SUBMISSION

BY

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AND
MOBIL EXPLORATION AND PRODUCING AUSTRALIA PTY LTD

TO

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

INQUIRY INTO THE REGULATORY ARRANGEMENTS FOR TRADING IN GREENHOUSE GAS EMISSIONS

CANBERRA

MARCH 1998

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1. Executive Summary

Mobil Corporation is a worldwide energy company which operates in both the upstream and downstream sectors of the Australian oil and gas industry. In Australia, its operations are run by two wholly owned subsidiaries Mobil Oil Australia Ltd (downstream marketing and refining) and Mobil Exploration and Producing Australia Pty Ltd (upstream oil and gas exploration and production).

In December 1997, over 160 nations agreed on the text of the Kyoto Protocol. Key provisions of the Protocol, if ratified by sufficient countries to enter into force, are:

- Legally binding commitments are established for 38 developed nations to reduce their emissions of six greenhouse gases (CO_2 , CH_4 , N_2O , HFCs, PFCs, and SF_6) by an average of 5.2% below 1990 levels during the 2008-2012 period.

- No limits are set on greenhouse gas emissions from the 130 developing nations which have ratified the United Nations Framework Convention on Climate Change (FCCC).

- A variety of mechanisms: emissions trading, Joint Implementation (JI), the Clean Development Mechanism (CDM), credits for sinks and encouragement of voluntary activities are included to create economic flexibility and hopefully lower the cost of implementing the Protocol.

1.1. Mobil's Position on the Kyoto Protocol and its Potential Implementation

In principle, Mobil does not support ratification of the Kyoto Protocol because, without limiting greenhouse gas emissions from all nations, it will not significantly slow the increase of greenhouse gases in the atmosphere and therefore not achieve the objective of the FCCC. In addition, the economic cost that the Protocol will impose on both developed and developing nations is not justified by our current understanding of the threat to global climate posed by human emissions of greenhouse gases.

However, if the Protocol is ratified and implemented, Mobil supports the use of market based economic mechanisms such as emission trading, Joint Implementation and the Clean Development Mechanism to reduce the negative economic consequences.

Any economic mechanism created in the implementation of the Protocol should:

- Cover all sources of the six greenhouse gases regulated by the Protocol,
- Create an incentive for non-Annex 1 countries to become involved,
- Provide credit for enhancement of sinks,
- Create easy mechanisms for companies to become involved,
- Provide an economic benefit to companies which participate,
- Be subjected to minimum financial and bureaucratic burdens, and
- Create a minimum intrusion to national sovereignty.

Regulatory measures should be used only as a last resort because of their unavoidable complexity, bureaucratic burden and market place distortions. Voluntary measures, particularly those taking advantage of emerging technology, hold great potential for improving energy efficiency and reducing greenhouse gas emissions.

1.2. Greenhouse Gas Emissions Trading

The Kyoto Protocol sets caps on greenhouse gas emissions from Annex 1 (developed) countries for the first commitment period 2008-2012. The Protocol also provides that if an Annex 1 country emits less than its cap during the first commitment period, it will generate emission credits which it can either bank for use against its cap in future commitment periods or sell to other Annex 1 countries that are emitting more than their cap. This trade in greenhouse gas credits can also occur at the national level.

Mobil believes there are two broad issues that need to be considered in relation to emission trading, namely:

- Is it possible to develop a workable, comprehensive, equitable, flexible, affordable and efficient emission permit trading scheme domestically and internationally?

- It is necessary to implement such a workable scheme at this point of time?

1.3. The Principles for a Workable Scheme

Mobil notes that in economic theory, greenhouse gas emission permit trading in competitive markets is a very effective mechanism for facilitating least cost emission abatement. However, there is, as in all things, a significant gap between the theoretical concept and how a trading system

may operate in a real life situation. It should be recognised that trading does not, of itself, abate emissions. Rather it is a vehicle for encouraging those with a capacity to take cost effective action to do so.

There are a number of principles that Mobil considers should underlie further work in relation to greenhouse gas emission trading. These are:

- Any scheme must not undermine the international competitiveness of the Australian economy. Any international scheme should apply to all countries that are major greenhouse gas emitters so as to minimise international trade distortions.
- A domestic scheme must be run at a national and not state level.
- Any national scheme must be capable of integrating into an international scheme including allowing the option for companies to freely trade nationally as well as internationally.
- The scheme must be able to deliver the objective. That is, it must be designed in such a way that it provides an economic incentive for those who can abate emissions to actually do so. The benefit of participating in the scheme must outweigh the operational costs.
- The coverage of the system should be comprehensive, that is, it should include all six gases covered by the Kyoto Protocol, all sources of greenhouse gases and credits for sinks and sequestration. The broader the coverage of an emissions trading system, the greater is the economic benefit and the more likely to achieve its end objective.
- The scheme must be equitable in its operation, that is, all parties must share a fair proportion of the burden including a fair share of the burden over time. New projects must not be disadvantaged.
- The scheme must allow emission abatement achieved in one time period to be banked for use or trading in future time periods.
- The scheme should not be a de facto revenue raising mechanism for government - emission quotas should be allocated free and not auctioned.
- The scheme must give certainty for ongoing operations and future investments.
- Emission permits must have a clear statutory backing. Compensation on just terms basis must be payable for any unilateral withdrawal of permits by government.
- There must be a transparent, credible and effective mechanism for accounting for emissions and for verifying them.
- There should be minimum government bureaucracy associated with trading and verification both domestically and internationally. Private organisations which rely on the free market mechanisms to create the market for emissions trading will be more effective than command and control schemes.
- The scheme must be compatible with other policies and measures both domestically and internationally (in the international context the scheme must be compatible with Joint Implementation and the Clean Development Mechanism).
- The size of the tradable quotas/permits needs to be as small as possible to increase flexibility in the market and enable companies to sell credits from reduction programs and

only buy as many credits as required to meets its obligations. 100,000 tonnes suggested in the Industry Commission's Staff Research Paper on "Framework for Greenhouse Emission Traading in Australia" is far too large. The USA SO_2 scheme enables companies to sell credits in lots of 1 ton.

The credibility of an emission permit trading system depends on the quality of emissions monitoring and verification. Once an emission trading system is in place, credits have monitory value. That value depends upon the emission reductions they represent being real, which can only be ensured if emissions have been monitored and the validity of the monitoring system has been verified.

In Mobil's view, there is a wide range of issues associated with addressing each of these principles which need to be resolved before it is possible to determine whether greenhouse gas emission permit trading on either a domestic or an international scale is workable, equitable, affordable, efficient and effective. We believe that considerable additional research and discussion needs to take place before regulatory arrangements are formulated.

Mobil opposes national emissions trading systems which allocate quotas only to fossil fuel producers and importers because such systems:

- Would have a relatively small number of participants which would limit the economic benefits of emissions trading, and
- Do not include end users, which would limit their incentives to improve efficiency and reduce emissions.

1.4. The Need for a Scheme Now

Mobil considers that there is no current need to rush to develop and implement a greenhouse gas emission permit trading system in the short and medium term remains to be demonstrated.

There is no pressure from the international process. The process of developing a workable international agreement is likely to be a protracted one and the final arrangements and details can not be approved until the Protocol has been ratified and come into force.

Equally, there is no real pressing need domestically. The Government has stated repeatedly that its existing policies and other measures announced in the Prime Minister's statement of November 1997 will deliver the outcomes Australia agreed to in Kyoto.

Nationally, greenhouse gas emission permit trading should not be considered a stand alone mechanism to facilitate abatement of greenhouse gas emissions. Policies such as improvements to

energy efficiency levels, fuel switching, developing new technologies and creating greenhouse sinks and absorption systems are other essential means for achieving emission abatement.

1.5. Conclusion

Mobil believes that given the extent and complexity of the issues involved, it would be very prudent to proceed cautiously with plans to design a greenhouse gas emission permit trading system either domestically or internationally. Future planning should involve the active participation of all potential parties to the system from its earliest stages.

As a consequence, Mobil believes that the best approach for the Committee to pursue is to endeavour to achieve a consensus on the policy principles that an effective emission permit trading scheme must conform to.

2. Introduction

2.1. Who is Mobil Oil Australia Ltd (MOA)?

Mobil was the first oil company in Australia. It began as Vacuum Oil in 1895.

MOA operates two petroleum refineries in Australia, one in Melbourne and the other in Adelaide, as well as seven distribution terminals, eleven coastal bulk plants and supplies (directly or through distributors) to over 1900 service station sites.

As one of Australia's major industrial companies, MOA directly employs over 1700 people and owns assets valued at approximately A$2 billion.

The Pacific Islands forms an integral part of MOA's marketing area. Mobil operates in eleven countries in the Pacific which are supplied by ship from the refineries in Adelaide and Altona.

2.2. Who is Mobil Exploration and Producing Australia Pty Ltd (MEPA)?

MEPA has current interests in 80 exploration permits (15 operated) covering 26 million acres on the North West Shelf and the Timor Sea, and the major oil producing fields of Wandoo (As operator) and Griffin. MEPA is also a partner in the WAPET consortium which owns the Gorgon gas field off Western Australia's north west coast.

2.3. The Contribution of the Sector to National Prosperity

The output from the upstream oil and gas sector in the form of crude oil, condensate, liquid petroleum gas (LPG) and natural gas provides approximately 55% of Australia's basic energy requirements. Crude oil comprises 37% of the energy consumption, primarily in the transport sector, and natural gas comprises 18%.

The consumption of crude oil will continue at current levels in the foreseeable future as gasolines and diesels derived from crude oil will continue to be the mainstay of transport fuels for many years to come until new cost effective technology becomes available.

Liquefied Natural Gas (LNG) exports make a significant contribution to "cleaner" energy consumption overseas, particularly in Japan.

The downstream oil refining and marketing industry is subject to full competition from overseas, particularly from non-Annex 1 countries in South East Asia.

Any policy measure that impacts on the international competitiveness of the sector is therefore a matter of key national concern as well as a matter of industry concern.

In this context it needs to be recognised that:

- The upstream and downstream oil and gas industry does not set the price for their products, rather they are set in highly competitive international markets.
- If a policy approach, such as emission permit trading, places a cost burden on the Australian oil and gas industry which its competitors do not face, these costs can not be passed onto consumers via price increases. The industry must absorb the cost increase. This inevitably means that the attractiveness of Australia as a place to invest is undermined with consequent supply security, budgetary, environmental (fuel switching) and balance of payments implications.
    - Most alternative suppliers of crude oil to Australia and competitors with Australian crude oil exports are not Annex 1 countries.
    - With the exception of a small plant in Alaska, Australia is the only Annex 1 country to produce LNG.
    - Supplies of imported refined petroleum products which compete against the local refineries are mainly sourced from non Annex 1 countries. Currently, imported refined products supply approximately 8% (in 1995) of Australia's requirements and growing.

If the Australian refining industry becomes less competitive, more refined products will be imported rather than refined locally and greenhouse gas emissions will be effectively moved offshore. If the overseas refinies that subsequently replace the Australian production, including purchased electricity, are more efficient than the Australian industry, there will be a net reduction in global greenhouse gas emissions. If on the other hand, it is less efficient, then global greenhouse gas emissions will increase for no change in global production. Emissions from shipping will increase as product tankers consume more fuel per tonne kilometre than the larger crude oil carriers and these emissions are not included in any country’s emission inventory. The same apples for other industry sectors.

2.4. Framework for the rest of this Submission

This submission primarily deals with issues relating to a greenhouse gas emission permit trading system in a domestic context. However, many of the issues raised are equally applicable in the international context.

Before endorsing emission permit trading as a policy tool that should be adopted in Australia or internationally to facilitate cost effective emission abatement, Mobil believes the following questions must be addressed.

- Is it possible to develop a workable, comprehensive, equitable, flexible, affordable and efficient emission permit trading scheme domestically and internationally?

- It is necessary to implement such a workable scheme at this point of time?

In answering these questions, there are some key threshold issues to be considered along with various other issues related to the design and implementation of any such emission permit trading system which we believe also need to be taken into account.

In addressing the question of the need for a scheme, Mobil believes careful consideration should be given to Australia's national and international economic (competitiveness) interests.

3. A Workable Scheme

Given that any greenhouse gas emission permit trading scheme is intended to provide the most cost effective path to achieving emission abatement, it is essential that the operation of the scheme be designed in such a way that the benefits achieved exceed the cost. This is essential if there is to be an economic incentive to trade. If this base criterion is not met, the scheme has failed in its prime purpose.

Policy Principle

Any greenhouse gas emission scheme must be designed in a way that provides an economic incentive for those who can abate emissions to actually do so. The benefits of participating in the scheme must substantially outweigh the operational costs.

There are several reasons why the workability of a greenhouse gas emissions permit trading scheme has to be examined in detail.

- While the concept, when it is applied to economic theory, clearly gives a least cost adjustment path for emission abatement, there are some significant differences between the assumptions that underlie an economic model and the factors that will apply in the real world, for example:
    - The theoretical world is a pure competitive one whereas the real life world is likely to have significant market constraints on it. Any international emission permit trading scheme will for the foreseeable future be restricted to Annex 1 countries. Such a scheme is likely to be dominated by two large buyers (USA and Japan) and one or two large sellers (Russia and the Ukraine) who will set the price.
    - The theoretical world does not have to deal with issues of measurement and verification. The real life world does and, in addition, the state of any science is such that measurement may be imprecise or difficult to achieve in many areas. The major measurement problems relate to diffuse emission sources, sinks and land use and clearance, each of which plays a significant part in the overall national emission levels.
- The most quoted example of an effective working emission permit trading scheme, the SOx emissions trading scheme in the USA, in no way approximates the complexity that would exist in relation to a real life greenhouse gas emission permit trading model, for example:
    - The SOx model does not cover the range of gases, sources and sinks that would be involved in a greenhouse gas system,

- The SOx model involves relatively few parties, and
- The SOx model does not operate in an international context

3.1. Basic Requirements

The basic requirements Mobil would see applying to a real world scheme are that:

- It must provide for the emissions to be measured in a consistent and transparent manner, with a practicable and cost effective verification system,
- It must be equitable,
- It must be efficient, that is it must be cost effective in its operation, with the benefits outweighing the costs,
- It must give certainty to investors.

In addressing the question of whether it is possible to develop a workable, equitable, efficient and certain emission permit trading system it is necessary to address the following 3 key areas

- Threshold issues (such as whether to have a cap/trade system or a baseline/credit system),
- Design issues (such as institutional mechanisms for trading),
- Implementation issues (such as monitoring and enforcement).

3.2. Threshold Issues

3.2.1. The International Context

The threshold issues which are unique to the international context include:

- Which countries are involved in the scheme,
- The relationship between international and domestic systems,
- The relationship of any international emission permit trading system to other policies.

As is noted below in the discussion on domestic issues there are a number of threshold issues where it would be desirable to have consistency between a domestic and an international greenhouse gas emission permit trading scheme.

In Mobil's view, the issue of the international coverage of the scheme should be governed by four factors.

- Australia's growth potential and economic and social well being depends upon maintaining and enhancing the international cost competitiveness of its traded goods sector. If emission permit trading places obligations on Australian industry that its international competitors in this sector do not face, then competitiveness is inhibited. This issue is most satisfactorily avoided by having a scheme that covers the greatest possible number of countries (including non Annex 1 countries).

- Greenhouse is a global problem requiring global solutions. A scheme that operates only within Annex 1 countries or only within a subset of Annex 1 will not be addressing the whole or even a major part of the problem. Emission permit trading will, at best, provide a partial solution and economic distortions and large capital flows to non Annex 1 countries will be an inevitable consequence.

- Emission permit trading is a mechanism for achieving cost effective abatement. Since some of the most cost effective emission reduction options exist outside Annex 1 countries it would not seem economically rational to limit such trading to Annex 1 countries or a subset of these.

- The concept of emission permit trading is based on the assumption that there is a competitive market for permits. The greater the number of buyers and sellers involved the more likely this theoretical precondition will be met. As noted above, a system that only involves a subset of Annex 1 countries is unlikely to be competitive e.g. a few large players could dominate. Therefore, it can not deliver the most cost effective emission abatement strategy.

Policy Principles

No aspect of greenhouse gas policy (including emission permit trading) should undermine the international competitiveness of the Australian oil and gas industry.

Any international greenhouse gas emission permit trading scheme must apply to all countries that are major greenhouse gas emitters, otherwise at best, it will contribute to a partial solution.

The relationship between international and domestic emission permit trading systems is also a critical factor. How this melding of two potential systems can be achieved is unclear.

It is desirable that international emission permit trading not be on a country to country or government basis. Until design issues (including sovereignty related issues) are worked though in

much more detail, any domestic or international system should not rule out the option of international corporations trading amongst their international subsidiaries or of corporations opting for which country they wish to trade in. The analogy of international trading in stocks and shares is an appropriate one.

It also needs to be borne in mind in the international context that greenhouse gas policy is as much an international trade issue as an environmental one and that emission permit trading is only a market mechanism for achieving cost effective abatement. It is therefore necessary to carefully consider the relationship between the international permit trading system to other policies needs to be constantly born in mind.

An emission permit trading system should not become a barrier to trade or create significant trade distortions. Participation or otherwise must not be accompanied by trade sanctions and the design of the system should not depend on the erection of trade barriers for its effectiveness.. In short, the system must be consistent with the World Trade Organisation (WTO) principles.

It is also essential that the permit trading system does not operate in a manner that inhibits international flows of capital.

Finally, it is essential that other international greenhouse gas policy mechanisms such as Joint Implementation and the Clean Development Mechanism are able to operate in an integrated manner with emission permit trading. To achieve this, consideration of all three mechanisms must proceed hand in hand and one should not be set in place without the others.

Policy Principle

Any national scheme must be capable of integrating into any international scheme including allowing the option for companies to freely trade nationally as well as internationally.

The scheme must be compatible with other policies and measures both domestically and internationally (in the international context the scheme must be compatible with Joint Implementation and Clean Development Mechanism)

3.2.2. The Domestic Context

The setting of a target is an essential pre-requisite to the implementation of a greenhouse gas emission permit trading system.

The Kyoto Protocol of 1997 sets a target for Australia of 8% growth in net greenhouse gas emissions from a 1990 base by the period 2008-2012. It is not clear, however, that this is the appropriate basis for a greenhouse gas emission permit trading system.

- There is still some doubt as to when or whether the Kyoto Protocol will enter into force. Even if it does, how effective will it be if the USA and other major emitters do not ratify the Protocol?

- The target has fundamental trade competitiveness implications for Australia since only Annex 1 countries accepted targets in the Kyoto Protocol.

- Other policies and measures have already been announced or put in place to achieve this target.

There is also a link between the choice of a target and the sector coverage of any greenhouse gas emission permit trading scheme.

- If all sectors, sources and sinks are to be covered the 8% growth target may seem appropriate. However this may not allow new entrants to establish businesses within Australia. The problems that need to be considered when establishing a base for allocating quotas are discussed in more detail later in this section.

- If some sectors (e.g. the almost 50% of emissions emanating from diffuse sources) are to be excluded from a domestic trading system, then a higher target would be necessary. For example, if the coverage was only the energy sector and energy intensive industries, government forecast suggest a target of about 40% growth from 1990 to 2010 would be appropriate.

- If all or some sinks are to excluded, for example land clearance, government figures suggest a target of 18% growth over the period 1990 to 2010 would be appropriate.

All of these are based on the assumption that the base line will be 1990 and the target period will be 2010 (i.e. mid point of the first budget period 2008-2012. If either of these time dimensions changes, then there is a need to reconsider the appropriateness of the target options in totality (see the discussion on base lines below).

Mobil believes there are four reasons why it is essential that all sectors should be included in any greenhouse gas emission permit trading scheme.

- Greenhouse is not a sectoral issue. It is one that not only affects all nations but also affects all sectors that either emit greenhouse gases directly and/or use materials or products whose manufacture or transport has resulted in greenhouse gases being emitted. In addition, the inter sectoral distribution of emissions in Australia is such that the exclusion of the emissions from one sector from trading would fundamentally compromise the effectiveness of the policy and alter inter sectoral competitiveness. The equity issues relate not only to the relative profitability of sectors and free riding but also to employment levels and future investment flows.

- Including all sectors should increase the flexibility of policy responses available.

- The broadest possible sectoral participation should improve the capacity to create an efficient market and prevent any one sector from being able to dominate and manipulate emission permit trades. For example, if the coverage excludes diffuse sources such as motor vehicles and land use, then as much as 50% of Australia's total emissions will be excluded from the trading scheme and there will be increased capacity for one sector with high emissions to distort trades and prices.

- All sectors need to be included to provide all emitters with an incentive to implement economic energy efficiency and reduction programs or invest in sinks and sequestration programs.

Whilst there are significant measurement and administrative difficulties associated with incorporating emissions from diffuse sources in such a trading scheme, this may not be as difficult as first thought. Take farming for example, most of the information is already reported. Fuel usage is reported in claiming the diesel fuel rebate, stock numbers and possibly the acreage being cropped. Land use is the only remaining area to be addressed and clearly this is currently being researched. It is important to keep in mind that much of the required information on diffuse sources is already being collected and the question is how to include diffuse sources into a emission permit trading scheme in a cost effective manner so that the benefits exceed the costs.

The key point is that, if some sectors are to be excluded from the coverage of a greenhouse gas emission permit trading scheme, such a scheme would not be acceptable unless a comprehensive suite of alternative policy measures are implemented to achieve emission abatement in the excluded sectors. These measures would have to come into force at the same time as thew emission permit trading scheme commenced operation.

The choice of target depends upon the comprehensiveness of the gas coverage of the scheme.

- The Kyoto Protocol covers six gases (CO_2, CH_4, NOx, PFCs, HFCs and SF_6). Having a domestic permit trading scheme cover all six gases would facilitate consistency with the design of any international scheme. However, since the Protocol allows a different period for counting some of the gases, there will be complications in system design.

- The adequacy of data bases and measurement mechanisms differs for some gases. For example, CH_4 emissions for agriculture are not well documented and are difficult to measure.

- The need to achieve the maximum possible policy, operational and/or commercial flexibility for achieving abatement of emissions would suggest that the coverage of gases in a greenhouse gas emission permit trading system should be as comprehensive as possible.

- The more gases that are traded, the broader and more diverse the market will be and the greater will be the capacity to achieve an efficient competitive market.

It should be noted that Mobil is opposed to a system that traded CO_2 emissions only. This goes against the comprehensive approach that has governed international negotiations to date and Australia's participation in those negotiations.

There is a link between target choice and whether trading will be of net or gross greenhouse gas emissions.

- Issues of compatibility with any international system and the need for operational flexibility suggest that emissions should be able to be traded on a net basis.

- Trading on a net basis suggests that natural carbon sinks and other methods of carbon fixation must be included in the scheme.

- The broadest possible basis for trading will help facilitate an efficient market by increasing the scope for competition and trades.

Policy Principle

The coverage of the scheme should be comprehensive; that is, it should include all gases covered by the Kyoto Protocol, all sources of greenhouse gases and credits for sinks and sequestration of emissions.

3.2.3. Allocation of Permits

Once a target has been chosen it is necessary to decide the basic mode of operation of the system. Will the system operate on the basis of:

- An allocation of permits with trading and to facilitate a cost effective approach to a future emission cap; or

- Acceptance of a base line and the need to trade credits achieved by taking emission reduction actions to reach some future cap?

The method by which the allocations of permits will be made raises fundamental international and investment equity issues that need to be considered in developing a workable scheme. These include:

- The basic principle that should be applied to the allocation of permits is that there should be equality of net welfare gains and/or losses for each party as a result of the allocation. Perverse costs and incentives should be avoided or minimised.

- There will be a need to ensure that windfall gains are avoided or minimised.

- Permits should be allocated so as to have zero or minimal financial and competitiveness distortions, This is probably best achieved by making any initial allocation of permits free. Any scheme to auction permits would in effect be a carbon tax with all of its associated problems.

- New projects should not be put at a disadvantage relative to existing projects. Possibly the government should retain a pool of permits to allocate to new projects or new players in the market.

- There will have to be a capacity to bank emission abatement gains now so that they can be applied in the future eg. to new investments or to existing projects that become less energy efficient over time e.g. in the later stages of oil and gas field production.

- There must be a capacity to accommodate changes in the level of scientific knowledge.

- Equally, since projects are likely to have an economic life beyond the period of current international treaties (eg. the Kyoto Protocol only runs to 2112) there needs to be a capacity to accommodate changes in international policy over time. Permits may have to be issued for the duration of a project to give certainty.

In relation to allocating permits, there is the question of which government should do the allocation. It is strongly recommended that the allocation should be done at the Commonwealth level even though matters such as land use clearance and control of airborne emissions are matters that have traditionally been in the domain of the States and Territories. Although sovereignty issues may arise, the allocation of permits by the Commonwealth Government is necessary since:

- the scheme needs to be uniform nationwide (a sub national scheme could constitute an impediment to free interstate trade under the constitution);
- the scheme is basically being introduced as a result of an international treaty;
- many corporations carry out their business activity on a nation wide basis and would wish to undertake greenhouse gas emission permit trading in the same basis.

Policy Principle

The scheme should be equitable in its operation; that is all parties must share a fair proportion of any burden including any burden over time. New projects should not be disadvantaged.

A sub national scheme or set of schemes is unacceptable.

The scheme must allow emission abatement achieved in one period to be banked for trading in future periods of time.

The scheme must not be a de-facto revenue raising mechanism for government - permit quotas should be allocated free not auctioned.

3.2.4. Determining the Base Year

The next key threshold issue is determining the base year. Again fundamental equity issues are likely to arise.

The Kyoto Protocol targets are expressed in terms of anthropogenic emissions by countries corresponding to particular periods of time. The international baseline for some gases is 1990 and for other gases there is a choice between 1990 and 1995. Such benchmarks will have a direct bearing on the total volume of permits which can be allocated within any domestic tradeable permit regime which might be established within Australia. However it does not follow from this that

these base years should provide the benchmarks for initial allocations of permits to users within Australia. This is a matter which business will need to consider further in future consultations with government.

In addition to the complex issues associated with initial allocation of permits, further critical issues which must be subject to detailed consideration and consultation include:

- How to allocate for economic (and emissions) growth in a way that is equitable and does not stymie actual and/or potential investment and growth in the economy or within individual sectors,

- How to allocate permits to new entrants in the economy (and the permits market) - or to those that have no operating/emissions history or quantifiable baseline emissions (say, for example, emissions at any stipulated base year),

- How to define to what, or where permits are allocated - legal entities (which may have operations in Australia but be registered in another country), permits for emissions (from disparate and multitudinous sources), particular sites, particular sources of emissions or the point of measurement of emissions,

- How to allocate permits to accommodate the expected emissions during the full economic life of a particular project or activity,

- How to allocate permits for, or accommodate, short term fluctuations in emissions from those originally estimated or calculated as part of the initial allocation methodology, and

- How to allocate and account for changes to Australia's target from one budget period to the next.

Mobil opposes national emissions trading systems which allocate quotas to only fossil fuel producers and importers because such systems:

- Would have relatively small number of participants which would limit the economic benefits of emissions trading,
- Do not include end users which would limit their incentives to improve efficiency and reduce emissions.

If the government decides to reserve some part of the permit allocation for distribution in a future period, there will again be significant equity issues. How the future allocation is determined and its subsequent distribution must be the subject of clear and transparent processes.

3.2.5. Creating Certainty

The final threshold issue is that of creating certainty. Certainty is necessary both for current and future investors and for transparency and efficiency of any trading mechanism.

Certainty with respect to handling changing scientific knowledge and changing domestic and international policy has already been mentioned.

Certainty must also be given against expropriation of permits. Permits must be treated as a property right. They must be given legislative protection and must be subject to the payment of just terms compensation if cancelled by government,

Policy Principle

The scheme must give certainty to ongoing operations and to future investments.

3.3. Design Issues

As they have dominated the discussion of threshold issues, two key criteria dominate design issues, namely:

- The international competitiveness of the Australian economy should not be impaired, and
- The benefits flowing from the scheme (in terms of incentives to take abatement action and trade) must not exceed the cost of administration and compliance.

Mobil is firmly of the view that a greenhouse gas emission permit trading system must be comprehensive (all gases, all sources, all sinks). If a comprehensive system is to operate, then it is necessary to decide on a basis for converting all emission abatement actions to a common basis. For consistency between the domestic and international systems and also for consistency with the current state of the science, Mobil considers that there is no alternative other than to establish trading on the basis of CO_2 equivalents determined on the basis of the global warming potential of the gases. However, the likelihood that these global warming potential may be further refined needs to be born in mind as it is possible that the Protocol may be expanded to include additional greenhouse gases.

Determining common methodologies for measurement will be an essential element for the design phase. It will be necessary to ensure that all entities measuring emissions are doing so in consistent manner. Some of the inventory handbooks that have been developed for the Australian National Greenhouse Emissions Inventory will be a basic starting point. Some clear rules will have to be developed about issues such as will measuring equipment have to be installed or can estimates be made on the basis of energy consumed or output produced.

There are still significant unresolved measurement issues internationally and domestically about absorption of emissions into forest sinks and the emissions associated with land use clearance and agricultural practices.

The costs of establishing estimation procedures and of installing equipment for metering emissions also have to be considered in gauging the overall benefits and costs of the system.

A second factor in relation to design is the determination of the entity to receive an allocation of emissions and to report trades. The upstream oil and gas industry will present a number of complexities in this regard.

Most oil and gas production fields in Australia are operated on a joint venture basis; that is, while a number of companies participate in the project of developing and producing oil and gas, one company is the overall operator of the field. The operator will have all the information on emission and production rates but not final accountability for policy and actions. It will be necessary to resolve whether the operator or the owners get an allocation of permits, and if owners get the allocation, a transparent basis for allocating permits and emissions within the joint venture and for trading will have to be determined.

Also, most oil and gas companies operate internationally. If companies get an allocation of permits nationally will they be restricted to trading within their national subsidiary or will they be allowed to trade internally within the international corporation? The outcome of this issue has implications for the efficiency and competitiveness of domestic markets and for the relationship between domestic and international permit trading. There are also transfer pricing, transparency and national reporting requirements to be considered.

If a company‘s operations incorporate several geographically dispersed production units, it is also necessary to consider whether emission permits will be allocated on a whole of company basis or on a plant by plant basis. If the later, will plants be able to trade within the company (and if so at what price and how will transparency be ensured) or must all trades be external to the company?

Another key design issue is the treatment of emissions resulting from the production of energy intensive exports. If production of the energy intensive export results in emissions being generated in Australia but its consumption generates significant emission abatement overseas it is reasonable

to argue that the Australian production entity should not bear the full burden of accounting for the production emissions. Possibly credits can be allowed for trading in the Australian greenhouse gas emission permit trading system.

A further complication in the debate about emission permits for new entrants concerns will have to be made as to whether an allocation of permits should occur at the design stage of a plant, at the commissioning stage or at the fully operational stage. Allocation at the design stage creates the possibility that the designed emission level will differ from the actual emission level, However, allocation at the start up or operational phase means that a new risk element is introduces into investment decision making. Since permits will be a tradeable property right, potential trades will have to be made about potential trading over the life of a project without a permit allocation having been received. It also has to be recognised that there may well be different emissions levels between the start up phase and the fully bedded down operational phase of a project. There may be windfall gains or losses depending in when a permit allocation is made.

The design of a trading mechanism will have two operational components:

- The allocation process, and
- The trading process

Who actually operates and controls each stage can differ.

The allocation of permits is a matter that needs to be done by government on a holistic basis, taking into account key factors, including fundamental international competitiveness, equity and investment implications that flow from the allocation decision. However, as noted previously allocation must not be a revenue raising exercise. The process of allocation needs to be open and transparent.

A key link between the allocation process and the actual trading system is the way in which information about the allocation of permits and the availability of permits for trading will be publicised. A competitive trading market in permits not only needs a significant number of buyers and sellers but it also requires ready access to all relevant information about the system. This is not an insurmountable problem in an era of electronic data availability, but it is one which must receive attention at the earliest stages of system design.

The allocation process should be the sole involvement of government in the operation of the greenhouse gas emission permit trading system. To have a cost effective trading mechanism it is essential the bureaucratic involvement be minimal and that trading costs be kept as low as possible. The actual mechanism for trades should be left up to the markets. The stock exchange and/or the commodity traders may handle it. There may need to be the capacity for secondary markets,

hedging and/or futures trading to ensure that risks can be minimised and market mechanisms operate flexibly.

Policy Principle

There should be minimum government bureaucracy associated with trading and verification both domestically and internationally. Market based schemes will be more effective than command and control schemes.

3.4. Implementation Issues

Implementation issues relate primarily to the areas of verification and enforcement and the institutional mechanisms that will maximise market flexibility.

3.4.1. Verification

The credibility of an emission permit trading system depends on the quality of emissions monitoring and verification. Once an emission trading system is in place, credits have monitory value. That value depends upon there being emission reductions they represent being real, which can only be ensured if emissions have been monitored and the validity of the monitoring system has been verified.

Verification will have to occur in three areas.

- Since it is almost certain that any initial allocation of permits must relate in some way to a base line level of emissions, it will be necessary to have independent certification of base lines.
- Similarly emission savings as a result of abatement actions will need to be verified, whether the savings are to be used/traded immediately or banked for some future period.
- Finally, credits attributable to greenhouse gas sequestration (sink development) efforts will have to be verified.

There is no need for government involvement in the verification process. The sole requirement should be for independent and credible verification of base lines, abatement savings, sequestration credits and trades.

How trading entities establish an appropriate degree of independence for their own verification processes should be a matter for internal governance. How the market based trading mechanisms seek verification of permits being traded, is a matter for the controlling body for the market mechanisms. If a permit is not accompanied by certification (or is accompanied by inadequate certification) presumably the market will trade it a discount to one that is accompanied by adequate certification; that is there will be a financial penalty for inadequate certification not a regulatory one.

There is a link between the comprehensiveness of a trading system and the cost of verification. The cost of verification will probably be lower if non-carbon greenhouse gases and sinks are excluded from coverage. However comprehensive, competitiveness, equity and flexibility would be seriously undermined by such a decision.

Internationally, countries which have well established environmental regulatory systems have mechanisms in place to establish credible systems. However, care must be taken to ensure that these systems do not create unnecessary burdens. Countries such as Russia, which do not have well developed environmental regulatory systems could face enormous difficulties in establishing credible emissions monitoring and verification systems.

Individual nations would have the primary responsibility for emissions monitoring and verification. The United Nations has a role to play, but it should be limited to checking on national systems. Environmental groups and some developing nations have suggested that a United Nations agency be established to certify emission credits. Given the traditional United Nations bureaucracy, this approach could be costly and time consuming. It would also give an international agency significant control over a key economic parameter, an intrusion into national sovereignty. A more reasonable approach would be to have United Nations review teams, which already evaluate countries' National Communications, certify that a country has an adequate emissions monitoring and verification system before that country could participate in emissions trading.

3.4.2. Enforcement

Enforcement penalty provisions arise in two respects.

- Consideration will need to be given to the appropriate penalties if fraudulent trading is detected.

- What penalties should be considered at an international level for non compliance with the Kyoto Protocol emission targets?

The US government and a variety of environmental groups have proposed using loss of emission trading rights as a penalty for non-compliance with the Kyoto Protocol. Mobil recognises the need for a meaningful set of non-compliance penalties to ensure that once the Kyoto Protocol enters into force, its provisions are adhered to by the countries which have ratified it. However, the penalty should fit the crime. Loss of emissions trading rights is a major penalty, with the potential to create significant economic impacts, whether the country involved is a buyer or seller of credits. It should only be used for cases of significant, premeditated non-compliance. Other, lesser penalties should be developed for minor or inadvertent non-compliance.

Companies could face significant problems if a country lost its right to trade emissions credits. A company which in good faith bought credits issued by that country would suddenly find that those credits were worthless, and it did not have the emissions credits necessary to continue its business. Use of loss emissions trading rights as a non-compliance penalty should be limited to future transactions and not invalidate existing credits.

Policy Principle

There must be a transparent and effective mechanism for accounting for emissions and for verifying them.

Institutional arrangements will need to be:

- Independent of government,
- Supported by statutory underpinning of property rights being traded, and,
- Supported by credible, independent verification and compliance mechanisms.

4. Is a Scheme Needed Now?

Mobil considers that the need to develop and implement a greenhouse gas emission permit trading system now, or in the near future, needs to be carefully evaluated against Australia's national and international economic interests. The costs and benefits need to be clearly identified.

The complexity of the issues that need to be resolved (as discussed above) provides a strong motive for caution.

It is likely that a badly designed greenhouse gas emission permit trading system would impose more costs than benefits in the Australian economy.

Importantly, it is not clear that Australia's current international commitments under the Kyoto Protocol cannot be met by the implementation of the measures in the Prime Minister's policy statement of November 1997, together with resolution of the land use aspects of Australia's greenhouse gas position. These land related policy areas are those that it will be most difficult to facilitate by an emission permit trading system.

Further, the timeline envisaged for ongoing international negotiations on greenhouse gases provide the opportunity to take all due care in the development of a domestic greenhouse gas emission permit trading scheme.

- It will be at least twelve months before even the broad principles to govern an international trading mechanism are agreed. The nations must get down to the detailed negotiating process of determining base lines, administrative mechanisms and verification of enforcement mechanisms. This will not be an easy negotiating task. The international equity and competitiveness implications will be very complex and extremely difficult to resolve. Final agreement on the details of an operational international system, if it proves workable to establish one, do not need to be resolved until at least 2005 and possibly later.

- En effective international permit trading scheme must involve a commitment to participate from key non-Annex I countries (eg. Chine, India, Brazil). Given the views expressed by these countries at Kyoto, it is difficult to see this commitment being forthcoming in the short to medium term.

5. Conclusion

There are clearly substantive threshold, design and implementation issues that need to be resolved before an effective greenhouse gas emission permit trading system can be brought into operation. Many of these issues are inter-related and resolution of them will involve complicated, and potentially costly, trade-offs. Significant amount of further study of these issues needs to be undertaken.

Mobil believes that, given the current policy imperatives and state of knowledge, no case exists for rushing to implement a greenhouse gas emission trading mechanism either domestically of internationally in the short term to medium term.

To rush the implementation of a scheme would have no demonstrated benefit for Australia (or the world) in terms of achieving its Kyoto Protocol emission abatement targets.

There is a strong probability that the rushed introduction of a scheme would impose significant net economic and social costs on Australia due to the key role that energy and energy intensive industries play in underwriting national property.

As a consequence, Mobil believes that the best approach for the committee to pursue is to attempt to define policy principles which are workable, efficient, equitable and certain emission permit trading system must conform to.

This submission sets out such a set of principles. They are:

- Any scheme must not undermine the international competitiveness of the Australian economy. Any international scheme should apply to all countries that are major greenhouse gas emitters so as to minimise international trade distortions.
- A domestic scheme must be run at a national and not state level.
- Any national scheme must be capable of integrating into an international scheme including allowing the option for companies to freely trade nationally as well as internationally.
- The scheme must be able to deliver the objective. That is, it must be designed in such a way that it provides an economic incentive for those who can abate emissions to actually do so. The benefit of participating in the scheme must outweigh the operational costs.
- The coverage of the system should be comprehensive, that is, it should include all six gases covered by the Kyoto Protocol, all sources of greenhouse gases and credits for sinks and sequestration. The broader the coverage of an emissions trading system, the greater is the economic benefit and the more likely to achieve its end objective.

- The scheme must be equitable in its operation, that is, all parties must share a fair proportion of the burden including a fair share of the burden over time. New projects must not be disadvantaged.
- The scheme must allow emission abatement achieved in one time period to be banked for use or trading in future time periods.
- The scheme should not be a de facto revenue raising mechanism for government - emission quotas should be allocated free and not auctioned.
- The scheme must give certainty for ongoing operations and future investments.
- Emission permits must have a clear statutory backing. Compensation on just terms basis must be payable for any unilateral withdrawal of permits by government.
- There must be a transparent, credible and effective mechanism for accounting for emissions and for verifying them.
- There should be minimum government bureaucracy associated with trading and verification both domestically and internationally. Private organisations which rely on the free market mechanisms to create the market for emissions trading will be more effective than command and control schemes.
- The scheme must be compatible with other policies and measures both domestically and internationally (in the international context the scheme must be compatible with Joint Implementation and the Clean Development Mechanism).
- The size of the tradable quotas/permits needs to be as small as possible to increase flexibility in the market and enable companies to sell credits from reduction programs and only buy as many credits as required to meets its obligations. 100,000 tonnes suggested in the Staff Research Paper is far too large. The USA SO_2 scheme enables companies to sell credits in lots of 1 ton.

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17 March 1998

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