Electricity Supply (Greenhouse Gas Emission Reduction) Amendment Bill

Second Reading
In Committee

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Second Reading

The Hon. IAN MACDONALD (Parliamentary Secretary) [12.25 a.m.]: I move:

That this bill be now read a second time.

I seek leave to have the second reading speech incorporated in *Hansard*.

Leave granted.

The Carr Government is proud of its efforts on greenhouse, and I am extremely proud to be introducing this bill. We have recognised that we need to play our part in protecting the Earth for our children, and generations to come. However, in protecting the environment we recognise that we need to work with business to deliver environmentally sustainable industry in an innovative and cost-effective way. That is precisely what the Electricity Supply (Greenhouse Gas Emission Reduction) Amendment Bill is all about. It is an important part of the Carr Government's suite of greenhouse abatement initiatives—initiatives that fill the vacuum left by the Howard Government.

Greenhouse is a global issue, and yet the Prime Minister refuses to join the global response to this global problem—namely, the Kyoto protocol. Last year the Intergovernmental Panel on Climate Change released its third five-yearly assessment of the science of climate change. It found increasing evidence that human activity is already altering the global climate system and projected that the rate of warming over the next hundred years is "very likely to be without precedent during at least the last ten thousand years".

The New South Wales Government recognises that something needs to be done. But we also recognise that whatever is done needs to be done in co-operation with industry as well as the community. What we have here is one of the first non-voluntary greenhouse trading schemes. For five years we went down the voluntary route. It did not work. We did not achieve our target of a 5 per cent reduction in per capita emissions on 1989-90 levels. What was achieved was a 10 per cent increase in per capita emissions.

However, this scheme is outcome focused—it will achieve the target. What we have set out to do is develop a scheme that does not rely on just taxing people. Instead what we want to do is encourage people to behave in an environmentally responsible way. We have argued for several years that the most equitable and economically efficient means of addressing greenhouse gas emissions is through a national emissions trading scheme—a scheme that sees uniformity in rules, and sees all Australian emitters taking responsibility for their emissions. So rather than just sit back and complain about the lack of leadership at the national level, the New South Wales Government has moved forward with this scheme for the electricity industry.

Electricity generation is the largest source of Australia's greenhouse gas emissions, accounting for 33 per cent of net emissions in 2000. The emissions are also growing rapidly, and in 2000 were 36 per cent higher than they were in 1990. Clearly, the problem is getting significantly worse. While

recognising that electricity is only part of the problem, the Carr Government considers that the electricity sector offers significant opportunities for abatement as it represents both the largest and one of the fastest growing producers of greenhouse gas emissions.

That is where the Electricity Supply (Greenhouse Gas Emission Reduction) Amendment Bill comes in. It is yet another piece of world-leading legislation. In 1999 we introduced what we believe to be the world's first legislation recognising carbon rights. Since then most States, and a number of other countries, have followed our lead with similar legislation. Why have they followed New South Wales? Because we have looked for the opportunities—opportunities that the Howard Government is intent on stifling by not ratifying the Kyoto protocol. This legislation builds on existing initiatives.

This policy focuses on getting greenhouse gas reductions; it is not an industry support policy, as is the Commonwealth schemes. The bill amends the Electricity Supply Act 1995 in order to provide the legislative foundations to encourage the reduction of greenhouse gas emissions, emissions associated with the production and use of electricity, and to encourage participation in activities to offset the production of greenhouse gases. It creates market incentives to encourage more greenhouse friendly generation. Importantly, it allows the market to manage its structure and approach to address the obligations. It provides a challenge to the market which has often said, "Let us manage". Well, here is the challenge.

I now turn to the detail of the bill. The Electricity Supply (Greenhouse Gas Emission Reduction) Amendment Bill amends the Electricity Supply Act 1995 and provides legislative foundations to encourage two important outcomes: firstly, the reduction of greenhouse gas emissions associated with the production and use of electricity; and, secondly, the development and encouragement of activities to offset the production of greenhouse gas emissions. The bill will achieve these key outcomes by four interrelated initiatives. Firstly, we establish a statewide greenhouse gas reduction target. Individual retailers and large consumers in the electricity industry are each allocated a slice of the required abatement task, according to how much they contribute to the problem.

Secondly, we establish a penalty regime to ensure retailers and large customers would prefer to take actions to reduce greenhouse gases rather than incur a fine for not meeting their environmental obligations. Thirdly, we establish a scheme that gives legal ownership of the greenhouse reductions, reductions achieved by various options retailers and customers have invested in. Essentially, this means that the certificates create a form of property right. Fourthly, we allow the owners of these options to trade them so they can earn revenue to cover their costs and earn a reasonable return.

The challenge the Government has set industry is the same one that it has had for the past five years. Industry must reduce greenhouse gas to 7.27 tonnes per capita, which is 5 per cent below the level in 1989-90. We have re-set the timetable so that this target must be achieved by 2007. To ensure the Government sees continual progress towards this end target, we have also set progressively tighter targets year-on-year leading to the final 2007 level. Thereafter, industry will have to maintain the 7.27 tonne level until at least 2012. If, however, the Kyoto protocol is implemented the New South Wales scheme will need to be reviewed.

There will also need to be a review of any schemes introduced in other States to ensure that there is not duplication. The Government wants all New South Wales customers, big and small, to contribute to improving the environment. That is why the bill ensures all electricity customers in New South Wales will be part of the scheme. Ninety-eight per cent of customers, which includes all householders and most small to medium size businesses, are already paying about $1.50 per megawatt hour to their retailer as part of their contribution to reducing greenhouse gases. This means that the electricity bills of the vast majority of customers will not go up following the introduction of this initiative.

The Government will also ensure that where customers have already chosen to pay a premium for Green Power, this will be over and above the benchmark. This means that Green Power customers will not be subsidising their retailer to meet their slice of the benchmark. The scheme will also not allow efficiency gains from coal generators that come about from January 2003, through funding from the Commonwealth's G-GAP initiative to be counted. The Government recognises that

large customers, who currently are not part of the existing arrangements, will be affected by the new scheme.

To reduce the impact of this scheme on large electricity customers, the Government has developed a complementary set of arrangements for those customers. Essentially, this allows large customers to choose between purchasing abatement from the electricity sector or reducing greenhouse gas emissions from their own processors and their own plant. Allowing large users to create these non-electricity certificates not only ensures real greenhouse gas abatement occurs, it also helps them reduce the costs of doing their fair share of abatement.

Large users will be able to split their target so that they are able to create these large user abatement certificates for part of their electricity use, while leaving the remainder with their electricity supplier to manage in the normal way. However, the bill does not allow large users to trade the abatement achieved from their own plant. These large user certificates can only be created by facilities located within New South Wales—that is, those sites subject to the legislation. This is all about keeping the costs down while achieving real emission reductions.

The scheme has been carefully designed to encourage the development of a vibrant environmental services market in New South Wales. The very fact that participants will now face a penalty for not taking action to reduce greenhouse gases will stimulate an unprecedented demand for new and innovative environmental options to reduce greenhouse gases. This scheme is unique in that it embraces a wide range of environmental options and the focus is on the environmental outcomes. This is not about picking winners. We let the market pick its own winners.

A key change to the existing arrangement is the recognition of interstate generators. This approach keeps costs down for two reasons. Firstly, it maximizes the available supply of options and, secondly, it provides access to numerous sources of existing and underutilised plant. Another key part of the scheme is the ability to count carbon offsets such as sequestration in forests. These will be limited to forests located within New South Wales. We have also spent a considerable amount of time looking at efficient administration of the scheme. A range of administrative functions need to be carried out to facilitate compliance and the proper functioning of the scheme. These functions can be categorised as either regulatory functions or administrative functions.

The regulatory functions are to be carried out by the Independent Pricing and Regulatory Tribunal, with the more day-to-day administrative functions carried out by a scheme administrator. Initially, the tribunal will be the scheme administrator, but the bill provides for other people to take on this role at any time. The Government is keen to see this role carried out in the most efficient and effective way. Efficiency will be promoted by the operation of a liquid trading market, for which we will depend on the private sector. The tribunal determines whether participants have complied with their slice of the benchmark, and imposes penalties on those who do not. The tribunal has been given strong powers to audit compliance with the scheme and it must regularly report to the Minister.

The tribunal also has a crucial role in establishing the abatement task and how this will be split between each participant. It can also recommend that the Minister amend regulations to improve the scheme. The scheme administrator has the more mechanical functions, involving accrediting certificate creators, registering certificates, monitoring and verifying the validity of the certificates. In this regard the Government has left the development of trading schemes to the private sector, which is well placed to develop effective, low-cost trading platforms. The Government also encourages the private sector to develop a wide array of financial trading products around the abatement certificates.

The bill contains a number of other initiatives to keep the costs low. For example, the scheme includes provisions for banking and borrowing of certificates. Banking occurs when a participant has overcomplied early in the life of the scheme. In this case overachievers are rewarded by allowing them to bank any surplus certificates so that they can be redeemed at a later stage. Banking is good for the environment because it does not discourage people from early reduction in greenhouse gases. It also promotes low-cost abatement because people can take advantage of the economies of larger scale schemes.

The bill does not place a limit on how long surplus certificates can be banked. Borrowing, on the other hand, occurs when retailers fail to fully meet their target in a particular year. In this case retailers are allowed a shortfall of up to 10 per cent of their target for that year. This shortfall must then be made up in the following year. There are no shortfalls allowed in 2007, so the final target must be met. The borrowing provision is designed to provide flexibility in the scheme and explicitly recognises that the environmental outcomes of new technologies may be uncertain. In this regard the borrowing provisions encourage people to explore more innovative abatement options, which, in turn, will ultimately lower the cost of reducing greenhouse gases.

The New South Wales Government has always been keen to encourage responsible use of electricity. Reducing electricity demand is obviously an effective way of reducing greenhouse gases. To date it has been difficult to encourage retailers, who make money out of selling electricity, to offer their customers ways of using electricity more wisely. This scheme changes this incentive. We believe that one of the cheapest ways of reducing greenhouse gases is to encourage customers to reduce their electricity demand. But one of the difficulties faced by retailers in such a scheme is the administrative cost associated with dealing with a large number of small, individual sources of abatement.

In an attempt to overcome this problem the Government intends to make provision for several years worth of abatement created by demand side activities to be counted upfront. These provisions will be made in the rules and regulations. For example, if an investment is made in energy-efficient lighting in a building, this could result in reduced electricity consumption for the next five years. All five years worth of abatement could be claimed upfront. This approach has several advantages. For example, this initiative would reduce the administrative costs associated with claiming small amounts of abatement in every year, making demand management options more attractive.

Ultimately this will encourage retailers to do what they have not done—get their customers to reduce electricity demand. The Government is not keen to have participants paying penalties. We would prefer to have the achievement of our greenhouse gas reduction target. The key will be the level of the penalty in relation to the costs of greenhouse gas abatement. The bill includes a penalty of $10.50 per tonne. It is important to index this to maintain this level in real terms, otherwise there is a risk that, over time, participants would prefer to pay the penalty rather than reduce greenhouse gases. Although the penalty will not be tax deductible, the cost of buying abatement certificates will be. This has been taken into account in setting the level of the penalty. With the given penalty, participants could afford to spend up to $15 in real terms on an abatement certificate and still be better off than they would be if they paid the penalty.

The Government's main aim is to ensure that there is a real reduction in greenhouse gas emissions. This is why it is extremely important to ensure that we know that any abatement claimed really occurred. To do this, the bill includes strong powers for the tribunal and scheme administrator to audit the legitimacy of the certificates created, and whether benchmark participants have purchased enough of them. If, after carrying out these audits, it is found that certificates have been created without any real abatement occurring, large penalties will apply. There is also a make-good provision, which means that the party that created the bad certificate will be required to surrender an equivalent number of certificates. If 100 bad certificates were created, the creator is forced to take 100 certificates back out of the system.

This liability falls on the creator of the certificate, not the purchaser. If the creator is unable to make good, the bill includes an ability to gain access to financial assurances. This financial assurance is lodged at the time of certificate creation, and will be used to fund the purchase of any certificates to make good any certificates later found to be invalid. The creator's obligation to lodge a financial assurance will cease after the completion of all the audits, assuming no problems are discovered. Many details are to be finalised in the rules and regulations supporting the bill. These are being developed through a very detailed and comprehensive consultation exercise with stakeholders, including industry. Drafts of many of these rules and regulations have already been circulated and consulted on. I commend the bill to the House.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [12.25 a.m.]: The Opposition will not oppose this bill. As the honourable member for Lismore in the other place said, we recognise the importance of reducing greenhouse gas emissions. However, the Coalition is concerned that implementing a scheme such as that proposed in this bill could have some major consequences for business and investment in New South Wales. The Minister for Energy has changed his tune on this legislation over the past 18 months. In April last year, through a spokesman to the *Sydney Morning Herald,* the Minister stated:

We are looking forward to establishing a long-term sensible and practical program that delivers results. A purely punitive regime that sets higher fines if you don't meet the targets does not encourage industry to meet targets.

I am intrigued by the quote attributed to the Minister through his spokesman. If the Minister really believes that that is the case, why are we now debating a piece of legislation, brought into Parliament by him, that does exactly what he said he was opposed to? In effect, the bill is doing exactly what the Minister did not want 18 months ago—it will establish a punitive regime with fines for non-compliance. It is almost as if the Minister for Energy has been handed the legislation and been told to get it through the Parliament.

This bill has had a long gestation period. The Premier took a proposal for a mandatory reduction scheme to the Council of Australian Governments [COAG] meeting in June last year seeking national approval for his plans. The COAG did not endorse the proposal; in fact not even Premier Carr's own Labor colleagues from the other States supported his grand plan, leaving Captain Wacky alone in New South Wales to carry on the issue. Let me make it clear, the Coalition is supportive of a national—and I emphasise the word "national"—scheme to reduce greenhouse gas emissions, but we are sceptical, and I believe quite rightly sceptical, about the likely success of, and the implications arising from, a state-based scheme. The bill amends the Electricity Supply Act 1995 to put in place a framework for mandating greenhouse gas emission reduction targets. It also sets down a penalty for non-compliance with the mandated reduction targets of $10.50 per tonne of CO_2 equivalent above the benchmark reduction target.

The bill establishes a statewide greenhouse gas reduction target, with greenhouse gas benchmarks set down for the years 1 January 2003 to 31 December 2012. The benchmarks range from 8.65 tonnes of CO_2 equivalent greenhouse gas emissions per head of State population to 7.27 tonnes by 2012. Each participant in the benchmark scheme will be allocated a benchmark reduction target, depending on how much each one contributes to the greenhouse gas problem. The bill defines benchmark participants as retail suppliers of electricity, electricity generators or other persons who supply electricity on a retail basis. Benchmark participants also include larger users of electricity, or owners and operators of projects designated as State significant by the Minister for Planning.

The inclusion of projects of State significance raises some questions. Why, for the purpose of the scheme, do these participants get a dispensation that is not offered to each and every business consumer? During consultation on the bill my staff and I spoke with a wide range of stakeholders. One of the major industry groups, which I will not name, stated that the bill could not be worse for its industry because it would add significantly to the cost of production and would not encourage investors to establish operations in New South Wales. Instead, they would choose to establish expanded or additional operations in other States.

The punitive regime of the bill—a regime the Minister for Energy did not want, according to his statement—sets down the penalty for non-compliance with a benchmark target of $10.50 per tonne of CO_2 equivalent of greenhouse shortfall for the relevant year. Earlier this year the Electricity Supply Association of Australia [ESAA], in a paper titled "Impact of a carbon cost on Australia's electricity generation", considered the impact of a similar penalty on Australian electricity generation. The ESAA paper has a similar framework to what is proposed in the bill. Its findings are based on a penalty of $10 per tonne of CO_2 with a time frame ending in 2009-10. The finding of the ESAA report reads:

For a $10 per tonne CO_2 impost, electricity prices in the wholesale market will increase by 14%. This will trigger emission reductions of less than 3%.

That is an important figure. The ESAA modelling was done on a national level, but considering that New South Wales is a major contributor to the generation capacity of the national electricity market it could be said that the conclusion of the ESAA may well be applicable in New South Wales. That is a major pass through to electricity consumers for a somewhat small emission reduction. I would be interested to hear the Government's response to the scenario put forward by the ESAA. Under the proposal the penalty amount may be adjusted according to movements in the consumer price index. It is interesting to note that the penalty is recoverable as debt due to the Crown, which concerns the Opposition.

The Government is imposing a penalty on benchmark participants that will go straight to consolidated revenue. This appears to be little more than a revenue-raising strategy for State Treasury. It is similar to what the Environment Protection Authority [EPA] does with load-based licensing. I can see the Treasurer during debate on the bill rubbing his hands as he envisages yet more money coming to him from the electricity industry and the private sector. If the Government were serious about this initiative, penalty payments would be directed to a specific purpose fund designed to encourage greenhouse gas reduction. Similarly, if the EPA were fair dinkum about cleaning up the water, the money it collected from load-based licensing would go straight back to fix up the tertiary treatment of sewage, but instead it goes into consolidated revenue.

The Independent Pricing and Regulatory Tribunal, in a recent report into demand management measures, recommended the establishment of a demand management fund to promote energy efficiency. The Opposition calls on the Minister to commit penalty payments under this scheme to be directed into such a fund structure instead of being directed to consolidated revenue as a debt recoverable to the Crown. In the absence of the Government making any attempt to deliver the penalties to anywhere apart from Treasury, the Opposition will formally propose, by way of amendment, that any penalties collected under the legislation be hypothecated to energy efficiency schemes or alternative energy schemes. Penalty money should go back into offering practical energy efficiency measures to businesses and householders with the end aim of reducing greenhouse gas emissions.

It is through the development and enhancement of such projects that greenhouse gas abatement targets can be delivered—not through the payment of penalty money to consolidated revenue. Under the legislation providers may create abatement certificates to be traded. Certificates are created in recognition of activities that are undertaken to reduce greenhouse gas emissions. Under the legislation accredited providers may be involved in activities including demand management, generation activities resulting in greenhouse gas reductions and any other activities that reduce greenhouse gas emissions.

Accreditation may be extended also to parties involved in carbon sequestration activities. I understand that this will not extend to interstate carbon sinks because of the practical difficulties involved in determining the existence or compliance of afforestation activities in other States. This refusal to accredit interstate carbon sinks highlights another shortcoming of a State-based regime. Why cannot businesses operating outside New South Wales be allowed to count their abatement activities in other States when they are creating certificates in New South Wales? Is this not a disincentive to investment? Why does the Government seem intent on putting up a virtual barrier between New South Wales and other States?

The Opposition will move an amendment at the Committee stage to allow interstate carbon sequestration activities to be counted towards meeting abatement targets. The honourable member for Cessnock in the other place claimed that this would be disadvantageous to New South Wales. Once again, he is wrong. Once again, he has failed to comprehend the importance of this matter. What we propose is simple: an incentive to attract abatement measures to New South Wales. The bill provides for the creation of two types of certificates, transferable and non-transferable, in respect of greenhouse gas abatement measures. Transferable certificates can be traded and transferred to

any person, while non-transferable abatement certificates cannot be traded openly. They can be created and lodged only with the scheme administrator.

The Opposition amendment will propose that any abatement or mitigation work undertaken by an active participant in New South Wales should be able to be fully accredited with certificates, and that these certificates be fully transferable. If the abatement or mitigation is undertaken outside New South Wales the certificates would remain non-transferable. This provides an option to encourage abatement projects to be undertaken in New South Wales rather than elsewhere. So we provide the incentive for them to put their forests and plantations in New South Wales. By limiting those certificates gained from abatement projects interstate for the non-transferrable type, the certificates generated by New South Wales abatement activity are differentiated and rewarded. The Coalition wants to encourage investment and job creation in regional areas, and in particular in New South Wales. That is why it is attempting to offset some of the negative aspects of this legislation.

Several major concerns have been put to the Coalition about this legislation. Current consumption of electricity in New South Wales is about 63,000 gigawatts a year, 70 per cent of which is used by business. It has been estimated that almost 70 per cent of the cost of this program will fall on business, adding yet another impediment to development of employment in New South Wales. A concern has also been raised by Australian Business Ltd [ABL] by way of a letter to the Minister dated 2 December relating to the baseline issue outlined in one of the methodology papers. ABL strongly advocates the baseline remaining at the January 1997 level to lower the impact of the scheme on New South Wales business competitiveness. ABL believes that moving the baseline to January 2002 will add to the cost of the scheme rather than result in any savings. I am interested to hear the Government's response to that very important issue.

In addition to that concern, we are now just three weeks away from the implementation of the scheme on 1 January 2003. However, the detailed rules and methodologies to accompany this legislation are only now being completed. We are effectively being asked to make a decision on the framework for a scheme without all the details being available. For example, the Ministry of Energy and Utilities Internet site currently lists a demand site abatement methodology paper for download. The foreword to that paper, which was released late last month, invited submissions to be made until 1 November. That was after the Minister introduced the bill in the other place. One of the key reasons we are debating this bill now rather than earlier is that another methodology paper has been released and comments are sought while the bill is being debated. In effect, the nuts and bolts of this scheme are still being worked out even as we debate the legislation. I understand that several other papers are still to be completed. When will they be completed?

Given that we are now in the first week of December, will there be enough time to circulate the rules and methodologies to participants in the scheme before 1 January? I would appreciate assurances from the Government on this important issue. Will a scheme begin on 1 January—in a little more than three weeks—that is only half or three-quarters ready? That is an important question. I also understand that some industry and financial institutions are concerned about the status of the abatement certificates created under this legislation and how they can be traded. Is the Government in a position to clarify those concerns, or will this remain as yet another grey area of the bill still to be worked out?

Further, can the Government clarify the situation with regard to the large users who have direct supply contracts with electricity generators? Does the penalty fall to the generator or to the customer? I understand that at least one State-owned generator could be faced with the possibility of paying penalties under this legislation. I am sure the Government and its advisers are aware of that generator in the aluminium area. I ask the Government to give an indication of the potential pass-through cost to end users of electricity. I also seek an assurance from the Government on a major issue facing BHP Billiton. The Government is aware of this issue and I would be very surprised if the Minister did not have an answer. The issue relates to BHP's waste coalmine methane generator at the Appin tower site.

The bill and the associated methodologies could see the electricity retailer—in this case Integral Energy—rewarded under this scheme, while the prime investor in the generator, BHP's Illawarra

Coal division, could be unrewarded or even penalised because of the deeming provisions. The company that has invested will be the loser. Can the Government give an assurance that an unintended consequence of this legislation will not be that Illawarra Coal will be disadvantaged at the expense of Integral Energy? If no guarantee can be given, what measures will be available to Illawarra Coal to deal with the problems that this bill and the methodologies will create for what is widely acknowledged within the industry as a successful greenhouse gas abatement project? The big Australian has done the right thing before the bill has been enacted and it appears that the methodologies upon which it is based will disadvantage it. That is silly if we are trying to encourage business to invest and the methodologies reward someone else. As I said at the outset, the Coalition supports measures designed to reduce greenhouse gas emissions, provided they are implemented on a consistent basis. There is no need for the Carr Labor Government to grandstand and go it alone on this issue. A media release issued by the Australian Chamber of Commerce and Industry on 16 September states:

Comments today by New South Wales Premier, Bob Carr, that the NSW Government will unilaterally pursue climate change policies are not in Australia's best interest.

Australian industry is committed to reaching the 108% target as agreed to by Australia at Kyoto in 1997. However, in meeting this target, industry needs a nationally consistent policy approach to climate change. We do not need States and Territories going it alone.

The decision of the NSW Government to pursue a climate change policy that is not within a strategic, long-term nationally consistent framework places industry in an unacceptable position. Industry needs certainty and consistency in order to stay competitive and to attract investment, and different climate change policies across jurisdictions will simply not provide this.

That is a very clear statement of concern from industry. In conclusion, the Coalition will not oppose the bill in this place. We recognise the importance of reducing greenhouse gas emissions and congratulate the Federal Government on its current initiatives, which are aimed at reducing emissions. Under the leadership of the current Federal Government, Australia is well on the way towards meeting its Kyoto obligations. I look forward to the Government addressing the concerns I have raised, because the Minister for Energy did not even attend the debate on this bill when it concluded in the lower House and was, therefore, unable to provide answers to our concerns in that place.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS [12.50 a.m.]: The New South Wales Democrats offer lukewarm support for the Electricity Supply Amendment (Greenhouse Gas Emission Reduction) Bill. The Government is taking action on reducing greenhouse emissions. This should be a Federal issue, but the lack of leadership from the Federal Government is very depressing. Having said that, the bill in its current form is far from ideal, and it is certainly unfortunate that this is State and not Federal legislation. The greenhouse effect is a reality and Australia's action to reduce emissions is long overdue. The European Union's green paper on greenhouse gas emission trading states:

The Earth's average surface temperature rose by around 0.6_C during the 20th century.

Many scientists conclude that the evidence is getting stronger that most of the warming over the last 50 years is attributable to human activities such as burning fossil fuels and deforestation, which cause emissions of carbon dioxide [CO_2] and other greenhouse gases. The groundbreaking CSIRO report commissioned by the Department of Immigration and Multicultural and Indigenous Affairs entitled "Future Dilemmas" shows that we are consuming energy at unsustainable levels. It is widely acknowledged that electricity generation accounts for a large chunk of Australia's greenhouse gas emissions at 33 per cent of total output, 96 per cent of our energy comes from coal and only 4 per cent from other sources, including renewable sources. The main purpose of the bill includes the establishment of a statewide compulsory greenhouse reduction scheme of 7.27 tonnes per capita to be achieved by 2007. A penalty regime applying to retailers and large customers for not meeting greenhouse gas reduction obligations will establish a carbon credits scheme enabling suppliers to offset carbon.

On previous occasions the Treasurer has had some difficulty in understanding my speeches on Transgrid and the Electricity Supply Amendment Bill 2000. That is ironic: the Treasurer is the main force behind this bill and is implementing the national electricity market reforms in New South Wales. The Democrats moved amendments to the Electricity Supply Amendment Bill 2000 to impose a greenhouse penalty of $10 a tonne of CO_2 on retailers that fail to meet their greenhouse gas reduction strategy requirements under the 1995 Electricity Supply Act. Even two years ago the Democrats recognised that most retailers failed to comply with their licensing conditions with respect to greenhouse gas reduction strategy requirements.

Currently, the only available penalty has been the revocation of their licence. The Government has finally recognised this and is taking action to implement a mandatory penalty regime. The Government should be congratulated on following the policy initiatives of the Democrats. On previous occasions I have tried to introduce this penalty, and both the Government and the Opposition opposed my amendments. However, in the lead-up to the next State election the Premier wants to establish his environmental credentials. Call me a cynic, but if the Government were serious about greenhouse gas reduction it would have supported my earlier amendments. On 3 September I gave an adjournment speech on the 1999-2000 Performance Audit Report of the Environment Protection Authority, entitled "Effectiveness of electricity retailers' strategies for reducing greenhouse gas emissions", which was released in February.

The audit report found that New South Wales electricity retailers have not complied with greenhouse gas emission targets. However, as I said previously, on two occasions amendments were proposed to the Electricity Supply Act to provide for a financial penalty of $10 a tonne of CO_2 to be imposed on energy retailers who did not meet the targets. The Premier claimed that he was Australia's greenest Premier, which is ironic because twice he refrained from introducing those penalties. Since then the result has been far from desirable. Compliance by retailers has been very poor. The Environment Protection Authority [EPA] report states:

The sufficiency of information of the rest of the retailers varied considerably between IVRs and was generally considered inadequate. Particular issues existed in relation to: the definition by the independent verifiers of the grading methodologies applied. It was not always clear what criteria were being applied by the independent verifiers to retailer data. Poor documentation in the IVR of the documentary evidence referred to preparation of the IVR a low level of independent verification of claims for Electricity Sales Forgone …

The EPA is of the opinion that that New South Wales electricity retailers' demand-side strategies for reducing greenhouse gas emissions achieved a low level of effectiveness; that is, less than 35 per cent of the forecast, in 1999-2000. The EPA also said that that New South Wales electricity retailers' combined supply-side and demand-side strategies achieved a medium level of effectiveness in reducing greenhouse gas emissions during 1999-2000, having achieved a total emission reduction of 56 per cent against the forecast. For the 1999-2000 period only two retailers, Integral Energy and Origin Energy Electricity Ltd, performed better than their benchmark, having reduced greenhouse gas emission levels below the benchmarks. In that period eight retailers exceeded the benchmarks by up to 10 per cent, and six retailers exceeded their benchmarks by up to 15 per cent. This is not a very good result.

In plain language that means that most retailers did not meet the targets that were set. In other words, they did not comply and their compliance claims were a bit rubbery. The Government is introducing regulations that must dovetail with the Federal scheme. However, that is difficult because if the registers are not clear on what greenhouse compliance certificates exist there could be a double counting of Federal and State credits for energy. Another problem between Federal and State schemes is whether the measurement should be in megawatts or tonnes of CO_2 produced. There seems to be some difference between State and Federal measurements. It has been suggested that there should be three types of credit: green generation, or renewable generation; electricity supply forgone; and biomass. Of course, theoretically they would all be regarded as equivalent.

However, there has been concern that electricity supply forgone—that is, the authority could say that it would have generated more electricity but decided not to because of this policy—could be easily fiddled, whereas renewable energy, or green generation, is fairly clearly measurable. Biomass or energy sequestration has to be monitored for the long term. That concern was raised in a briefing paper on the bill prepared by the Electricity Restructuring Group of the University of New South Wales, which was released in November. The Electricity Restructuring Group found that the proposed scheme lacks precision of definition, and is open to various forms of double counting due to the nature of the tradable instrument chosen for implementation—a baseline and credit approach—with the intrinsic problems of baseline definition that is implied. It is important that each credit given—and generally green generation is preferable—is traceable and numbered so that it can be audited.

In other words, for each credit given there should be a specifically traceable certificate so that any shoddy practice in generation of that certificate can be reflected in the value of the certificate in the market. Some months ago I put that to the Minister. However, I note that it is not included in the bill, and that is very disappointing. The Democrats believe that greenhouse credits have to be independently traded, as with shares on a register, and be totally transparent. If it is claimed that someone has saved a certain amount of energy, effectively reducing greenhouse gas, that will be audited so that the claim is traceable. If it is not credible, the credit will be taken from the organisation or drop in value. If the credit relates to a certain incident which is claimed to save the release of tonnes of CO_2 into the atmosphere, that has to be proved. The buyer of the credit will be held responsible for the veracity of the claim. In this way, a market mechanism would be established so that any crooked credits would be lowered in value, people would be reluctant to buy them, and the credits would not gain legitimacy by going onto a register where they are indistinguishable from genuine credits.

One can foresee crooked accountants coming up with electricity supplies forgone, saying, "I was going to expand my business but I did not; therefore I have forgone electricity supply. Please give me some credits." The Government wants the Independent Pricing and Regulatory Tribunal [IPART] to audit the credits. However, the New South Wales Democrats believe it is important that the Environment Protection Authority be given a central role because the authority has been far more critical in its approach to auditing the veracity of certificates generated. The concern is that the EPA will be excluded from the bill because of the nature of a previous report. In other words, because the authority has done a good job of auditing, it is somewhat of an embarrassment and it has been excluded from the bill. That is a major flaw in the bill. This aspect was also raised by the University of New South Wales Electricity Restructuring Group.

A further concern for the Democrats is the Government's obsession with secrecy. Under proposed section 97HD, Cabinet documents and Cabinet subcommittees are exempted from providing statements or any information to the tribunal or scheme administrator. I do not understand why this should be so secretive. The Democrats believe that transparency is the answer to these sorts of problems. Under proposed section 97K, the Minister may approve rules regarding greenhouse benchmarking. The clause was inserted at the time of the previous amendment bill in 2000. I intend to move amendments in Committee that will ensure these rules are made by regulation.

It is important that the Government gets the legislation right, because if it does not Australia will continue to exceed its greenhouse gas emissions. New South Wales, which plays a huge part in the Australian economy, can do so, even if the Federal Government does not. However, the bill is seriously flawed and I believe it must be improved. For that reason I have suggested an amendment that will ensure a compulsory review of the bill, as suggested by the Electricity Restructuring Group.

The latest Federal report recommends that a national scheme be implemented after a period of three years in the belief that this will give more certainty to industry. Given the involvement of Minister Warwick Parer and his well-known links to the coal industry, this sounds like a delaying tactic rather than a serious attempt to implement a national scheme. The implementation of a State scheme is at least a starting point, but we are disappointed that it is so flawed in its execution. This

bill could be the basis of a national scheme, but there is a lack of audits interstate and the New South Wales audits are being conducted by the IPART without input from the EPA, which is disappointing. The lack of ability to trade credits interstate, as suggested by a National Party amendment, is one way of addressing this, but it is of concern that there is no way of auditing interstate credits.

The Hon. Duncan Gay: Yes, there is—by IPART.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS: The IPART does not have jurisdiction in other States, however.

The Hon. Duncan Gay: It checks that they are there, on a user-pays basis. It is required to come back to New South Wales.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS: I believe that under the current practices it is difficult to enforce even in New South Wales, and I think it would be worse interstate. It would also mean that interstate investment would go interstate, which is perhaps a parochial way of looking at the matter. Certainly, this bill is progress at a national level, in a country that is not doing very well. However, we believe the bill has serious flaws, which we will attempt to address in our amendments. I am disappointed that the Government does not wish to accept them.

The Hon. Dr PETER WONG [1.04 a.m.]: Lowering greenhouse gas emissions is a prominent international issue that is highly ranked on the Australian agenda. I support the bill in principle because its objectives hold obvious long-term and far-reaching advantages, particularly for the environment but also in the burgeoning industry of sustainable energy. This is positive news in light of the preceding failures in voluntary greenhouse gas emission programs, particularly in association with the use of electricity generators in New South Wales. Attitudes are slowly evolving from economic alarm at the loss of jobs and increased business costs, to the realisation of new opportunities.

The Partnership for Climate Action, an initiative of seven major international energy and commodity firms, promoted the potential of using carbon trading principles to reduce greenhouse gas emissions without sacrificing business viability or cost efficiency. I simply wonder whether the Government's strong stance on State isolation in the matter of forest carbon sequestration is based on a State-by-State approach envisaged as the national norm for the long term.

If New South Wales is the first State to introduce this type of bill, the Government's initiative must be commended. However, I seek more information on the incentives the Government intends to use to encourage greater participation in the scheme. The Government should also provide an impact statement of the effect that this isolationist approach will have on national and international companies wishing to invest in our State, knowing that their abatement activities will earn no, or conditional, tradable credits. Does our State already possess the tradable credits and tangible assets to justify this isolationist stance, particularly if the long-term outcome is advancing towards a Commonwealth scheme? If the eventuality is to be a Commonwealth scheme for tradable carbon sequestration rights, we need to ensure that legislation is protecting our long-term and immediate interests.

The Hon. IAN COHEN [1.06 a.m.]: The Greens are pleased to strongly support the intent and content of the Electricity Supply Amendment (Greenhouse Gas Emission Reduction) Bill.

The Hon. Eddie Obeid: You never support anything.

The Hon. IAN COHEN: The Minister complains that we never support any legislation. When we do support legislation, the Minister chooses not to listen. The bill introduces, for the first time, an enforceable greenhouse emissions benchmark for New South Wales participants in the electricity sector. Honourable members will recall my private member's bill, the Electricity Supply Amendment (Greenhouse Targets) Bill 1998, which proposed such an enforceable benchmark.

The Hon. Duncan Gay: It was probably the silliest bill you introduced, because it would have done the opposite to what you wanted it to do.

The Hon. IAN COHEN: I will not argue with you, given that it was so long ago. However, the Government has now introduced a bill that is along the same lines and ensures that this important issue is addressed. After four years of charging New South Wales consumers a $1.50 additional charge that went into the Electricity Tariff Equalisation Fund to assist New South Wales retailers to meet their benchmark, and auditing the fact that only one will retailer was meeting its benchmark, the New South Wales Government has finally accepted that a voluntary benchmark was not working in the electricity sector.

I commend the Minister, the Hon. Kim Yeadon, for introducing a bill that moves towards compulsory benchmarks. I believe that if the Labor Government were to introduce similar legislation in other areas, it would receive the fulsome and continued support of the Greens. The Minister and I have had many differences of opinion, particularly on forestry issues. However, the Minister's efforts on this bill are worthy of support, and I congratulate him. I am pleased that legislation on such an important issue is moving forward in a manner that may have real benefit with regard to greenhouse gases emissions. New South Wales is the industrial powerhouse of the nation, emitting more greenhouse gas than any other State in Australia. The Greens note that in the first two years of the scheme the emissions are higher than the per capita emissions target.

The Hon. Duncan Gay: There's a bit comes out of the brown coal in Victoria but they are not in the scheme.

The Hon. IAN COHEN: Let us hope that the Victorians follow suit and introduce legislation such as this as there are opportunities in that area. This bill sets out an emissions benchmark glide path that encourages participants to achieve the target while allowing sufficient flexibility in the early years of the scheme for participants to invest in renewable energy outcomes that have a longer lead time in terms of producing New South Wales greenhouse abatement certificates. This will encourage renewable energy investment while ensuring that the per capita emissions target of 5 per cent below 1989-90 levels is met by 2007.

The scheme will transform the energy market in New South Wales, it will attract investment in more greenhouse-efficient energy solutions and encourage investment in demand management and renewable energy. This is a vital plank of the New South Wales Greens' vision of a sustainable electricity sector in this State. If New South Wales is to compete effectively in a Kyoto-compliant world market we will require additional incentives to create both demand management and renewable investment outcomes. Despite the doom and gloom scenarios emitting from the greenhouse policy vacuum in the Federal Government, investment in renewables and demand management will create jobs and profits for New South Wales, and much of that benefit will flow to regional areas.

Clive Hamilton, Director of the Australian Institute, has reviewed the regional opportunities that will result from a higher mandatory emissions benchmark. For New South Wales it means more jobs in regional areas, such as the western slopes of the Great Dividing Range where the State's wind energy potential is highest, more jobs in the Murray-Darling Basin as a result of investment in reafforestation and plantation establishment and the biomass opportunities that flow from this investment, and more jobs for the Western Division and for towns such as Deniliquin and Broken Hill, where solar energy potential is highest. More than 80 renewable energy projects are under way in regional Australia. That amounts to an investment of between $3 billion and $4 billion. That is occurring in an economic and political climate that does not actively encourage investment, with those investors having a view of Australia's energy future. Former President of the United States of America Bill Clinton, when tackling fossil fuel industry lobbyists, noted:

… the largest obstacle to meeting the challenge of climate change is not the huge array of wealthy vested interests and the tens of thousands of ordinary people around the world who work in the oil and coal industries, the burning of which produce these greenhouse gases. The largest obstacle is the continued clinging of people in wealthy countries and developing countries to a big

idea that is no longer true—the idea that the only way a country can become wealthy and remain wealthy is to have the patterns of energy use that brought us the industrial age. In other words, if you're not burning more oil and coal this year than you were last year, you're not getting richer; you're not creating more jobs; you're not lifting more children out of poverty. That is no longer true.

Bill Clinton saw through the vested interests who were all about entrenching their domination of the traditional energy market, and fortunately the New South Wales Government has resisted the best efforts of similar vested interests in this State.

The New South Wales Greens note that the potential for enormous windfall gains to coal and gas generators, particularly interstate generators, has been reined in by ensuring that the baseline stays at 1 January 2002. I note that the Hon. Richard Jones proposes to move an amendment that will make that commitment explicit in the bill. The New South Wales Greens also acknowledge the commitment by the Minister for Energy, Mr Yeadon, in his second reading speech to remove from the scheme carbon sequestration from other States. The Greens believe this will limit the potential damage that this form of carbon certificate could wreak on the credibility of the scheme.

An example of the excesses of this arrangement is the Mitsubishi group, which piggybacks carbon sequestration on top of its huge demand for wood pulp by clearing native forests in Tasmania and putting in their place short-term plantations with the express purpose of cutting them down in as few years as will deliver the fibre it requires for paper and cardboard products. The products of that activity are soon burned or decomposed in landfill and return to the atmosphere after only a few years. Yet carbon certificates are granted to Mitsubishi's subsidiary, the Tokyo Electric Power Company, for this activity.

We now know that all the world's temperate forests are absorbing approximately 10 per cent of global carbon emissions. While that is important, it is obviously only a small part of the solution. The idea that manipulations of the forests can somehow increase absorption is uncertain at best. I was pleased to see the recent release of the New South Wales wind atlas—

The Hon. Duncan Gay: It was about a week ago.

The Hon. IAN COHEN: I have a copy of the atlas in my papers but it does not rise easily to the surface. It is an excellent guide that presents an exhilarating opportunity. I pay credit to the Minister for Energy for that initiative, which could lead to the creation of enormously beneficial alternative energy schemes, particularly on the western slopes. The Greens wholeheartedly support that idea. The atlas shows the windiest places in New South Wales. While the windiest place, the top of Mount Kosciusko, is obviously unsuitable for a wind farm, many other places in New South Wales are suitable. The next three windiest locations are Lake Bathurst, where wind speeds average more than eight metres per second; Bourke, where winds speeds average more than seven metres per second; and Scone, where wind speeds average up to seven metres per second. The Greens hope that the Government will consult with local communities north of Goulburn, west of the Blue Mountains and north of Armidale, which the atlas pinpoints as being highly suitable for wind farms.

The Hon. Duncan Gay: Lake Bathurst is south of Goulburn.

The Hon. IAN COHEN: Thank you, I stand corrected. There are already wind farms in that area. Is the Deputy Leader of the Opposition satisfied with them? Are they doing the job? Is there a spin-off for local employment in the form of maintenance jobs?

The Hon. Duncan Gay: There is a double spin-off for tourism.

The Hon. IAN COHEN: What more could we want in a country area?

The Hon. Duncan Gay: The only unfortunate side-effect is that the Hon. Michael Egan has visited twice.

The Hon. IAN COHEN: There is always a downside, but there are benefits from tourism and job

opportunities in maintenance and support. I wonder whether the equipment was constructed in New South Wales. If it was, that is fantastic; if it was not, there is no reason why the equipment for future wind farms cannot be manufactured entirely in this State. That is the kind of initiative that can bring real benefits to regional communities. Wind farms can not only be a highly sustainable form of agistment; they lower regional energy prices and encourage energy-use awareness by their presence. But perhaps more importantly, once wind farms get up and running industry will develop to manufacture the components. That will make the industry more competitive and deliver real employment opportunities in New South Wales. It is not unforeseeable that, with the kind of support the Government gives the coal and biomass industries through grants, rebates and subsidies, the wind energy industry could in a few short years be a shining example of economic growth. That is an example that the Greens would support.

The changes that humans have already made by increasing carbon dioxide levels in the atmosphere are thought to be causing a greater release of carbon through the breakdown of leaf litter and more frequent forest fires. Only a slight increase in those factors could wipe out the supposed benefits of carbon sequestration. Other countries, notably Japan and the United States, are already using Australia as their carbon dump. It is highly doubtful whether these activities will result in a net benefit to the global community. The release of carbon stored in native vegetation and soil as a consequence of establishing plantations and industrial farming practices is occurring in New South Wales right now. While we welcome the proposition that the accounting of this novel market in carbon should be managed by the Independent Pricing and Regulatory Tribunal [IPART], we are asked to trust as yet undefined rules and methods of controlling this activity, which as it stands may be little more than an escape hatch for the electricity generators.

It has been shown that a newly planted forest must stand undisturbed for 120 years before it has accumulated the amount of carbon released in the initial clearance of the pre-existing forest. That is much longer than the lifetime of the plantations which take their place. Under this proposal there is no accounting for the massive amounts of carbon released by the clearance of native forests. Recently the *New Scientist* magazine has reported that the soil contains up to six times more stored carbon than the forest standing above it. Much of that is lost when the ground is ripped up to prepare for a new plantation, and more is lost when herbicides are used to control competition from undesirable grasses and shrubs. There is no credible accounting system for the full carbon cycle, which comprises much more than the plantations allowable under this bill.

The present state of carbon trading does little to guarantee that carbon credits are granted for physical carbon that is drawn from the atmosphere, trapped in plant matter, and kept there with some certainty for a period of time sufficient to make a difference to the climate. Unless and until the many loose ends of the carbon trading game are clearly spelled out, the New South Wales Greens are not comfortable relying on this mechanism to stabilise the climate on which we are all so dependent. It would be much better if we in New South Wales set the standard at home by implementing firm controls on further activities which would release the wealth of carbon already stored above and below the land. The IPART will be bold indeed to set up a credible system of carbon accounting when the world's scientists are only beginning to come to grips with the magnitude of the problem. We strongly agree with the Minister that demand management is a good way of reducing the consequences of electricity generation, and that means using less of it.

Presently a strong disincentive to do so exists, in that those who use the most electricity pay the least for it. The modest demand management provision of this bill—to allow the claim for abatements in advance—goes some way, but is hardly bold enough given the dire situation we face. The scope of the solution required has been clearly spelled out by Amory Lovins of the Rocky Mountain Institute in his coining of the term "negawatts". Those negative watts are the watts of electricity that are freed up by not wasting them. They are the least expensive form of reducing carbon emissions, the most certain form yet, and a good way of enabling more communities and businesses to enjoy the benefits without the costs of building new power stations and the emissions which inevitably arise from them.

The far-sighted Victorian Labor Government of Joan Kirner engaged the Rocky Mountain Institute to conduct an audit of the Victorian energy system. The audit made recommendations to remove the

perverse incentive of cheaper energy prices for those consumers who use more of it. Another of the recommendations was to provide a means by which those energy customers keen to have new, more efficient appliances fitted could have that done by the supply authority, which would fund the new work as it would a major infrastructure project, and the customers would pay progressively through their regular bills. Both of those mechanisms required public investment, whereas business left to itself will tend to favour least-cost, sub-optimal outcomes. The State funds major infrastructure at more favourable rates than private business can access, and those demand reduction mechanisms are deserving of such funding.

The Victorian initiatives suffered an untimely interruption with the rise of Jeff Kennett. The good example of a previous Labor government stands awaiting for another with the courage to implement this program. On the environmental front, this bill is just a small step towards addressing the world's carbon addiction, which is threatening global ecosystems. The Intergovernmental Panel on Climate Change [IPCC] has concluded that the balance of evidence suggests a discernible human influence on global climate. How much? The IPCC reported that the present atmospheric concentration of CO^2 has not been exceeded during the past 420,000 years, and it is likely not to have been exceeded during the past 20 million years. We are carrying on a huge experiment with the planet's ecosystems without an eye to the future.

In Australia, the effects of the global climate change include damage to World Heritage areas such as Kakadu, the wet tropics, the Great Barrier Reef and, closer to home, the Blue Mountains; huge reductions in water availability, such as a 30 per cent reduction in the mean flows of the Murray-Darling rivers; the loss of unique alpine environments such as that protected in Kosciouszko, the home of the mountain pygmy possums; and increases in the intensity and frequency of extreme weather events such as wild storms and droughts. In New South Wales, the CSIRO has shown that New South Wales can expect to become 0.5 degrees to 2.7 degrees Celsius warmer by 2050. There will be an associated drop in rainfall with that projected temperature increase. Basher and Pittock of the CSIRO stated in their 1998 report "The Regional Impacts of Climate Change: An Assessment of Vulnerability"—

The Hon. Henry Tsang: Point of order: The Hon. David Oldfield is reading a magazine.

The Hon. David Oldfield: To the point of order: It is my understanding that former President Johno Johnson, ruled that the *Jesuit Social Services* or Jesuit papers did not constitute newspapers and that it was perfectly all right to read such material in the Chamber.

The Hon. Henry Tsang: I withdraw my point of order.

The Hon. IAN COHEN: It is good to hear such relevant points being taken from the benches of the Australian Labor Party. It is amazing that I cannot get members on that side of the Chamber to concentrate when I agree with them. I wonder sometimes what is the point. The report of Basher and Pittock stated:

Australia's relatively low latitude makes it particularly vulnerable through impacts on its scarce water resources and on crops presently growing near or above their optimum temperatures.

Detailed studies on the impact of projected climate change on dry land wheat show that the maximum wheat yield line will move approximately 300 kilometres closer to the coast, from between Brewarrina and Walgett to between Walgett and Narrabri. With that overall increase in temperature, the climatic variability of New South Wales will increase dramatically. Droughts and flood are projected to occur twice as frequently.

The Hon. Duncan Gay: Do you know what you just said? You moved 300 kilometres closer to the coast but only from one side of Walgett to the other.

The Hon. IAN COHEN: The Deputy Leader of the Opposition may be right. I will delete the reference to 300 kilometres but the sentiment and the relevance behind the statement still stands.

The Hon. David Oldfield: It proves people are listening.

The Hon. IAN COHEN: It does. I am thoroughly impressed that at 1.30 a.m. I can elicit such intelligent interjections from the Opposition, and it is appreciated. In any addition to the wisdom of such an article I am open to any support from the National Party. As honourable members in this House who represent rural areas know, that finding will result in a decrease in arable land in New South Wales and contribute significantly to the financial uncertainty of regional economies. The coastal areas of the State are also vulnerable. More frequent storm events will increase storm surges and contribute to coastal erosion and inundation. Dairy cows are also particularly susceptible to heat stress, reducing milk yields by an average of 4 per cent by 2030. In short, climate change and the costs of adapting to climate change are huge unknowns, both in terms of ecosystem impacts and economic impacts. The relatively small cost of the New South Wales enforceable benchmarks scheme is an investment in the future. The New South Wales Greens support the intent of the bill, but foreshadow several amendments to strengthen the legislative scheme.

I appreciate the role of the Minister for Energy, who has taken significant steps in a positive direction on an acknowledged problem that is close to the heart of the Greens and their many supporters throughout the nation, and the world for that matter. I appreciate that the Government has acknowledged the issue, and that the Opposition is taking the issue seriously. Hopefully, there can be a unanimity of purpose on this issue, because the spin-offs are that we need to look after the land, take greater care in using our resources and change our attitude in relation to energy consumption. By demanding management and wisdom on the part both of authorities and the general population, we can make a significant difference. The Greens believe that greenhouse gas emissions and their impacts on the environment and the economies in Australia and throughout the world are a major issue. I am pleased that Minister Yeadon and the Government have taken these steps.

The Hon. MALCOLM JONES [1.30 a.m.]: The Electricity Supply Amendment (Greenhouse Gas Emission Reduction) Bill will reduce emissions from power stations over the next decade. Whether this is necessary, I will return to later. The bill also introduces a whole new language with which we must become familiar. I do not know whether I commend the Government for introducing this legislation. However, it effectively creates a new industry, being the market for carbon credits. Whether the Government will allow the market to get started will be determined by it taking a pragmatic business approach to getting on with the job, or political interference will ruin things. However, assuming that the rest of the world follows these initiatives, New South Wales can be well placed to enhance trade with this new industry. This would appear to be applaudable. However, the effects on industry within our electricity grid system, our competitiveness and the effects on employment remain to be seen and assessed.

Given that our power stations are based in the country—upper Hunter, Wallerawang, Mount Piper, Minnamurra, Lake Macquarie, and elsewhere—and the urban power stations at Balmain, Pyrmont and the like are long gone, I do not think that localised pollution is an issue. Having been involved in the M5 East inquiry for a few years now, and having examined ambient air temperatures and so on, I think motor vehicles and particularly bushfires are infinitely more polluting than power stations. We have the toughest air regulations in the country, and our power stations must operate within those tough regulations. The Kyoto agreement is all about cutting greenhouse gas emissions. I cannot accept that the Carr Labor Government is serious about greenhouse gases. In the past 12 months we have seen so much greenhouse gas and carbon gas released into the atmosphere. If Carr and his Ministers had been serious about greenhouse gases they would have attended to hazard reduction adequately—they were told often enough.

The pollution of the past month from bushfires makes a joke of greenhouse gas considerations. The Government was told often enough and regularly enough. Anyone who refutes this can check *Hansard* for my questions both in question time and in successive estimates hearings. One main problem with the bill is the containing of sources to New South Wales. If sourcing is contained to New South Wales, I believe that the project will fail. I will not waste the time of the House by reiterating the benefits of carbon credit trading. This has already been widely canvassed. However, I

alert the House to potential industrial drawbacks, which perhaps explain the reluctance of Prime Minister Howard and President Bush to embrace Kyoto. A 5 per cent reduction in gases out of power stations, which are all government owned, does not require legislation. It requires a board meeting at which the directors are told by shareholders to cut gases.

This complex bill and setting up of an industry are a sham because if the source is limited to New South Wales the power stations in New South Wales will require 10 million tonnes of carbon credits by 2007 and will have access to only 600,000 tonnes in New South Wales. The worst case scenario—600,000 tonnes of carbon credits at its maximum of $15—is $9 million, with the same penalties imposed if no cuts are made. The electricity industry, which is the Government, will simply draw a cheque for $9 million from one pocket and pay it to the Government and put it in another pocket—which creates a nonsense—unless there is a secret agenda running here. That is not uncommon with this Government. The National Parks and Wildlife Service and the Carr Government taught me all about secret agendas in my fight with them both inside and outside this place. If the Government were to privatise energy, it all starts to make sense. An election is coming. Surprise, surprise! It then becomes confusing.

If the Government wants to sell off energy, why would anyone in their right mind think to put such a ball and chain, such a disincentive, around the neck of a buyer as this bill does? It would help if these questions were addressed appropriately. However, legislation has also been passed which cannot yet be enacted due to the lack of a carbon credit industry framework in places such as Massachusetts, New Hampton, Oregon and California. They have the legislation in place but there is no market for it. Hopefully, this bill will go a long way to creating such a framework. There appears to be confusion regarding the ability of this industry to function until and if Australia becomes a party to the Kyoto agreement. I seek clarification of this point by the Minister.

I turn now to sourcing. I refer to division 6, section 97DA. I seek advice from the Minister as to where in the bill Minister Yeadon gets his authority to say, "These large user certificates can only be created by facilities located within New South Wales—that is, those sites subject to the legislation." The Minister said that in the second reading speech in the other place, but it is not mentioned in the bill. The Minister's statement creates a problem, which is that the quality of the timber has an effect on the unit price of the carbon credits. Section 97DA does not mention limiting the planting of forests for accreditation. However, I believe that amendments will be moved in Committee to provide for eligibility for accredited areas limited to New South Wales. The larger the timber catchment area, the better the marketable price of the carbon credit.

For example, currently New South Wales is in drought, and prolonged drought has the potential to reduce prices due to somewhat inferior timber, whereas if user certificates could be for an area, perhaps Australia-wide, then the timber production areas of Tasmania and Western Australia, which are not subject to drought, will nullify any discounting of timber values. During drought, sequestration of the timber may diminish. I appreciate that no reference is made to this issue in the bill. However, I seek either clarification or denial as this is to the detriment of the legislation. I believe that amendments may be proposed to address this issue, so I assume the matter will be dealt with in Committee. If Sydney is to become the carbon credit trading centre of the western Pacific, and perhaps the world, this limiting comment by Minister Yeadon regarding limitation of user certificates only to facilities in New South Wales must be withdrawn. Otherwise, we will not be able to compete properly and it could cost Sydney the opportunity to operate such an exchange. Furthermore, the limitation of sources for sequestration will add substantially to the cost of compliance.

New South Wales power stations will be in the market to purchase 10 million tonnes of carbon credits by 2007, while New South Wales will perhaps be able to provide only 600,000 tonnes of credit carbon per annum. So the market will become functional very quickly. The limitations imposed by any proposed amendments to restrict sourcing only to New South Wales are unnecessary and potentially very costly. If we need to have a new power station commissioned, the demand will go off the scale and the New South Wales limitations will be a major financial problem. In my experience, the wealthier nations around the planet are the cleanest. Sadly, the poorer nations are the most polluted. The creation of wealth in western society is the best way to combat pollution. Wealth is created through industry and limitations on industry can have an effect on the lifestyle of the

population and on the environment in which we live.

Reverend the Hon. FRED NILE [1.40 a.m.]: The Christian Democratic Party supports in principle the Electricity Supply Amendment (Greenhouse Gas Emission Reduction) Bill, but we believe it needs the amendments that have been proposed by the Opposition, which, it seems, will improve the scheme. The main purpose of the bill is to change what has been a voluntary or self-regulation system into a coercive or regulated scheme with penalties. That approach is receiving strong opposition from the industry. Existing benchmarks required electricity retailers to reduce emissions by 5 per cent on a per capita basis by 2000-01 as compared to 1989-90 emission levels. According to the Government's calculations, retailers are currently not meeting those benchmarks, with emissions now at 10 per cent above the 1989-90 levels on a per capita basis, rather than 5 per cent below.

The Electricity Supply Act is being amended by this bill so that the existing 5 per cent reduction on the 1989-90 emission levels will be extended to 2007, and they will remain at that level for at least the following five years, to 2012. This scheme will commence on 1 January 2003. Abatement certificates will be able to be created through a number of procedures such as running existing low-emission generators, demand side management, investment in new low-emission generators and sequestration in forestry. Counting towards the benchmark low-emission generation located outside New South Wales is important to ensure that the benchmark can be met in the least-cost way. The amendments foreshadowed by the Opposition will overcome a problem with the bill, which currently restricts carbon sequestration activities to New South Wales. The Opposition proposes to reintroduce interstate carbon sequestration activities to the bill as a way of creating abatement certificates to offset emissions and meet benchmark reduction targets. This provision was originally included in the development of the bill, but was removed in the final stages.

We have received a submission from EMC Consulting representing Zurich Capital Markets, which owns the former forestry plantations of Australian Plantation Timber Pty Ltd. The firm is concerned about that aspect of the bill and supports the Opposition's proposed amendments. It indicated in its submission that over the past year Zurich Capital Markets and Hancock Natural Resource Group have invested in the development of a market in carbon sequestration based in Sydney. They are not alone, as many Australian and overseas companies have invested several millions of dollars in New South Wales on business development, legal and accounting firms, and salaries and fees associated with this new forestry carbon business. For instance, Zurich Capital Markets owns, and Hancock Natural Resource Group manages, the forestry resources of the former Australian Plantation Timber Company. These plantations are in Western Australia, South Australia and Victoria, and operate under the Australian Forests Fund.

Those firms invested millions of dollars on the basis of the Carr Government's proposed scheme to reduce greenhouse gas emissions through the establishment of mandatory, enforceable emission targets. They believed that the scheme presented a range of opportunities for business to contribute to addressing one of the great environmental challenges, whilst developing a dynamic trading market of great potential in Sydney. They remain committed to the scheme but hope to have it broadened in one significant way—by the Opposition amendment to extend carbon credits to interstate sequestration. In their submission to us they have said that the bill restricts carbon sequestration to sources in New South Wales. This is a recent development, as the scheme had been envisaged to operate nationally until the Minister for Energy said in his second reading speech that carbon sequestration would be confined to New South Wales sources. That has created some major problems in the industry.

The industry claims that restricting carbon sequestration to New South Wales sources will add to the scheme's cost to industry. While in the early years of the scheme New South Wales sources may have had sufficient supply of credits to keep costs down to approximately $7 per tonne, as predicted by the Government, by 2007 the market for credits will expand dramatically, when the price will likely approach the penalty price of $15 per tonne. If the market price for abatement certificates approximates the penalty level set by the Government there will be little incentive on benchmark participants to seek alternative cheaper abatement measures. The way the Government is restricting the scheme may undermine what it is seeking to do. There have been major problems

with electricity generating prices and, we understand, losses to the New South Wales taxpayer of millions of dollars. If the Government is not careful, changing this bill to establish a new policy may have the same economic effect. The Government should give serious consideration to supporting the Opposition amendments if it wants to stay in the black and not in the red.

The Hon. RICHARD JONES [1.47 a.m.]: As my speech is lengthy, I seek leave to incorporate it in *Hansard.*

Leave granted.

This Government's introduction of compulsory benchmarks for greenhouse gas emission reductions has set an Australian standard, put NSW at the forefront of the burgeoning renewable energy sector and taken a very important step in putting us on the road to an environmentally responsible future.

The benchmarks will significantly reduce Australia's greenhouse gas emissions.

Enforcing the benchmarks is expected to reduce emissions by 52.57 tonnes during the next decade - the equivalent of taking 2.9 million cars off the road – and if the benchmarks were enforced in *all states* then Australia could meet its Kyoto agreement to reduce greenhouse gas emissions to 108% of the 1990 levels by 2010.

If no action is taken on the other hand, then greenhouse emissions are expected to reach 65.97 tonnes by 2011/2012.

We cannot therefore afford not to act. We can also no longer afford to rely on voluntary benchmarks.

NSW introduced voluntary benchmarks back in 1997 and yet after 6 years electricity retailers in this State have still not managed to meet them.

In fact, in the most recent Environment Protection Authority electricity retailers performance audit report almost all retailers performed worse than the previous year and the energy retailers who failed to meet their emissions reduction targets fail on average by over 15%.

Integral Energy and Origin Energy Electricity Ltd were the only industry players that met their responsibilities to the public and actually achieved greenhouse gas emission levels equal to or lower then their targets. The rest of the industry missed the target by miles.

Advance Energy, AGL Electricity Ltd, Australian Inland Energy, Citipower, EnergyAustralia, Ferrier Hodgson Electricity Pty Ltd, United Energy Ltd and TXU Electricity Ltd all exceeded their greenhouse gas emission level targets by up to 10%.

ACTEW Retail Ltd, Ergon Energy, Great Southern Energy, Northpower, Powercorp Australia Ltd and Yallourn Energy Pty Ltd exceeded their greenhouse gas emission level targets by up to 15%.

It is therefore well and truly time that compulsory benchmarks were put in place to ensure that we reduce our emissions and play a real role in putting the brakes on climate change.

Climate change is one of the greatest environmental threats we face this century.

Unless serious action is taken to dramatically reduce greenhouse gas emissions, human activities will continue to increase greenhouse gas concentrations in the atmosphere: doubling pre-industrial levels of CO2 levels by 2050.

This is expected to bring about an increase in mean annual global surface temperature of 1.4-5.8ºC by 2100 and over the next 50 years, will result in:

- a decrease in available water resources;
- a reduction of area of arable land; and
- a reduction in crop and livestock quality/output.

Climate change is of course not just a global scale problem with global scale effects, NSW is, for example, expected to warm by 0.5-2.7_C by 2050.

While this might not seem like much, a relatively small change in temperature (between less than 1ºC and 1.7ºC) causes a major change in regional climate patterns.

Not only is NSW expected to be 0.5-2.7ºC warmer by 2050, frosty nights are expected to decrease by 20-100%, the incidence of spring drought is expected to double across NSW, fire frequency is expected to increase and the frequency of days above 35ºC is expected to increase by 10-50%.

And that is not all!

Water is predicted to become scarcer. The flow of major river systems is expected to be reduced, with the Murray Darling, Ovens, Goulbourn and Macquarie River Basin losing up to 10-30% of irrigation water by the year 2030.

As a result, competition for an already over allocated water supplies will increase the price of agricultural production and place further stress on rivers and ground water systems supporting arable lands.

The effects of these predicted changes in temperature and rainfall will have dramatic adverse effects on and presents a great threat to the survival NSW' agricultural based businesses and communities.

Climate change is expected to decrease the area of arable lands currently used for agricultural production in NSW as:

- extreme weather events (drought and flood) are projected to occur twice as frequently throughout NSW causing a loss of arable lands through soil erosion and landslides;
- soil moisture is projected to decrease due to evaporation from higher temperatures;
- the projected mean increases in drainage of 6 to 27mm/year represent a substantial potential change in landscape hydrology which is likely to increase risks of salinisation in areas not yet affected and increase rates of salinisation in areas already affected;
- increased salinisation and alkalisation is projected to occur in semi-arid zones; and
- research in Western NSW predicts a decrease in land area suitable for cropping up to 300,000ha.

Increased temperatures are also expected to alter crop seasons, increase dairy and beef cattle heat stress and introduce new pest and disease occurrences into NSW.

The frequency of heat stress in Australian beef cattle is expected to increase by 138% by about the year 2050 because of climate change.

By 2030, milk cows without shade cover are expected to suffer an average milk loss of 280L/cow/year (4% of annual production) and by 2070 between 250 to 400 L/cow/year milk loss (6% annual production).

Higher temperatures are expected to increase the southward spread of cattle tick and buffalo fly.

Wheat yields are also expected to decrease, either with warming beyond 2_C or rapidly with reduction in rainfall.

In light of the fact that a 20% reduction in rainfall is expected to reduce average yields by 5-53%

and result in up to 300,000 ha becoming unsuitable or marginal for cropping, recent climate change scenario suggested rainfall reductions of about 12% will have significant repercussions for the industry.

The predicted increase in carbon dioxide levels is also expected to reduce grain protein (or nitrogen) contents by about 10-12% and significantly downgrade grain quality by 1- 2 quality classes.

Given that the cause of these effects, climate change, is being brought about by our use of and dependence on greenhouse gas producing fossil fuels such as oil, coal and gas to power transportation and industrial processes and generate electricity, the most effective form of action we can take is to reduce our dependence on fossil fuels and develop clean energy alternatives.

The combustion of fossil fuels is after all one of the primary reasons for the increased concentration of carbon dioxide in the atmosphere and increases in carbon dioxide emissions account for about *70%* of the enhanced *greenhouse effect* to date.

Energy burned to run cars and trucks, heat homes and businesses and power factories is responsible for about *80%* of those emissions and over 90% of our electricity is generated by burning high greenhouse gas producing coal.

Of the 18 tonnes of greenhouse gases that the average Australian household puts out a year, 9 tonnes come from *heating, lighting and refrigeration*.

NSW is a major contributor to these emissions and therefore can play a major role in reducing them.

In 1990, the emission of greenhouse gases from NSW amounted to the equivalent of 175 million tonnes of carbon dioxide equivalent and accounted for approximately *30%* of the national greenhouse gas emissions.

All electricity retailers operating in NSW also purchase most of their electricity from coal-fired power stations. In fact, in 1999–2000, only approximately 4% of their purchases fell into categories of low-emission generation, including wind, hydro, biomass/biogas, solar, large cogeneration, coal seam methane and other generation purchased and 'assigned' to the retailer.

It is no surprise then that the majority of NSW carbon dioxide emissions, some 45%, come from the energy sector.

It is also no surprise that the most effective and efficient way that we can reduce our greenhouse gas emissions is to target the energy sector. The way to do that of course is to do as this Bill does and introduce legally enforceable greenhouse gas targets.

While critics often argue that consumers cannot afford the cost of meeting enforceable targets, they ignore the 'hidden' costs of current energy policies.

Estimates of damage costs for climate change range from 1 to 2.5% of Gross State Product, for an average global temperature rise of 2.5 to 4^{o}C. While these estimates are from the peer-reviewed literature by the Inter-Governmental Panel on Climate Change, they are based on the *US economy*.

As Australia is more vulnerable to climate change than the US, damage costs are expected to be even higher here.

The best scientific evidence predicts global warming will see extreme weather events increase in frequency and intensity, bringing enormous costs to the community, government and industry. Events of the last few years, such as the Sydney hailstorms, north coast floods and the tragedy of the Christmas bushfires, have already seen many household insurance premiums rise by around 20% - $100 for a standard $500 home and contents policy - and increasing numbers of people

finding their homes are uninsurable.

On top of this, climate change will threaten many plant and animal species with extinction, devastate agricultural production in many areas of the State, and some insurance companies are beginning to factor climate change into long-term forecasts, suggesting it will stall investment in areas like regional development, agriculture and housing.

On the other hand, as the NSW Premier Bob Carr himself has said enforceable targets “will add little or no extra cost to household power bills."

The predicted average cost of enforceable targets to NSW consumers is a mere *$3.60 a year*.

It is also highly likely that retailers are already being overcompensated for meeting greenhouse benchmarks because:

- one third (34%) of the estimated average cost of meeting the revised benchmark is already built into regulated tariffs and being paid by customers;
- in 2000-01, standard retailers were already retaining from the Electricity Tariff Equalisation Fund, on behalf of regulated customers only, $8.8 million more than is estimated will be needed to meet the benchmark *for all customers* in 2002-03;
- in 2007-08, standard retailers will retain from the Electricity Tariff Equalisation Fund, on behalf of regulated customers only, all except $2 million of the estimated cost of meeting the benchmark *for all customers* in 2007-08; and
- in 2000-01, retailers were buying 32% of the current benchmark.

Enforceable benchmarks will however not just minimise the negative impacts of climate change and thereby reduce its cost, they will benefit the economy and be good for jobs. They will bring jobs and investment in the fastest growing industry sector in the country - renewable energy.

In the newly competitive market electricity retailers will seize upon every marketing advantage to attract customers, especially environmentally conscious consumers. Operating in a state featuring enforceable emissions reductions will give a distinct advantage to NSW based retailers who will be able to market their environmental credentials to other states.

Around 60,000 customers across Australia have already chosen Green Power products, including 2500 businesses, current Australian investment in renewable and low emissions energy is valued at $6 billion and over 100 new approved renewable energy projects have been installed in Australia since 1997.

The renewable energy sector is also an increasingly lucrative and marketable. In fact, it is the fastest growing industry in the country and has the potential to generate employment and export growth for the State.

Employment in the renewable energy sector is already rising at a rate of more than 12% per annum, while traditional energy sectors are shedding employees. of enforceable greenhouse gas benchmarks also often claim that reducing greenhouse gas emissions would cause thousands of jobs to be lost in regional and rural Australia.

Very few regions however benefit from traditional energy sources such as coal and industries now developing to replace traditional energy industries will invigorate many regional areas. The benefits from the growth of sustainable energy industries, for example, will be concentrated in regional Australia.

Most existing and planned renewable energy and natural gas electricity facilities are spread across regional Australia.

Cutting greenhouse has emissions will also mean a shift to natural gas cogeneration, a low emissions source of energy that can be developed to benefit regional Australia.

The development of greenhouse-friendly energy industries is also creating a large number of jobs in regional Australia.

Sustainable energy projects are already helping to revitalise some areas of regional Australia. Throughout the country over $6 billion of new investment is being made in renewable energy and manufacturing and processing projects powered by gas-fired cogeneration and most of that investment - $3-4 billion - is in regional Australia.

There are, as a result, over 80 new projects under construction or proposed in regional and rural Australia. Those projects include the southern hemisphere's largest solar farm at Singleton, NSW and wind farms at Crookwell and Blayney in NSW, Codrington, Victoria and Ravenshoe, Queensland.

The more that greenhouse gas emissions are lowered the greater will be the shift of energy production to regional Australia. This will mean more local jobs, and less centralised power generation.

Six regional communities have already benefited from investments in the new sustainable energy industries, providing jobs, training and above all renewed hope for the future. Tumut in southeast NSW, Tweed Shire in Northern NSW, Ravenshoe in North QLD, Rocky Point in Southeast QLD, Codrington in VIC, Albany in Southwest WA and Narrogin in WA have benefited from cogeneration and wind farms projects.

This is only the beginning. With proper planing and government policies much of regional Australia could enter a new era based on sustainable energy.

Given the rapid technological improvements taking place in almost all forms of renewable energy, there are also several new industries likely to emerge as viable new opportunities in the future for regional Australia. Opportunities such as tidal power, solar, mini-hydro, high temperature geothermal ('hot rocks') and ethanol and biodiesel from crops for motor fuel.

There are also huge greenhouse-related opportunities from natural gas for regional Australia. While gas is a fossil fuel using it to generate power efficiently results in greenhouse emissions that are only a fraction on those produced by existing coal-fired power stations.

This will provide opportunities for all those parts of regional Australia that either produce gas or lie along gas pipelines that take gas to larger markets.

The development of these technologies and industries will of course depend on local circumstances and the extent to which governments introduce measures to reduce greenhouse gas emissions.

It should also be noted that the renewable energy industry has indicated that it can expand well beyond the Federal Government's Mandatory Renewable Energy Target, of an additional 9,500GWh of renewable electricity by 2010.

In fact, it can achieve more than twice that amount.

It is little wonder than that the renewable energy sector has joined the conservation movement and consumer advocates in welcoming enforceable greenhouse gas benchmarks.

A spokesman for EnergyAustralia has, for example, said that "We support the state government's greenhouse efforts… we are already working hard to develop new ways to help customers reduce greenhouse gases."

To be effective and deliver real reductions in greenhouse emissions though, enforceable benchmarks need to be matched by stringent compliance guidelines and the penalties for exceeding

emissions targets need to be rigorously enforced.

Achieving real greenhouse emission reductions will also rely heavily on reducing overall consumption through demand management, substituting the old, brown and heavy energy sources, such as coal, with new, green and light sources like wind and solar energy and encouraging the use of, and investment in, genuinely renewable energy sources.

Unfortunately though the proposed Greenhouse Gas Emission Benchmark Scheme as provided for in this Bill will not achieve its objectives - a mandated per capita reduction in greenhouse emissions by 2007, limit the cost burden on consumers and obtain demand management industry, renewable energy industry and regional development in NSW.

The Scheme as currently drafted:

- promotes interstate carbon sinks;
- provides a windfall to interstate gas generators built after July 1997;
- introduces double counting where the taxpayer has already funded renewable generation (eg, via Greenhouse Gas Abatement Program funds and Mandatory Renewable Energy Targets);
- lacks essential support for demand management and transparency and clarity around Large User Abatement Certificates (LUACs) and the manner in which they will be granted to major industry; and
- fails to adequately provide for the review and amendment of undefined methodologies for LUACs, sequestration, and electricity sales foregone.

The current settings for per capita reductions in emissions, 7.27 tonnes of carbon dioxide per capita by 2007, bias the arrangements to large central generation plants, through increased use of both gas and more efficient coal plants. As a result, most retailer investment is likely to be in these areas rather than demand management and renewables. It is also likely to result in consumers having higher than necessary energy bills.

As the most effective way to contain costs is through demand management, an additional weighting is needed in the scheme, either by way of a quota or rules for demand management. The legislation should therefore set a quota of at least 15% and could allow for retailers to bring credits from the ensuing years forward, after the first year of operation of the demand management investment.

The legislation should also set a quota for renewable energy of at least 15% and could include solar hot water systems.

Another problem with the Scheme as currently drafted is that the focus on carbon sinks and 'new' generation *anywhere* in NEM will see much of the benefit of NSW investment in the only enforceable benchmarks in Australia go to other states.

It would be far more efficient to limit opportunities to NSW, as NSW would then receive the bulk of regional development funds from the industry. Even more benefits could be derived from setting a limit of 30% and defining 'new' generation as that constructed since January 2003. This would bring about more investment in the renewables industry and in demand management, substantial employment and economic activity gains and reduced network and generation investment.

Expanding the range of activities large users can engage in, in order to generate LUACs, also undermines the integrity of the scheme. As large users are by definition associated with large emissions profiles, this will pervert the effectiveness of the entire NSW Greenhouse benchmarks scheme.

LUACs should therefore be removed from the scheme and large users should be able to self generate Renewable Energy Certificates and acquit to their own benchmarks.

Another concern is the absence of clear methodologies for carbon sequestration, electricity

sales foregone and large user abatement.

All methodologies must be in the public domain and individual negotiation, certification of abatement measures, compliance and audit mechanisms must also allow proper public scrutiny of the large user benchmarks.

I and my colleagues on the Crossbench intend therefore to move amendments in Committee that rectify these matters. I urge all Members of this House to support those amendments.

The Hon. IAN MACDONALD (Parliamentary Secretary) [1.47 a.m.], in reply: I thank honourable members for their contributions to this important debate. I shall answer a number of the issues raised by the Deputy Leader of the Opposition. He referred to the timing of the scheme, non-tradable large user certificates, sequestration in New South Wales, the impact on electricity prices, the BHP issue, generators subject of the scheme and the need for a national scheme. In relation to timing, the revised benchmarks scheme will commence on 1 January 2003. The scheme is not being implemented with undue haste. It builds on five years experience with a voluntary scheme. A position paper outlining the key elements of the new arrangements was released in January this year. In May the Government announced its decision to go ahead with the scheme. Intensive consultation with industry and environmental groups took place over several months of the scheme's development. Consultation is still proceeding with respect to the details. By 1 January 2003 industry will be aware of all the details of the scheme. There will be no surprises. For these reasons, the Government sees no reason to delay the start of the scheme.

A further question related to the tradability of large user abatement certificates. Large users will not be able to trade large user abatement certificates. Large user abatement certificates can be created if a large user undertakes abatement on its own site in New South Wales that is not directly related to electricity consumption. Recognition of such abatement was included as a concession to energy-intensive industry in New South Wales. The rest of the scheme is focused on securing greenhouse abatement in the electricity sector itself. This concession is limited—these non-electricity related certificates will not be able to be sold to other benchmark participants, such as retailers. The bill does allow for non-transferable certificates to change hands in connection with the sale of the business, or in other circumstances provided in the regulations.

Another question related to sequestration. Sequestration credits from New South Wales only will be able to be counted under the New South Wales benchmark scheme. Sequestration raises particularly difficult monitoring and verification issues. Allowing sequestration from interstate may raise these costs. Carbon sequestration must be maintained for at least 100 years. This is an onerous obligation. The New South Wales Government has more confidence that it will be able to enforce this obligation on providers within its own jurisdiction. Limiting sequestration to within New South Wales will not cause the cost of the benchmark scheme to rise above the $1 to $2 per megawatt-hour previously estimated.

A further question related to prices. The Government is implementing this greenhouse abatement policy in a least-cost and flexible manner to minimise the costs to New South Wales consumers. Setting the penalty at $10.50 per tonne of carbon dioxide equivalent will cap the cost of the policy at under $2 per megawatt-hour averaged over the life of the scheme. Around 98 per cent of customers in New South Wales are already paying around $1.50 per megawatt-hour to their retailer to comply with the existing scheme. The costs of abatement under the new scheme are expected to be less than the price customers are already paying. Therefore the scheme should not result in a price rise for the vast majority of customers.

A question was asked about BHP Billiton, which supplies coalmine methane to the Appin and Tower generators. This contract was negotiated between Integral and BHP and their partners. I presume BHP and their partners signed the contract because they thought it was a good deal. It is important to note that this mandatory scheme was never envisaged at the time this contract was negotiated. And, under the previous voluntary benchmark arrangements, the output of the Appin and Tower plants was deemed to have been assigned to Integral Energy. That is, this has been going on for five years. The Government has been advised by Integral that at no stage in the history of this

contract has BHP or its partners challenged the ownership of the credits arising from the operation of the plant.

Given that BHP could not have anticipated this scheme at the time that it negotiated its contract, and therefore could not reasonably claim that its investment was dependent on securing greenhouse credits, and given that BHP appears not to have challenged the deeming provisions under the previous voluntary arrangements for the past five years, it is only logical for the existing arrangements to be grandfathered. This is all the Government has done. Integral will continue to be deemed to have been assigned the greenhouse credits arising from the operation of the plant. BHP and their partners will not be given a windfall at the expense of taxpayers.

The Deputy Leader of the Opposition sought clarification on whether a generator would be subject to the penalty under the scheme. One State-owned generator will be subject to a benchmark. That is Macquarie Generation, with respect to its direct supply agreement to the Tomago aluminium smelter. Macquarie Generation, not Tomago, will have the greenhouse liability for electricity supplied under that contract.

The final matter raised related to the question of a State versus Federal scheme. We agree with the Opposition. The greenhouse problem would be better addressed at a national level, rather than at a State level. However, the New South Wales Government has been forced to act because the Commonwealth has declined to do so. It has refused to ratify the Kyoto protocol. It has failed to show leadership in this area. The New South Wales Government is actively encouraging other States and Territories to follow its lead and adopt the greenhouse benchmark scheme. In this way, a national approach might be achieved even in the absence of Commonwealth action. The New South Wales Government is simply filling the vacuum left by John Howard. With that, I commend the bill to the House.

Motion agreed to.

Bill read a second time.

In Committee

Clauses 1 to 4 agreed to.

Schedule 1

The Hon. IAN COHEN [1.55 a.m.]: I move Green amendment No. 1:

No. 1 Page 3, schedule 1 [2], lines 11-14. Omit all words on those lines. Insert instead:

(1) The objects of this Part are:

(a) to reduce greenhouse gas emissions associated with the production and use of electricity and to encourage participation in activities to offset the production of greenhouse gas emissions, and

(b) to do so in accordance with the principles of ecologically sustainable development contained in section 6 (2) of the *Protection of the Environment Administration Act 1991*, in so far as those principles are capable of applying to the objects set out in paragraph (a).

This amendment would make the bill subject to the principles of ecologically sustainable development as per section 6 (2) of the Protection of the Environment Operations Act. Whilst it could be argued that the very nature of the bill is intended to support ecologically sustainable development, there are matters as to how the greenhouse objectives of the bill are achieved. Much can be lost in the detail of implementation, and the bill needs a clear direction in ensuring that

activities that obviously are not in accordance with ecologically sustainable development cannot be counted towards the abatement task—for example, native forest biomass. The Protection of the Environment Operations Act is New South Wales' best legislative expression of that direction and will continue to develop and evolve. It is appropriate that this bill benefits from the continuing guidance of the Protection of the Environment Operations Act. I commend Greens amendment No. 1 to the Committee.

The Hon. IAN MACDONALD (Parliamentary Secretary) [1.56 a.m.]: The Government cannot support the amendment. These principles import wider environmental considerations into what is a greenhouse abatement scheme specifically related to the electricity sector. In any case, these wider considerations are already included in legislation that governs the development of any projects that create certificates. Therefore the amendment is unnecessary and potentially confusing.

Amendment negatived.

The Hon. IAN MACDONALD [1.57 a.m.]: I move Government amendment No. 1:

No. 1 Page 5, schedule 1 [2], lines 1 and 2. Omit "a market customer or".

The definition of "large customer" in the bill currently explicitly excludes "market customers". Market customers are those who purchase their electricity directly from the national electricity pool. The current definition inadvertently prevents customers who are a market participant for some of their load, but a retail customer—or a customer directly supplied by a generator—for the remainder of their load, from electing to manage their own benchmark. This is not the intention. The proposed amendment would allow large customers who also happen to be market participants to elect to manage their own benchmark for their non-market customer load.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [1.58 a.m.]: The Opposition agrees with the amendment. It is one of process. Had the Government not moved this amendment, the Coalition would have been happy to move it.

Amendment agreed to.

The Hon. IAN COHEN [1.59 a.m.]: I move Greens amendment No. 2:

No. 2 Page 10, schedule 1 [2], line 21. Insert "and must be at least 25% less than the amount of any greenhouse shortfall last carried forward by the benchmark participant" after "that year".

This amendment requires the shortfall carried forward from the previous year to be 25 per cent less than the original figure in each succeeding year, except the figure for the last year of the scheme which cannot be carried forward. This is a prompt for scheme participants to get cracking. It would be very unwise for participants to allow the shortfall to grow without any action. It creates a severe penalty regime—and the amendment addresses this problem—if the relief of the shortfall becomes too big a job for participants to achieve in later years of the scheme, with inevitable pressure to reschedule debts to a collective climate. Expectation of future earnings is a risky surety to borrow against, especially when the earnings are uncertain. A shipload of highly efficient light bulbs or shower heads is probably a sound investment, but inevitably there will be pressures to apply this to the so-called carbon plantations, with very uncertain results. We believe that the low penalty rate applying may not be sufficient disincentive for the accumulation of debt, thus the need for this amendment. I commend Greens amendment No 2 to the Committee.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.00 a.m.]: The Government does not support this amendment. The proposed amendments would reduce the size of the shortfall that any participants can carry forward in any particular year. It would add nothing to the total amount of abatement that would be undertaken over the period and would reduce flexibility for no greenhouse gain. It is also likely that such a restriction would cause participants to choose more confidential, proven technologies over newer, more innovative technologies.

Amendment negatived.

The Hon. RICHARD JONES [2.02 a.m.], by leave: I move my amendments Nos 1, 3 and 4, in globo:

No. 1 Page 12, schedule 1 [2], line 20. Omit "$10.50". Insert instead "$15".

No. 3 Page 17, schedule 1 [2]. Insert after line 23:

(5) The regulations and greenhouse gas benchmark rules may not make provision for accreditation as an abatement certificate provider in respect of the generation of electricity from coal except to the extent that the accreditation relates to improved efficiency of a generating system that uses coal, being a generating system that was in existence before 1 January 2002.

(6) If the regulations and greenhouse gas benchmark rules make provision for eligibility for accreditation in respect of the generation of electricity outside this State, those provisions must ensure that accreditation as an abatement certificate provider, and any entitlement to create abatement certificates, is limited to generation activities outside this State that give rise to sales of electricity in this State.

No. 4 Page 20, schedule 1 [2], lines 5-7. Omit all words on those lines. Insert instead:

(e) if the person is accredited as an abatement certificate provider in respect of carbon sequestration activities, a condition that requires the person to maintain the greenhouse gas abatement secured by the carbon sequestration activities for 100 years,

Amendment No. 1 will change the greenhouse penalty from $10.50 to $15, the amount announced by the Government. Amendment No. 3 will ensure that the regulations and the greenhouse benchmark rules allow the generation of electricity from coal as inevitable activity only if it involves improved efficiency from coal generators existing prior to 1 January 2002. It would be embarrassing if the benchmarks set out, say, 1997 and two large Queensland coal-fired power stations became part of the scheme. That would bring the scheme into disrepute. It also again directs New South Wales funds, which have been amassed from payments by New South Wales consumers, to Queensland. Surely any funds should go to improving the generation capacity and mix in New South Wales first. Amendment No. 4 will ensure that, when there is a carbon sink, it must last for 100 years. This is a matter of ensuring a viable carbon sink process and a level playing field. It would be most unfair if one participant got a valid carbon sink for, say, 50 years, and another had one for 100 years.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [2.03 a.m.]: The Opposition opposes these three amendments. In relation to amendment No. 1, the penalty amount that has been set under this bill is $10.50 per tonne of CO_2 equivalent. When the bill was originally proposed, the penalty amount was set at $15 per tonne of CO_2 equivalent. I understand the amount was reduced to $10.50 because the tax component payable on the penalty amount was $4.50. The tax component on top of the $10.50 penalty effectively adds up to the original $15 penalty. This amendment will replace the $10.50 amount with $15, and added to that would be the $4.50 taxation component. What this amendment would do is in fact impose a penalty of $19.50. The Opposition opposes the amendment because it is not in the business of making restrictive legislation even more draconian.

The Opposition also opposes amendment No. 3 because it seeks to remove coal-fired electricity generation from the equation. That would be lunacy in New South Wales, considering the amount of electricity that comes from coal-fired sources. That just does not make sense. The Opposition also

opposes amendment No. 4 because that amendment seeks to require a person who is engaged in carbon sequestration activities to keep the abatement created by that sequestration for 100 years. The bill as presented to Parliament already essentially has this provision in new section 97DD (3) (c), so there is no need to reinsert it through an amendment.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.05 a.m.]: The Government opposes these amendments for reasons similar to those expressed by the Opposition.

Amendments negatived.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [2.06 a.m.]: I move Opposition amendment No. 1.

No. 1 Page 12, schedule 1 [2]. Insert after line 33:

(6) It is the wish of Parliament that any greenhouse penalties payable to the Crown under this Part be used for the promotion of greenhouse gas reduction activities and programs nominated from time to time by the Minister.

Amendment No. 1 relates to new section 97CA, "Greenhouse penalties". New section 97CA (5) states:

A greenhouse penalty imposed under this Part may be recovered in any court of competent jurisdiction as a debt due to the Crown.

The Opposition is concerned about this provision. It effectively directs penalty moneys collected under this scheme to consolidated revenue. The Opposition's amendment will insert a new subsection (6) in section 97CA. The amendment states:

It is the wish of Parliament that any greenhouse penalties payable to the Crown under this Part be used for the promotion of greenhouse gas reduction activities and programs nominated from time to time by the Minister.

The purpose of this amendment is simple: It is to ensure that penalties extracted from participants who failed to meet their greenhouse gas emissions reduction target are spent on appropriate programs and activities, rather than having those funds make their way straight into consolidated revenue. The Coalition believes that the penalties covered under this scheme should be used to achieve the objectives of the scheme, that is, a reduction in greenhouse gas emissions. The amendment that I have moved states that the penalties to be directed to the programs are activities that are nominated from time to time by the Minister. There is a degree of leeway which will allow the Minister to direct the moneys either to a household reduction scheme for pensioners or young families, or to a business reduction program, or even an industrial reduction program.

A range of programs already operates, including subsidies for the installation of solar panels for householders and other measures, and the penalty revenue could be directed to those. In the future, there may be more pressing but currently unknown needs to which the penalty moneys could be applied. That is why the Opposition worded this amendment in a particular way. Frankly, we believe that it is a commonsense amendment. It is the type of provision that should be in the Environmental Planning and Assessment Act for local based licensing.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.09 a.m.]: The Government supports the amendment. It would create a flexible way in which any penalty revenue raised could be reinvested in abatement projects.

The Hon. IAN COHEN [2.09 a.m.]: The Greens are pleased to support the National Party amendment, which is very well directed. In my second reading speech I suggested that the pool of money from the penalties could allow people to buy energy-efficient appliances and pay for them over time with their electricity bills. This would be a very affordable scheme and could have a double

benefit. I commend the Deputy Leader of the Opposition for putting the amendment up.

The Hon. RICHARD JONES [2.10 a.m.]: I also commend the National Party for this excellent amendment.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS [2.10 a.m.]: I support this amendment as it is an excellent incentive. It is the exact opposite of the schemes under which electricity suppliers lend people money to buy airconditioning systems.

Amendment agreed to.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.11 a.m.], by leave: I move Government amendments Nos 2 and 3 in globo:

No. 2 Page 17, schedule 1 [2], lines 7 and 8. Omit all words on those lines.

No. 3 Page 17, schedule 1 [2]. Insert after line 13:

(4) The regulations and greenhouse gas benchmark rules may make provision for or with respect to eligibility for accreditation in respect of carbon sequestration by the planting of forests or other means, but only if:

(a) the activity occurs in this State, or

(b) the activity occurs in another jurisdiction in which a mandatory scheme intended to promote the reduction of greenhouse gas emissions, approved by the Minister for the purposes of this subsection, is in operation.

(5) The Minister may approve a scheme for the purposes of subsection (4) only if the Minister is satisfied that:

(a) the reduction of greenhouse gas emissions proposed to be achieved by the scheme is not less than the reduction proposed to be achieved by the scheme established under this Part, and

(b) the monitoring and enforcement of compliance with the scheme to be approved is no less stringent than that applicable to the scheme established under this Part.

The amendments provide that accredited sequestration providers must be located in New South Wales. Providers in other jurisdictions can be accredited so long as these jurisdictions adopt an abatement scheme that is at least as effective in reducing greenhouse emissions as the New South Wales benchmark scheme. In addition, monitoring and enforcement arrangements in that scheme must be at least as stringent as those in New South Wales. The Minister must be satisfied of these two criteria before sequestration from other jurisdictions will be admitted.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [2.12 a.m.], by leave: I move Coalition amendments Nos 2, 3, 4 and 5 in globo:

No. 2 Page 17, schedule 1 [2], line 8. Insert "(whether those activities are carried out within or outside this State)" after "means".

No. 3 Page 17, schedule 1 [2], line 12. Insert "or outside this State" after "in this State".

No. 4 Page 25, schedule 1 [2], line 26. Insert ", subject to subsections (3) and (4)" after "certificates".

No. 5 Page 25, schedule 1 [2], lines 27-32. Omit all words on those lines. Insert instead:

(3) An accredited abatement certificate provider is entitled to create transferable abatement certificates in respect of the following activities, to the extent that those activities give rise to an entitlement to create an abatement certificate:

(a) carbon sequestration activities carried out within this State,

(b) activities of an elective participant, associated with production processes that use electricity in this State, that result in reduced emissions of greenhouse gases.

(4) An accredited abatement certificate provider is entitled to create non-transferable abatement certificates only in respect of the following activities, to the extent that those activities give rise to an entitlement to create an abatement certificate:

(a) carbon sequestration activities carried out outside this State,

(b) activities of an elective participant, associated with production processes that use electricity outside this State, that result in reduced emissions of greenhouse gases.

Whilst there is a slight similarity with the Government amendments, Coalition amendment No. 2 returns to the bill a policy of the Government that was apparently removed prior to the tabling of the bill in the other place. I understand that during the extensive industry consultation process that occurred in the development of the bill interstate carbon sequestration activities were always intended for inclusion in the bill as a way of creating abatement certificates to be used in offsetting emissions and meeting benchmark targets. When the bill was tabled that section had been expunged. I have received a letter from a legal firm representing a group of clients seeking to invest in carbon sequestration activities. It reads in part:

The New South Wales Greenhouse Abatement Scheme's September 2002 Options Paper contemplated that the New South Wales scheme could be extended to other jurisdictions and stated that it was "important that impediments to such extensions [to other jurisdictions] are not inadvertently included".

The Government's pre-October 31 2002 policy including carbon sequestration from forests Australia wide is consistent with this general principle.

We suspect this Policy will result in all Australian states gravitating towards a system of registering and trading carbon sequestration rights in a way that is consistent with the New South Wales Scheme.

Coalition amendment No. 3 expands on the philosophy and the reasoning behind Coalition amendment No. 2 and it refers to the elective participant schemes resulting in reduced emissions. Amendment No. 4 is mainly an amendment of a machinery nature. No. 5 is the important one that ties them all together. I referred earlier to the Coalition's desire to allow the inclusion of interstate carbon sequestration and abatement measures in this scheme. The amendment goes one step further and provides an incentive to establish carbon sequestration and abatement activities within New South Wales. The member for Cessnock in the other place claimed in his rather short and lacking in detail speech on the bill that the Coalition, and in particular the National Party, was against the establishment of these initiatives in New South Wales because we want to include interstate sequestration and abatement measures. Once again he is wrong. The Hon. Ian Cohen made similar suggestions in his speech, although he did not go to the same length. The amendment deletes subsection (3) of proposed section 97F, replacing it with new subsections (3) and (4), as outlined in our amendment. The proposal is simple but I believe very good: under the Coalition amendment an accredited abatement certificate provider will be entitled to create transferable

abatement certificates for carbon sequestration activities carried out within New South Wales.

Similarly, the activities of elected participants that result in reduced emissions of greenhouse gases, and that are carried out within this State, will count towards the creation of fully transferable abatement certificates. Under this amendment, an accredited abatement certificate provider will be entitled to create non-transferable abatement certificates for carbon sequestration activities outside New South Wales, and we know that activities in New South Wales are much more valuable than those outside New South Wales. So it provides two classes, maintains the ability to invest in New South Wales, encourages that investment, and still allows interstate activities to be used. Activities of an elected participant that result in reduced greenhouse gas emissions and that are conducted outside New South Wales will also count towards the creation of non-transferable abatement certificates. The intent is simple: If abatement sequestration is undertaken in New South Wales the abatement certificates can be traded; if abatement or sequestration is undertaken outside New South Wales the abatement certificates cannot be traded.

The abatement certificates will be able to be created and lodged with the scheme administrator in order to meet a benchmark target, but they will not be able to be traded. This is an active incentive for the establishment of new carbon sinks by way of private forestry operations in New South Wales and it will also encourage the establishment of other abatement measures including private cogeneration and other activities. These New South Wales based sequestration and abatement measures will be a premium because the certificates created in New South Wales will be a tradeable commodity, whereas those created for activities outside New South Wales will be non-tradeable.

Some people have asked how are the certificates outside New South Wales accredited. We believe that the Independent Pricing and Regulatory Tribunal [IPART] would be able to accredit those certificates, on a fee-for-service basis. Someone who wants to be accredited gains an advantage in being accredited, and therefore would pay IPART to do it. IPART has to be geared up to cover the scheme in New South Wales. As it is, the extra gearing up would be covered on a user-pays basis. As the Democrat indicated earlier, IPART does not have to enforce outside New South Wales, only within this State. Outside New South Wales, IPART only has to sight and verify, which it is able to do quite easily. That is why we are moving these amendments. We believe that the Government's sequestration amendment, whilst it is a slight step along the way we are going, is just a feelgood amendment because it really does not do anything, and it depends on legislation that does not exist in the other States.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.22 a.m.]: The Government does not support any of these amendments moved by the Deputy Leader of the Opposition. In relation to amendment No. 2, the Government would be willing to contemplate interstate trading in carbon sinks if and when other States commit to participating in a wider national scheme. The Government has proposed an amendment which I have already moved. In relation to amendment No. 3, the Government would not be willing to allow firms operating interstate to create certificates in relation to non-electricity related abatement—large user abatement certificates. The ability to create large user abatement certificates has been added as a special flexibility mechanism and is a special concession to ease the transition for large users who have, in the past, been exempt from the scheme. Broadening these arrangements to interstate industrial facilities substantially widens the scope of the scheme. The main focus of the New South Wales benchmark scheme is to reduce greenhouse gases related to the electricity industry. The scheme is not intended to be a wider environmental policy.

The Government does not support amendment No. 4 for the same reasons that it opposes amendment No. 5. In relation to amendment No. 5 I am very surprised to see the National Party moving this amendment: perhaps they have forgotten that they represent people in rural and regional New South Wales. This amendment will simply see investment diverted from New South Wales regional areas to other States. What Country Labor wants are plantations and the jobs they bring to New South Wales. The Nationals appear to want to stop it.

Furthermore, subsection (3) (a) is already provided for in the legislation. Credits from sinks in

New South Wales will be able to be freely traded. Subsection (3) (b) is not supported because this substantially broadens the scope of the scheme to a wider environmental program. The focus of this legislation is to reduce greenhouse gases associated with the electricity industry. The ability to create large user abatement certificates has been added as an additional flexibility mechanism and is a special concession to ease the transition of large users. For these reasons the Government believes that its amendment is the way to go in relation to this New South Wales focused scheme.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS [2.25 a.m.]: I move my amendment No. 2:

No. 2 Page 25, schedule 1 [2], lines 27 and 28. Omit "Subject to the regulations and greenhouse gas benchmark rules, an". Insert instead "An".

This amendment ensures that elected participants in a large energy consumer cannot trade to others the abatement certificates that they create. This is the intention of the Government but the current wording is unclear. Trading would create a very complicated system that is not based on energy generation for other industrial processes that will be hard to benchmark and to monitor. We believe in transparency of these certificates.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.28 a.m.]: The Government does not support this amendment as it would inadvertently prevent large users from being accredited to create transferable certificates in relation to generators, demand-side abatement or sequestration.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [2.28 a.m.]: The Coalition opposes the amendment for pretty much the same reasons as the Government. We wonder why the honourable member is seeking to remove the requirements relating to abatement certificates being subject to regulations and greenhouse gas benchmarks. The support of the Government for its amendment and the criticism of our amendment is flawed. The Government indicated that our amendment was against development in regional New South Wales but, as I indicated in detail, our amendment will provide incentive to push development into regional New South Wales and provide probably the only sensible balance to the amendments. We not only support the push for the development of forests into New South Wales; we totally encourage them in other areas as well.

The Government proposes an amendment based on legislation that does not exist, on the possibility that other States may have legislation on greenhouse gas emissions. Despite the offer of the Premier, the other States have refused studiously to go down that track. The Opposition has put forward something definite that can work but the Government is relying on pie in the sky, something that may work sometime in the future if other governments pass appropriate legislation. If I had to choose between something that exists and will work and something that may work and probably will never work, I would go for surety.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.31 a.m.]: Either way, the Opposition amendment means that investment will occur in rural areas outside of New South Wales.

Question—That Opposition amendments Nos 2 to 5 be agreed to—put.

The Committee divided.

Ayes, 14

Mrs Forsythe	Mr Lynn	Mrs Sham-Ho
Mr Gallacher	Reverend Dr Moyes	Dr Wong
Miss Gardiner	Reverend Nile	*Tellers,*
Mr Gay	Mr Oldfield	Mr Colless
Mr M. I. Jones	Mr Ryan	Mr Pearce

Noes, 15

Mr Breen	Mr R. S. L. Jones	Mr West
Dr Burgmann	Mr Macdonald	
Ms Burnswoods	Mr Obeid	
Dr Chesterfield-Evans	Ms Rhiannon	*Tellers,*
Mr Cohen	Ms Saffin	Ms Fazio
Mr Della Bosca	Mr Tsang	Mr Primrose

Question resolved in the negative.

Opposition amendments Nos 2 to 5 negatived.

Government amendments Nos 2 and 3 agreed to.

Australian Democrats amendment No. 2 negatived.

The Hon. IAN COHEN [2.40 a.m.], by leave: I move Greens amendments Nos 3 to 6 in globo:

No. 3 Page 19, schedule 1 [2], line 13. Omit "are examples of the types of conditions that may". Insert instead "conditions must".

No. 4 Page 19, schedule 1 [2], line 33. Insert "if appropriate," before "a condition".

No. 5 Page 20, schedule 1 [2], line 1. Insert "if appropriate," before "a condition".

No. 6 Page 20, schedule 1 [2], line 8. Insert "if appropriate," before "a condition".

Amendment No. 3 makes a list of the types of conditions that may be imposed on the accreditation of a person as an abatement certificate provider. There should be no doubt that the credits generated by this scheme are not falsely tendered; that they are underpinned by sound finances; that they are insured; that the carbon they represent is kept secure for 100 years; that they are attached to the land title; and that the holder will assist the auditors. Hopefully this was a slip up in drafting. These types of conditions are fundamental to the proper operation of the scheme. They should not be discretionary. The amendment creates a level playing field, and that is an important consideration for future participants.

Amendments Nos 4, 5 and 6 ensure that people accredited as abatement certificate providers have to provide financial assurances, take out insurance policies and/or enter into covenants only if it is appropriate to do so. These are mandatory requirements where appropriate; that is, unlike some other conditions, they may not apply in every circumstance. I commend the amendments.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.42 a.m.]: The Government does not support these amendments. In relation to amendment No. 3, not all of the conditions listed would necessarily attach to all abatement certificate providers. For example, the requirement relating to maintaining carbon storage for 100 years only applies to sequestration providers and not generators or demand-side abatement providers. The Government does not support amendment No. 4. The presumed intention of this proposed amendment is to undo the effect of amendment No. 3; that is, stating that accreditation conditions must include the following list to ensure that financial assurances must be provided if appropriate. The current wording already achieves this result. The juxtaposition of "must" in amendment No. 3 and "if appropriate" in amendments Nos 4, 5 and 6 is likely to lead to uncertainty about what conditions of accreditation should be imposed.

The intention of amendment No. 5 is to ensure that a condition to procure insurance is applied only if appropriate. The current wording already achieves this outcome. The intention of amendment No. 6 is to ensure that conditions relating to sequestration and land titles are applied only if appropriate. The current wording already achieves this outcome. The Government opposes all amendments.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [2.43 a.m.]: The Opposition also opposes the amendments.

Amendments negatived.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS [2.43 a.m.], by leave: I move my amendments Nos 1, 3 and 4 in globo:

No. 1 Page 20, schedule 1 [2]. Insert after line 18:

(h) a condition that requires a person who is a retail supplier to undertake programs to reduce the consumption of electricity as part of its activities.

No. 3 Page 41, schedule 1 [2]. Insert after line 21:

(7) Sections 40 and 41 of the *Interpretation Act 1987* apply to a rule in the same way as they apply to a statutory rule within the meaning of that Act.

No. 4 Page 41, Schedule 1 [2]. Insert after line 30:

Division 12 Reviews of Part

97L Review of operation of Part

(1) In this section:

independent review means a review:

(a) undertaken by persons who:

(i) in the Minister's opinion, possess appropriate qualifications to undertake the review, and

(ii) include one or more persons who are not employed by the government or a government department or authority and have not, since the commencement of this section, provided services to the government, a government department or a government authority under or in connection with a contract, and

(b) that is not conducted or managed by a government department, authority or other private or public organisation that had or has carriage of either the implementation or ongoing operation of the subject of the review.

(2) The Minister must cause an independent review of the operation of this Part to be carried out as soon as practicable after 1 January (and before 30 June) in the years 2005, 2007 and 2009.

(3) An independent review under this section is to include consideration of the following matters:

(a) the extent to which the Part has:

(i) contributed to reducing greenhouse gas emissions, and

(ii) encouraged additional generation of electricity from renewable energy sources,

(b) the extent to which the policy objectives of this Part have been achieved and the need

for any alternative approach,

(c) the mix of technologies that has resulted from the implementation of this Part,

(d) the level of penalties provided under this Part,

(e) other environmental impacts that have resulted from the implementation of this Part, including the extent to which plantation forestry waste has been utilised,

(f) the possible introduction of a portfolio approach, a cap on the contribution of any one source of abatement and measures to recognise the relative greenhouse intensities of various technologies,

(g) the level of the overall and interim targets,

(h) the performance and efficiency of the market, taking into account, among other things, the design of the abatement certificate scheme and frequency of trading,

(i) the appropriateness of and scope for further government action to address any shortcomings in market efficiency or effectiveness of this Part identified by the review.

(4) The person or persons who carry out an independent review under this section must give the Minister a written report of the review on or before 30 June in each review year.

(5) The Minister is to lay (or cause to be laid) a copy of the report before both Houses of Parliament on or before 30 September in each review year.

(6) If a House of Parliament is not sitting when the Minister seeks to lay a report before it, the Minister may present copies of the report to the Clerk of the House concerned.

(7) The report:

(a) is, on presentation and for all purposes, taken to have been laid before the House, and

(b) may be printed by authority of the Clerk of the House, and

(c) if so printed, is for all purposes taken to be a document published by or under the authority of the House, and

(d) is to be recorded:

(i) in the case of the Legislative Council, in the Minutes of the Proceedings of the Legislative Council, and

(ii) in the case of the Legislative Assembly, in the Votes and Proceedings of the Legislative Assembly,

on the first sitting day of the House after receipt of the report by the Clerk.

Amendment No. 1 ensures that retail suppliers must, as part of their abatement activity, undertake programs to reduce consumption of electricity. I am concerned that energy retailers have a culture that works against the sale of less electricity, that is, energy conservation. The classic example is the scheme operated by Energy Australia that involved loans for people to purchase airconditioners that were repayable with electricity bills. Of course, that encouraged increased electricity consumption. If we cannot reduce electricity use per capita, we will run into great expense by having

to build new generation and delivery infrastructure. That is the problem at the retailer level, but was also the problem at the planning level with the central business district upgrade, which is now costing in excess of $200 million, when demand management would have been far cheaper. I spoke against TransGrid and its regulation of the grid. It wanted engineering and building solutions rather than alternatives that involved coal generation. Demand management is a cheap and effective way to reduce greenhouse gas emissions. The implementation of demand management creates many jobs in the production of energy-saving equipment and installation. This amendment allows that incentive to be built in for retailers.

Amendment No. 3 ensures that the greenhouse benchmark rules that will accompany the regulations, but which are very important in operation of the scheme, will have the same review process. Amendment No. 4 is extremely important. The legislation as it is removes the effective auditing function previously done by the Environment Protection Authority. An audit of the scheme's effectiveness is also included in the Commonwealth Renewable Energy (Electricity) Act 2000, which enables the Federal Mandatory Renewable Energy Target [MRET]. Although it should be acknowledged that conducting a review of this form may in itself introduce market uncertainty about future directions. There is some suggestion that the MRET review will commence in early 2003 and is to some extent inhibiting forward trading of renewable energy certificates for 2004 and beyond. However, the New South Wales Australian Democrats share the view of the University of New South Wales Electricity Restructuring Group that, on balance, the importance of the scheme in delivering real outcomes, reducing greenhouse gas emissions and undertaking some form of technical review carries more benefits than what is currently on offer in this bill. We believe this bill is significantly flawed, that it should be looked at technically and formally by external bodies. The review needs a major rewrite. An external review might result in the legislation being redrafted. I accept the point raised by the Hon. Duncan Gay in his contribution to the second reading debate that the details are only just being worked out. The Australian Democrats believe that the situation is as bad as he says it is. Therefore, an external review is vital. I commend the amendments to the Committee.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.45 a.m.]: The Government does not support any of these amendments. In respect to amendment No. 1, retailers should not be required to undertake programs to reduce the consumption of electricity. The policy is not designed to pick winners. Instead, the benchmark scheme is specifically designed to reduce greenhouse gases using the cheapest means possible to minimise price impacts for consumers.

Amendment No. 3 would require a notice of all greenhouse benchmark rules to be tabled in Parliament and would make those rules disallowable by Parliament. The rules are highly technical in nature but fundamental to the operation of the scheme. If they were disallowed because of disagreements about small technical issues, the consequences could include an inability for anyone to create certificates and an inability to comply with the scheme. Such a threat of disallowance would undermine the operation of the scheme. In relation to amendment No. 4, the review clause is not required, because the entire Electricity Supply Act is due for legislative review in 2005. The review as proposed would create tremendous uncertainty in the market. The Government opposes the amendments.

The Hon. DUNCAN GAY (Deputy Leader of the Opposition) [2.48 a.m.]: The Opposition also opposes these amendments. Amendment No. 1 seeks to insert a new subclause (h) that refers to retail suppliers of electricity being required to undertake programs to reduce their consumption of electricity. This does not make sense. These entities are retailers of electricity. Does the honourable member want to reduce the business of retailers by legislating that those who sell electricity must not consume it? The Opposition does not support amendment No. 3 because it would make the rules and methodology disallowable. The Opposition does not support amendment No. 4, which seeks to insert provisions relating to a review of the scheme. The amendment appears to be primarily based on the review provisions of the relevant Federal legislation and proposes independent reviews of the scheme at three, five and seven year intervals. The honourable member said that the Independent Pricing and Regulatory Tribunal would not be an appropriate administrator, but if his rationale extends to that he will not support the bill at all, for the same reasons that he did not support my amendments. Proposed section 97HA (3) (b) of the bill states that the scheme administrator, the Independent Pricing and Regulatory Tribunal—the authority that the honourable

member said would not work—has the following function:

To monitor, and to report to the Minister on, the extent to which accredited abatement certificate providers comply with this Act, the regulations, the greenhouse gas benchmark rules and any conditions of accreditation.

Proposed section 97HA (3) (c) states that the scheme administrator can also "conduct audits, or require the conduct of audits, for the purposes of this Part". Furthermore, elsewhere in the bill provision is made for benchmark participants to provide an annual report detailing their compliance with reduction targets. Participants who do not supply that annual report are subject to a penalty. It is clear that the bill provides for review mechanisms and the Coalition is concerned that the Democrats amendment would insert a mechanism that is cumbersome and, frankly, not necessary.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS [2.51 a.m.]: The bill is flawed. I do not believe that the Independent Pricing and Regulatory Tribunal is the body to review it, and that is why my amendment provides for another review. The bill is possibly better than nothing and that is why I have said that the Democrats have lukewarm support for it; they were the first words in my contribution to the second reading debate.

Amendments negatived.

The Hon. RICHARD JONES [2.52 a.m.]: I move my amendment No. 5:

No. 5 Page 21, schedule 1 [2]. Insert after line 29:

(3) A regulation or rule made for the purposes of subsection (2) (b) is to establish the point or level from which electricity generating activities relating to a generator having a nameplate rating exceeding 30 megawatts that was commissioned before 1 January 2002 give rise to an entitlement to create abatement certificates in one or more of the following ways:

(a) the point or level may be the point or level that is equivalent to the usual level of output of the generator, as determined in accordance with the regulation or rule,

(b) the point or level may be the point or level which reflects the usual greenhouse gas emissions intensity, expressed in tonnes of carbon dioxide equivalent per megawatt hour, of the output of the generator, as determined in accordance with the regulation or rule.

This amendment ensures that the regulations and greenhouse benchmark rules are to set the baseline date from which activities are counted to 1 January 2002. The modelling used by the Government operated from this baseline. It showed that there was only a very small cost to the consumer of between $1 and $2 per kilowatt hour. It also showed that by using this baseline a good variety of energy options would be adopted—wind, gas and demand management. If we were to set the benchmark at, say, 1997, two large Queensland coal-fired power stations would be included, making a mockery of the Government's scheme. It also means that the New South Wales utilities and consumers will be paying for Queensland energy infrastructure of the worst type. We should be paying for green energy infrastructure in New South Wales and creating jobs in this State.

The Hon. IAN MACDONALD (Parliamentary Secretary) [2.52 a.m.]: Once again the great amender of bills in this Chamber has successfully convinced the Government to amend its legislation, and we will support it. This might well be the last successful amendment moved by the Hon. Richard Jones in this Chamber—an excellent amendment at that.

Amendment agreed to.

Schedule 1 as amended agreed to.

Schedule 2 agreed to.

Title agreed to.

Bill reported from Committee with amendments and passed through remaining stages.

Bill Name:	Electricity Supply (Greenhouse Gas Emission Reduction) Amendment Bill
Stage:	Second Reading, In Committee
Business Type:	Bill, Debate
Keywords:	2R, COMM
Speakers:	Nile, Reverend The Hon Fred; Gay, The Hon Duncan; Chesterfield-Evans, The Hon Dr Arthur; Wong, The Hon Dr Peter; Cohen, The Hon Ian; Jones, The Hon Malcolm; Jones, The Hon Richard; MacDonald, The Hon Ian
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