkable Australian who passed away in December 1994. His contribution to the Australian industry and APPEA was extraordinary. He was the Association's foundation chairman. He was one of the driving forces behind the establishment of APPEA conferences.

The medal is awarded in recognition of outstanding services in promoting the objectives of the industry through valued contributions in and to the Australian petroleum exploration and production industry or through notable and sustained leadership pertaining to the Association.

The term "contributions in and to the Australian oil and gas industry"

can have a number of meanings. It could include persons working in full member companies. It could include persons working for major contractors and the APPEA Secretariat. It could include retired public servants and politicians and persons providing commercial, legal and public affairs services to the industry. It could also include commentators on, or chroniclers, of the industry.

The recipient of the medal this year is a geologist by training and a chronicler and commentator on the industry by profession.

Born in Melbourne he gained an Associate Diploma in Geology at RMIT in 1967 and a Bachelor of Science Degree in geology at the University of Western Australia in 1970. He then spent time working as a field geologist in northwest Queensland.

He then made a total change in career direction and travelled to London where he became Exploration Editor for the *Oilman* magazine. Since then he has held a range of positions as an industry related journalist in major national newspapers and as an editor in industry-related magazines.

Over that period he has taken on another role. Effectively he has become the semi-official historian of the Australian oil and gas industry and has published five books on the industry.

He has travelled widely making himself familiar with the industry in Australia, Europe, Africa, the Middle East, the USA, Canada and east Asia.

In his spare time he writes children's books.

In 1992 he was awarded the American Association of Petroleum Geologists Journalism Award.

It is with great pleasure that I announce that the winner of the 2002 Reg Sprigg Medal is Rick Wilkinson.

—Dr Agu Kantsler
APPEA Chairman

Acceptance speech of Mr Wilkinson

I feel both flattered and very humble in receiving this award because over the years I have been

helped by many who are worthy of the honour.

A number of people before me have given tribute to Reg Sprigg and I want to add my personal debt of gratitude.

I had the privilege of meeting Reg a number of times and whether it was an interview by phone or face-to-face he always gave generously of his time and of his great knowledge.

He was never too busy to pause and help whether the questions were about industry history or events of the day, and on one memorable occasion he gave me a guided tour around his work at Arkaroola in the Flinders Ranges.

It is an honour to receive this award bearing his name.

As many of you know Reg was something of a writer himself. He was also a humourist and it is he who pointed out very early on that I had joined the most balanced profession in the world. When I looked a bit puzzled, he grinned and said—well you know, journalists always have chips on both shoulders.

It's true that journalism is very competitive—the possibility of scooping your rivals always keeps you on the knife edge with the adrenalin running.

But there is also a comradeship once the deadlines have passed and I think this is particularly so among the energy writers. You only have to go into the media room at this conference to see that this is so.

I have received a great deal of help and support from a number of colleagues at various times over the years and it is difficult to single anyone out.

However, I would like to mention two people with special thanks.

Some of you may remember the authoritative byline of J.N. Pearce in the Sydney Morning Herald back in the 1970s and early 1980s. John was a New Zealander living in Sydney and the doyen of the resources media. His advice and guidance on a number of occasions when I was just starting out was freely and generously given.

The other is Bob Murray who was my predecessor on the Financial Review. In the early 1970s Bob wrote the first history of the Australian oil

industry entitled *Fuels Rush In* (if you put that with some of my book titles you can gather that we historians are not much chop as headline writers) and it was his work that first got me interested in the industry's past as a way of understanding the present. It's a fascination I still have.

But writing books is one thing. Getting them published is another. Publishing is a bit like exploration. It's very risky business.

I have been fortunate in finding publishers willing to take the risk and I would like to say a special thanks to David Ell who published my first two oil books and to Christopher Beck who has taken a chance with two more recent publications And, hopefully, soon a third.

Writing is a solitary pastime.

I owe a great deal to my partner, Elaine, for her patience and support of a companion who locks himself away in the study for hours on end and often emerges grumpy when the words do not flow as they should.

Finally, I want to thank the APPEA Council for selecting me for this award.

And to all of you—the explorers ... the producers ... the researchers whom I have talked to over the years. Without your enthusiasm, your humour, your intrigues, your discoveries, there would be no industry. There would be no story.

Thank you all for your input and trust.

K.A. Richards Scholarship

While recognition of contributions to the industry is important, recognition that the industry needs bright stars if it is to progress and grow is equally as vital.

The recipients of the next two awards are working at the cutting edge of different aspects of one or the greatest challenges facing our industry, namely greenhouse, and in particular whether geological disposal of greenhouse emissions is a solution to this challenge. The work they are doing is vital to our



APPEA Chairman Agu Kantsler congratulates Jason McKenna who was presented with APPEA's K.A. Richards Scholarship for 2002.

industry's future. It is highly relevant to the entire energy sector. More importantly, it has placed Australia at the leading edge of research on an issue that is of national and global importance.

They are indeed "bright stars".

The K.A. Richards Scholarship is awarded to post-graduate students in the fields of petroleum engineering or petroleum geoscience. The scholarship was established by APPEA in 1989 in recognition of the dedicated and outstanding services that Ken Richards had given to the industry and to the Association.

Ken had been Chairman of APPEA, a long serving councillor and was an Honorary Life Member. He had a long and distinguished exploration career with Esso and was a director of that company at the time of his sudden death in 1984.

The winner of this year's scholarship is working at Curtin University as part of the Australian Petroleum CRC Geodisc Program on the seismic monitoring of geological sequestration of CO₂.

His work is so leading edge that I understand recently he complained to his supervisor that he was spending so much time delivering papers in national and international fora that

he was not able to spend time on his work and writing his PhD thesis.

It is with great pleasure that I announce that the K.A. Richards Scholarship for 2002 has been awarded to Mr Jason McKenna.

Tony Noon Scholarship

The second award is the Tony Noon Memorial scholarship that is pres-

ented to a talented undergraduate student who is showing an interest in pursuing a career in the industry areas such as exploration, safety, engineering, the environment and economic or legal studies.

The scholarship is named in honour of Tony Noon who had a distinguished career in the Queensland Government and the APPEA Secretariat prior to his untimely death from leukemia in 1998.

The winner of this year's scholarship is working at the University of New South Wales as part of the Geodisc program of the Australian Petroleum CRC. He is studying the economics of CO₂ geological disposal. He intends to use the scholarship to meet part of the cost of a trip to present the paper at the sixth International Conference on Greenhouse Gas Control Technologies to be held in Kyoto Japan in October 2002.

It is with much pleasure that I announce that the winner of the Tony Noon Scholarship for 2002 is Victor Nguyen.

Below: Victor Nguyen who was awarded the APPEA 2002 Tony Noon Memorial Scholarship presented to a talented undergraduate.





APPEA Chairman Agu Kantsler presents the inaugural APPEA Environmental Award to ChevronTexaco's Australian Managing Director Rhonda Zygocki.



BHP Billiton Petroleum President Philip Aiken receives the inaugural APPEA Safety Improvement award from APPEA Chairman Agu Kantsler.

Presentation of Awards for Safety Performance in 2001

We now move from recognition of personal contributions to the industry to recognition of outstanding performance by teams of people in the industry in two areas of highest industry priority—environmental and safety management.

One of the difficult things about working in this industry is that on the rare occasion we fall short of our high aspirations in relation to safety and the environmental management we get the full blast of public attention. In relation to the environment, possibly the situation is worse. We are a popular scapegoat even when we are not involved.

The sensational is news.

However, the ongoing, hard work and effort of everyone in this industry and the achievements that they deliver are not seen as news. Perhaps, more unfortunately, sometimes achievement is treated with cynicism in the public domain.

For the record then, let me make a number of points.

This industry does not see best

practice safety and environmental management as an aspiration for the future.

It is a necessity 24 hours a day 365 days a year. It is, and has been for some time, a critical fully-integrated part of our day-to-day operations.

Only one goal is acceptable—zero safety incidents—zero environmental incidents. Only one standard of performance is acceptable—the world's best.

We admit that at times we are not perfect—we fall short. However, the commitment never falters. The objective never changes. The effort of thousands of workers in this industry is on-going and total. It is something we can all be proud of.

That is why APPEA believes recognition of performance by our peers is critical even if it is not the stuff that makes the lead item on the TV news.

This year APPEA has taken a number of new initiatives. Today we are going to present the first ever APPEA award for environmental achievement and the first APPEA

award for safety improvement. We will also make a number of awards for safety management.

On the basis that a picture is worth a thousand words, let us take a quick tour of some aspects of the industry's environmental management performance.

The criteria for deciding the APPEA Environment Awards are effectiveness, innovation, applicability to the rest of the industry, ownership by employees and sustainability.

The companies who were on the finalist list for this award were BHP Billiton, ChevronTexaco, Esso Australia and Newfield Exploration.

It is with pride in this industry's achievements, and following advice from our sponsor PricewaterhouseCoopers, that I announce that the winner of the inaugural APPEA Environment Award is ChevronTexaco and I invite Rhonda Zygocki to come forward and accept the award.

Now we move to the area of safety. It is a matter of the deepest regret that last year we fell short and that the industry recorded a fatality. While we still look very good compared to other sectors of the Australian economy and the rest of the industry globally, let me repeat what I said a few moments ago. Zero is the only benchmark that is acceptable.



APPEA Chairman Agu Kantsler presents the Category A APPEA 2001 Safety Award to Esso Australia's Managing Director, Robert Olsen.

That said, the industry has had some outstanding performances in the safety area this year and our auditors, PricewaterhouseCoopers have had a difficult task. We appreciate the contribution they make to the verification process and their sponsorship of the environment and safety awards.

Now to the awards.

Firstly, the inaugural APPEA Safety Improvement Award. The criterion for this award is the greatest improvement in the Total Recordable Incident Frequency Rate over the period 2000–01.

All the employees of BHP Billiton should be very proud that their efforts have resulted in their company winning this award. They are a good

example of people continuously striving to improve an already highly commendable, industry leading performance, to one that is even better. I ask Mr Aiken to come forward and receive this award on behalf of everyone in BHP Billiton.

Now to the Category A and B APPEA Safety Awards which are assessed on the basis of safety performance as well as safety management initiatives.

In Category A, for operating companies the result was a close run thing. It was very close to a dead heat between two companies. The staff of Magellan, who ran second, should be very proud of their outstanding performance in achieving a zero for

their Total Reportable Injury Frequency Rate.

However TRIFR is only one of the criteria for this award. On the advice of PricewaterhouseCoopers, the winner of the 2001 APPEA Safety Award in Category A is Esso Australia

Would Robert Olsen to come forward to receive the award on behalf of Esso's staff.

In Category B, for companies who solely operate exploration operations, the short listed companies were Kerr McGee and Tap Oil.

The advice of PricewaterhouseCoopers is that the winner of the 2001 APPEA Safety Award in Category B is Tap Oil.



Tap Oil Managing Director Paul Underwood receives the APPEA Category B Safety Award for 2001 from APPEA Chairman Agu Kantsler.



APPEA Chairman Agu Kantsler presents John Hurley of International Sea Drilling with the APPEA Category C Safety Award for offshore drilling.



APPEA Chairman Agu Kantsler presents Marshall Melnechuk of Parker Drilling with the APPEA Category C Safety Award for onshore drilling.

Would Paul Underwood please come forward to accept the award on behalf of the staff of Tap Oil?

The Category C Award is for drilling companies and is assessed by the International Association of Drilling Contractors Australian Chapter following verification by the National Safety Council of Australia. This award reflects the fact that the industry sees its commitment to safety as covering all aspects of industry operations.

The IADC advises that the winning offshore drilling Contractor in 2001 is International Sea Drilling and that the winning onshore drilling contractor in 2001 is Parker Drilling Company PNG.

Would representatives of both these companies come forward to receive their awards?

Everyone in the industry should take pride in the achievements of all the companies and their workers who have received awards here today.

Your efforts are the practical demonstration of the industry's commitment.

Could I ask you to join with me I congratulating all our winners, to thank the companies that provided us with video clips including Esso, ChevronTexaco, BHP Billiton, Santos, Woodside, Apache, Newfield and Nexen, and to thank our verifiers PricewaterhouseCoopers?

BEST PAPERS



APPEA Technical Papers Co-chairman Denis Dare presents the award for the Best Paper in the Commercial, Legal and Environmental section to lead author John Bradshaw.



APPEA Technical Papers Co-chairman Denis Dare presents the award for the Best Paper in the Exploration and Production section to lead author Paul Fink.

APPEA Best Paper and Best Poster Awards

The papers presented to the 2002 APPEA Conference were of high quality and, as usual, the Technical Papers Committee, chaired jointly by Denis Dare of Santos and Peter Cook, had difficulty in selecting winners.

Best Paper—Commercial, Legal, Environmental section

The potential for geological sequestration of CO₂ in Australia: preliminary findings and implications for new gas field development

Dr J. Bradshaw, Dr B.E. Bradshaw, G. Allinson, A. Rigg, V. Nguyen, L. Spencer.

Best Paper—Exploration and Production

Seismic to simulation: integrated reservoir model for Patricia Baleen gas field

P. Fink, M. Adamson, F. Jamal and C. Stark



Above, left: APPEA Technical Papers Co-chairman Peter Cook presents the award for the Highly Commended Paper in the Exploration and Production section to lead author Paul Strong.
Above, right: Takeshi Nakanishi receives the Best Poster award from TPC Co-chairman Denis Dare. **Right:** John Carmody presents the PESA best presentation award to Simon George.



Highly Commended, Exploration and Production

High resolution palaeogeographic mapping of the fluvial-lacustrine Patchawarra Formation in the Cooper Basin, South Australia

P.C. Strong, G.R. Wood, S.C. Lang, A. Jollands, E. Karalaus and J. Kassan.

Best Poster

Towards an efficient exploration frontier: constructing a portfolio of stratigraphic traps in fluvial-lacustrine successions, Cooper-Eromanga Basin

Takeshi Nakanishi and S.C. Lang



PESA Best Presentation

Evidence for a new oil family in the Nancar Trough area, Timor Sea.

Simon George

Recognising the issue: we need to explore more

Once again we reach the closing moments of an APPEA Conference. Soon we will be saying goodbye to old friends and to new ones.

Once again the host city, the convention centre staff and the APPEA staff have done us proud. Thank you all for your hard work over the past four days and for all the hard work you have put in the proceeding months.

In this closing address I want to focus on the core of our business—finding more oil and gas.

In his opening comments on Monday Agu noted the declining production curve Australia faces for oil and condensate over the next ten years.

Richard Gibbs eloquently made the point that economy will continue to grow over this period. The Government and the Opposition nationally both aim for economic growth at a rate of 4–5% per annum.

Other commentators note that the population is expected to grow to about 25 million by 2020 and that meeting current economic growth projections will require investment in between 7,000 and 13,000 megawatts of new, additional base load electricity generation capacity.

The June 2001 meeting of heads of Australian governments made it clear: "Australia will be primarily reliant on energy from fossil fuel for the foreseeable future".

Adrian Williams this morning showed it was possible to deliver this fossil fuel based energy and meet



*Mr Ray James,
APPEA Vice Chairman and Managing
Director of Icon Energy Limited*

sustainable development objectives.

Renewable energy is a vital niche market but it is not the answer.

Michael Jeffery made it clear, relying on imports to meet growing and ongoing demand for oil is a highly risky business. Mark Koelman showed us that the option of alternative fuels must be pursued now but that it will be some way into the future before large volumes can be delivered to the market.

We have no choice as a nation. Australia needs to find more oil and gas and to use more gas. Australia will be reliant on fossil fuel for the foreseeable future.

Half of that fuel is petroleum. More exploration is a necessity. We need to:

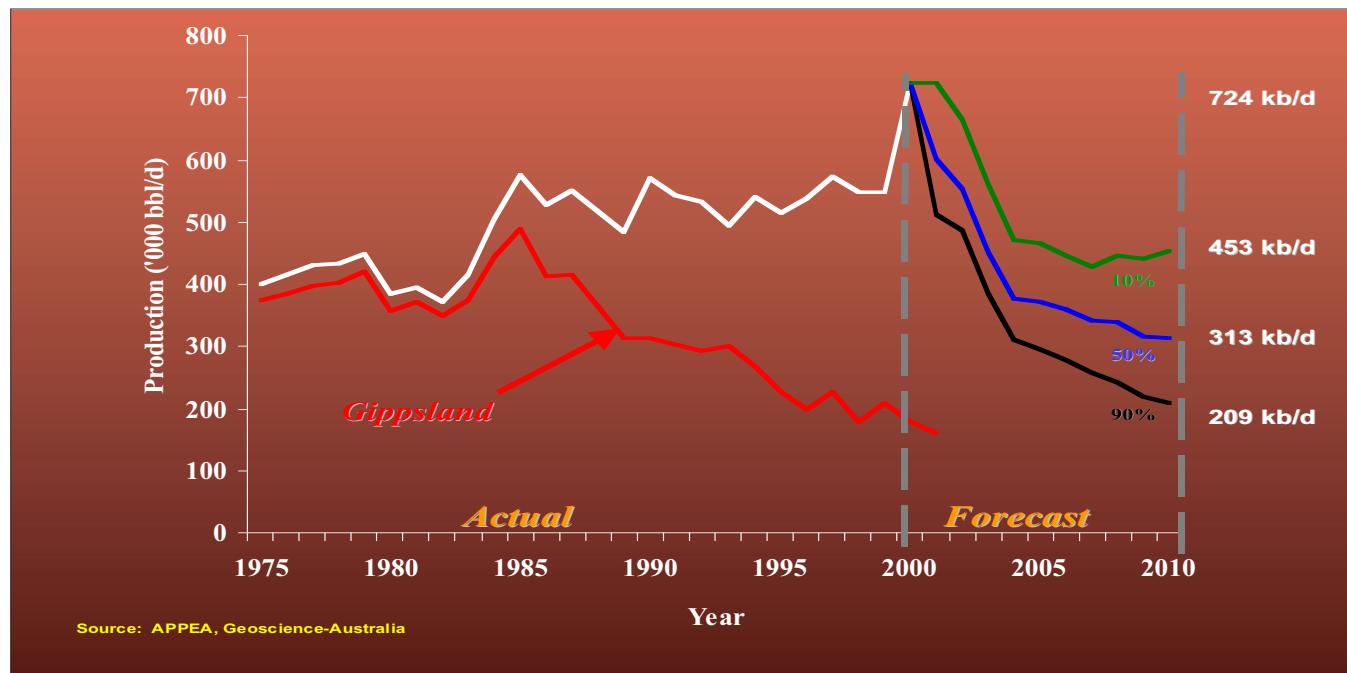
- enhance pre-competitive geological research;
- address the problems of the Native Title Act;
- change the approach to environmental approvals; and
- change the taxation treatment of exploration expenditure.

We need to explore more.

Yet, John Ellice-Flint and Steve Bell both made the point, given Australia's complex geology, the system we currently have in Australia is not particularly attractive to investment. John Akehurst made similar points two months ago in Canberra at the ABARE Outlook Conference.

The Commonwealth Minister has recognised the issue. He has called for a new national exploration strategy, but delivery of such a strategy is probably 12 months off and it will take another year to legislate it into effect after that.

In one of our key production provinces, Queensland, there is no sense of urgency. We have been trying to get the petroleum act rewritten for more than three years. We have been seeking a coal bed methane regime for some nine years. We have been trying to integrate petroleum and native title approvals processes for at least five years. We have been trying to get new



Potential crude oil and condensate production decline.

environmental regulation guidelines for at least five years.

At best we are at the advanced draft stage and as a result exploration on new tenements in Queensland has almost ceased. In Australia, an enhanced exploration effort requires four things.

Firstly, we need to do more pre-competitive appraisal work to identify potential resources. Does Australia have new prospective petroleum provinces? Do we have provinces where prospectivity needs to be re-evaluated in the light of new techniques?

Adequate funding for Geoscience Australia and State geological surveys is not an option—it is a national energy policy necessity. If government is not willing to make this funding available, they need to recognise the issue Steve Bell raised. Under the current rules, the private sector will not be willing to fill the gap.

However, government also needs to recognise that if they withdraw from the field, the inevitable cost is that exploration will become the domain of larger companies and the small companies who are the industry's traditional risk takers will be forced out of business in Australia.

Secondly, we need a new native title act. At present in South Australia and Queensland we are facing a piecemeal fragmented negotiation process that potentially will take decades to lead to a resolution of all outstanding matters.

Anyone who thinks that a process that means it takes three years to get a petroleum exploration licence is in the interest of indigenous Australia, the upstream petroleum industry or the nation has had their brain addled by too much good South Australian wine.

The existence of native title is not the issue. The right of indigenous Australians to assert their claims is not an issue.

The issue is the timeframe under which outcomes are delivered to both parties. We need a fundamental rethink.

Bureaucrats and parliaments have put in place a land management process that fails to recognise the social organisational structure of indigenous society. Negotiation with an extended family society where notions of property are fundamentally different to Westminster traditions have been rammed into a straight jacket that is rigid, sequential, time

constrained, bureaucratic and legalistic.

The process is excessively costly for all parties. Governments clearly do not have the resources or the skills to progress action in anything but a fragmented one-at-a-time manner.

The whole process needs to be rethought. I suggest that it might be appropriate to pose the following question to indigenous Australia.

Design an effective decision making process that both functions effectively within your social structures and also delivers quick outcomes.

When that has been done, and both industry and indigenous representatives have tested it, it needs to be legislated.

In addition, we need to have an economic and social rethink.

Resource development in indigenous lands, be it mining or petroleum development, will not deliver an economic bonanza. The willingness of most of Australian society to turn a blind eye to the relative social disadvantage faced by indigenous Australians leaves them with no option but to attempt to use the native title negotiation process to gain every ounce of economic benefit possible from it.

So long as these two core issues are not addressed, we will not have a native title approvals process system that can work effectively.

The consequence will be no empowerment of indigenous Australia, continued welfare dependency, inadequate resource exploration, long delays, declining self-sufficiency nationally in transport fuels, longer gas supply lines and higher overall risk levels which discourage investment.

Surely, this is not a nationally acceptable outcome.

The third issue that an exploration strategy needs to address is environmental approvals process. It is time governments bought their processes into the 21st century.

They are no longer dealing with an industry where denial of good environmental management is a fact.

Best practice environmental management is fully integrated into petroleum industry decision-making.

We cannot sneeze without having to carefully evaluate the environmental implications and take remedial measures. I note recently when David Suzuki was asked to identify industries that were taking a responsible approach to environmental management his first response was to name the petroleum industry.

I also note that every time an environmental activist wishes to protest about petroleum developments three words arise, whales and oil spills. Does anyone, including public commentators, ever check their facts before they repeat these assertions? Does anyone actually look at the Australian industry's track record? Perhaps the reality is that good environmental management is not sensational enough to be news so the only option is to repeat historical perceptions whether they are now accurate or not.

We may not be able to change public perception, but government processes can change.

Environmental approvals processes in government need to quickly recognise some of the issues raised in the Keating report in Western Australia. Environmental processes are in silos—everyone is focussed on

Australia will be reliant on fossil fuel for the foreseeable future, Half of that is petroleum. More exploration is necessary.

their micro segment, not on the whole process.

No one is looking at what the total outcome is. No one asks what it is that industry and society need. All they ask is did I do my part of the process properly and have I made a new requirement to justify the time I spent?

Keating has also made the point that it is questionable whether the environmental decision makers are actually adequately trained and skilled to make the decisions they are supposed to make.

This might explain why we so often see mining industry precedents being applied to petroleum projects and why land-based management techniques are applied to the marine environment.

Finally, it is time we stopped focussing on defining the boundaries of conservation areas and instead asked how can sequential and multiple use be practically pursued. It is time we stopped treating all forms of economic activity as identical.

Instead of sweeping, one-cap-fits-all declarations, its time decision-makers asked what aspect of petroleum activity actually compromises what environmental value. Having identified the precise issue, the next question is what solutions are there that protect that value and allow development. The rest of society has moved from a risk avoidance approach to decision-making to a risk minimisation approach—it is time environmental managers did likewise.

The fourth matter that an exploration strategy has to address is the taxation treatment of exploration expenditure. Two things need to be looked at. Steve Bell and John Akehurst raised one—the petroleum resource rent system has to reflect the different risk/reward situation associated with undertaking exploration in deep water areas.

The company tax system has to address the problems small and medium companies with no taxable income have in raising capital for exploration purposes.

The last question is a vital one. Traditionally small and medium companies have been the risk takers in this industry. Do we keep this risk taking attitude as a core component of our exploration effort or don't we?

If the answer is yes, tax change is necessary. If the answer is no, I worry about the future of our nation, our industry and of this conference.

The resources we wish to find are society's resources. There is a huge payback to Australia nationally and regionally if we find them.

Australia needs these resources or the political and social risk levels we face will rise and our economic well-being will decline.

In the short to medium term there is no option—we find more or we import more at great national cost.

That is the key issue for this country.

That is why we need a national exploration strategy dovetailed into a national strategic approach to energy policy

It's important that we be reminded of the importance of exploration, and particularly the role of small and medium companies, in exploration onshore. They are a vital component of both the gas and the oil parts of this industry.

I said when I opened this session, that many factors contribute to the success of a conference. Firstly let me express our thanks to all of the APPEA Council for the support and encouragement they provide in developing and running the conference. Particularly let me thank the chairs of our three plenary sessions and also Agu for being very patient while I hassled him to agree to speeches in very trying personal circumstances

Sponsors are another of those critical factors. Without the contribution that you make financially, this conference could not operate. Thank you—each and every one of you and particularly our principal sponsors Macquarie Bank and BHP Billiton. I

invite you to watch the screen as we once again acknowledge this group of companies.

Finally, but not least importantly, I want to thank everyone who was involved in any aspect of the organisation and running of this conference. You, the delegates, see the outcome of the efforts of these people when every aspect of this conference functions to perfection.

The running and management of this year's conference has had some special challenges associated with it. For all of the APPEA staff the six

weeks leading up to this year's conference has been particularly challenging and taxing. Thank you for the great team effort you put in as we dealt with those challenges.

I think anyone who has seen Julie Hood during this conference will know that she has had her own particular challenges. Julie, it's been a great effort and now you can relax and have the baby. We all wish you well.

As the names of all the staff and the devoted band of helpers appear on the screen please join me in a hearty vote of thanks to these

dedicated workers—without you it would not be possible.

And now to next year.

It is with great pleasure that I announce that the 43rd APPEA Conference and Exhibition will be held at the Melbourne Convention Centre from 23–26 March 2002.

Mr Ray James, APPEA Vice Chairman, delivered this address to the 42nd APPEA Conference in Adelaide on Wednesday, 24 April 2002.
