

## GREENHOUSE GAS EMISSIONS

### *Motion*

**HON J.A. SCOTT** (South Metropolitan) [4.13 pm]: I move -

That the House notes the implications of the rapid rise of greenhouse gas emissions on the Western Australian ecosystems, human population and economy and supports any measures intended to reduce these emissions and their impacts.

Greenhouse gas production and climate change is an issue that it seems very hard to get our political leaders, whether they be state, national or international, to consider seriously. It is the most significant issue members in this Parliament will face in the next 50 years, and particularly in the next decade when we can do something about it. I want to know precisely why our political leaders are behaving in this way - putting their heads in the sand and pretending that this is not happening. When I first gave notice of this motion on 2 May, I did so not only because of the importance of the issue, but also because in the Governor's speech outlining the new Government's forward thinking for this term of government not one mention was made of greenhouse gas production; yet a report has since been released by the Commonwealth Scientific and Industrial Research Organisation that predicts absolutely frightening -

Hon M.J. Criddle: What is the name of the report?

Hon J.A. SCOTT: It is entitled "Climate Change Projections for Australia". The predictions in this report for Western Australia are terrifying. The frightening aspect is that the Premier is not alone in omitting to mention greenhouse gas production. The federal Government is taking an even worse line. It is doing practically everything it can to pretend that we do not need to deal seriously with this issue. In fact, in recent years Senator Hill has travelled around the world and has done his best to undo any agreement that came out of Kyoto. Australia has done nothing in this area, despite its being allowed to increase its greenhouse gas production by eight per cent and being given a special deal compared with many other countries. In fact, it has encouraged more greenhouse production rather than examined ways to ameliorate it. Instead of sticking to an eight per cent increase, over the next decade Australia's greenhouse gas production will increase by 130 per cent, and Western Australia will produce 50 per cent of that. That is an absolute disgrace.

Hon M.J. Criddle: How?

Hon J.A. SCOTT: One way is by continuing current projects, such as road building, in which the former Minister for Transport was very much involved, instead of promoting more public transport usage. City planning has been very poor.

Hon B.M. Scott: We always favoured public transport.

Hon J.A. SCOTT: Such as purchasing diesel-powered buses instead of gas-powered buses?

Hon B.M. Scott: I am talking about trains running from Fremantle to Rockingham.

Hon J.A. SCOTT: Hybrid trains are exactly what we need to reduce greenhouse gas emissions. Later in my speech I will deal with what we must do, but I will now talk about some of the impacts from which we will suffer, according to this report. This new data from the CSIRO climate impact group predicts a very grim future for Western Australia. On the subject of rainfall and temperature, in winter-spring the bias is towards decreases in rainfall in the south west - that includes the city area - of between minus 20 per cent and five per cent. Therefore, the variation is 25 per cent, but it is weighted towards a big decrease in rainfall. That is only in the medium term. A minus 60 per cent to 10 per cent decrease is expected by 2070. If the rainfall in this State decreases by that amount, that will devastate not only our economy, but also our whole way of life.

The report predicts that the rainfall we do have will tend to be extremely heavy, will fall over shorter periods and will be accompanied by wild weather. It says the increase in the average temperatures could lead to large changes in the occurrence of extremely hot or cold days in Perth. It says the number of hot days in Perth could rise from 15, to 16 to 22 by 2030, and to 18 to 39 by 2070; and tropical cyclone wind speeds could increase by five to 20 per cent by the end of the next century.

As for biodiversity, the report predicts that many natural systems will have difficulty adapting to climate change. In the native forest and woodland ecosystems, warming and lower rainfall could threaten many eucalyptus species; in the woodland ecosystems in the south west, changes could affect the habitats of all frogs and mammal species, and 28 per cent of dryandra species and one acacia species would be significantly reduced by a warming of only half a degree. If half a degree will cause that incredible damage to our ecosystem, and we get a rise of six degrees, that will cause even more damage. Global warming of two degrees could lead to the elimination of habitats for 66 per cent of dryandra species and all acacia species. That is very serious damage. A climate change of two degrees is in the pipeline now with these sorts of projections for the greenhouse effect over just

the next few years. When we look at climate change and its relation to greenhouse gas emissions, there is a 30 to 50-year timelag. The climate changes that we are now experiencing are the result of greenhouse gas levels of around 30 to 50 years ago.

In terms of rangelands, and diverse plant and animal species, the report predicts that climate change and rising CO<sub>2</sub> levels could have the potential to significantly alter the interactions between plant species, particularly where there is a balance between woody and grassy layers. The report predicts that climate change and the rise in the sea level could add to the vulnerability of wetlands, and that riverine environments could be severely affected by reductions in rainfall. It predicts that increased events of fire and flood are likely to increase the stress on established vegetation invasion by weeds and exotic species. It says that reduced rainfall in winter could reduce forest growth and increase the risk of forest fires. If the sea level rises significantly, the vast freshwater floodplains of northern Australia could be subject to significant water inundation. The report also predicts that warmer oceans could result in coral bleaching. Members will be aware that already we have had significant coral bleaching off the coast of Western Australia, with Scott reef particularly badly affected.

In terms of agriculture, the report states that high CO<sub>2</sub> levels increase plant productivity and the efficiency with which plants use water. However, if warmer conditions were accompanied by decreased rainfall, these benefits would be limited and productivity could be reduced. The report says that dryland wheat in the south west is likely to be at risk because of projected decreases in winter and spring rainfall. If the temperature increases by one degree, yield will increase through higher CO<sub>2</sub> levels but will decline due to reduced rainfall. Higher temperatures increase the speed of crop development but reduce yield, as time for grain filling is reduced. The potential for lower grain protein means that wheat would not be suitable for pasta and bread making. Warmer winters would mean there would be reduced accumulated chilling, resulting in lower yields from reduced fruit quality in stone fruit and apples in southern Australia.

The report predicts effect after effect. It even goes into the milk losses in the dairy industry. It is estimated that annual milk losses could be between 250 and 310 litres a cow by 2030. The report says that if shade sheds were provided and sprinklers were used on the cows, annual losses could be limited to just 60 to 90 litres a cow. That will be another expense for dairy farmers.

In terms of the water resource in this State, the report says that reduced rainfall in southern Australia will lead to decreases in stream flow, resulting in water shortages and sharpened competition between urban and agriculture water users. Warmer conditions will increase the ability of pests to survive winter and accelerate the development of species that are active in summer.

Effect after effect is predicted for this State, yet we have little or no action from Governments either here or federally. In fact, the federal action has been to prevent anything being done about it.

Some members are familiar with the faulty report that was put out by the Australian Bureau of Agricultural and Resource Economics around the time of the Kyoto Protocol. The bureau was asked to calculate the cost of complying with the Kyoto requirements and, according to every other economist who looked at its paper, it overstated the cost of reducing greenhouse gas emissions by more than 10 times the actual amount, while not taking into account the cost of not doing something about it. If in 70 years the rainfall in our south west is reduced by 60 per cent, the cost will be very significant.

One thing that really sticks in my craw is that we keep hearing that it is pointless for Western Australians to do anything because we are a small part of the world with only a small population and Australia produces only two per cent of the world's greenhouse emissions. I looked in the telephone book to see how many countries had international telephone codes. The phone book shows that 231 countries are connected to the international phone system. If Australia produces less than two per cent of emissions, and we are one in 231 countries in the world - which is just an estimate from the phone book - but we have one of the smallest populations, per capita we are one of the worst greenhouse producers on the planet. That is especially so in Western Australia, which outdoes the rest of Australia. We are contributing far more than our share. As I have already stated, in the next 10 years Australia will increase its greenhouse emissions by 130 per cent, and Western Australia, with its small population, accounts for 50 per cent of that.

The United States of America overall is the largest offender in greenhouse production - I am not sure of the percentage, but I know it is a significant proportion of world's greenhouse production. Its latest excuses for not wanting to be part of the Kyoto Protocol are that developing countries are not meant to be part of that agreement and it would not be fair on the US economy if it had to ameliorate the impacts its emissions are having on the planet. The reality is that the countries the US has been pointing at, like China, have made big improvements. Last year China had the best result in greenhouse gas reductions of any country in the world. China reduced its greenhouse gas emissions by seven per cent, so it is a very bad example for the United States to use. That is not to say that China does not have the potential to have a very large increase in greenhouse emissions. However, it is making a far greater effort to reduce them than is Australia.

I reiterate that we cannot stop now what will occur in the next 30 years. Temperature increases and significant changes in our weather patterns in Western Australia will occur based on our activities so far because, as I pointed out, the timelag for the consequences is 30 to 50 years. Every member of Parliament should be aware that if this Government and subsequent Governments do not do anything about greenhouse gases, we will be in deep trouble. Every member here is responsible for what will happen over the next decade.

Hon B.K. Donaldson: Will you lecture the eastern bloc countries? You should talk to them if you are talking about pollution and emissions.

Hon J.A. SCOTT: We can all sit around like Hon Bruce Donaldson and say we should do nothing because an eastern European country is not doing anything.

Hon B.K. Donaldson: You are picking the wrong target.

Hon J.A. SCOTT: I am not picking the wrong target at all. Australia produces more greenhouse gases per capita than the eastern European countries. There is no country worse than Australia. That is not because we are terrible people but partly because Australia is a very sparse country and we need to travel a lot. We also have mining and agricultural industries, which are large producers of emissions. However, there are many ways in which we can do something about it; but we are not. It is not a crime against humanity that those industries operate in Australia. However, it is a crime to do nothing about the pollution they create. We must start thinking of ways to make changes; and there are many ways. To put it bluntly, the future is definitely in our hands. No generation of politicians here or anywhere else around the world has had a more important role than that of addressing greenhouse emissions. This is the big issue. We can forget about woodchipping being the major reason for losing our forests if we allow temperature rises of six degrees to continue. Our forests will be significantly depleted, as will the fauna they protect. The entire biodiversity will be vastly affected.

What can we do about this problem? We can take a significant number of steps. Governments need to circulate the message that things can be done at a personal level. The only action the federal Government is taking is spending money on advertisements telling people something must be done. It is not giving any good examples of things that can be done.

Taxation reform could provide a significant incentive. We could do the same in this State. I understand that the new Labor Government will be considering carbon credits, which one of my colleagues will refer to in a later stage of this debate. Clearly, industries in this country have not self-regulated to the point where we can be assured that they will reduce their greenhouse emissions. We can introduce many measures. Unfortunately, if we want to encourage measures through taxation, the goods and services tax is probably one of the worst forms of taxation for that. It makes no differentiation between industries that cause huge amounts of pollution and greenhouse gas emissions and those that are clean and low energy using.

Hon B.M. Scott: The GST has nothing to do with it.

Hon J.A. SCOTT: It has a lot to do with it. A carbon tax will encourage people to reduce the levels of carbon dioxide their industry produces.

Hon B.M. Scott: What is wrong with a goods and service tax?

Hon J.A. SCOTT: It is indiscriminate. It does not allow Governments to create taxation incentives for things that are good for the community and penalties for things that are bad for it.

Hon B.M. Scott: Who is to decide what services are good for the community? We live in a free society.

Hon J.A. SCOTT: Unfortunately, we do not live in a free society. We live in a very expensive society. We are taxed for everything we have. According to Hon Barbara Scott, in this so-called free society we are free to pollute, because the previous Government was reluctant to do anything about polluters.

Hon Barry House: Why did you not back the Derby tidal power project? You are a hypocrite.

Hon J.A. SCOTT: I looked into the issue of tidal power and found that one of the best ways to increase greenhouse gases is to create dams. The amount of methane caused by the creation of dams is greater than the amount of gas produced by gas turbines. If Hon Barry House had done his homework he would have found that the tidal power project was not such a good way to reduce gases. Had that not been the case, the Greens (WA) would have been more sympathetic towards tidal power. Members on the other side of the House should do a bit of research on these issues rather than let their emotions run away with them, as they tend to do.

A different taxation system could make a great deal of difference. Under a wholesale tax, paper produced from forests could incur a high tax, as occurs in Western Australia, whereas recycled paper could incur a much lower tax.

Hon B.M. Scott: Do you know what chemicals go into recycling paper?

Hon J.A. SCOTT: I know that the paper used by the conservation movement does not have that problem because we do not produce highly bleached recycled paper.

Hon B.M. Scott: Have you seen it done?

Hon J.A. SCOTT: No, but we did some research into the process. Paper can be bleached in many ways, such as by using bacteria, which produces a minute amount of greenhouse production - probably a slight amount of methane.

Through tax incentives, Governments must encourage people to select methods of recycling and production that cause minimal harm and must discourage them from using methods that produce high levels of greenhouse gases. There are many ways in which the goods and services tax has a negative environmental effect, but that is just one of the issues that need to be addressed. We also need to change the way industry is structured in Western Australia. Both the current Government and the previous Government are great champions of coal-fired power stations. In Collie the major parties were trying to outbid each other back in 1992, prior to the election, competing to see who could build the largest power station in order to win the seat of Collie. Neither gave any thought at all to the benefit to this State, because we know that if they had turned the gas back on to the Collie A and C power stations, they would have produced an extra 23 megawatts of power without building any power stations, and significantly reduced the level of greenhouse gas. It was a political decision, because both parties wanted to win the seat. The new economy must be brought in through a transition period. A determination must be made of how much of the State can be switched from coal and oil, and onto natural gas.

I commend the current Government for its move on the bus system. The previous Government made an appalling decision to go with diesel-powered buses in the metropolitan area. Not only is diesel fuel a much higher greenhouse gas producer than natural gas, it also releases a number of highly toxic substances into the community. The most carcinogenic materials are found in diesel exhaust. The new economy in this State should be moving ahead, based on natural gas. This would give the State a huge advantage, initially over other States, but also over the rest of the world, as compressed natural gas is a much cheaper product than oil or liquefied petroleum gas because it is not taxed at the same level and is cheaper to produce. If all the people concerned about the price of fuel were able to switch their vehicles over to compressed natural gas, they would be able to operate them more cheaply and our economy would benefit; so too would the environment.

It is not enough, however, for the State to look for new ways of doing the same old things. Huge emphasis has been placed on grandiose, massive schemes, a lot of which fall over; for example, years ago plans were made for compact steel mills. A whole raft of big steel projects was devised under a previous Labor Government, and now the Oakajee project is going ahead. The Government wants to pump hundreds of millions of dollars in subsidies into these industries, which are high energy-using industries, rather than think ahead and consider alternative investment in sunrise industries that produce less greenhouse gas. As a result of these grandiose schemes, our economy is slipping further behind compared with other economies. We are becoming, in world terms, an antique economy.

We also need to consider significant planning reform in our cities. Over the past 30 to 40 years, Perth has been designed to spread out over a vast area. The city of Perth covers a greater area than London, while containing only a tiny fraction of its population. This fact makes it difficult to operate efficient public transport systems, which cannot work in an economic way without greater population densities. In Perth a vast amount of money has been pumped into road construction. Perth has more road space per capita than anywhere else in the world, and 17 per cent of the State's gross domestic product is spent on roads and cars, which is the highest percentage in the world. It is a vast amount - double the amount spent in European cities.

Hon N.F. Moore: Has anywhere else in the world got it right, in the opinion of Hon Jim Scott?

Hon J.A. SCOTT: Yes, there are cities that are doing it properly.

Hon N.F. Moore: I would be quite happy to take up a collection to send Hon Jim Scott there, so that we do not have to listen to this every day for the next four years.

Hon J.A. SCOTT: That may be the opinion of Hon Norman Moore. The Leader of the Opposition is now in that position because he holds those antique views. When he takes a few trips to look at a few of those cities, he may come back enthused that there is a better way to do things, rather than build roads, roads and more roads. The reality is that nothing has been done to plan suburbs that are energy efficient; we have not ensured that buildings are energy efficient. No regulations are in place calling for greater efficiencies. Members opposite may say "so what", and I will tell them what. The future of this planet depends on these changes being made. We must make these changes, and the sooner we make them, the less severe they will have to be. Hon Norman Moore must get used to talking about these things, because -

Hon N.F. Moore: The Liberal Party is not in government now. Hon Jim Scott should be telling the Government - those members who sit alongside him - what they should be doing. Can we hear what the Government is going to do? He knows what the Opposition did when in government. He has told us we were wrong, so now let us find out what the Labor Party is going to do.

Hon J.A. SCOTT: I have already said that the Labor Party did not even mention this most important issue during the election campaign.

Hon N.F. Moore: Then Hon Jim Scott should be telling the Government what to do, instead of lecturing the Opposition.

Hon J.A. SCOTT: Hon Norman Moore should not interrupt and make silly comments. Significant planning reform in the city is needed to ensure that it does not become the kind of city the rural rump has imposed over the past few years with its road-building exercises to bring B-double trucks into St Georges Terrace.

Hon Murray Criddle interjected.

Hon J.A. SCOTT: Hon Murray Criddle must want to see a 60 per cent reduction in the rainfall in this State. I can imagine the effect that would have on the wheat crop.

Hon M.J. Criddle: Just remember to tell that to the members opposite

Hon J.A. SCOTT: I will. I want to see significant transport reform. I understand that the Government is making structural changes to the bureaucracy. The Greens (WA) agree with those changes because it is vital that Main Roads has its hands taken out of the kitty. The department should be a road builder, not a planner. The structural change that has been made is very important, but it should go much further. I am worried, because I understand the Government intends to go along with the appallingly planned railway mentioned in debate yesterday. That railway is being built deliberately to avoid most of the population and to service the needs of developers building south of South Lake rather than the current city population. We must encourage people to travel less and to use public transport more. To do that we must have a proper public transport system. That means we must spend less on roads and more on transport infrastructure. I am happy for money to be spent on the upkeep of rural roads, but we must reduce spending in urban areas. We are spending 17 per cent of gross domestic product in this area. That is far too much and it is keeping us broke. Because that money is being spent on roads, it is not available to be spent more appropriately; that is, on a better public transport system, better planning and more urban infill.

The Government will face its biggest challenge in changing this State's economic future. The hardest task will be to change the prevailing ethos that only massive projects are profitable. We must not continue to watch hundreds of millions of taxpayers' dollars being spent on white-elephant, high energy producing projects rather than pursue more intelligent developments.

It is surprising that we have not seen much more spent on research and development in this State. Why are we not pumping hundreds of millions of dollars into research and development to generate funds to pursue ideas rather than spending huge amounts buying other people's ideas? Why must we import technologies that are not necessarily appropriate when we could be designing for our environment? Why has this State lost what was once a lead in solar energy development? With some support from the Government, we could have been leading the world. Instead, Governments have spent hundreds of millions of dollars subsidising the coal industry and high energy use industries in this State because of past mistakes in energy planning. These issues can be dealt with easily. We can reshape our economy and cities to use less energy. However, we do not seem to be able to make Governments understand the importance of dealing with this vital issue of climate change. If after four years in this place the Government has not made significant inroads into the greenhouse problem, that will be its most significant failure. The state of the economy is much less important than the state of the environment. The economy is important, but it is not as important as the future of all living things in this State. It is hardly worth passing on a legacy of huge increases in tropical diseases spreading south and so on.

I recently heard a very interesting discussion on Radio National about the huge medical benefits to be enjoyed as a result of investigating our insect population. Massive profits can be generated from that area of research. Western Australia has one of the largest and most unusual insect populations in the world, but we are doing no research in that area. On the other hand, we pump hundreds of millions of dollars into projects such as the Oakajee development. We must change our approach and deal with these environmental changes.

Hon B.K. Donaldson: Build it and they will come.

Hon J.A. Scott: Hon Bruce Donaldson is nodding his head in agreement.

The future will judge how we have dealt with this issue. Unfortunately, even with significant legislative changes, we will still have to live with past mistakes. I urge members to support this motion and to take the issue seriously. I commend the motion.

**HON TOM STEPHENS** (Mining and Pastoral - Minister for Housing) [4.58 pm]: I thank Hon Jim Scott for moving this motion because it provides the House with the opportunity to debate an issue that he has correctly identified as important for all of us. It is important not only for Western Australia, for which we have particular responsibility and which faces challenges in this area, but also for our nation and the international community. This rapid rise in greenhouse emissions has implications for our State's ecosystems, human population and economy.

Hon Jim Scott has provided us with the opportunity to look at additional aspects of this question. I was particularly interested in some of the member's concluding remarks when he talked about this State's obligation to study and understand the tiniest things - in this case, insects - and to learn what they can contribute to benefit us all. That has been one of the interesting aspects of having Greens (WA) members in the Chamber, and their contributions are valued. Those members will appreciate that their concerns have now become mainstream concerns. Those concerns have been taken up by the Labor Party and more widely - I note that the liberals for forests have taken them on board. I suspect that eventually the Liberal Party will start to understand the need to tackle these issues. In the short time in which we have been in office, we have made it clear that the Labor Government recognises the importance of greenhouse gas emissions and their effect on climate change, Western Australian ecosystems, the human population and the economy, and that it acknowledges the need to support measures intended to demonstrate reductions in greenhouse gas emission and the likely impact of that. I will tell the House more about that tomorrow.

Debate adjourned, pursuant to standing orders.