

Inter-jurisdictional Emissions
Trading Working Group

Submission by

ExxonMobil.

November, 2005

Executive Summary

1. ExxonMobil encourages state governments to take both a long-term and global view of both the risks of climate change and the solutions that may be necessary to address those risks.
2. Near-term limits or caps on emissions are not an effective way to address the long-term risks of climate change yet they have direct negative impacts on economic activity.
3. In contrast the development and global deployment of innovative, commercially viable technology is the path that can address long-term climate change risks while preserving and promoting economic growth in the world's economies, including Australia's.
4. The Australian Federal Government has undertaken this approach in developing its national/international greenhouse response.
5. The establishment of initiatives like the Low Emissions Technology Development Fund and the signing of the Asia Pacific Clean Energy and Climate Pact creates a long term policy framework for addressing the potential risks associated with climate change.
6. In the near term Gas-fired electricity in Australia offers one of the biggest reduction opportunities in the power generation sector and can be achieved with current technology, without introducing higher cost measures such as emissions permit trading or carbon taxes.
7. State based or local responses unless done within the overall national framework, will be ineffective and potentially counter-productive.

Introduction

ExxonMobil is the largest integrated oil and gas company in Australia. Total investment, in both the Upstream and Downstream, is around A\$13 billion. Over A\$2.5 billion in technology and facilities has been invested in Australia over the last five years.

ExxonMobil is a producer of oil and gas from the Gippsland basin in Victoria through its subsidiary Esso Australia Resources Pty Ltd. This oil and gas is supplied to customers in Victoria, New South Wales, the ACT, Tasmania and South Australia.

In addition, ExxonMobil is seeking to become a major gas producer in Papua New Guinea and in the Carnarvon Basin of Western Australia. Our PNG marketing group is actively marketing gas into the north and east of Australia. If successful, the project will require very significant investment for the development of both gas production facilities and transmission pipelines. Our marketing activities for Carnarvon Basin gas targets primarily export LNG sales with an opportunity to assess the feasibility of domestic gas sales in Western Australia.

Background

The Inter-jurisdictional Emissions Trading Working Group (IJWG) was established to develop an emissions trading scheme. It was initiated in early 2004 on the instigation of then NSW Premier, Bob Carr and involves all states and territories.

The terms of reference for the Working Group are as follows:

- Provide a framework to reduce emissions
- Assist in meeting Australia's Kyoto target
- Position us for a carbon constrained future
- Reduce emissions beyond 2012
- Allow for international consistency
- Focus on energy but allow expansion
- Minimise compliance and administrative costs

Its key objectives in developing a state based scheme include :

- Meeting environmental objectives
- Achieving emission reductions at least cost with reasonable burden sharing
- Minimising risk and exposure of governments to future carbon liabilities
- Provide greater certainty for investors

The IJWG is now seeking submissions with respect to approaches to designing a state based emissions trading scheme (ETS) and it is in this context that ExxonMobil welcomes the opportunity to provide comment

Addressing Climate Change Risk

ExxonMobil believes that climate change is an important issue.

We recognise that the risk of climate change and its potential impacts on society and ecosystems may prove to be significant. Our approach is to take sensible, economic actions now to improve efficiency and reduce emissions while pursuing research designed to better understand scientific issues and to achieve technology breakthroughs that could dramatically reduce future emissions.

Specific actions we have taken include:

1. Enterprise level measurement and reporting of emissions from our operations and stewardship to corporate management in the same way that we steward costs and use of raw materials.
2. Development of accounting and reporting guidelines. As there is currently no commonly accepted methodology for accounting for greenhouse gas emissions, we have been a leader in developing a global Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and Gas Industry (with the intention that this methodology would become an industry standard). The methodology has been adopted by IPIECA.
3. Reducing operational emissions through energy efficiency improvements, fuel switching and flare reduction.
4. Implemented a new Global Energy Management System to focus on continuous improvement.
5. Cost-effective and systematic ways to reduce flaring at our production sites
6. Reduced energy use in our refineries and chemical plants, resulting in 37% more efficiency than 25 years ago.
7. Conduct and support scientific and economic research
8. Support scientific research at MIT, Columbia University, Stanford (economic research)
9. Undertaking advanced technology research and development Partnership in the United States with Toyota for research into commercially viable fuel cells and advanced internal combustion engines
10. Support breakthrough technology research (Global Climate and Energy Project "G-CEP") Technology research to develop innovative, commercially viable solutions leading to significantly lower greenhouse gas emissions - US\$100M investment in Stanford University led US\$250M Global Climate and Energy Project (G-CEP). Other sponsors are Toyota, GE and Schlumberger.

In Australia, greenhouse gas emissions for our upstream operations have been reduced by nearly 28% since 1990. All our plants have operational programs aimed at minimizing flaring.

These programs together with initiatives to improve fuel efficiency have contributed significantly to this result. An 18% reduction has also been achieved across our Australian refining business.

A National/International Approach to Climate Change

Climate change is a global issue requiring national governments to work towards global solutions.

In this context an effective climate change policy should have clear objectives that:

- Promote sensible, economic actions now to reduce emissions
- Encourage use of commercially viable technologies to reduce emissions
- Stimulate technological innovation for affordable long-term solutions
- Recognise that economic progress is essential for environmental stewardship
- Provide flexibility to adjust policies with advances in science and technology
- Confer no unfair competitive advantages or disadvantages to particular industry sectors
- Avoid taxes or tax-like mechanisms
- Create enabling frameworks for technology transfer - especially to developing countries.

Such matters are the proper responsibility of national governments. State based or local responses to issues such as climate change, unless done within the overall national framework, will be ineffective and potentially counter-productive.

We would strongly argue for a national and global approach to climate change and that states work within that framework and avoid introduction of state based measures.

In this regard, we believe that Australia's national greenhouse response has been one of the most comprehensive and effective in the world. The national response has recognised the energy intensive nature of Australian industry and has been implemented to-date without significantly damaging the economy.

In particular the decision by the Australian Government to become a signatory to the Asia Pacific Clean Energy and Climate Pact is an important step in the development of technology aimed at the main sources of emissions growth in the emerging Asia-Pacific region.

It is important that given the national and international policy framework established by the Australian government that states work within this approach.

Emissions Trading

Any policy measure under consideration must motivate long-term commitments in R&D and investment in order to lead to cost-effective greenhouse gas mitigation. In this context it will be difficult for any emissions trading scheme to motivate costly action or support cost effective investments when:

- there is great uncertainty over future targets and commitments such as the Kyoto protocol;
- fiscal and regulatory measures are reversible by sovereign governments; and
- the property rights in future credits are consequentially vague.

Emissions trading may promote short-term efficiency, conservation and fuel switching measures, but not long-term solutions requiring investments with long payouts (e.g., R&D, transportation infrastructure, generating equipment).

In short an emissions trading scheme operates as a tax on energy usage for covered industries. Such schemes, which cap total emissions, require the purchase of credits or further investment to remain in business. The size of the tax will depend on whether permits have to be acquired annually or not, and whether permits are required for all emissions or only those above a baseline.

However defining a baseline is extremely difficult as few companies either measure or report their emissions. Emissions trading would therefore add to investment uncertainty until all details of operation of the scheme were resolved. Exemptions from the scheme however will not improve this uncertainty because of the imposition of the burden on a narrower base and the risk of future policy reversal.

Domestic (or international) emissions trading schemes are also unlikely to apply to all greenhouse gas emitting activities (particularly domestic, agricultural and transport sectors). For example a domestic emissions trading scheme applied to the traded goods sector would leave Australian exporters less competitive and an emissions trading scheme applied only to domestic industry would impose a high burden on a narrower base of the economy.

In addition to the direct cost of the permits, or the investment to avoid the liability to acquire permits, there would also be significant associated administration and transaction costs (establishment, monitoring, reporting, enforcement, price volatility, hedging risk, participation in secondary financial markets).

Emissions trading is also unlikely to send a price signal on CO₂ to end users of energy because market forces in import and export exposed industries will prevent cost pass through. Permit and system administration/transaction costs will effectively decrease the attractiveness of investment in these industries.

Additional issues that also need to be considered are the fact that carbon dioxide emissions cannot be compared to emissions of pollutants such as sulfur dioxide or particulates. Technologies currently exist to cost effectively reduce or remove these pollutants and the level of their emission is relatively minor in the energy industry. Carbon dioxide on the other hand is produced as an unavoidable consequence of combustion of fossil fuels.

As well It is important to recognize that many companies advocating the adoption of emissions trading are intending to pursue it as a business in and of itself whereas ExxonMobil does not have this aim.

Economy Wide Costs of Emissions Trading

ExxonMobil takes a long-term view of both the risks of climate change and the solutions that may be necessary to address those risks. In this context near-term limits or caps on emissions are not an effective way to address the long-term risks of climate change yet they have direct negative impacts on economic activity.

The strong link between energy use and economic growth means that an arbitrary cap on energy use acts as a drag on overall economic activity with little if any impact on reducing global greenhouse gas emissions.

Research recently published by the International Council for Capital Formation (ICCF) reveals the broad and significant economic repercussions of adopting an emissions trading regime using Kyoto targets. While the research focuses on the UK, Germany, Italy and Spain it is instructive in assessing the potential impacts on the Australian economy if a similar system were adopted here.

The research revealed that if the four countries meet their Kyoto emission reduction targets in 2010 by adopting an emissions trading regime they face:

- **Increasing energy bills:** An average increase in electricity prices of 26% and an average increase of 41% of natural gas prices by 2010, across all four countries.
- **Significant job losses:** Job losses of at least 200,000 in each of Italy, Germany, UK and Spain to meet Kyoto targets by 2010 - rising to as many as 611,000 in Spain in 2010.
- **Damage to economy:** A significant reduction in GDP below base case levels by 2010: 0.8% for Germany (18.5 billion Euros), 3.1% for Spain (26 billion Euros), 2.1% for Italy (27 billion Euros) and 1.1% for the UK (22 billion Euros).

Electricity and gas price increases

	ELECTRICITY	Gas
	2010	2010
Italy	13%	44%
UK	35%	46%
Spain	23%	42%
Germany	31%	30%

2010: KYOTO TARGET

2020: 60% below 2000 levels by 2050

Source: International Council for Capital Formation (ICCF)

Technology Support

As noted throughout this submission, ExxonMobil believes that successful development and deployment of innovative, commercially viable technology is the only path that can address long-term climate risks while promising and promoting economic prosperity.

Governments can play an important role by:

- Focusing on pre-commercial research
- Avoiding use of subsidies and incentives
- Creating an international framework that encourages the introduction and transfer of
- technologies through open markets
- Supporting appropriate private-public partnerships
- Making consumer acceptance a key success factor for any solution
- Making a long-term commitment as development times are long and capital investments are large.

In our view, this is the area in which State Governments should focus its effort - within a national framework of broad policy of support for greenhouse gas reduction technologies.

ExxonMobil's is playing a role in facilitating and encouraging investment in technology through the groundbreaking Global Climate and Energy Project (G-CEP) at Stanford University.

This ten year project is dedicated to researching new, commercially viable energy technologies that can substantially reduce greenhouse gas emissions. The goal of G-CEP is to identify and conduct research into overcoming barriers to the adoption of technologies and find the solutions to accelerate their application globally. A broad portfolio of areas will be researched including energy infrastructure, advanced transportation, carbon dioxide sequestration, separation and storage, hydrogen, and next-generation coal, nuclear and renewable energy.

Near term reduction opportunities that do not limit growth

ExxonMobil is the world's largest, non-governmental marketer of equity gas. Expanding the use of natural gas is an attractive way to meet the world's growing demand for energy while emitting less carbon dioxide compared with use of coal or liquid fuels (70% less carbon emissions per MBDOE from gas than coal).

Given natural gas is both economically and environmentally attractive it is a preferred fuel for power generation in many markets, making natural gas the fastest-growing source of conventional energy in Australia and globally.

While there is broad recognition of the need to reduce greenhouse gas missions, the relative cost of the tax burden that applies to gas compared to coal introduces a distortion in the electricity sector that prevents the operation of market forces.

The following chart shows the relative disparity of the tax burden as applied to gas.

Gas Taxation Currently Not Equitable With Coal

Fuel	Approx Resource Taxation per GJ*
Vic Brown Coal	\$0.059
NSW Black Coal	\$0.07
SA / Qld Natural Gas	up to \$0.25
NSW / Qld Coal Seam Methane	up to \$0.25
Federal Petroleum Resources	Potentially \$1.00
Rent Tax (Offshore Gas)	

While we believe that coal will continue to represent an efficient energy source for Australia, more gas-fired electricity offers one of the biggest near-term reduction opportunities in the power generation sector.

This can be achieved with current technology, without introducing higher cost measures such as emissions permit trading or carbon taxes.

Summary

ExxonMobil encourages state governments to take both a long-term and global view of both the risks of climate change and the solutions that may be necessary to address those risks.

Near-term limits or caps on emissions are not an effective way to address the long-term risks of climate change yet they have direct negative impacts on economic activity. In contrast the development and global deployment of innovative, commercially viable technology is the path that can address long-term climate change risks while preserving and promoting economic growth in the world's economies, including Australia's.

The Australian Federal Government has undertaken this approach in developing its national/international greenhouse response. The establishment of initiatives like the Low Emissions Technology Development Fund and the signing of the Asia Pacific Clean Energy and Climate Pact creates a clear policy framework for addressing the potential risks associated with climate change.

In the near term Gas-fired electricity in Australia offers one of the biggest reduction opportunities in the power generation sector and can be achieved with current technology, without introducing higher cost measures such as emissions permit trading or carbon taxes.

State based or local responses unless done within the overall national framework, will be ineffective and potentially counter-productive.