



HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON ENVIRONMENT, RECREATION AND THE ARTS

Reference: Trading in greenhouse gas emissions

CANBERRA

Monday, 22 June 1998

OFFICIAL HANSARD REPORT

CANBERRA

HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON THE ENVIRONMENT,
RECREATION AND THE ARTS

Members

Mr Causley (Chair)

Mr Jenkins (Deputy Chair)

Mr Anthony	Miss Jackie Kelly
Mr Billson	Mr Kerr
Mr Robert Brown	Dr Lawrence
Mr Eoin Cameron	Mr McDougall
Mr Entsch	Mr Mossfield
Mr Hockey	Dr Southcott

The committee will inquire into the regulatory arrangements that would need to be put in place to support a market in greenhouse gas emissions including:

mechanisms for measuring, verifying and monitoring emissions and the compliance with contracted arrangements;

mechanisms to integrate emissions trading with the development of carbon sinks (such as timber plantations, gas aquifer reinjection, soil rehabilitation etc), including the science, measurement and security of such arrangements;

the allocation of the right to emit greenhouse gases;

regulatory mechanisms to support a national market and potentially an international market in emissions trading;

possible emission traders, administration and transaction costs;

roles and responsibilities of governments and other stakeholders; and

the impact of emission trading on the environment and industry and the economic and social welfare of the Australian community.

WITNESSES

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GRUEN, Dr Nicholas, Assistant Director, Business Council of Australia, GPO Box 1472N, Melbourne, Victoria 3001	435
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HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON ENVIRONMENT, RECREATION AND THE ARTS

Trading in greenhouse gas emissions

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Monday, 22 June 1998

Present

Mr Causley (Chair)

Mr Billson

Dr Lawrence

Mr Jenkins

Mr McDougall

Mr Kerr

Committee met at 9.11 a.m.

Mr Causley took the chair.

BOTTERILL, Ms Linda Elizabeth, Senior Industry Policy Co-ordinator, Metal Trades Industry Association, GPO Box 817, Canberra, Australian Capital Territory 2601

BLUM-CAON, Ms Sharon Louise, Chairperson, Environment Reference Group, Metal Trades Industry Association, GPO Box 817, Canberra, Australian Capital Territory 2601, and, Corporate Environmental Manager, Southcorp Ltd, PO Box 14038, Melbourne, Victoria 8001

CHAIR—I declare open this public hearing of the House of Representatives Standing Committee on Environment, Recreation and the Arts for its inquiry into the regulatory arrangements for trading in greenhouse gas emissions. This is the committee's seventh public hearing for this inquiry and follows hearings in Sydney, Brisbane and Melbourne. Further hearings are planned for Canberra and Perth. The committee's inquiry is focusing on the arrangements that should be put in place for a trading scheme in greenhouse gas emissions in Australia. As we collect information about the best sort of scheme to adopt, we will be looking for mechanisms that will ensure that emission trading contributes to emission reduction as equitably, effectively and efficiently as possible. We will be looking for ways of providing maximum certainty at minimum cost for the environment and the emissions traders.

Before proceeding, I wish to advise the witnesses that the committee public hearings are recognised as proceedings of the parliament and warrant the same respect that proceedings in the House of Representatives demand. Witnesses are protected by parliamentary privilege in respect of the evidence they give before the committee. You will not be asked to take an oath or make an affirmation. However, you are reminded that false evidence given to a parliamentary committee may be regarded as a contempt of the parliament. The committee prefers that all evidence be given in public, but should you at any stage wish to give evidence in private, you may ask to do so and the committee will give consideration to your request.

We have received a submission from you and have authorised its publication. Are there any changes to that submission at this stage?

Ms Botterill—No.

CHAIR—Do you want to make a brief opening statement?

Ms Botterill—The agreement of the parties to the Framework Convention on Climate Change to the Kyoto Protocol in December last year marked an important turning point in Australia's and the world's economic history. If this protocol is ratified and enters into force the production possibilities of the global economy will have been fundamentally changed. The way that Australia responds to these changed circumstances is of great interest to MTIA. To date Australia's response to the issue of global warming has been

largely through voluntary mechanisms such as the greenhouse challenge. We believe that these are very effective measures for reducing our greenhouse gas emissions.

With the agreement at Kyoto, we are now faced with the probability of a legally binding target reduction and the question of how we are going to meet this obligation. MTIA supported the approach taken by the Australian negotiators in Kyoto and commends the government on the outcome achieved. The eight per cent increase over 1990 levels still presents Australia with a challenge. It appears that the measures in the Prime Minister's statement of 20 November 1997, combined with land use change, could still leave us a little short of our target for the first budget period. However, the figures are still rubbery. For this budget period other flexibility mechanisms available under the Kyoto protocol, such as joint implementation or the Clean Development Mechanism, may provide Australia with easier and more cost-effective avenues for addressing the reduction shortfall.

However, at this stage we can only guess what the target will be in subsequent budget periods. It is probably a fair assumption that the task will not be easier than the Kyoto outcome. Government and industry, therefore, will need to determine not only how we will meet the possible shortfall in emissions reductions between now and 2008 to 2012; we should also be thinking about setting in place a system which can deliver any obligations that arise after 2012.

As outlined in our submission, there are two approaches to reducing emissions: so-called command and control measures or through the use of market based instruments. Research undertaken by the Industry Commission, ABARE and others concludes that market based approaches are less distortionary and are the most cost-effective means for achieving emissions reductions. Any system must also allow for economic growth. In his statement in November last year, the Prime Minister suggested that Australia's population is likely to have grown by about 30 per cent in the period 1990 to 2010. In order to ensure the maintenance of living standards and avoid increasing unemployment, the Australian economy will have to grow in that period. The challenge is therefore to achieve economic growth while reducing greenhouse gas emissions. Closely related to this point is the need to protect and improve Australia's international competitiveness, a task made all the harder by the current exclusion of developing countries from any obligations under the Kyoto protocol.

Emissions trading has its attractions; however, MTIA cautions that it should not be adopted unquestioningly. The complexities associated with its implementation raise a number of concerns. At this early stage we would urge government to keep an open mind and ensure all options are examined before a decision is taken on the best approach to meeting Australia's obligations under the Kyoto protocol. The following remarks then are made without prejudice to the possible emergence of a better approach to emissions reductions. While we accept the theory that emissions trading has advantages over its alternatives, we are concerned that, if some of the assumptions underlying this conclusion

do not hold to be true, we must not find ourselves committed to proceeding with trading.

The principles I am outlining this morning are based on MTIA's preliminary consideration of the issues. It is possible that, once a more detailed proposal is available for assessment, MTIA may amend these views. Work undertaken by the Industry Commission suggests that any emissions trading scheme should be managed on a national basis rather than being state based as a national scheme would maximise efficiency. The scheme should be comprehensive covering all greenhouse gases, sinks and sectors. The basic unit of trade should be CO₂ equivalent units based on the global warming potential of the gas as determined by the IPCC.

Although some sectors present measurement difficulties, such as transport and agriculture, some means should be developed for their inclusion, otherwise the burden of reduction will fall unfairly on those sectors of the community which have the misfortune to be more easily counted. The allocation of permits must be equitable and the initial allocation should be free of charge.

Industry Commission research suggests that in the long run it makes no difference to the market whether initial permits are sold or allocated free. The real issue is developing a system which allows for new entrants and also retains scope for economic growth. The question of allocation raises the problem of where in the supply chain the permits will be applied. This highlights the potential for an emissions trading system to introduce distortions into the economy. Will the permits be issued at sector, industry or plant level? If mishandled the allocation process has the potential to interfere seriously with the operation of the marketplace by altering patterns of competitive advantage within and between industries.

It is probably inevitable that the allocation decision will be influenced by political considerations; however, it is important that the process is transparent and certain. Credit must be given for voluntary reduction measures that have been taken. MTIA has supported the voluntary no-regrets approach to emissions reduction taken to date and would prefer this approach to continue. The greenhouse challenge has been very successful in encouraging companies to implement greenhouse gas reduction measures. MTIA has a facilitative agreement with the greenhouse challenge office and we are managing a tier 2 project in the metals sector which will result in a further 30 cooperative agreements being signed. Realistically, the introduction of a price on emissions will sound the death knell of voluntary schemes such as the greenhouse challenge. Once the emissions reductions have real monetary value, there will be no incentive to participate in voluntary programs. This raises the issue of credit for reductions already achieved through voluntary action.

Unless some signal is given early in the development of an emissions trading system that voluntary measures already taken are to be rewarded, the greenhouse challenge is unlikely to meet its target of over 1,000 cooperative agreements by 2005 putting further pressure on other mechanisms to deliver Australia's reduction target.

Once the allocation problem has been addressed there remains the issue of measurement and verification. At the end of the day, the Australian government is the signatory to the Kyoto protocol and it is the government that will be in breach of its international obligations if emissions exceed the agreed level. An emissions trading scheme would therefore require a high level of integrity to ensure that emissions equal permits at the end of the budget period.

MTIA members' experience with the New South Wales load based licensing system, and more recently with the industry handbooks issued under the National Pollutant Inventory, demonstrates that even an apparently straightforward formula based approach to calculating emissions can produce unreliable results. Measurement of emissions and the administration of the permits within companies has the potential to be onerous and generate large compliance costs. These should be assessed against the cost to business of alternative approaches to emissions reduction.

The Kyoto protocol is about reducing emissions. Therefore, any trading system should include a mechanism for reducing the number of permits in the system. One approach is for the government to participate in the market and to purchase permits in accordance with the transparent and pre-determined timetable for the reduction of emissions. In order to ensure a predictable investment environment, business will need to know in advance the availability of emissions permits. Any domestic emissions trading regime cannot be developed in isolation from an international system. Negotiations are already under way on the implementation of the various flexibility mechanisms in the Kyoto protocol and it is important that during these negotiations consideration is given to the impact of the system on Australia's economic interests. Although it has been argued that there are advantages in being a first mover in developing an emissions trading market, MTIA would urge government not to consider the introduction of a domestic scheme until the Kyoto protocol comes into force unless it can be demonstrated that it will be in Australia's economic interest to do so.

There is no doubt that the scheme must be designed and ready to implement if Australia decides to proceed with emissions trading as a means for meeting its Kyoto target when the protocol comes into force. However, the timing of its introduction will have important competitiveness implications for the Australian economy which must be taken into account. Business must continue to be consulted closely on the design of any emissions trading scheme and governments at all levels must examine closely the linkages between emissions trading and other policies, regulations and environmental reporting requirements already in place or evolving. For example, the New South Wales government's load based licensing scheme includes nitrous oxide which is a greenhouse gas. Other environmental measures such as the National Pollutant Inventory and some state environmental regulations will need to be revisited to ensure that reporting and record keeping requirements, and the costs associated with these activities, are minimised.

MTIA would like to see all levels of government consider the development of a

single environmental reporting format where similar information is required from which the various agencies could draw the information they are seeking. The implementation of the Kyoto Agreement is now as much an economic as an environmental issue. We have a target which is likely to become legally binding on the Australian government and we will need to find the most cost-effective way of meeting this obligation. In theory, the answer is probably emissions trading. However, we must recognise that the assumptions underlying the theory may not hold true and we must keep an open mind to other possibilities before committing Australia to a particular path to emissions reduction.

CHAIR—Thank you. Sharon, do you want to make any statement at this stage?

Ms Blum-Caon—Yes, I just have some brief comments. I would just like to give you a very brief rundown on what Southcorp is about so you know where I am coming from and then just perhaps re-affirm a couple of the points that Linda has made from a Southcorp perspective.

Southcorp is an international company. We have a turnover of \$2.5 billion. We employ over 12,000 people so we are a substantial Australian company. Part of our mission and values is about behaving with integrity and being a responsible member of the community in which we operate. The environment is very important to us and our environmental program has been rolling out from the board downward for a couple years and is a significant and serious part of our business.

As part of that, as a road map to achieve our environmental goals, we are rolling out a global environmental management system throughout our operations, which is a proactive systematic and forward thinking approach to environmental management. What the core of that is about is getting our operations to systematically go through their activities, determining what their environmental effects are and which ones are significant, not only from the environment viewpoint but looking at legal requirements, community complaints and that sort of thing. Having worked out which ones are priorities, we will set in place action plans for reducing impacts.

That is a very core part of what we are doing in Southcorp and that program is rolling out throughout our operations. We are at the point now where one site has virtually completed implementation of the system. Others are still to start because there is a staggered roll-out. To give you an idea of some things that have occurred in the past, in Southcorp our Vulcan Dishlex, for instance, was environmentally redesigned from the ground up for disassembly for ease of recycling, to make it more energy efficient and so forth. We have got a number of programs like that under way.

The initial focus is on the production cycle, but eventually our environmental program will look at all phases of product stewardship from working with suppliers on sourcing raw materials right through the transport, use and disposal phases of our products. It is an important issue to us and I just wanted to make that clear. We have an

environmental program for a number of reasons. We think it is good for business. We have a goal to be both economically and environmentally sound. We are looking at corporate image and competitive advantage. This kind of information is demanded by shareholders and financial institutions. It is part of doing business today.

Southcorp is serious about the environment. Industry, in general, is spending a lot of energy and resources in the environmental management area. The point I would like to make is that this should be reflected by an equal commitment from government by supporting clear coordinated environmental programs that promote certainty in providing incentives for business and are outcome driven rather than command and control. To this end, environmental emissions trading certainly fits in principle, as Linda pointed out. What we do not want is half thought out tokenism. We want in this area a clear, well thought out policy that has taken everything into account.

I would like to highlight a couple of the points that Linda did make. Certainty is vital. To achieve this you need flexibility in the timing of the permits, to be able to buy in advance, to be able to bank and to include permit producing activities such as carbon dioxide sinks. Certainly, Clean Development Mechanisms with developing countries, should we interface with an international system, is vital. Most of Southcorp's businesses in Australia are mature and all, perhaps with the exception of the wine group, have activities in developing South-East Asian countries.

I did not touch on that before. To let you know what Southcorp does, we are Australia's largest wine producer; we also have large business interests in appliance manufacturing and packaging. Wide coverage of all sources, sectors and gases is vital. It is going to be perhaps a little bit difficult to find good ways of including the transport and agricultural sectors, but we see this as vital because they are significant contributors. There are certainly roll-on benefits to including those sectors. In agriculture, this will certainly support the landcare programs. Southcorp is involved with that in a number of ways, through our vineyards, trying to tackle the salinity and water use issues in the Murray-Darling and so forth. I do not know if we would be a net producer or sink of greenhouse gases in that area because we have woodlots and vineyards but we also produce CO₂ through fermentation. I am not sure how that would come out.

Certainly the transport area is vital to include. Tackling this area would also have roll-on benefits in the ambient air issue which is coming up in NEPM, I believe. Free allocation is vital. I guess the alternative to that is auctioning, but auctioning could easily stifle subsequent trade. There would have to be some adjustment according to cost of abatement before the auction even went ahead. Free allocation would certainly be important and something we would support.

As a final comment, the areas that clearly need some more examination, because it is certainly a complex issue, are those transport and agricultural sectors and the critical points of control in terms of implementing the trading. Linda touched on this in terms of

who you target—for instance, the energy sector, the energy generators or the energy users?

One would argue that to get a greenhouse outcome, or to achieve a target, you would want the energy users producing energy in a more efficient way, or looking at alternative technologies. But you also want the users to improve their efficiency. Without getting duplication within the trading system, you need to find mechanisms to get gains in both those areas and, obviously, the challenges are even harder in the farming and transport sectors. This certainly needs to be looked at in a lot more detail. That is all I wanted to say in terms of an opening statement.

CHAIR—Thank you. Linda, you mentioned that, if our assumptions were not correct in some of the areas that we negotiated at Kyoto, it could put us at a disadvantage. There has been some debate about our baseline information and the fact that maybe that baseline information is not going to be available in time from the states. Are your members concerned about putting us at a disadvantage because either the information was not quite correct, or we are a bit tardy at the present time in getting that baseline information?

Ms Botterill—I guess there are two points there. My reference to the assumptions not holding true is more in terms of the economic theory that emissions trading is the most effective way to go. I have heard Brian Fisher from ABARE describing the prospect of emissions' trading as an economist's dream, the perfect competitive market because there are no transport costs. I think that is a great approach and if that were to be the case, in theory, yes, it is probably the best way to go. My concern is that in the real world when you start bringing in some of these complexities, some of the assumptions that result in the outcome of emissions trading being the most effective way to go, if they do not hold true, you may find another approach may be more cost effective.

In terms of the uncertainties about the numbers, we are not the only country that is grappling with that issue. I think that the whole Kyoto process is still in a fair state of uncertainty in terms of base years and baseline information and there is a concern about the whole protocol process that we have got these obligations to be met. We have yet to see what the compliance regime is going to be and what the penalties are going to be for non-compliance. It is of concern that there is still this degree of uncertainty within the process.

CHAIR—Nevertheless we have some deadlines to meet. There was a meeting in Bonn, I think a week or so ago—

Ms Botterill—That is right.

CHAIR—and we have another meeting before Buenos Aires in November. We seem to be rushing down this track very quickly with a very complicated issue. If we do not get our baselines right, then it is going to put us at a distinct disadvantage, I would

think. Would you agree with that?

Ms Botterill—I think this highlights our caution about proceeding too quickly with these types of mechanisms, such as emissions trading. We really need to get the baseline material and our facts straight before we are committing Australia. This is why, although we agree that work needs to be done to examine the possible structure of an emissions trading regime domestically, we also need to be looking at other alternatives with equal vigour and interest so that, if we are in a situation where the target looks a lot steeper, we have got a menu of options to choose from in how we are going to meet that obligation.

CHAIR—I think you mentioned in your opening statement the critical factor of trade and the effect that trade is going to have on this. I have no illusions about that; I think there is no doubt that it is a very big issue. In that issue you said that you would prefer that Australia did not move too quickly, and you have just reiterated that. But, given the fact that you would keep a close look on overseas countries and overseas companies and what they might be doing, do you think that Australia might be putting itself at a disadvantage if it does not react reasonably quickly? It would appear that some other people are positioning themselves in the market.

Ms Botterill—It is a highly speculative activity. There are no guarantees that the sorts of credits that they are buying from the likes of Costa Rica are going to be recognised if an emissions trading regime actually comes in place.

To a certain extent that is an issue of speculation for those companies. I think that certainly Australia does not want to lag and if an international emissions trading regime were to come in, I think we need to be in there from day one. We certainly do not want to be disadvantaged.

What I am concerned about is that, if we were to move early, we would be imposing costs on our industries that are not being imposed on their competitors, and I think that would put us at a distinct disadvantage. So I think the timing issue is critical. We need to ensure that we are ready to go when the rest of the international regime is set up, but I would caution against going sooner.

CHAIR—In the allocation of permits I take on board your statement about people who have already been trying to do something about emissions under the protocols we have in place at the present time. Evidence has been given to the committee that it seems that 1990 is a reasonable cut-off date. If permits were allocated about that time, then those people who have been conscientious and have been trying to do something about their emissions would not be disadvantaged. Would that be a reasonable assumption?

Ms Botterill—I think it probably would. I suppose more of my concern with relation to programs like the greenhouse challenge is that the Prime Minister set a target in November last year in excess of a thousand signatories to the greenhouse challenge by

2005, and there have been fewer than 500 now—I think they got fewer than 200. If an emissions trading scheme is being developed, and it looks as if it is going to come in, there will be no incentive for new people to join, I suspect, because they are going to want to claim a price on those reductions.

At the moment there is speculation that we are about four per cent short in terms of the gap between what was done on the Prime Minister's statement—land use change—and where we need to be. And that raises concern that that four per cent will widen if the target of a thousand companies on the greenhouse challenge by 2005 is not met.

CHAIR—You are saying that you do not believe that a trading system will account for all of the emissions. Are you looking there at the transport and agricultural industries? Could you flesh out a little bit what your thinking is in the areas you think it probably would not cover in the trading system?

Ms Botterill—A preliminary assessment suggests that, for example, domestic use of motor vehicles is going to be hard to capture. If you put the permits on at the production of petroleum and the price of petrol goes up a couple of cents, that is probably not enough to get people to be reducing the usage of their motor vehicles.

Where agriculture is concerned, particularly where you have got small family farms, there is a difficulty with the imposing on those businesses of the discipline of measuring their emissions, balancing the emissions when you put a crop in the ground and then when you take it out again in terms of land clearance and land care activities, and then requiring them to purchase permits. And that is quite a large proportion. I understand that agriculture is responsible for a large quantity of our methane, for example, which has a much higher global warming potential than CO₂. It is an area where, as a nation, we have an obligation to reduce our emissions and somehow we are going to have to capture all emissions, including from these difficult sectors.

CHAIR—So that comes down to measuring and, I daresay, it would be a possibility in those difficult areas to make some estimate at this particular stage, possibly until we have better science, and that would probably be the best way to go.

Ms Botterill—That seems right but, again, we caution that estimates have their problems. The national pollutant inventory is based on estimates of emissions based on inputs into production. We had a member company do a comparison between actual emissions from an operation and the results that they got using the estimation techniques proposed in their NPI handbook. In some cases they were out by a factor of 10 or more, and they were way over estimating their emissions when they compared the estimations with the actual measured emissions.

So, yes, estimation is the way to go, but we need to ensure that we thoroughly test the estimation techniques. And they will need to be accepted by our international trading

partners as well. The framework of the parties to the Kyoto protocol will have to be happy, be satisfied, that the estimation techniques we are proposing for these sectors are, in fact, accurate.

CHAIR—A trading scheme could be monitored, obviously, from the point of view of making sure that it was working effectively by the ASC and probably with some support by the ACCC, but there would still have to be some type of body set up to measure whether people were achieving their objectives and whether, in fact, the measurements were correct, or the new science coming in was correct. There have been suggestions that it should be a government bureaucracy, and from my knowledge of industry and business they do not like governments and/or bureaucracies. Is it possible that a private organisation could do this?

Ms Botterill—This raises an issue of concern when I was talking about the cost and compliance costs on business. I was recently at a conference in Sydney which was addressed by somebody responsible for running the SO² trading in the United States and she described in some detail how the emissions were verified and how the permits were processed. It was an enormous computerised system which required quite a degree of capital investment not only in the computer system and the data processing but also in actually sticking monitors onto smokestacks to measure the actual emissions that were coming out. That is one of the concerns that I have in terms of the idea that this is a perfectly competitive market and is going to be more cost effective. I think we need to be weighing that up against the other potential options.

In theory, I cannot see anything wrong with having an authorised privately run business to undertake that task. We are privatising other areas of government business. There is no reason that it could not be done by a branch of the Australian Stock Exchange, for example, that had been set up and authorised by the government.

I think at the end of the day, though, there needs to be that close linkage with government because it is the government that has signed the protocol and it is the government that is going to have to front up to the protocol parties and demonstrate that it has met its obligations. So there would need to be a degree of government oversight to ensure that the government's obligations were being met.

CHAIR—You mentioned that it would not necessarily need to be a national scheme to be effective. Under our constitution, of course, we have little problems with that and the states tend to flex their muscles from time to time. Would your organisation be active in trying to persuade state governments that COAG should agree to a national scheme in this area?

Ms Botterill—Again, this is a preliminary view. It is based on the work that was done by the Industry Commission last year that suggested that a national scheme would be more cost effective. It would be a more efficient way of allocating permits, rather than on

a state by state basis. When we are looking at it from the perspective of the most cost-efficient way of reducing our emissions, obviously that is the most attractive way to go. We have not arrived at a final position on that. There may be a way to do it on the state basis which gets around the problems identified by the Industry Commission.

Ms Blum-Caon—Certainly it would be easier for companies that work across state boundaries, too, to have a national system.

Mr McDOUGALL—Can you just bring me up to date with the change that has taken place in MTIA with regard to membership? It seems to have been changing its focus lately.

Ms Botterill—We are in the final week and a half of a merger arrangement with the Australian Chamber of Manufactures. From 1 July we become the Australian Industry Group with a membership of about 11,500 members and, as a result of the merger, the profile of our association has moved to the point where roughly 75 per cent of the Australian Industry Group's membership will be small to medium enterprises.

Mr McDOUGALL—Of those groupings, how many of them—both in groupings and in total numbers—would be effectively involved in emissions?

Ms Botterill—I would have to take that on notice. I do not have the figures at my fingertips. We are now covering virtually every industry sector that you can think of, including textiles, clothing and footwear, information technology, the metals industry, the packaging industry and the white goods industry. All of the international airlines that fly into Australia are members of the MTIA and the to be Australian Industry Group. So basically we have a huge cross-section of sectors in industry encompassed within the membership.

Mr McDOUGALL—I think it is important if you can give us an idea, because on the evidence we have got at the moment, I think we are talking about the energy producers being 50 per cent, roughly. Frankly I do not know whether that is true or false because I do not know whether we know who else emits and how much they emit. I think that it is a bit of a stab in the dark. We know that energy in the form of electricity production, cement manufacturing and a couple of other big players, such as the aluminium smelters, are very big components.

You mentioned—very rightly, in my mind—the question of the domestic automotive industry. I am still trying to get into a picture who else is in the playing game and how important it is to them in those industries or to them individually as companies.

Ms Botterill—ABARE have actually just recently done some work by sector, but I do not have the numbers at my fingertips. I am happy to provide those to the committee.

Mr McDOUGALL—I would appreciate that. You raise the point that the market should be open only to those with a need for permits. But you also say that a national scheme should not be developed in isolation from the international scheme. I have a bit of a problem in this area. One, if you do not have an open permit trading scheme, how do you operate on an international market, because I do not think we can dictate to the international market whether it is going to be open or closed and, two, how do you see Australia fitting into that sort of scenario?

Ms Botterill—There are a couple of things. As far as the international trading is concerned, I think it is yet to be determined whether it is in fact going to be open beyond government-to-government trading. That is one of the issues that is being considered by the parties at the moment—whether they are going to allow private sector trading to be involved, whether companies can be involved trading cross-border or be limited to governments doing that trading.

The concern about the involvement of parties that do not have a need for it was raised by our members. We surveyed a cross-section of our members in the preparation of our submission, and this was one of the concerns that was raised by quite a number of them. They are concerned that the price of the emissions permits may be pushed up by speculators who have no need for the permits. That was the basis of the comment in our submission.

CHAIR—On that point, you said that the countries are negotiating whether it will be country to country and not individual. Surely that is contrary to American culture. Surely America is a very big player in this.

Ms Botterill—America is going to be a net purchaser of permits, I understand. There is still so much to be negotiated. I have been receiving, courtesy of the Australian Industry Greenhouse Network, day by day, emails from Bonn, and this thing is moving at an absolute snail's pace. Even some of the issues that Australia believed they had come out from Kyoto with a good result on appear to be being opened up again by some of the countries. Issues like who the participants are going to be in the system will be a long way down the track.

Mr McDOUGALL—What happens, though, when you get a multinational company that sets up a trading arrangement internally, which we have heard about, and that trading arrangement internally may even include developing countries which are not even assigned to the protocol? How is that going to be placed?

Ms Botterill—I think that is going to be an issue for the international negotiations because the developing countries are not party to the reduction emissions in the protocol. That raises an interesting question about whether the companies would be required to perhaps involve themselves in the Clean Development Mechanism with a subsidiary of

their own in a developing country. It is an area that is again under negotiation.

Mr McDOUGALL—Couldn't that apply, though, to some of your members?

Ms Blum-Caon—Certainly. That would apply to us easily.

Mr McDOUGALL—Wouldn't you see a benefit in that?

Ms Blum-Caon—Definitely. We would very much like to see any trading regime include Third World countries and developing countries.

Mr McDOUGALL—Is that not at odds with the MTIA which wants a closed system?

Ms Blum-Caon—No.

Mr McDOUGALL—If you are a member of MTIA and you want that open system, and the MTIA are saying, 'No, we do not want an open system; we want it so closed that you cannot even trade within other industry groups on a permit system'—

Ms Botterill—No, that is not quite what I intended to say. Our concern was about non-industry players—and that is using industry in the broadest term—who are only interested in trading in emissions permits to make money on them and are not going to use them for the purpose for which they were developed. That was the concern that our membership raised. A number of our members said that those groups should not be allowed to trade in emissions permits.

Mr McDOUGALL—If it is legitimate to have a trading system and the objective is to reduce greenhouse gases, why should it be not permitted for somebody to purchase permits to take them out of the market to reduce greenhouse gas emissions?

Ms Botterill—That is certainly the role we would see for government in actually achieving those reductions. As I explained in the statement and mentioned in our submission, one of the approaches we see to actually achieving those reductions over time is to reduce the number of permits in circulation through government purchasing those permits and taking them out of the market.

CHAIR—Why buy them? Why should it not just be reduced to two per cent or three per cent a year?

Ms Botterill—The problem with doing it that way in terms of saying, 'This year your permit is worth X tonnes of CO₂ and next year it is worth X minus Y' is that you then introduce a distortion into the system. The advantage of emissions trading, as I understand it, is that those companies that have the lowest emission abatement costs are

the ones which will undertake the abatement, selling their permits on to those who have higher abatement costs. If you force the same rate of reduction on every company, you are distorting that process.

If you just have a predictable reduction in the number of permits in the market, those industries that still have scope to undertake cheap abatement measures will do so because they know that the number of permits in the marketplace are coming down. But what you are likely to do if you say, 'It is X this year and X minus Y next year,' is inflict some very high costs on some of those industries that do not have low cost abatement measures available to them.

CHAIR—So particularly the concrete industry or something like that?

Mr KERR—If you are withdrawing the permit from purchase or by whatever mechanism, you are still going to have to have the same economic consequence for the large—

Ms Botterill—They will be bought in the marketplace, though, so the number of permits available in the marketplace will reduce, and those companies which can achieve abatement at a lower cost—

Mr KERR—But does it matter whether permits are withdrawn because of a design feature or because of taking out through purchase? You will still have a certain number of permits available, and their price will be determined by market factors.

Ms Botterill—The distinction I am making—

Mr KERR—There is no distortion. How do you get a distortion out of that?

Ms Botterill—But the distinction I am making is between a permit that is worth this much next year and less next year, and is applying a uniform reduction—

Mr KERR—But if your permit is designed so it has a declining value over time, it will still create a market at a particular level at a particular time, and the value of the permit will be market determined. It does not matter whether they have been acquired through purchase or by structural design. How does it distort?

Ms Botterill—I am not an economist, but my understanding is that, if you have a company that is costing them a certain amount to make their abatement measures and they find that the permits they have got this year cover their emissions but next year they do not, they are going to have to make that next reduction at a higher cost, whereas, if you have another company that has got much lower abatement costs, they can sell off their permits down the track.

Mr McDOUGALL—You are making an assumption, however, that a company can only improve its abatement by extra cost. There is something getting lost out here in the fact that a lot of manufacturing organisations can actually get productivity and profit benefits out of improving their greenhouse gas emissions but they tend to be looking at it purely as a cost. What is MTIA doing about that?

Ms Botterill—A lot of our companies, our members, actually recognise that there are benefits. This is why it is, in fact, a focus of our tier 2 project, which is the managing energy for profits program that we are running with the greenhouse challenge office. As the title says, it is aimed at medium-sized energy users to make the point that you can make savings in your business on energy saving measures and at the same time reduce your emissions. We are certainly aware of the fact that there are cost savings. That is where the greenhouse challenge has been so successful as a voluntary measure. The ‘no regrets’ measures are making the point to the signatories that they can actually save money on their bottom line by reducing their emissions and their energy use.

Ms Blum-Caon—There is a lot you can do without capital investment but, sooner or later, with a lot of these things, you do come up against having to spend capital to take things to the next step. That applies to not just greenhouse gases but to lots of types of pollution. Where there are housekeeping things you can do, efficiency things, then you will come up against the capital.

Mr KERR—I accept all that; but, at the end of the day, isn't the marginal cost, the return on your investment, going to determine your long-term strategic position in a market, or whether to continue with a particular process? If you take the view that you supply quota and then you do not have any reduction in its value and you purchase out quota, the real market value of the rest of the available quota increases. You will be sitting there with an inefficient, grandfathered plant, chewing up quota which has now got a very significant market value. Why won't you make a new investments decision on that basis?

I am trying to get to the economic basis of the argument that distortions are introduced. I do not think they are, on an economic model. I wonder what modelling or economic analysis underlies this assertion, because what seems to me to underlie it largely is fear of change. You actually want to say, ‘You do not have to do anything.’ The truth is that once you introduce a trading system you do change things, because you change the value and you create a new marketable commodity, which in itself creates an incentive to do certain things and not to continue doing others.

Ms Botterill—We are certainly not advocating doing nothing. This is why we have been so active in terms of our participation in the Greenhouse Challenge and in advocating voluntary measures. As I mentioned in my opening statement today, we recognise the fact that there is now a new element in the global economy. There is a new cost. Basically, the production possibilities of this planet have been changed by the signing of the Kyoto protocol, and it is quite a significant change. It is something we are certainly not advocat-

ing that industry should stick its head in the sand and ignore. It is something that we are going to have to act on.

CHAIR—We are rapidly running out of time, but I have a couple of quick questions. You mentioned that, in fact, permits should be given to those who are emitting at the present time. How do we treat people who are being the good guys in all of this: the hydro-electricity generators and the solar generators? How do we give credits to them?

Ms Botterill—That is one of the complexities I was referring to earlier. The SO₂ trading scheme in the United States gave extra credits to companies that were undertaking particularly clean production methods. When they distributed the emissions in the first place, when they kicked the scheme off, the figure of about 120 per cent or 140 per cent of actual emissions was allocated to plants or to industries that had actually implemented some clean production measures. They were to a certain extent rewarded. As has been pointed out this morning, a lot of companies have also been rewarded in the sense that they are already making cost savings from their participation in some of the voluntary schemes.

CHAIR—You also mentioned earlier that the permits should be given, and I understood that they should be on 100 per cent or 120 per cent cover of emissions—or whatever percentage you are talking about now. Why wouldn't a scheme be set up in such a way that you would give, say, 90 per cent of a permit and hold back 10 per cent—this is just figures off the top of my head—to allow this draw-down and also to allow new people into the system?

Ms Botterill—At this stage, we have not arrived at a final position on whether it should be 100 per cent coverage. We certainly believe that there should be some mechanism, perhaps in the holding back of permits, to allow for new entrants and also for economic growth. This is one of the areas that we will be looking at more closely, as any proposed system is available for us to examine.

Mr JENKINS—Could I just touch on carbon sinks, and the way your organisation would see that aspect fitting into the tradeable emissions system? Have you looked at what value we can get in toto from that type of fixing?

Ms Botterill—It is not an area that we have looked at in any great detail, other than to say that we believe that all sinks will need to be covered by an emissions trading regime. We need to look at both sides of the equation, but we have not done a great of work in that area.

Mr JENKINS—We would see that, whilst it is not the total solution, it is a major part in companies making offsets, and so it is fairly important. I am not sure whether you are working on the assumption that the overwhelming majority of emissions would be included in the umbrella of a trading system. But others have put it to us that certain

sectors would make it very difficult for us really to put them under the umbrella, and so we would be working upon a system that did not cover everything.

Ms Botterill—It would have to be a mixture because, as we were discussing earlier, agriculture and transport are going to be a problem with emissions trading. Emissions trading will cover a fair bit, though: as I mentioned, a lot of people who have been taking voluntary measures will be moving out of those measures into emissions trading, if they have the opportunity to do so. Certainly, we are going to need to look at a policy mix, because the cost-effectiveness of emissions trading only applies where there are certain assumptions. When you look at agriculture and the use of domestic motor vehicles and so on, it is a very complex area, and some other measures may need to be looked at.

Mr JENKINS—Finally, do you see companies being able to take advantage of the Clean Development Mechanism and the joint limitation? Or is that going to be something that operates at a national level, between countries?

Ms Botterill—My understanding of the Clean Development Mechanism is that it is something that companies can take advantage of. I understand that the international partnering office is actually going to be making some sort of announcement this week about Clean Development Mechanisms and about opportunities for companies to become involved.

Mr JENKINS—Have you been doing any work about the interaction between CDMs and a tradeable emissions scheme?

Ms Botterill—It is not an area we have done a lot of work on, at this stage.

CHAIR—Thank you. We ran a little over time because we were late starting, but thanks for your evidence. Obviously, there may be some questions we might want to come back to you on. I do not think the debate has finished yet.

Ms Botterill—It certainly has not. Thank you.

[10.02 a.m.]

EYLES, Mr John Maxwell, Executive Director, Australian Industry Greenhouse Network, GPO Box 4866, Melbourne, Victoria 3001

GRUEN, Dr Nicholas, Assistant Director, Business Council of Australia, GPO Box 1472N, Melbourne, Victoria 3001

CHAIR—Welcome. Do you have any comment on the capacity in which you appear before the committee?

Dr Gruen—I am an Assistant Director of the Business Council of Australia, which is a member association of the Australian Industry Greenhouse Network.

CHAIR—Thank you. We have received a submission from you and have authorised its publication. Are there any changes to that submission at this stage?

Mr Eyles—No, there are no changes. Obviously, things have moved on a little since then; but in essence we believe that the submission is still relevant to the situation as it is developing. I can make a few brief comments to update you.

CHAIR—I invite you to do that, if you would like.

Mr Eyles—The main thing is that, as we look at emissions trading and other measures announced by the Prime Minister in November of last year, there is a need to understand how these things might interact, in order to ensure that any regime that we introduce is complementary to what we do in other areas—with the overall aim, as pointed out by the Prime Minister in his statement, of protecting Australia's national interest with respect to jobs and the competitiveness of Australian industry on one hand while, on the other hand, meeting our commitments in the most efficient way possible. We think that makes for a fairly challenging task to design a system that would be complementary to a range of regulatory and even voluntary measures.

We would stress that, in going through this, we need to build on successes that we have had in the past. For instance, in Australia's second national report, one of the main things identified in terms of improvements that Australia has already made relates to the industry greenhouse challenge program, with over 20 million tonnes per year of savings as a result of that program. That is another important feature to bear in mind as we work on all of these things.

We basically would stress that Australian business does understand the potential of emissions trading as a market based mechanism. It is clearly a very powerful instrument; but, as with all powerful instruments, we need to make sure that we understand exactly

how it is going to operate and what the outcomes of particular settings with respect to that instrument will be.

Our submission might be seen as unduly cautious by some people, but we would simply highlight that it is a very complex issue. It is much more broadly based than any emissions trading system that has been introduced anywhere else around the world. The SO₂ program in the US is held up as the shining example for emissions trading systems but, compared with this, it is really a very simple one: it is a national scheme, limited to a relatively small number of large players. We are talking here about a scheme which, if it is going to be effective, is going to be both national and international, with linkages between those systems.

We understand and would support that a well-designed system has a lot of potential, but equally there are a number of quite major issues that have to be worked through and understood, so that the right sorts of decisions can be taken about the way such a system would be set up. At the end of the day, we have to bear in mind, as we did in going into negotiations in Kyoto, that we have to ensure that Australian jobs and industries are not sacrificed. That is particularly challenging in an environment where, unfortunately, we still have a situation where only annex 1 countries are part of the protocol and where the developing countries vigorously oppose even any discussion of a timetable or any sort of future commitments towards negotiating some restraint, if you like, with respect to their situation.

That pattern is continuing. It continued in the last couple of weeks in Bonn; there is still extreme opposition within the developing countries for them even to entertain the opportunity to take on voluntary reductions. Argentina has advanced that concept and has been extremely heavily criticised within the G77 for daring even to advocate that developing countries be able to take on voluntary commitments as part of the protocol. Realistically, we have to say that we are looking at a very long time before all countries in the world are part of an emissions control regime. In that situation, that leaves a country like Australia, with its heavy resource bases, with a particular exposure—because the alternative location for expansion and growth for a number of our resource industries is frequently in developing countries.

In our submission, we have raised a number of issues. I want to make it clear that that is not to try to prevent consideration of emissions trading. However, we do think that it is essential that there be a thorough and extensive process of consultation, analysis and full understanding of exactly how a particular regime would come into effect and what changes it would drive. The characteristic of a market system will be that it will drive change, and it will probably drive it more rapidly than a number of other ways of effecting change, and so we had better understand exactly where that is going to take us before we trigger it.

The time that is going to be devoted to sorting out the difficulties occurring internationally—in terms of reaching agreement between the umbrella group and the

European Union with respect to trading, and then getting the rest of the world to feel comfortable that they understand it and will support it—will potentially give Australia a good opportunity to think this through carefully, to work on our ideas and to stay in touch with what other countries are doing. New Zealand is very keen, I believe, to get some sort of pilot scheme going in the trading area, and so we have an opportunity to learn and observe what others are up to, as well. With that brief introduction, I will leave the submission as we have it at the moment and allow more time for an interactive discussion on this.

CHAIR—Dr Gruen, do you want to make any statement?

Dr Gruen—No.

CHAIR—Does anybody want to lead off on questions?

Mr KERR—I would like to follow up a few of the points that you have raised. Firstly, I understand that you are arguing that there should be no rush to introduce a trading system. Given that there are many companies that potentially stand to benefit from being able to improve their efficiencies and operate in a way which would allow them to develop credit, and given that we want to move the football field in this area, isn't it the case that we actually disadvantage ourselves if we hold off? You say that we can wait for New Zealand and watch them, but why is it that our little near neighbour can put forward something and get it going but that we must sit around the table, still talking about it?

Secondly, in terms of the introductory issues, you have said that any scheme would have to be comprehensive in its introduction. We have had representations in Victoria, in particular from the private generators, who I think are members of your network, who say that it should be introduced as quickly as possible and that there would be no disadvantage in introducing a sectoral approach. In other words, start with areas where you can quantify the measurement and get the design rules right—and we are not talking about doing this haphazardly—and then build the protocols that enable other more complex measuring systems in: sinks and issues of that nature. They say that waiting for all that to be resolved would prevent most cost-efficient reductions in their crucial sector.

Mr Eyles—I do not see that this is something that has to start in all ways and in all sectors at precisely the same time, but you have to understand what the total map looks like. The way that you might phase it in has to be part of the design that you evaluate, and you must work out whether introducing it in a particular sequence is likely to produce outcomes that you want from the national interest point of view, or whether that is likely to produce outcomes that you do not want from a national interest point of view.

My very quick response on the New Zealanders is that they believe they have a very large number of units that they are going to be able to trade in international markets. They are very enthusiastic supporters of international trading, and that is the particular

reason: they expect to be a big seller.

CHAIR—We would be naive to believe that countries and companies who could stand to be advantaged by this trading scheme would not be out there actively trying to move it along or positioning themselves in the marketplace. Those who stood back would be disadvantaged, wouldn't they?

Mr Eyles—They may or may not be. It depends. People who are trying to participate in a market that does not formally exist at the moment are taking a risk—and, hopefully, a known risk with respect to what the rules might be. Sinks were mentioned in the earlier discussion, and that is clearly an area where there is a lot still to be sorted out. We made a small amount of progress in Bonn that started to provide some definition as to exactly how the protocol was going to deal with sinks, but there is a lot more work to be done there yet—including an IPCC special report that will not be finally available until COP 6.

I believe there will be a number of countries, particularly in the European area, who will argue vigorously that there should not be any final decisions taken on the sinks area until the special IPCC report is available. People participating in trading in the sinks area will be doing it on a risk basis and they may or may not be advantaged in doing that. It will depend on how well they have read the risks.

Mr KERR—What about the issue of permits? You have indicated that your preference is for free issue, but you have also said that there should be some account taken of companies that have already undertaken abatement measures. Again, we have had a lot of discussion about the economic basis of allocation. Firstly, those who come with the economic rationalist approach say that there is no basis for overcompensating people who have already made abatement measures because they did it for market reasons; in other words, they did it for reasons which improved their efficiency. So retrospective allocation of permits to accommodate people who have made market based decisions is not a rational or smart thing to do.

Secondly, they argue that the market itself will provide a driver which enables new entrants to not be disadvantaged. This is an argument which is difficult intuitively for many of us because there does seem to be some advantage given to existing players if you provide a permit to them. But I have heard this argument repeatedly and I am gradually becoming attuned to it. It does seem to me difficult to have that analysis and also say there should be some special measures for people who have already made market adjustments in the run-up to the introduction of the permit system.

Mr Eyles—You raised two issues. First of all, in terms of existing investments, the people who made those investments had an expectation of getting a return on that investment. By potentially imposing, effectively, a tax on them by auctioning permits or whatever changes that, and that was something when they made the investment they had

no reasonable knowledge of knowing. So, there is an argument to say that the existing operations do need to be looked at differently.

Mr KERR—I was not arguing that. I was looking at the second point that you made. I can accept where you are saying that they be issued free—you can make a policy choice as to whether you issue them free or at a price or at a discount, there is no distortion in that, whichever way—but there is a suggestion in your submission that—

Dr Gruen—Reward for early action.

Mr KERR—Yes, reward for early action.

Dr Gruen—It is almost a platitude now of the army of consultants travelling the world, mostly from the United States, offering their wares as experts in these areas with regard to the sulfur dioxide trading, that reward for early action is very important. I agree with that. Perhaps the strongest way of putting it would be to say that, if you are going to engage in some degree of grandfathering, if you do not proceed from early on saying you are going to do that, you actually create very perverse incentives, and that is that it becomes worth while for companies to delay emissions abatement. Indeed, at the limit—and one would like to think Australian companies would not do this—it becomes an asset to them to increase emissions until grandfathering takes place.

Mr KERR—I understand what you are saying, but is that not an argument for moving rapidly to the introduction of a trading system? If one is put into the atmospheric that this is an inevitable—

Dr Gruen—If you pardon the pun.

Mr KERR—mode of reaction that governments will take, preferable to command and control regulation, and there is a broad consensus that this is the most efficient way of addressing it with the least adverse economic and social consequences, then surely you immediately start to create distortions. People will say, ‘Can we put off abatement measures until such time as we can actually get an economic credit from it?’ I have had these conversations with major companies, which have been saying to me, ‘Should we make these investments now or hold off? What will an incoming Labor government do?’ It is not an abstract or theoretical question.

Mr Eyles—It is clearly an issue that needs to be dealt with. But one of the things that we were trying to deal with here is that the participation in the greenhouse challenge program did shift us from a business as usual path as far as I am concerned. I know from direct experience that measures have been undertaken under greenhouse challenge that would not have otherwise been initiated. Fortunately, in most cases there are other benefits as well as greenhouse benefits, there is no doubt about that. It was in response to basically a challenge from government that said, ‘We are going to start reducing emissions either

through a carbon tax or by some other means.' The 'by some other means' had pretty strong support, at least from big companies in Australia and the major associations, for greenhouse challenge.

I think it is something of significance that should be recognised and the people who did not participate in that should not be left on an equal footing simply because they did not get motivated to do something under greenhouse challenge.

Dr Gruen—The other issue you are raising there is the base year for grandfathering.

Mr KERR—I am raising a base year for the grandfathering issue. Also, if you allocate permit at existing levels then you may taper it down or you may choose some other mechanism. If you add to that allocation at free permit a superstructure of additional permit in recognition of past action, you are actually starting out your grandfathering process at a level of emissions as if the greenhouse challenge program had not been in place. So, you are lifting the starting point in available permit. I am not certain that that is a desirable outcome.

Dr Gruen—Certainly if you run the tape backwards, if you look at it with retrospective foresight, if you know what I mean, it is the right thing to do because otherwise you would have to say, 'Yes, for the last X years while we have been encouraging companies to go into the greenhouse challenge, at the end of the day there turned out to be a penalty involved in doing that.' So, it does seem to me to be important.

Mr KERR—What is the penalty?

Mr Eyles—The penalty will be that those companies are not going to have the very low cost abatement options that are available for people who have not even looked at it yet.

Dr Gruen—Not only that, but they get fewer permits. That is the issue. In a sense, if people have still got the easy options to implement, that is fine, but they should not then be able to grab hold of an asset which is called 'permits' and sell them to people when other people have already gone down—

Mr KERR—All right. Maybe the argument is that companies that can establish an effective participation in greenhouse reduction, and you would have to benchmark this in some way, and God knows how difficult that would be,—

Dr Gruen—That is the problem.

Mr KERR—get 100 per cent and others do not, on the basis that they have available the low fruit. So, that is an argument against free allocation of permits to the

vast majority of industries.

Dr Gruen—That is right. The principle we have been putting forward is reward for early action. On top of that you can overlay a miserly allocation or a generous allocation, but the two principles should be kept separate. Likewise, you can say this is an argument for getting going the trading system early, but that is a huge decision which should be made on its own merits rather than this little wrinkle in the system which can be dealt with in a much more targeted way, which is to say, 'Let's work out a base year, let's work out a formula which is fair.' It must be fair to companies that are not just starting now, which creates perverse incentives, but is fair to companies starting at some period in the past, which is the period from which we do not want to penalise people for taking early action.

Mr KERR—Have you done any operational thinking in this area?

Dr Gruen—Not that we can share with you.

Mr KERR—It is an interesting proposition—

Dr Gruen—Absolutely.

Mr KERR—but I can see it is beset with enormous and frustrating difficulties. The idea sounds fine—

Dr Gruen—Yes, that's right.

Mr KERR—but if you overburden anything like this with a whole range of complexities that will create tensions within the business community, and I imagine it would—

Dr Gruen—I expect it would.

Mr KERR—I suspect they would create a lot more tensions than just simply a flat allocation at existing levels. If you operationalise this I would like to see what you actually propose in terms of a base year and measurement backwards and all those sorts of things.

Mr Eyles—We are continuing to work on this issue. You are right, it is complex and it is difficult. But, at the end of the day, a flat simple system would also create a huge amount of tension and drive the kind of restructuring in the economy that the government may not want to see. Inherent in the consideration of emissions trading is the need to deal with the complexity of these issues, and the need to do some very careful analysis of exactly how it is set up, how you deal with the base year, how you deal with the changes from the base year, including early action and not so early action. You have to differenti-

ate; otherwise you create the wrong sorts of incentives, or signal that you are—

Mr KERR—My final question is this: if you are arguing that early action should get credit, doesn't that apply internationally as well, in the sense that—putting everything else aside—wouldn't it make sense for Australia to introduce an early program of this nature to minimise the kind of catastrophic system changes that are necessary. Assume that you have a trading system operating with some form of reduction or taper in credits for the period now until the year 2005 or 2005-2008. Surely that gives people a lot longer time and much more flexibility than if you were, for example, to defer this for the term of the next government, and then come to it as a program where change has to emerge more rapidly.

Mr Eyles—I am not sure that sufficient work has been done on those different trajectories to be able to give you a definitive answer. One thing which occurs to me is that, for instance, with the US—one of the major players in this—I do not believe we are going to see them trading under a cap for quite some years yet. I think we will see them introducing incentives and so on, but we will not see them trading under a cap within the US for quite some time.

I think there is a moot question about how soon you start to really change your trajectory in terms of your emissions to meet that budget period, recognising that the protocol we achieved in Kyoto does not give any credit for early action. We cannot bank anything that we do before the budget period.

Mr KERR—We can bank all the land clearing changes which have been stored up. I do not know how those issues are resolved in Bonn and subsequently; nonetheless, I accept that other countries will have different rates of adaption and change. Some will drag their heels, some will move rapidly. That is the nature of this game. We want the developed world to come into this process and, as yet, it has not shown too much spring in its heels in that direction.

All that said, if Australia does move beyond signing the protocol to its ratification, and does undertake these obligations, then one of the points that the greenhouse network and others have always made is that Australia actually takes these things seriously. If we are going to reach the emissions reduction strategy targets that have now been accepted, then is it not logically the case that the greater the time frame over which this can be done, and the more market driven the mechanisms are, the less the cost of adaption will be?

Mr Eyles—Yes—

Mr KERR—I remember with vivid detail the 25 per cent tariff reduction that the Whitlam government introduced, and the way in which that actually created—maybe necessarily, but it created—an enormous period of economic and social dislocation. Surely

it is a matter of adapting as effectively as you can, over the longest time frame, giving people self-interested reasons for making the changes themselves rather than having government drive it by command and control regulations towards the end of the period.

Mr Eyles—I agree that you have to create that certainty out into the future. Exactly how you start adjusting the cap, if you like, that the trading system is operating on I think is another parameter that you have to look at very carefully. In our case, I think there is a need to allow some time to pass for some of the renewable type projects—such the gas projects in Queensland that are talked about to come on stream—to see some co-generation start to come on stream, in terms of power generation and so on.

Mr KERR—But why not economically advantage it?

Mr Eyles—It is really how you set the targets that you are going to trade within in that period prior to the budget period, in my mind. That is another parameter which will determine the cost of the permits.

Mr KERR—I accept that, but, surely if business knows something like this is going to happen, it would want to know the guidelines, the rules and the framework as soon as possible; otherwise people will be making these beggar my neighbour decisions. They will be making decisions saying—

Mr Eyles—I am sorry, we are not arguing for not determining the rules as early as we can; we are arguing to determine the rules based on thorough analysis and understanding. Yes, let us do that as early as we can, but let us not assume that, having determined those rules and determined an implementation plan, that will force an early change to X per cent by 2005, for instance, because that is another parameter in the design that needs to be worked through.

CHAIR—I would like to follow up with a couple of questions, again on these permits. It has been consistently said by emitters and industry that these permits should be allocated free. But we have a problem as to how we then satisfy those people who are not large emitters—in fact, are nil emitters in the generation of electricity—say hydro power, wind energy and solar energy, et cetera? And how do we allow new entrants in, who may be emitters but not big emitters but need to get into the system? I think I used a figure a while ago of 90 per cent—I do not know what the figure might be—but if they were allocated free and then some were held back and some auctioned, the thinking behind this is that while industry says it cannot make any cheap reductions in emissions, when it is really put to the line and has to think about what it might do, it might use some lateral thinking and buy a wind farm or whatever. It really forces the issue if they have to tackle this particular position. Why shouldn't those who are generating clean electricity be given permits according to the carbon dioxide equivalent, if you like, of generating that energy from coal?

Mr Eyles—If a trading system is introduced, I believe they will have an advantage because they will not have to buy permits to cover the electricity that they supply. That will immediately change the competitiveness between the renewable energy and the energy based on coal.

CHAIR—That may be true for hydro; I do not know whether it is true for solar and wind at this stage.

Mr Eyles—It has to be, because they do not have to buy any permits.

Dr Gruen—The other point about options is that, again, you are getting a bit ahead of where we are, in the sense that we need to work out some of these issues and micro detail for ourselves. It is clear from our submission that we have not done that at this stage.

CHAIR—Buenos Aires is getting very close, so we—

Dr Gruen—Yes, that is right. The crucial issue in a trading system is to demonstrate that some trade is taking place. The way in which that is being handled within the American SO₂ system is that there has been, as I understand it, full allocation, and there is nevertheless an option of something like 2½ per cent a year. The way that happens is that 2½ per cent of everyone's permits are yielded up and auctioned and the revenue then goes back to the permit holders. That is a way of achieving both the objectives—of ensuring that you can introduce the scheme without massive dislocation, at the same time as having a liquid market for people who need to go into the market and buy new permits. That is the kind of model. In other words, what I am trying to say is that rather than advocate it, you need not face this choice between allocation and auctioning. You can have the two things coexist—full allocation and a liquid market of however much you want, without using that kind of mechanism.

Mr Eyles—The other thing is that the growth that is going on in the Australian economy is going to quite quickly establish tension for permits. One industry sector with which I happen to be familiar—the aluminium industry—talked to you some weeks ago. In that industry, for instance, their per unit of production emission rates will go down by nearly 20 per cent between 1990 and 2000, and yet because the growth in output will go up by about 30 per cent over that same period, there is a need for additional permits there in any case. I would agree with Nick that it will work its way through.

I keep coming back to wanting to stress the point that we know Australia's economy is made up in a way which makes it particularly vulnerable to excessive costs in this area, and that is the reason for our note of caution through this whole exercise. We think we need to move based on thorough understanding rather than concern that Buenos Aires is in November or that there is an election coming up and we had better agree to

something now because our next government may impose something more radical on us. We are doing a lot of work on this and we will continue to work on it. We are finding it is tough going, particularly as we try to find ways and means of getting agreement across a number of industry sectors, which is what the Australian Industry Greenhouse Network is made up of. There are quite a number of different sectors and interests represented in our organisation, so it is pretty slow and tough going to get agreement on these issues. But we are continuing to work on it. We see this as a very serious option to be considered.

We have some concerns that, in considering this, we have to, at the same time, deal with other regulatory type measures which are already under way. It is not quite, as Duncan suggested, an either/or situation. We do not have the option at the moment of saying, 'Let's go with emissions trading. Let's not do mandatory renewables. Let's not do minimum efficiency standards for industry and minimum efficiency standards for power stations.' We have to try to deal with both things.

CHAIR—I, personally, believe that we are probably ignoring some of the opportunities with the Clean Development Mechanism. If it comes into an international trading scheme, and there are benefits in going into developing non-annexure 1 countries and improving efficiencies and emissions there, surely Australia is in a fairly strong position to take advantage of that. Who should be pushing that? Should the government be pushing it or should individual companies be pushing it to get best advantage?

Mr Eyles—I think it probably needs both. Unfortunately, the Clean Development Mechanism still needs a lot of work done on it internationally. I, personally, believe that it has probably the greatest potential to make this a truly global effort. I am a strong supporter of the Clean Development Mechanism, but there are some major issues still to be worked through there in terms of what the transaction costs might be because of the talk about the supervisory structures and the certification structures that will be set up over it, plus there is provision for a fund to be generated to provide assistance to countries for adaptation.

It is unclear as to what the overheads associated with the Clean Development Mechanism might be but, in a general sense, I think it is something industry has supported right through this debate. Previously it was called joint implementation, and we have been supportive of doing that wherever it made sense. Up to now, there has not been any agreed basis for you to get credit for that work. At least the Clean Development Mechanism says there will be a basis for getting credit for those sorts of projects in the future, and if the political difficulties around setting it up can be overcome and the transaction costs are not too high, I think it will be attractive to industry.

Dr Gruen—There is a role for government and industry to be as vigorous as they can both there and with joint implementation generally. I think when we look back in 15-odd years, we will not believe some of the places we found to abate carbon emissions. This is something that we really should be as vigorous as we can about. There are people

around the place making all sorts of grand claims for both of those flexibility mechanisms. I approach that with a due degree of caution but, even so, I still think it is very important to be vigorous because the opportunities may be hard to grasp but they may be pretty big.

CHAIR—Dr Gruen, I think you were present on Friday when I delivered a paper in Sydney. I discussed the issues of where emissions should lie. I was particularly looking at the aluminium industry and some of our exporting industries, including coal. We have some conflicting positions in some of these areas. We need to keep these to the fore in our negotiations. Have you done any work in that particular area or do you have any opinions on it?

Mr Eyles—We have discussed that issue at some length on a number of different occasions with Ambassador McDonald. I think it is probably an issue that you should discuss with her. As we see it, that is very much in the politically too-hard basket in terms of the international negotiations. Clearly, it is a significant issue for countries like Australia which are major exporters of energy intensive products, but there is a lot of complexity and difficulty in negotiating that. A number of other countries, probably us included, export wood products, for instance. Should that be taken into account in where the carbon ends up?

At the end of the day, unfortunately, one of the things that may arise out of all of this is that it could have a perverse outcome. For instance, if aluminium exports to another country require that country to somehow provide us with the credits for the emissions, then that would create a real incentive for them to buy their aluminium from a developing country. Until it is a total global scheme, you really cannot make those sorts of schemes work very effectively because they could have a very perverse outcome because of this artificial distinction between whether you are an annex 1 country or a non-annex 1 country. Some of the most up-to-date smelters in the aluminium industry, for instance, now are being built in developing countries. That is the future competition.

Dr Gruen—The one thing we can try to do is to ensure that the issue of carbon leakage is uppermost in the minds of international negotiators. At the moment, it cannot be seen. At the moment, I do not imagine much has occurred. You can see in the investment plans of major emitters that if you are looking into the future it is already quite likely that a substantial amount of carbon leakage is planned. I think we need to keep the international community focused on the fact that carbon leakage has no environmental benefits. It has economic costs and it may indeed have environmental costs. If you had to guess which would be environmentally better without any other information, my guess would be that, if something is economically efficient, it is more environmentally efficient. Obviously, that is a very rough rule of thumb but, if it is more expensive somewhere, it is quite likely it involves more emissions—that part of the expense involves shipping our coal to this destination and burning the coal there. That generates more emissions in simply doing that.

It is exceptionally difficult for us to deal with this issue on our own. If we are required to do it on our own, the only way we can do it is to shunt costs from one sector to another sector. But it seems to me to be something where we are uniquely well placed—in terms of our own self-interest—to insist it is a major and continuing pre-occupation of international negotiation.

Mr McDOUGALL—I think most of the points that I wanted to ask about have been covered. The one that does intrigue me a bit, if you could just throw your thoughts on to it, is how multinational companies trade internally and within an international system which fits into a national system and the complexities that arise from that. Have you some thoughts in relation to that?

Mr Eyles—The first thing is that the trades to be recognised under the protocol will have to be authorised in some form or another by the governments, and there is continuing negotiation and things to be resolved about exactly what that means. Potentially it might mean that all of the governments linked to the operations of a particular multinational that wants to carry out trades will need to authorise those trades because, at the end of the day, the national governments are the ones that will be bound under the protocol, if it is ratified. In the process of doing that, that will require the governments to spell out the conditions and terms in which that is carried out.

Some multinationals I think are concerned that they may have to deal with a situation where some countries—there are some obvious ones, probably including Australia—are likely not only to permit government-to-government trades but to permit trades at a corporation level as well, because they see that as in fact improving the efficiency of the market. There may well be some other countries, though, that do not have that view and that will not authorise trades other than at a government level. I think a multinational with operations in two countries like that will have some difficulty in managing their internal trading process.

Mr McDOUGALL—But surely there is some benefit. Let us say, and you raised the point earlier, there is a multinational company—it is limited to annex 1 countries—and that company makes a decision to push its new development off to a developing country that does not have to comply. The government of the country that it has come from is certainly going to have an advantage if that manufacturing is going to go off. Why wouldn't they agree to it? And how does that get caught up in the international trading agreement? How can a government stop that from taking place?

Mr Eyles—I do not think they can. That is the carbon leakage dilemma and I do not see how that can be prevented, if I understand the basis of your question.

Dr Gruen—That is the nature of the protocol we have signed.

CHAIR—I am going to have to leave it there; we are running out of time,

unfortunately. Thank you very much for your evidence. As I said to other witnesses, we might come back to you on certain questions at a later date, if you do not mind.

Mr Eyles—Thank you very much.

[10.49 a.m.]

FISHER, Dr Brian, Executive Director, Australian Bureau of Agricultural and Resource Economics, GPO Box 1563, Canberra, Australian Capital Territory 2601

TULPULE, Mr Vivek Ashok, Research economist, Trade and Global Change Branch, Australian Bureau of Agricultural and Resource Economics, Edmund Barton Building, Barton, Australian Capital Territory 2600

CHAIR—Welcome. We have not received a submission from you but we have copies of two of your publications which deal with domestic and international emissions tradings. Would you like to make an opening statement?

Dr Fisher—Thank you, Mr Chairman. I will just make some general points first and then, if you would like, we could move to questions.

First of all, it might be worth talking a bit about the whole question of ratification and entry into force of the protocol and the implications that has for when you might or might not put measures in place, including emissions trading, in Australia. The only certain piece of information we have at the moment is that the first commitment period under the protocol starts in 2008. At this stage, we do not know when the protocol will be ratified and, therefore, when it will enter into force. As a consequence of that, there is some uncertainty about when you might see those international arrangements and, therefore, the implications of those international arrangements falling on Australia.

In the second publication that we have sent you—the one on international emissions trading—we talk a bit about the optimal trajectory for trying to hit the target from 2008 to 2012 that Australia is committed to under the protocol, should that protocol enter into force. We suggest that, at least theoretically, there is some evidence that you should start early—in other words, that the adjustment costs associated with starting early are less than if you try and hit the target from 2008 onwards. The real issue, of course, is that to hit that theoretical optimal is quite difficult because of the uncertainty associated with exactly what is happening in the international negotiations.

There really are no decisions currently being taken at this stage in the international negotiations that help us very much in terms of deciding when we should establish an emissions trading regime in Australia. The negotiations at the moment are about the nature of those flexibility mechanisms, the policy mechanisms that will be put in place internationally. The negotiations, from my personal observation, are proceeding slowly and will take, I suspect—and this is again a personal observation—some years to complete. The things that just recently happened in Bonn, that will happen in the fourth conference of the parties at Buenos Aires and beyond do not give us too much information at this stage about the timing of the introduction of an emissions trading regime in Australia. In terms of what we know about any international scheme, should it be implemented, there seems

to be general agreement among those who are advocating emissions trading that the coverage should be comprehensive and that, should these arrangements go into place, we will be trading in units denominated in carbon dioxide equivalents.

The other thing that is probably worth saying is that there is, at the international level, a lot of discussion about compliance. The point I would like to make is that compliance is an issue for the protocol as a whole, not just emissions trading. So we need compliance arrangements negotiated for every mechanism, every policy instrument that is put in place at the international level, not just emissions trading.

In relation to some of the domestic issues that have come to our attention recently, I will draw on our experience at a conference we held in late May in Sydney to summarise some of the issues that came up. At that conference there was widespread agreement that emissions trading was a good instrument to put in place in Australia; that, if we were to put in place such an instrument, the coverage should be as comprehensive as possible but that there are some limits. For example, there are some industries that it does not make too much sense to try and cover in an emissions trading regime. It seems to us that it does not make much sense to try and cover methane emissions from the livestock industries, for example, merely because those non-point sources are very difficult to monitor and the enforcement problems in that industry would probably be quite difficult. So when we say that the emissions trading arrangements should be as comprehensive as possible, we need to keep in mind some practical restrictions in the design.

From our perspective it makes good sense to include sinks in the design. There will be a lot of debate about this internationally, but in terms of a domestic arrangement it seems to us that it does make good sense to have it as comprehensive as possible and therefore we should have sinks included. Of course, there still has to be a lot of scientific work done in terms of the exact amount of carbon sequestered in different ecosystems, but that is not beyond the science community. That is just part of, basically, good design.

Finally, I notice that there has been a lot of debate here and elsewhere about the allocation of permits. It seems to us that that is an extremely vexed question; it is probably the thing that is going to consume the most time in terms of putting an arrangement in place. There are arguments for auctioning every permit. Not everybody would agree with that, and the opposite of that is grandfathering every permit.

In the case of the US sulfur dioxide trading arrangement, a small proportion of the permits is auctioned. The reason that small portion is auctioned in the United States is principally to help the market determine a market price. So it is a price discovery process, rather than an allocation process.

If we decide to grandfather those permits, there is a question of what the base year will be. The base year in both the protocol, effectively, and the convention is 1990, but it is unlikely that we have enough information to grandfather permits sensibly on the basis

of the 1990 year. That data probably does not exist. So we would need to choose some other base year and then factor back to the number of emissions we had in 1990. If we do that, we are going to have to be careful about strategic behaviour associated with those who may wish to manipulate the emission levels for the announced base year.

All of those issues, I think, are at this stage underresearched and most of the answers are unknown. About the only piece of advice I can provide you, Mr Chairman, is that is going to be a very difficult issue to solve. With that I might stop and we can answer questions.

CHAIR—I might try a couple of curly ones first. I have not seen anything from Bonn, but obviously that was the next step in negotiations. We have all watched with interest, over a number of years, the negotiations for a world trade agreement, which took quite some time. I would imagine that this is not going to be any different; it is on a similar scale, I suppose, with similar complexities. Nevertheless, we should not sit back and assume that we have got time on our side. We should be doing something in Australia, shouldn't we, to try and hit those targets—to aim for those targets and put a scheme in place to try and achieve that?

Dr Fisher—I think that that is the crux of the matter: one of the difficult policy issues we have to face is how we phase into the targets for 2008, assuming that they are in place. We have two problems on our hands associated with this. One is that it is likely that the adjustment costs associated with phasing into the target will be less if we start early. On the other hand, if we start early and we impose restrictions in Australia when other annex B countries to the protocol have not imposed those restrictions, then we immediately face loss of competitiveness against those other developing countries. For instance, if we were to put in place strict greenhouse gas emissions in Australia and the United States did not, we would be at immediate competitive disadvantage in our metals industries, for example, against the United States and we would lose export revenue as a consequence of that. You have to weigh up those two things: the issue of phasing in and reducing your adjustment costs versus the potential losses in export competitiveness associated with imposing restrictions if others have not done so.

The other issue that we have to be concerned with is the whole question of carbon leakage to developing countries, but that is something that is going to be happening regardless—assuming that we have this protocol enter into force. There is really not much we can do about that except to encourage developing countries to come on board on this protocol as quickly as possible.

CHAIR—I dare say that these negotiations at the present time are to do with trade advantage as much as they are with carbon dioxide emissions, and in Australia's position we have certain areas that we need to protect. For instance, we export a lot of aluminium and a lot of coal, yet on the other hand we see the Europeans saying, 'We are going to take advantage of the nuclear power we produce and the fact that we are phasing out some

inefficient factories in eastern Europe.' Australia also has a very big reserve of uranium. In the international negotiations, has this been factored in at all as a clean fuel, and have the negotiations taken into account the environmental dangers of uranium as compared with CO₂?

Dr Fisher—While those issues are under the surface, they do not often surface as explicitly as that. One of the characteristics of this negotiation is that to date it has been conducted primarily by groups and people from environment areas in government rather than trade areas in government. Consequently much of the debate is really about the environmental effectiveness of these arrangements rather than about the trade implications. Perhaps that is one of the difficulties we have faced in the negotiations. Many of the demands, for example, by the European Union have not been embedded in what is economically possible but what some environment departments felt was desirable in certain countries within Europe. Those things have made this negotiation slightly more complex and more difficult than something like the Uruguay Round, which was very explicitly a trade and economic negotiation.

Dr LAWRENCE—And ignored environmental and social impacts.

Dr Fisher—The Uruguay Round was principally about trade; however, I think there was occasion when some environmental issues were discussed.

Dr LAWRENCE—With a small 'o', I think.

CHAIR—But it would be stupid to believe that trade was not involved in some of this, at the end of the day. Obviously, the countries will be trying to position themselves to be competitive. We have fought wars over trade, so surely behind it there is going to be some of that thinking.

Dr Fisher—I think the reality of this negotiation has started to dawn on some countries since the protocol was negotiated, when countries have started to have to think carefully about the difficulties associated with hitting the targets that have been agreed. I think that explains to some extent the time it has taken the European Union to agree to burden share internally as has recently been announced, in the last few days.

CHAIR—I return to the area that you said was one of the difficult areas—the obscure sources of emissions. You mentioned agriculture, which is an area where Australia finds itself in a difficult position. It is my understanding that methane is considered to be 16 times more warming than CO₂—

Dr Fisher—I think 21.

CHAIR—There is some argument about how much, but it really does leave us with a considerable problem. I think you said that at this stage it would not be worth our

while trying to cover that because it is so difficult. Would our international partners agree to that? Surely they would be trying to position us on that one.

Dr Fisher—If I have accidentally mislead you then I should make myself absolutely clear. What I meant was that when I was talking about the coverage in emissions trading arrangements, what I was talking about was coverage specifically with emissions trading as the policy instrument. We would need to deal with emissions across the board, preferably in an exactly equivalent way, at least in terms of the implicit price that we put on the carbon equivalent of those emissions. What I am saying is that we would need to find other policy instruments to encourage agriculture to reduce its emissions in an equivalent way to the sectors that we might be encouraging to reduce emissions through an emissions trading arrangement.

There is a full range of instruments. You can choose from regulation, taxes, subsidies, and subsidies on research and development—all those things. For example, there is work going on in the production of methanogens, which are drugs that might be used in ruminant animals to increase the efficiency in the way the rumen works. Whether those things will or will not work is a moot point. You would need to ask the scientists whether they believe that there is much of a chance of that coming to pass. That is one potential approach to dealing with this particular problem. Whether it comes to fruition is in the lap of the gods.

CHAIR—I will give you the job of chasing down all the kangaroos!

Concerning whether our base line data is accurate and whether we will have it in place to meet the time scales that are necessary, what is your position with that? Do you have any background on that?

Dr Fisher—Our job is to take the data and do projections. I think—

CHAIR—Coming from the States, is it?

Dr Fisher—The right people to ask that question of are the people at the Australian greenhouse office who are in charge of the inventory work and all of the science and reporting that goes to our international obligations and our obligations to government to provide that information.

Dr LAWRENCE—You said a couple of times in your introductory remarks that, in relation to the targets, ‘assuming that they are in place.’ Do you anticipate that there will not be any agreement reached by the target dates set?

Dr Fisher—I am working on the basis that we will have ratification and that the protocol will enter into force, and on that basis we are proceeding with our research and I continue to go to these negotiations. However, there is always the possibility that the

United States will not ratify. I think the US Senate has made some very strong statements about the conditions under which it will allow this protocol to be ratified and so there must be some uncertainty associated with that prospect. Of course, the United States constitutes something of the order of 24 per cent or 25 per cent of CO₂ emissions in the 1990 base year. If the US does not ratify—and I am not wishing to suggest for a moment that the US administration is not striving to cause ratification to occur—it would put this protocol in difficulty.

Dr LAWRENCE—That position has already changed though, hasn't it? Even at the time that the most recent conference was on, the US Senate was sabre rattling and suggesting that it would not endorse anything that was necessarily agreed by the government at that point.

Dr Fisher—Sorry, the—

Dr LAWRENCE—By the Clinton administration.

Dr Fisher—The position hasn't changed?

Dr LAWRENCE—They were saying that during Kyoto and immediately after.

Dr Fisher—Yes, they were.

Dr LAWRENCE—I am wondering what has changed. You seem more provisional in your expectations.

Dr Fisher—No, I do not think I am more provisional, I am just alerting the committee to the notion that this thing is not a completely done deal, although I continue and we continue in ABARE to work on the research on the basis that something will happen with respect to this protocol.

Dr LAWRENCE—One of the other things that comes through both in your submission today—and this is important as we are looking at an emissions trading regime but we are obviously looking at some of the wider issues—and in some of the submissions made to us is that it is very clear that there are advantages to certain industry sectors and certain export sectors in taking a lead role in relation to various models and methods and processes and products that control emissions, yet you appear to be saying all the time that we would lose advantage. You appear to be saying we would lose our position if we moved prematurely to anticipate that these protocols would be agreed to, or something like them. Is that justified by the economic data? Are there no opportunities in Australia being relatively forward in developing some strategies to reduce emissions, whether they are through trading or other means?

Dr Fisher—What I am trying to say is that when we are taking this decision about

when to move, we need to take both sets of information into account. For example, if I think back to some of the statements made at our May emissions trading conference, there was a lot made of the so-called first mover advantage, in other words, the notion that if you have an arrangement first in place then you have the opportunity to build a deeper market, you have the opportunity to have your system used as the benchmark or the precursor to other systems around the world so that some of your rules potentially will be adopted elsewhere around the world.

Clearly, there are advantages in being first. But as I said before, we do have to weigh up the consequences of being first against some of the potential competitiveness losses if we are first. This may not be an issue if the protocol is ratified by and enters into force in, say, 2001 or 2002. However, it does become an issue if we are still waiting for the protocol to be ratified in 2005 or 2006 and we think it still will be ratified. We have the target bearing down on us of 2008 so it would clearly be in our best interests to move.

Mr BILLSON—I have about a dozen questions to ask so bear with me. The interplay question fascinates me. This whole Kyoto process has the potential to have a profound impact in so many ways once you start thinking about its application. I am interested in whether you can update us from Bonn or from elsewhere on how the interplay question between this protocol and some of the trading issues is being discussed.

We spoke earlier about trade between climate compliant annex 1 countries and non-annex countries. We talked about how we could bring a non-annex 1 trade product into a climate controlled world, whether it needs a climate controlled certificate on it which might amount to a glorified tariff or something like that. How are those discussions going? I cannot see us getting fully into this without answering those sorts of questions.

Dr Fisher—It is fair to say that the discussions in Bonn most recently basically did not touch on any of those issues. The main discussions in Bonn were around the questions of how we will treat sinks under the protocol. We talked about the question of adequacy of commitments of all countries, in other words, the commitments that countries have or are committed to under the Kyoto protocol and, in the case of developing countries, under the convention, and whether they are adequate to meet the objectives of the convention.

In addition to those, there is the question of whether there will be compensation available from developed countries to developing countries as a consequence of the impact of climate change, or the impact of measures, and there is the question of the so-called flexibility mechanisms. These are emissions trading, joint implementation, the Clean Development Mechanism, et cetera. They were the four basic sets of issues and the sorts of complex issues you are talking about that really have not been addressed, and I do not think will be addressed until we get past some of these more fundamental sticking points that—

CHAIR—In one series, or later?

Dr Fisher—Much later would be my guess.

CHAIR—Because it is fundamental, isn't it?

Mr BILLSON—Yes. Does it not amount to having a bit of a debate in a bubble—excuse the pun; that we can somehow quarantine this debate from the world and the systems that go on and govern nations' conduct and individual behaviour? It is a nice way to do it, but I just cannot imagine how people will cop that at the end of the day—a notion, a framework that is pure in its own right, but is like leaded petrol over here when someone has created a different sort of engine that does not run on it. There is a bit of a fundamental real world issue there, isn't there?

Dr Fisher—I agree with you. But I think the nature of the debate at the moment is more on the broader issues and we have not got down to the nitty-gritty of the sorts of things that you are talking about. I do not expect us to get down to that for some time.

Mr BILLSON—Some countries are talking about encouraging developing countries to opt in. Surely, if a developing country is going to opt in, they would have to understand what the advantages are of doing so and what the disadvantages are of not doing so. Doesn't that then bring you back to all these other related interactive issues that we are not really talking about at the moment?

Dr Fisher—It potentially does, I think. But the level of sophistication of the debate, frankly, is much less than the level that you are suggesting at this stage.

Mr BILLSON—In our own country, if you could buy aluminium somewhere outside the annex 1 countries, there is potentially a huge advantage there. Cement, that calcination process, you cannot do a whole lot about. If that is factored in as a cost or a compliance obligation in Australia, there are countries on our doorstep that have cement to burn—excuse the pun again.

CHAIR—Over-supply.

Mr BILLSON—They will just wander down here. I am not sure whether we as a nation will be terribly happy about standing back with an invitation to displace domestic industry because we have not worked through some of these critical interplay issues.

Dr Fisher—Yes, I agree. That basically goes to the heart of this whole question of carbon leakage and the loss of export competitiveness, which, I think, accounted in our estimates last year for some of the consequences of taking on these commitments. Something of the order of 40 per cent of the costs falling on Australia are associated with the types of costs that you are talking about—basically, a loss of export competitiveness

and carbon leakage associated with taking on commitments whilst developing countries are not committed to taking on those commitments.

Mr BILLSON—Moving into sinks and getting back to some of the Bonn agenda, last week I read—frankly, with amusement—that there is an energy producer in New South Wales who has purchased an established forest in New South Wales and is claiming that as a huge greenhouse windfall. I would have thought that that is exactly not the sort of outcome we would be looking for, bearing in mind the debate we have had about vegetation, net gains, net losses. Simply transferring ownership of something that is existing is not going to add a whole lot of credibility to our sinks argument, I would have thought. What are your thoughts?

Dr Fisher—Basically, what is happening in the negotiations is that the negotiators on sinks—and the right people to talk to about this are, again, the Australian greenhouse office, because the negotiators are located there—are starting at article 3.3 of the protocol and starting to define issues such as what are the definitions of afforestation, reforestation and deforestation, what is the definition of ‘since 1990’ and issues like that.

Of course, it is true to say that transferring ownership of already established forests, particularly if they were pre-1990—and I do not know whether this report was or was not pre-1990, but if, for example, it was pre-1990 then they are probably not eligible—is again dependent on the negotiators deciding on those definitions and having them agreed to, and on us making sure that we have arrangements in place in Australia that are consistent with the international arrangements that will be agreed to.

CHAIR—The Puerto Rico one is often put up as an example of a company buying in to get some advantages as far as carbon credits are concerned. I understand from a representative from the United Nations last week that in fact the UN may have rejected that as being a credit. Do you know anything about that?

Dr Fisher—Is this Costa Rica?

CHAIR—Yes.

Dr Fisher—Those arrangements will be under something called the Clean Development Mechanism, which is article 12 of the protocol, and there is still a lot of debate we have to go through to establish what exactly is included under article 12 and whether sinks are included. There is a reasonable presumption that sinks should be included, but that is still to be defined.

Mr BILLSON—On the same sink subject, there is a question that is in my mind in terms of transaction costs verification and how you would work them into a trading arrangement. I often wonder whether sinks are better recognised as an offset value, a contra capacity, rather than as something that can create new greenhouse values.

Let me explain. For instance, you are an emitter, you gush out 10 million cubic tonnes of CO₂ equivalent, and I have gone berserk and planted vegetation everywhere that could arguably knock off 500,000. Rather than my having to verify my 500,000 credentials and incur all the costs for a virtuous act—hopefully—wouldn't we be better off just saying, 'You find me, and when you bring your emissions to account you can deduct my 500,000?' It is then your job to verify whether I have 500,000 and to bring them to account.

At the end of the day, you need an emissions capacity, which is what you have less contra deals offsets through sinks—whatever that equals. Rather than my saying that I have 500,000 and then running around the countryside trying to flog what might amount to a poopteenth of an offset capacity, you would aggregate them, you would find a group of farmers that might be doing the same thing, and in that way the offset exercise would be at your cost, to help you with your emissions. Can you talk about those two different models?

Dr Fisher—That is one way we might do it. Effectively, that would be some sort of bilateral trade—basically, almost a 'barter deal' between two parties.

Mr BILLSON—Yes, a contra deal.

Dr Fisher—It probably would be more efficient if we could turn that into multilateral arrangements so that, if you have a market in place, brokers can aggregate up and search other people out, and the company concerned does not have to go off and search for another person that wants to do the deal. In general, a standard market would be a more effective way to arrange that. At least from an economist's point of view, a market based solution is better than trying to do bilateral trades, basically.

Mr BILLSON—I am thinking about threshold issues, like volume. The chairman might have 50 acres under plantation. That is an enormous effort for him, but that will amount to a blip on the screen for an emitter. An emitter might not want to go and transact with 35,000 chairmen to accumulate what they need. Is there an argument for saying that, unless you can trade in a certain volume or the trade has a minimum unit, some broker needs to aggregate it, that some other process is needed to bring it up to a unit that is worth trading in?

Dr Fisher—There has been quite a bit of debate about the unit of trade. I guess there is no consensus on this, but there is a general movement towards the notion that the unit of trade should be one tonne of CO₂ equivalent, and one tonne is not very much. Obviously, you would be aggregating up from one tonne. It is unlikely that most people would be doing one-tonne trades, but the unit of trade needs to be quite small because there are some small players out there. For example, Monaco is a signatory to the protocol. Monaco had 72,000 tonnes of CO₂ equivalent emissions—if my memory serves me correctly—in 1990.

So, from a practical point of view, these units have to be small, and there is no real reason why we cannot make the units small because presumably this market will be established electronically. We already trade billions and billions of shares at a few cents each, potentially, in some companies daily on share markets around the world. So the technology is in place to do this. Basically, you need as many players in these markets as possible to make them as deep as possible.

My view would be that we should have a unit of trade of the order of a tonne and, therefore, you do not have the problem you are talking about. In these sorts of markets there will be more than enough brokers, I would suggest, who are willing to come in and aggregate up the chairman's 20 tonnes. I do not think we will have a problem with those sorts of services being available. In fact, that is part of why there is so much pressure to establish these markets early.

Mr BILLSON—That is the flip side of the cattle example, though. What I would be keen to see if we go down this path—

CHAIR—It is a verification. When you come down with those small players, it is the verification of who does it.

Dr Fisher—We are going to have to have verification in place regardless. We are going to have to have rules and verification arrangements, and we are going to have to have decisions taken about how much carbon is going to be sequestered in a *pinus radiata* plantation at location X. All of those things are going to have to be established and be verifiable and provable internationally, otherwise we are not going to be able to count these things.

Mr BILLSON—Sure. But it has a bit to do with where that cost of verification lands because of the example we spoke of. If the chairman has to bring out a BSc or every qualification under the sun to be verified as a UN verification person, and it costs them three times the amount just to have them turn up at the farm gate than it does the value of the sequestration effort, that is not a great incentive. That is why I was wondering about this offset idea. Then the cost actually lands somewhere else. I can understand what you are saying.

Dr Fisher—Regardless of whether you offset or have bilateral trades or multilateral trades, you are going to have to do the verification anyway. There are going to have to be some decisions taken about the way in which you put that in place. That is going to fall on somebody. In all these markets those costs are going to be shared through the market, given the rules of the way the market works. I do not really think that is an issue that will impact on us, other than changing the amount of trades that we do.

Mr BILLSON—Your key message is that the verification cost and effort should not be a heavy factor influencing proposals about trading scheme design; it is going to

happen anyway.

Dr Fisher—Yes. Basically, we should try to minimise those costs, but we are going to have to have those systems in place and they are going to have to be internationally acceptable, otherwise we are not going to be able to trade these certificates internationally.

CHAIR—We need to think about simple methods of assessing so they do not become too complicated and too expensive.

Dr Fisher—Exactly. But you need to keep in mind that these things will be, to some extent, governed by what we negotiate internationally.

Mr BILLSON—The chairman has been drawing our attention to something one of your colleagues said about a virtual second board, that is, where sequestration efforts have been thoroughly verified, vetted, whatever the case may be. They would be of a one tonne equivalent, and you could trade them one for one with an emitter, for instance.

However, there might be some areas of uncertainty—mixed vegetation and the like—where the calculation is not as safe and you might cop an 80 per cent value for your outcome and trade up to the first board. If you can either invest the money in verification, prove your claim that it is somehow different from the default values that have been negotiated, whatever, that would get you up into the first board; otherwise you just cop a discounted value on the second board.

Dr Fisher—We might consider something like that, but I think we would be well advised to pay attention to what is happening in the international negotiations and adopt the rules that are going to be used for these purposes for our inventory internationally, and then use those domestically, unless those rules are spurious.

CHAIR—So the Chicago Board of Trade will dictate?

Dr Fisher—No. Here I am talking about the rules that will be adopted for the methodology we use to verify sinks, for example, under the protocol.

Mr BILLSON—To implement the protocol?

Dr Fisher—Yes. The Chicago Board of Trade will have its own rules about, for example, who is allowed to trade and all those sorts of things. Those rules will be established in the context of the rules and guidelines set out under the protocol itself, which are yet to be negotiated.

Mr BILLSON—In terms of the permit allocation issue, an idea that has some appeal to me, which I would invite you to comment on, is an initial allocation that sees

the permit values discounted over a period of time that brings us in line with the 2008-2012 target—that is, you get some accommodation now, but you know you are going to lose 3½ per cent or two per cent or whatever the value is each year towards that accounting period. That would do two things: one, ease the landing, and two, encourage you to start now. And a third thing would be that we could create some permit capacity yield out of that that we could auction for new entrants, for new players or to be bought back by people that cannot fulfil that trend-down line.

Somebody suggested, and we managed to contain our laughter, that we should over-allocate now and then have the government pay compensation to recover the permits—that, because we had given a property right to be recovered, that triggers compensation provisions under the constitution. I cannot begin to tell you how underwhelmed I was about that suggestion. To overcome that, you would end up with this trend-down idea. Could you comment on that, please?

Dr Fisher—I could not possibly comment on future government policy. It seems unlikely to me that a government would commit itself to pay future compensation like that to put in place such an arrangement as your second proposal.

Mr BILLSON—Not mine; someone else's. I am trying to—

CHAIR—It was proposed again this morning, actually.

Mr BILLSON—Was it? There you go.

Dr Fisher—That does not strike me as something that governments are fond of, frankly.

Mr BILLSON—It gives something for nothing, and you can pay for it down the track.

Dr Fisher—That is for others to decide. The question about how we phase into the 2008 target from where we are is actually, I think, quite a difficult one, as you suggest. Your proposal of phasing down is one way. Another way would be to, for example, let us imagine we start in 2005—and I am not advocating this, I am just saying let us take that as an example. We could establish what the emissions base is in 2005. Let us say it is 118 per cent of 1990. We need to get to 108 by 2008. We could allocate 108, and we could let the market start with the notion that you will hit something at 2008 and let firms themselves make economic decisions about how they phase in. I think there are plenty of ways to do that, but there is very little research to base a best decision on. I think this is one of the areas where we need to do a lot more work before I would be confident of giving the right answer, frankly.

Mr BILLSON—It leads into the US administration's approach. As I understand it

from officials from the US, Clinton and Gore are seeking to implement something not so dissimilar from what we are talking about—to reward early performance so that people who act now, make a contribution, actually make progress towards reduction in emissions, which is the ultimate goal, get some recognition and value out of that. Through that process and the financial incentives and assistance being made available, we will lock in a large chunk of corporate America as a way of increasing the prospects of ratification through the Senate. Is that something that you are seeing? Is that a strategy engaging industry? Is it something that you think we should be looking at as well, to get them on side earlier?

Dr Fisher—I think it is crucial to engage industry, and certainly, at the emissions trading conference in May, we had a very positive response from industry. I think the message we received there was that the earlier you can engage industry and discuss a lot of these issues, the more smoothly everything is going to go. I think that is almost a perfectly true statement. With respect to the US system, I think a lot has been made of the experience from the sulfur dioxide trading arrangements in the United States, and that system is a very valuable experiment, effectively, in establishing these sorts of regimes. One thing that you need to keep in mind in looking at that experiment is that, in fact, it is a very small part of the US economy that is affected. What we are talking about, in the case of CO₂, goes to the heart of the operation of just about every part of the economy. To establish an emissions trading arrangement in CO₂ is a radically different proposition from establishing one that affects a handful of power utilities. Effectively, it affects only a small part of their bottom line, so I think you have to be careful about drawing exact parallels between those two systems.

Mr BILLSON—My last question relates to the other interrelated policy measures which you emphasised at the beginning of your contribution. With the livestock example, isn't there an argument that says the industry might be granted an aggregated emissions permit which would see it able to lay off some emissions capacity if the herd, across the board, produces or if there is a plan to increase the production of beef—or something like that? There may be a need for the industry as a whole to acquire emissions capacity to accommodate that.

The parallel would be the motor vehicle industry, where the government has announced a number of measures specifically to deal with motorists and the motoring sector. Again, couldn't a way of supporting other policy measures, within a trading framework, be to grant peak motoring bodies—whether they are the state vehicle registration boards or whatever the case may be—a permit capacity for their fleet in their state which would either grow if the fuel consumption went up, or go down if it did not? That could be reflected in other measures, such as registration fees and the like. Are they the sorts of things that would bring more people into the trading framework but actually make it function without leaving out huge chunks of activity which are non-point source minor contributors in their own right?

Dr Fisher—Just in terms of motor vehicles, first of all, I think it would probably be better—and we talk about these issues in the back of the first book—to put the emissions trading arrangement in place in the wholesale fuel sector rather than have motor vehicle manufacturers or somebody else hold the permits.

Basically what we are trying to get at is fuel use, not anything else. So, reflecting the price of carbon in your registration fee really is a pretty indirect way of trying to tell motorists that their price of fuel has gone up. It would be, I think, more effective to go for allocating the permits to wholesale fuel suppliers rather than motor vehicle manufacturers or registration authorities.

Mr BILLSON—How do you get the link, though, between behavioural change and where those signals land? Do you get it through fuel pricing?

Dr Fisher—Exactly, through fuel pricing. Basically whoever it is—Shell—has to hold permits enough to reflect the amount of fuel that is going to be used from their service stations, and the price of petrol at the pump will rise; as a consequence of that, motorists will drive more carefully or purchase—

Mr BILLSON—You would rely on other policy measures to encourage car manufacturers to look at smaller PMU rated vehicles or electricity or combined—you would pursue that through other mechanisms or—?

Dr Fisher—You could do that, and in fact the Prime Minister's statement has already got those sorts of notions embedded. I think it is useful to keep in mind that we are not going to solve this problem with one policy instrument alone—

Mr BILLSON—No, I agree.

Dr Fisher—So we need a range of these instruments, and there is already a range of those things mentioned in the PM's package.

With respect to agriculture, theoretically, if I might drop back to being a bit theoretical, what we optimally would want to see is the price of carbon basically being equated across all of our sectors so if we were to establish an emissions trading arrangement that tells us that the price of carbon dioxide is, say, \$20, or that CO₂ is \$20, \$30, \$50 or whatever you want—pick a number—in Australia then we would want to put in place measures in some way or other that reflect that price into the agricultural sector.

I think it is a bit difficult to imagine a system where you would put in place an aggregate permit for broadacre agriculture, for example, and then try and expect 120,000 commercial firms to fight out how they are going to respond to that permit. So I really do see the notion—

Mr BILLSON—So what would you suggest? Does it give you comfort to say those things without suggesting an alternative?

Dr Fisher—I would suggest some other policies, like, for example, doing more research on ruminant feed and those sorts of issues—at least in the beginning. Now it may well be—

CHAIR—Do you know what the average cocky would say to you about that?

Mr BILLSON—Yes, absolutely. They would say, ‘Thanks for coming; have a nice day.’ But you need some way of sending a signal to the person on the land that it is worth investing money in that sort of research. If there is no price signal how do you do that?

Dr Fisher—I agree, this is a very difficult issue. However, I would have to say that if it is the case that the CSIRO turns up with a means of increasing the efficiency of the feed conversion in ruminant animals by 20 per cent as a consequence of feeding at least some livestock a pill, I would not be surprised if farmers are more than prepared to take this on because that means an increase in the productivity of those livestock. So there is another way around this.

CHAIR—That opens up a broader debate but we will have to go on because we are well past our time. It opens up a huge debate. Thank you very much for your evidence. We will have to leave it at that but obviously we will have some more discussions on these particular matters.

Dr Fisher—Thank you, Mr Chairman. It is our pleasure.

[11.45 a.m.]

McDONALD, Ms Meg, Ambassador for the Environment, Department of Foreign Affairs and Trade, R G Casey Building, Parkes, Australian Capital Territory 2600

STURGISS, Mr Robert George, Executive Officer, Climate Change and Biodiversity Section, Department of Foreign Affairs and Trade, R G Casey Building, Parkes, Australian Capital Territory 2600

CHAIR—We have received a submission from you and have authorised its publication. Has that been updated recently, or do you want to change it in any way?

Ms McDonald—No, I do not think we would anticipate changing any of the information that we provided in that submission. Obviously there are events which have occurred since then, particularly developments post-Kyoto, with the evolution of the international arrangements for emissions trading, or the prospects for international arrangements for emissions trading, but there is nothing that would actually change the substance of our submission at all.

CHAIR—Would you like to make an opening statement?

Ms McDonald—Just briefly, Mr Chairman, I am unsure, given the nature of the previous questioning and commentary, the extent to which you have been updated with developments from the Bonn round of meetings.

CHAIR—No, we have not.

Ms McDonald—My intention was to give you an opening statement which essentially updated you along those lines. As you might be aware, the bodies which are charged with implementing the code of protocol are the two subsidiary bodies to the framework convention on climate change: the subsidiary body for scientific and technical advice, and the subsidiary body for implementation. They are both bodies of the convention and have been mainly engaged up to now with implementation of the commitments under the convention, that is, the assessment of countries' progress towards meeting the implied target of returning emissions to 1990 levels by the year 2000 by the so-called annex 1 countries, and the assessment of the national communications of parties assessing the nature of the policies and measures which they have implemented pursuant to their obligations under the convention directed towards achievement of that implied target. As well, they are looking at the commitments and the policies and measures which have been implemented by non-annex 1 parties. They, too, are required under the convention to provide what are called 'National Communications' which give updates of progress on implementation of their own policies and measures.

The bodies of the convention have been in existence since the coming into force of

the convention in 1994, but have largely been overshadowed by the negotiation of the Kyoto protocol which commenced following COP 1. What we have now seen in Bonn for the first time since the entry into force of the convention and the operation of those two bodies is their engagement, not only on the convention, but also on the protocol. I think it is fair to say that, as you have just heard from Dr Fisher, a number of the issues which the protocol contains and which those subsidiary bodies are charged with implementing raise a great many very complex policy and economic issues for the implementing countries.

What we saw in Bonn was really the world community coming to grips with how to implement the very difficult set of propositions now presented and agreed to in the Kyoto protocol. In particular, the issues which the subsidiary bodies grappled with were the implementation mechanisms and emissions trading which, by the decision taken in Kyoto, were requiring the parties to take a decision at Buenos Aires—the COP 4, which is expected to take place in November. As well, there are decisions on the Clean Development Mechanism, that is, the mechanism for undertaking projects with non-Annex 1 countries. This would also generate credits which could be credited against countries meeting their Annex B commitments. As well, there are the arrangements for joint implementation, again, a project based mechanism for generating credits which could be shared among Annex 1 countries.

In addition to that, there are a range of decisions—again, which Dr Fisher has alluded to—related to the implementation of the provisions on sinks, articles 3.3 and 3.4 of the protocol, which raise a number of interpretative and definitional issues, and the Bonn meetings were very much preoccupied with that.

As well, the Bonn meetings were preoccupied with the question of future commitments of developing countries. The convention requires that there be a second review of the adequacy of the commitments under the convention, under article 4.2(a) and 4.2(b) of the convention, which relate to that implied target. The convention requires that the parties undertake a review of the adequacy of those commitments at Buenos Aires. The obvious conclusion which was reached at Berlin in relation to those targets was that they were not adequate to meet the ultimate objective of the convention and, therefore, we concluded what was called the Berlin mandate, which resulted in the Kyoto protocol. So now there is obviously a very difficult political issue ahead of the parties at Buenos Aires in deciding how to frame the set of decisions relating to the adequacy of those commitments three years afterwards and, really, what the implications of that are for future action under the convention.

The Bonn meetings, I guess, were characterised by a set of very difficult issues, both political and technical. I think the political issues very much concerned what I would term the umbrella countries, the non-EU Annex 1 countries, that came to the meeting very much wanting to see progress made on the flexibility mechanisms and particular emissions trading. I do not know whether you have received advice of this but a group of those countries to which Australia belongs—the umbrella group, Australia, the United States,

Canada, New Zealand, Japan, Russia, Ukraine, Norway and Iceland—tabled a paper setting out what we believe should be the basic elements and principles to underpin an international emissions trading system. That paper was very well received, but revealed essentially that we were more advanced in some of our thinking about the way in which an emissions trading system should operate than perhaps was the EU.

The EU, in particular, was preoccupied with the negotiation of its internal burden sharing agreement which it concluded only two days after that meeting. However, the EU then tabled its own paper setting out the additional elements, if you like, of an emissions trading scheme which it believes would be necessary to meet the requirements of the Kyoto protocol.

We were then characterised by a negotiation with the G77, the developing countries, that revealed a considerable concern about the complexity of the negotiations that they faced in relation to emissions trading, as well as in relation to the Clean Development Mechanism and joint implementation. Essentially, the developing countries are looking to have more preparatory work and to receive more information and are not as ready to undertake the intense negotiations necessary on an international emissions trading scheme as the developed countries currently are.

So I think the conclusion that we would reach following the Bonn meetings is that any decisions which could be reached by Buenos Aires will be much more of a framework character than, perhaps, might have been assumed to be the case prior to Bonn. We will be engaged over a longer period to at least COP 5 at the end of 1999 before we could see decisions being able to be reached on the basic rules which would govern an international emissions trading regime.

That being said, however, there is also very much a resolve on the part of the developed countries to make progress on defining the international rules to govern all of these mechanisms. It is very important to see all the mechanisms in an interrelated way, simply because it is intended that the credits that will be generated by the two project based mechanisms will be entirely fungible and creditable against meeting annex B targets.

I guess the best way of summarising the situation is that we are now establishing quite detailed work programs—programs designed to negotiate on those issues which are negotiable and to deliver a much greater degree of information and capacity building on the part of the developing countries, to enable them to feel informed enough to make decisions multilaterally. It is quite easy for developed countries to reach conclusions on some of the basic elements of the system.

There are a number of political elements, particularly the question of complementarity. Should there be a limit placed on the degree to which any country can use international emissions trading credits to meet its commitments under the protocol?

There is also a question as to whether there should be a limit on the degree to which Russian credits and eastern European credits could be traded. This remains a political question which can only be resolved by ministers at COP 4 or perhaps beyond. The other question, which is very much related, is the question of treatment of sinks. One of the positive outcomes from Bonn was a set of decisions designed to define the particular provisions of articles 3.3 and 3.4 of the protocol, to establish a set of tasking for further scientific advice from the IPCC to assist the subsidiary bodies to take relevant decisions on sinks and to establish a series of expert workshops to contribute to that.

We feel very pleased that there has been a proper process established to define and to lead to greater certainty in relation to the interpretation of the Kyoto protocol provisions on sinks. That work, which will take place in the lead-up to COP 4 and also beyond that, because it will take some time before we get the information from the IPCC, will enable us to set up a proper scientific base for the interpretations of those provisions of the protocol which are of particular importance to us.

Another element which will be very important, particularly in terms of the operation of the mechanisms, will be the question of increasing the level of certainty and scientific basis for the inclusion of sinks because of its importance in relation to the Clean Development Mechanism. The inclusion of sink activity under the Clean Development Mechanism will also be a very important factor in improving the cost effectiveness of the overall outcome and ensuring that the Clean Development Mechanism operates in the best way possible. That too is another issue which remains on the agenda, but we think that the progress that has been made so far will assist that as well.

In summary, I think the results of Bonn are that it is going to take much longer to reach definitive decisions. I think Dr Fisher has given you an indication of what some of the reasons for that are. This is probably the biggest environment agreement that currently exists. Its impact will be across all of the economies of all of the countries involved, both developed and developing. As the decision makers come to grips with that and with the complexities that that is generating, I think the process of reaching decisions will perhaps not be as quick as some people had originally anticipated after Kyoto. I would not see that as a negative though; I would see that as a positive—that it is recognition of the seriousness with which all countries are now proceeding to examine the implications of the protocol and to come to grips with how to implement it correctly.

CHAIR—I might just ask a couple of questions. I do not know whether you were present earlier when I asked a couple of questions on trade. The first question is: is Australia keeping its eye on the ball—and the fact that this is as much about trade as it is about greenhouse warming? Australia produces something like 78 per cent of its export income from mining and farming.

Ms McDonald—I think that the one thing that has characterised our participation in this negotiation right from the outset has been very much a whole of government view.

We have looked at the costs of taking action and the impact that our own action and those of others would have on our economy. That has very much governed our participation in setting our objectives in the negotiation. That has been very much based on the judgment that it is not much use agreeing idealistic targets which can never be met because the economic costs are too great. We are very much governing our approach in negotiating the post-Kyoto agenda in the same way that we did in negotiating our pre-Kyoto agenda—that is, factoring all of those things very much into our position and going into it very much with our eyes open.

CHAIR—We were told earlier that the United States is still discussing whether they will ratify the agreement or not. I think the Senate is having some discussion on that at the present time and, I dare say, given their own domestic interests, is looking very closely at that. Can you understand that it is all very well for us to have a cerebral debate here, and probably internationally and nationally, but that with, say, methane, which appears to be one of the big contributors, if you tell the farmers out there that not only are we going to have a trade policy and a competition policy that affect them, but we are now going to have a greenhouse policy that affects them—and many of them are making less than the dole, if not negative incomes—they are going to react politically?

Ms McDonald—I am not quite sure of your question there, Mr Chairman.

CHAIR—What I am saying is that, while we are engaged in this debate about the fact that we accept that global warming is taking place and we have to do something about greenhouse gases, I would put it to you that the vast majority of the Australian public are not engaged in that debate and probably are not enthusiastic about it. If we make some decisions that are going to affect them economically, whether they be mine workers or whether they be farmers, they will reject that through the ballot box and all of our efforts will have been in vain.

Ms McDonald—The question that you raise about the implications of ratification and implementation of this treaty—the same debate in fact that you have alluded to about Australia and the implications—is one which is going on in other major economies. The problem that you described, of there being a lack of understanding across wide sections of the community of exactly what is involved in actually effectively tackling the greenhouse problem, is one which is common to most developed economies as well and one which we are very much aware of. There is very much a perception that it is something easy to do when, in fact—as Dr Fisher has described—it is something which involves action at every level of the economy. From that point of view, it is one which has to be treated very much as an economic issue and one which has economic costs attached to it.

The objective then for implementing any of the obligations that we would take on under the protocol should we choose to ratify—I would add that the question of ratification is one which is a decision yet for Australia to take as well as for the United States and other developed economies—is a question of making a decision based on it being a

cost that we can meet and that sections of the economy accept that. That is a large part of what would be required under the government's treaty analysis. A national interest analysis would actually have to identify those costs and make clear those costs in a public way.

Again, as with most other international treaties, it is not until the measures are actually in place or are in prospect that most parts of the economy then understand exactly what the implications of signing any treaty are. The government has made every effort to try to make that very clear and has built that into its approach, and will continue to build that into its approach.

It is also very clear that tackling greenhouse and meeting targets will come with a price tag attached. That is one thing that the government made very clear in the run-up to Kyoto. It is now attempting to address ways of minimising that price tag and making sure that we do not assume any greater costs than our other major competitors.

CHAIR—In the area of the Clean Development Mechanism you mentioned that it was further discussed at Bonn. Australia has some very good technology in many areas. In fact, we pride ourselves that from time to time we are right at the cutting edge in a lot of the new technologies. Are we doing enough to position ourselves to get some offsets from some of the negatives from this type of technology into the non-annex 1 countries. Do you think we are doing enough in that area to position ourselves?

Ms McDonald—The Clean Development Mechanism is something which was brand new. It originated only in the final weeks of the protocol negotiation and is at the moment a pretty unknown quantity to most of the developed and developing countries. We are positioning ourselves very much at the forefront of that debate and taking an active role in it simply because we think that the definition of that mechanism and the way in which it will operate will be something very important as a means of providing an avenue of low cost emissions reductions through project based activity in developing countries, particularly from Australia's point of view with countries in the region.

Also, it will be an opportunity for countries to generate credits through sink activity, and that provides an important opportunity for reducing costs, particularly in the first budget period because of the ability under the Clean Development Mechanism to bank credits, that is, from the year 2000 on to bank credits against meeting targets in the years 2008 to 2012, and that is an important early incentive.

For all of those reasons we are among those countries that are taking a most active interest in the definition of how this mechanism will operate. It is also one of the things that we are pressing for early decisions on, precisely to give predictability and to allow firms to start to position themselves. Like all other countries, we are engaged in doing so. It is a very new mechanism and one which will require a lot of work.

CHAIR—I daresay I am asking for an assessment here but from Bonn, would you say that there was a feeling amongst nations there that they were heading towards a tradeable scheme in emissions?

Ms McDonald—Certainly the protocol makes that very clear. It established the fact that countries could meet their commitments using emissions trading. The requirement to define principles, modalities and rules is one which now we are attempting to reach agreement on. Exactly how and how defined those rules will be by COP 4 and beyond is really the question now. It is not whether there will be and whether we will have emissions trading—we definitely will—it is really a matter of whose rules and under what terms and conditions.

Mr BILLSON—I feel that there are enormous opportunities for Australia, not only in engaging in the project based, Clean Development Mechanism, joint implementation and all those sorts of issues, but particularly in being an honest broker in the wider scheme of things. Would you feel that, with our efforts leading up to Kyoto, the work that is still going on with yourself and the good offices of the Commonwealth, we could argue that Australia should be established as a UN centre for climate change as a way of being the branch office for implementing the protocol and a place where we are in the region to verify and assess Clean Development Mechanism joint implementation projects and therefore get an advantage out of our engagement beyond being well placed to work within the protocol?

Ms McDonald—We would be joining a long line of international bodies and agencies and private sector agencies who feel that they also have a place in that particular sun. But certainly there are going to be opportunities and there are going to be market opportunities under a fully established international emissions trading scheme as well as with the operation of the Clean Development Mechanism. The question of getting endorsement for the Australian centre I think is quite a long way off. There will be a lot of competition for that and, in fact, if the emissions trading system works on a properly market based system, then there will be an opportunity for those sorts of centres in a variety of countries.

That is one reason why we have put a lot of effort into working within this umbrella group to attempt to establish the rules and the basics of the system that we would want to see operate. We want to see it market based and allow the determination to be left up to the market rather than trying to centralise everything through one particular UN body. We do not think that would be the best way of proceeding. There are some who believe that we should be designating UNCTAD or some other UN body like UNEP as the central coordinating body. We remain very much convinced that these things should be market based.

Mr BILLSON—On a similar theme, some of our colleagues in the umbrella group appear to be doing a whole lot more than we are, both at a government and at an industry level, towards—I would not say locking up, but certainly corraling opportunities for Clean

Development Mechanism and joint implementation projects in developing countries.

Is that consistent with your observations? Do you see other countries putting more of an effort into getting technology and knowledge out into developing countries now or getting some memorandums of understanding entered into with a view to working those further once the mechanisms become clearer?

Ms McDonald—A lot of the activity that has been reported and the two cases that I cite—you may have others—are the reports of a bilateral agreement between Russia and Japan on a series of power station upgrades under the joint implementation heading.

What I would say there is that the Japanese government has assigned a great priority to undertaking joint implementation projects. That fits in very much with its own bilateral program with Russia and its assessment of ways in which it will go about meeting its long-term energy needs. Those sorts of announcements that we have seen are very much consistent with the long-term programs that the Japanese government has got. But it is also important in looking at that to see the size of the task that Japan has taken on in meeting its Kyoto target and the difficulty that it will face particularly in terms of the economic costs involved in doing so. It is understandable that the Japanese government is proceeding down that path.

The other announcements or arrangements that I am familiar with are those which really stem from the United States government's joint implementation, or AIJ, program with a range of developing countries. That was a program that it established under the convention and which now is ongoing, but it is really looking at upgrading. I think our own establishment of the AIJ office within the Department of Primary Industries and Energy and the work that it is now looking at undertaking really mirrors that sort of work, but this is obviously going to be something which is very much private sector driven. Really the establishment of the international rules will provide enough of a catalyst for that work and those initiatives to be really given a much greater profile.

The other thing that I would point out is the extent to which a lot of these announcements have been very much played up in the international media. When you start to look at what is actually there, a feasibility study is not a deal. I think we have really got to very much keep in mind that the work that we are doing and the way in which we are setting up our own programs, given our size and given the amount of government funds involved, look comparable. I do not think that we have got any reason to feel panicked that other countries are stealing a march on us. Quite the contrary, I think our domestic debate and the level of understanding really are much more widespread and there is much greater consideration and preparatory work going on, particularly in the private sector in Australia, than I would say in many other economies. From that point of view, we might not have the headlines, but we are certainly doing our homework.

Mr BILLSON—In a related area, our aid effort, we have heard that some other

countries are re-tweaking their aid programs, mainly poverty alleviation and natural systems regeneration, whether it be vegetation projects and the like, not only for its aid virtue, but also to recover the greenhouse credit value as a dividend to some of that activity. Is that an idea that appeals to DFAT or is that something that you think we should give more consideration to?

Ms McDonald—Again, I am aware that there are these sorts of reports, but in fact it is very important to look at the provisions which govern this sort of activity and the way in which it could be credited and dealt with under the convention. One of the very important aspects here is the question of additionality and whether any government funding for these sorts of projects is additional to what is already being distributed in aid, and it must pass that test, as well as, of course, the additionality in greenhouse terms. While there is a lot of talk about re-orienting aid projects, the extent to which any of that new and additional money is something which most participants, particularly the donor countries, accept is not new and additional.

There is a lot of wishful thinking and interpretation going on there, but even in most recent discussions in Bonn about the role of aid money, for instance, under the Clean Development Mechanism, it is accepted, even by major donors such as Japan, that there is not going to be the money that would be required. It just does not exist. There is not going to be that sort of increase in new and additional aid funding which would be capable of generating significant greenhouse credits. All countries really see the CDM operating as a market mechanism, predominantly with private sector financing and not really an aid mechanism.

Mr McDOUGALL—I have one question in relation to possible protection for Australian companies that commit themselves to emission reductions, when developing countries may be aided by international companies that, in their own country, are meeting their commitments but that, in the developing countries, are not meeting their emissions. What are your comments in relation to the government placing a tariff or some sort of charge on imports coming in from those countries?

Ms McDonald—Mr Chairman, could I ask for some clarification? Are you asking for a charge on imports from developing countries that are not subject to emission limitation?

Mr McDOUGALL—I mean countries who may be utilising a manufacturing plant of a multinational company that is performing its duty in its own country but that does not have to do so in the developing country in which it is manufacturing.

Mr BILLSON—A 'climate compliance' charge.

Mr McDOUGALL—Call it what you like.

CHAIR—It is a tariff.

Mr BILLSON—It looks like one and smells like one.

Ms McDonald—The whole question that you raise about insurance against competitiveness impacts and trying to counter the effects of carbon leakage is one which really underpins very much our own approach to development of an international emissions trading system and these other mechanisms. But also, in the long term, that is something that impacts on everyone. Whether such a border charge or border adjustment would be part of a domestic scheme is something that you would have to ask those that are designing a domestic scheme.

The nature of this sort of competitiveness impact has only recently been part of the international debate. It has been interesting to see concerns develop, in the negotiation of the European Union burden sharing targets, about competitiveness impacts vis-a-vis other European Union countries; but that is a sign that at least the economics of dealing with the targets is starting to be felt and that it is starting to be factored in to the way in which countries are approaching implementation of their commitments.

It has also been the major driver behind the US consideration of ratification—in particular, the Senate position—and one which is very much the driver behind the condition that, without some indication of the timing for future commitments by developing countries and the terms under which those commitments could be entered into, this is a problem which everyone will face in implementation. While I do not have a definitive yes or no answer, the one thing that is clear is that this is part of the debate—and will be part of the debate in the future—about how to avoid the perverse competitiveness impacts and avoid carbon leakage and how, from an environmental point of view, to ensure the environmental integrity of the agreement.

After all, if you have massive carbon leakage—and if you do not have action by developed countries and particularly the major developing country emitters to start to curb their emissions growth—the action by developed countries really will not contribute anything towards alleviating the problem. It will be very hard to get any developed countries to look at taking on further commitments, if we are not making progress in resolving the original environmental problem.

Mr McDOUGALL—The reason I have asked the question is that we have been trying to deal with this question in patents for years, and it has been ignored by developing countries for years. They manufacture and export into countries that have patents over certain products and their response is simply, ‘We do not recognise patents. We do not recognise your patents.’ We have been grappling with that for the past 25 or 30 years and we have got nowhere. Is there any light on the horizon that we are actually going to get somewhere on this? Or are we going to live in a never-never land—with, at the end of the day, the developing countries continuing to do as they like?

How are we going to bring them to the table on the agreement? I can see an

economic disadvantage to a country like Australia, such that, if we go down this track and have an agreement on a national basis and agreements with annex 1 countries, we are going to get the major manufacturers in this country saying, 'If we are not going to be protected, we are going to pack up and move offshore.' We have been through that argument in another area before. Where is the discussion being conducted that is going to come up in Buenos Aires to assure us that this is not going to happen?

Ms McDonald—As I described to you about the nature of the debate in Bonn, it is going on. It is a very difficult debate but it really comes to the crux of the problem that you have very clearly laid out: without some progress on developing countries' commitments, it really is impossible to persuade business in developed countries to impose costs on themselves that will then simply lead to their having to move into countries where they will not face those costs. It is a basic competitiveness problem and one of which Australian industry and the government are very acutely aware.

The question of when developing countries, particularly the major emitters, will be prepared to take on commitments is very much a long-term question. It is one where there is a lot of political pressure being brought to bear, by the US administration in particular, on the major emitters—particularly China. One has to be realistic about the likelihood of their agreeing to enter into early commitments. It does become a major factor for countries implementing the protocol, in thinking about how to put pressure on the developing countries to come on board. After all, it is a global problem; and the developing countries themselves are likely to start to feel the impacts of climate change and those costs. Whether they are prepared to accept some of the costs of taking action really is something which has so far eluded us under the climate change convention.

Mr McDOUGALL—As an extension of that, how do the negotiators then consider a major multinational company that develops its own trading system within and that takes advantage of the fact that it operates in both developed and developing countries? Say that the multinational is setting up a public image that it is doing a great job and that it has adopted a philosophy within its own company, but it is taking advantage of other countries. We are seeing such companies possibly get a market advantage in the international marketplace, because they are perceived to be doing something; but they are taking advantage of the developing countries who are not complying. I see that as absolutely false, and we are starting to see it happening already.

Ms McDonald—It is very important to see that developing countries have not been asked to take on emission commitments. They are complying with their commitments: it is just that they are outside the emission commitments system. But they are complying with their obligations. It is just that they have a different set of obligations from ours. As to the question of treatment of companies, this is an issue where we are a long way down the track in our own thinking about this. This is something which the international system is only just starting to come to grips with, and action by multinational companies is something that will have to be factored into development of rules within the international

trading system.

Trading will not solve the question of bringing developing countries in. It can provide an incentive, through the negotiation of an emissions cap, which they could then have the ability to sell. That will then raise a whole lot of other problems internally, within the trading system itself, for existing participants. This is something that again we are only just coming to grips with, but it will have to be dealt with in order to make the trading system viable for the second and subsequent budget periods, when hopefully we are dealing with bringing in new entrants to the system.

Mr McDOUGALL—Based on that comment, we have had evidence from the power generating industry in Australia that they want to start a trading process within Australia sooner rather than later. From what you have said to us today, that does not sound feasible, because they already start to get into this loop—which can be advantageous to them but not necessarily advantageous to the total process. Can we set up a national trading system on the basis of what you are saying, that the international agreement is becoming slower and slower?

Ms McDonald—Anyone would be free to set up a domestic trading system in the same way as the US has set up its sulfur trading system. That remains a domestic policy decision. The question of how you deal with the competitiveness implications of that is again an issue for domestic policy setting. It must be part of that decision making. There is nothing to stop any country from setting up its own domestic emissions trading regime.

The question of compatibility with a subsequent international system, if that were to be the phasing, would be a matter for very careful negotiation. That would be in addition to the question of competitiveness for individual firms and for the economy as a whole. They are all things which must be factored into any judgment about what sort of response Australia should take, particularly from a trade point of view. Certainly the Department of Foreign Affairs and Trade would be very much concerned about the impact on competitiveness, and I would point you to the speech which Mr Downer gave to the ABARE emissions trading conference where he laid out very much the set of concerns in relation to competitiveness impacts which we would be very much concerned about from a trade point of view.

Mr McDOUGALL—Following on on this developing country situation, which is critical: what incentives are there in the system at the present time for these countries to embrace more efficient technology from an annexure 1 country? If there are not any incentives, could it be done through the United Nations aid program? Could there be incentives in that?

Ms McDonald—From an efficiency point of view and an environmental point of view, the incentives for any developing country to embrace energy efficient technology are very much within their own economy. There are benefits, particularly in the power generating sector, in embracing cleaner technologies. Not only is there a greenhouse

benefit in most cases, but there is also a local and regional benefit, particularly from smog and other particulates. So, from that point of view, there are often wider environmental benefits as well as the obvious economic and investment benefits inherent in any decision than strictly from a greenhouse point of view.

One of the important aspects of the Kyoto protocol was that, with respect to the Clean Development Mechanism and its ability to generate greenhouse credits, which would be shared between the investor and also the host country, the investor gets a benefit and the host country gets the benefit in the terms that I have just outlined. As well, the host country is able to generate those credits which it can then choose to either sell on an international market to a country that is taking on commitments—an Annex B country—or hold for itself as a means of meeting future emission commitments that it might be prepared to take on in future.

There is an important incentive built into that Clean Development Mechanism which has not hitherto been available. We think it is one which will be more powerful than any aid based program. If you look at the investment flows, particularly in infrastructure investment to major developing country economies compared with the aid flows, aid flows are becoming an increasingly small proportion. Being able to tap into and provide incentives through the investment flow, particularly in the development of new infrastructure, really is the best way of achieving both short-term and long-term benefit.

CHAIR—Is there any evidence that developing countries are showing an interest in it?

Ms McDonald—Certainly there is a great deal of interest in many developing country economies, particularly the major emitters. However, I would have to say that the politics of Bonn, and the particular UN politics which were evident in the meetings that we have just been at, witnessed that some forces within those economies as well as some of the other countries—particularly the OPEC countries—were able to dominate the views of the G77 to essentially realise a slowdown in any decision making in relation to the Clean Development Mechanism. Our view is that this probably cannot last simply because there are too many incentives in many developing country economies now with those that can see that there is an opportunity here to benefit. We are not going to reach final decisions on many of these things by Buenos Aires, and it will take a lot of work to develop a very much market based Clean Development Mechanism even by COP 5.

Mr BILLSON—I am conscious of the time, Ambassador, so I will fold three questions into one if I may—one dealing with science, one compliance and the other a consistency question. On the science: are we past that? Did Bonn accept the relationship between emissions and climate change and are we now getting into the mechanics of it? Secondly, on compliance: we have had some trouble with biological and nuclear weapons and the like in the past with getting people to play by what would seem to be very virtuous international expectations. Sanctions and the like interest me, particularly looking

at the sulfur dioxide example and how that might be translated into the international community. Lastly, on consistency: have we had a comparative analysis of GATT and other treaties alongside Kyoto to see whether they are friendly with one another, whether they interact successfully, or whether there are some confounding signals in them that need to be ironed out to make them work well in the real world?

Ms McDonald—That was really three questions in any case.

Mr BILLSON—It was—quite substantial ones.

Ms McDonald—On the science, I think one can actually take the commitment under the Kyoto protocol as demonstration of acceptance of the science and an understanding that there are still great uncertainties but that there is a preparedness by the major countries of the world to accept the obligation to take action of the type embodied in the protocol pending the outcome of further definitive science. We are now preparing for the third assessment report—the TAR—which will examine and achieve an update of the science from the second assessment report. That is likely to come out by 2000, and will provide the backdrop for any negotiation of a further round of commitments under the protocol, particularly those for the second budget period but also beyond, particularly on this question of developing countries.

On the question of compliance, there are really several issues here. One is the question of what I would call the pro-compliance agenda. You have talked with Dr Fisher in some detail about the nature of monitoring, measurement and reporting which will be necessary to underpin the Kyoto protocol commitments—and the nature of those commitments which is quite different from the ones that have existed in the past—and the emissions trading regime and the other two flexible implementation mechanisms, joint implementation and the Clean Development Mechanism. In order to make those mechanisms work, there is now a much greater incentive for better monitoring, more rigorous reporting, more rigorous review and greater transparency than there has been in the past. That creates a whole set of new issues for us, some of which we are already obliged to do under the terms of the protocol but many which we will find we will have to do to make those mechanisms work.

The second part of the compliance agenda is to deal with the question of what happens when we have got non-compliance. There will be domestic questions, how to deal with non-compliance under a domestic regime, and also the international question: what sort of international regime for non-compliance do you want?

Certainly, our view and that of many other countries in the umbrella group is that the first emphasis must be on strong domestic penalties and to make sure that those domestic penalties are ones which underpin the successful operation of an international regime so you have got a guarantee that all participants are operating in compliance. You have also then got to deal with the questions of international compliance and, certainly,

that is now coming to the fore and we will be starting the negotiation of that compliance regime, probably by early next year.

That raises a whole set of very difficult questions, which brings me on to your third question, this question of the relationship between WTO obligations and the obligations of a free and open global trading system with the Kyoto protocol obligations and, in particular, the operation of an emissions trading regime. That question of consistency is one which is being kept under review at all times. Obviously, there is very much an understanding of the relationship here, but exactly what the relationship is will have to be defined as we define the relationship and the terms and conditions of an emissions trading regime.

It certainly will have implications, and this is one of the reasons why the Framework Convention on Climate Change has a requirement for the least trade restrictive measures to be adopted built within it. It is something that will be governing our approach to development of an emissions trading regime, as it will a large number of others. It is a question that can only be resolved in the design questions as we go, rather than defining a priori.

Mr BILLSON—Can I invite you to extend your answer on the last point, looking at that view that some nations like to keep apart human rights obligations under treaty frameworks and trade. This cross-treaty pollination of compliance seems to be difficult in some areas of the international community, yet it seems the only trick we have got to try to achieve compliance with Kyoto is to link it to trade. Is that something that is being discussed? There seem to be some inherent inconsistencies in reverting to trade to achieve compliance when there have been other treaty obligations where there has been a conscious decision to keep trade out of the equation.

Ms McDonald—Forgive me if I left the impression that I was linking trade sanctions to compliance. Quite the contrary, it has been one of our main concerns not to have this happen. In fact, this is going to be one of the major issues in relation to design of an international compliance regime for the Kyoto protocol. This is not yet a matter of international debate. It has really been a matter of discussion, obviously, with our major partners that are most interested in developing an open international emissions trading regime to ensure that we are doing so in a way which does not lead to the creation of new trade barriers and does not lead down the path of needing to have trade sanctions invoked.

The question really is: how do you build in sanctions within an emissions trading regime which does not require you to go outside the emissions trading regime? So you build in the incentives and also the penalties within the regime itself. The question of linkage, which was the question which I was raising, stems from the set of competitiveness issues concerned and the question Mr McDougall raised about the propensity for new trade barriers to be set up as a means of establishing this regime. That is something that we need to look at from a WTO perspective, as well as from a general competitiveness

perspective—that we do not want to see this agreement used as a pretext for establishing a new form of protection, essentially. So you need to look at it from that point of view—that it is not only WTO consistency but also the question of compatibility with an open and free trading system more generally.

CHAIR—I am going to have to conclude here. We are well over time. Ms McDonald, you mentioned the umbrella group report which was submitted in Bonn. Is that available to the committee?

Ms McDonald—It is. In fact, I have copies here of the umbrella group paper, the European Union paper, and also a G77 statement setting out their views on emissions trading and other mechanisms. I will table them for you.

CHAIR—Thank you very much. And thank you for your evidence.

Resolved (on motion by **Mr McDougall**):

That, pursuant to the power conferred by paragraph (o) of standing order 28B, this committee authorises publication of the evidence given before it at public hearing this day.

Committee adjourned at 12.46 p.m.