Towards a new response to climate change –
Perspectives from Australia

Senator Penny Wong, Minister for Climate Change and Water

Introduction

Good evening, ladies and gentlemen.

It is a pleasure to speak here this evening, particularly given the significant role the London School of Economics has played in the international climate change debate over recent years.

When LSE’s Grantham Institute was announced, Lord Stern commented that it is crucial for social scientists to take the lead in building policy on climate change.

Scientific understanding of the causes and consequences of climate change has, in recent years, received much attention and consideration. This focus on the science of climate change was undoubtedly overdue, and we will need to ensure that our scientific understanding of climate change continues to improve and deepen.

However, it is the building of our policy response that should now be the focus of our attention. This is where the greatest shortfall lies between what is required of us and what we are currently doing.

Tonight I will offer some observations on the global response to climate change, both generally and through focusing on the Australian policy response since the new Australian Government took office in December last year.

First, consider what it is we are seeking to achieve. We are working to build an economic, environmental and social policy response from all the nations of the world. We are doing this because climate change has the capacity to threaten our economies, our communities and our way of life.

And we have to build this response across nearly 200 disparate nations, amongst which there are markedly different societies, political systems, cultures, legal regimes and economic circumstances. These countries vary widely in their understanding of, and preparedness to act in response to, climate change. Those of you who know the challenges in building a coherent climate change policy response within one country can appreciate the scale of the challenge before us globally.

The current global negotiations on climate change come after the collapse of the Doha trade talks in July, where the world failed to reach agreement on a trade deal. This experience underscores how difficult it can be to achieve international agreement.

Adding to the complexity is the global context in which the climate change policy debate must now take shape.
The climate change debate has been understandably overshadowed in recent weeks by volatility on global financial markets and the possible flow-on effects of this financial crisis to national economies around the world.

Developments have been dramatic: more than 25 financial institutions around the world have either collapsed or been bailed out.

Borrowing costs have risen around the world.

And the financial crisis has contributed to a serious global slowdown, which has seen output in five of the world’s seven largest developed economies either contract or go flat in the three months to June this year.

These events have given rise to speculation in some quarters that now may not be the best time to try and conclude an international agreement to reduce greenhouse gas emissions. Some have said that if the world cannot agree on trade, it has no hope of agreeing on climate change. Others assert that recent global financial and economic events demand delay in action on climate change; that we cannot afford to reduce emissions right now or - in Australia’s case - proceed to introduce a market-based emissions trading scheme.

The Australian Government’s view is that the risks of delaying remain greater than the risks of acting on climate change.

It is precisely because of concern about our future economic prosperity that we must address climate change now. There will never be an easy time to make the transition to a low-carbon economy. But we know the longer we delay, the higher the costs. And delay inhibits our capacity to grasp the substantial opportunities that will come from making this transition.

Early action will allow Australia – and other countries of the world – to make an orderly, gradual adjustment to a low-carbon economy. Delaying action, so that the economy is forced to catch up later to the environmental imperative, will only deliver it a sharper shock down the track.

Acting now will also provide certainty to business in an otherwise uncertain climate. In Australia, business is expecting the introduction of a domestic carbon price in 2010. Despite the current financial crisis, Australian industry peak bodies have emphasised their desire for certainty – further delays will only result in added business uncertainty, with negative consequences for investment and business planning.

**The Australian perspective**

In 2007, the now Prime Minister, Kevin Rudd, commissioned Professor Ross Garnaut – one of Australia’s most respected economists – to undertake a comprehensive analysis of the impacts of climate change on Australia’s economy.

The Review took over a year to complete, with the final report released last month.
The significance of Professor Garnaut’s work is profound. We are the first in the world to quantify the costs of climate change for our country, just as Lord Stern did for the world.

Central to Professor Garnaut’s findings is one stark reality: Australia – as a hot and dry continent – has more to lose than any other developed nation if we fail to take global action on climate change.

The Rudd Government was elected in November last year with a commitment both to ratify the Kyoto Protocol and to implement a market-based approach to reducing greenhouse emissions.

Very early in my term as Minister for Climate Change, I set out Australia’s policy framework based on three pillars:

- Reducing Australia’s greenhouse gas emissions;
- Adapting to climate change we can’t avoid; and
- Helping to shape a global response that is both effective and fair.

This overarching framework is broadly similar to the approach being taken in the United Kingdom and other nations.

In Australia, our approach is strongly grounded in market-based reform rather than a regulatory response.

We have chosen a market based approach because we believe the core of an effective response to climate change is to resolve what Lord Stern described as the ‘greatest market failure the world has seen’. That is, to ensure that at least a portion of the costs of climate change are reflected in our economic transactions; that our investment, production and consumption decisions are influenced by a carbon price.

**Reducing Australia’s greenhouse gas emissions**

The Carbon Pollution Reduction Scheme is Australia’s principal market-based mechanism for tackling climate change. Under the Scheme, the Australian Government proposes to introduce a cap-and-trade emissions trading scheme in 2010.

The Scheme is central to the Australian Government’s economic reform agenda. Key design elements have been set out in a Green Paper which I released in July 2008.

Through the Carbon Pollution Reduction Scheme, our aim is to develop an emissions trading scheme that is best practice. The size of the challenge, and its importance for Australia’s own circumstances, means that we cannot aim for anything less. By ‘best practice’ we mean a scheme that is efficient and cost effective; that makes the lowest cost transition for our economy. We are seeking to establish a scheme which has a core integrity while dealing with the range of legitimate policy concerns and sectoral impacts.

In this task, we are indebted to the EU’s ground breaking experience and to the frankness that the European Commission has shown in talking to other governments
about the lessons learnt - both in terms of what has worked well and what could be done differently armed with the wisdom of hindsight.

The Green Paper proposes a scheme that covers the majority of Australia’s carbon emissions — across sectors including stationary energy, transport, fugitive emissions, industrial processes and waste. This approach reflects the economic reality that wide coverage allows businesses to find the lowest-cost opportunities to reduce emissions. The International Emissions Trading Association — and many domestic commentators — have supported this approach to coverage.

We are proposing to auction the majority of permits from the start of the scheme, and — subject to a comprehensive and effective international agreement which removes the need to provide transitional assistance — we propose to move over time to full auctioning of permits.

We are taking this approach because we know that auctioning permits promotes allocative efficiency — meaning that permits will be bought by those who value them most. Auctioning also provides resources to deal with sectors that are most affected by the carbon price – including, importantly, households, which are often overlooked in these policy debates.

Another notable feature of the Australian model is our intention to target free permit allocation and industry assistance to meet identified policy concerns. For us, the need for such a disciplined approach is a key lesson from the EU ETS.

There, free permit allocation allowed windfall gains while the allocation methodology sent mixed signals to change behaviour in response to the carbon price. Instead, we propose to target free allocation of permits to specifically address some of the competitiveness impacts of the scheme in order to reduce carbon leakage. Hence, we propose to allocate permits to activities where these risks are likely to be the greatest; that is, the most emissions intensive of trade exposed industries.

Our approach to domestic industry assistance is similarly balanced. For example, we have identified risks from the scheme of loss of value for our coal fired power generators and possible consequences for Australia’s investment environment. We propose to provide limited, direct assistance to these facilities to ameliorate the risk of adversely affecting the investment environment, rather than providing an allocation on the basis of past or future emissions.

In all cases, we are acutely aware that the legitimate policy concerns of assisted industries must be balanced with the needs of households and other affected industry sectors.

The Australian Government views the Carbon Pollution Reduction Scheme as the central means of reducing carbon pollution. However, we also recognise that there are a range of critical complementary policies that need to operate alongside emissions trading.

The Government’s drive for energy efficiency and a future National Energy Efficiency Strategy, forms a key plank of our approach to reducing emissions, along
with our commitment to research and development into new low emissions technologies.

But we see emissions trading as the central means of reducing carbon pollution. We are not attracted to an approach that seeks to introduce complementary policies as a substitute for a broad based market approach. Instead, an economy-wide carbon price is critical to designing least cost complementary policy approaches.

**Preparing for a global carbon constraint**

Having outlined the broad principles underpinning the Carbon Pollution Reduction Scheme, I will now outline where I think some of the opportunities in tackling climate change lie for Australia.

Aside from the obvious need to make up lost ground in Australia’s response to climate change, there is a deeper logic driving our ambition to have the Carbon Pollution Reduction Scheme up and running in 2010.

It is a logic built on the Australian Government’s recognition that there will be a global carbon constraint at some stage in the future.

Anyone who accepts this fundamental premise must also accept that the economically responsible course of action to prepare for this global carbon constraint is to put in place reforms that enable the domestic economy to respond and capitalise on evolving opportunities.

It will be the countries that have moved to implement climate change reforms that will be best placed to deal with the global carbon constraint.

Further, it will be the nations that have put in place solid market-based reforms to tackle climate change that benefit most from the economic opportunities presented by global efforts to reduce emissions.

The Australian Government has set a target of reducing greenhouse gas emissions to 60 per cent of 2000 levels by 2050. We already know that to meet our target, carbon emissions per dollar of real GDP will need to decline much faster than any improvements we have seen in recent decades.

At its core, our climate change economic reform agenda is about reducing our carbon intensity while maintaining strong economic growth. This is what some have come to refer to as improving our ‘carbon productivity’.

**Economic opportunities from improved carbon productivity**

Australia’s geography, geology and economy present significant advantages in the transition to a low-carbon world.

*Investment flows into low emissions technology*

The Carbon Pollution Reduction Scheme will give Australian companies the incentive to find new and innovative ways to reduce their emissions, which in turn will lead to the development and expansion of lower emissions technology.
A recent article from *Energy Policy* journal predicts that a global carbon market could grow to reach a value of 10 trillion US dollars – comparable to the size of the oil industry. Such a market would drive large scale investment in renewables and low emissions technology.

The International Energy Agency has estimated that halving global emissions by mid-century will require investment worth 45 trillion US dollars.

Further, Australia’s Garnaut Climate Change Review found that the incentive to mitigate will result in the expansion of industries where Australia can develop a comparative advantage.

Such industries include electricity generation – from our abundant resources in geothermal, wave and other renewables – through to our national potential for biosequestration.

Australia also has vast renewable energy sources from the sun and wind.

For example, a report from Invest Australia highlights that solar radiation is Australia’s largest potential energy source – and that over 9 per cent of Australia’s land surface receives in excess of 1,950 kilowatt hours per square metre of sunshine each year.

Our scientists are among the best in the world. We have the potential to become world leaders in clean energy technology.

With energy demand soaring and abatement efforts gearing up around the world, the benefits could be substantial.

In addition, the Garnaut Climate Change Review suggests that the incentive to mitigate will – over the long term – contribute to expanded agricultural production and stimulate new technologies and better land management practices.

These incentives to mitigate in the agriculture sector – one of our largest exporters – could build on Australia’s role as a leader in the development of environmentally sustainable agricultural practices.

Environmentally profitable alternatives are increasingly being developed as economies increase their abatement efforts.

Those alternatives include biomass production for renewable energy and biogas production from methane.

**Carbon market development**

As I have outlined, the Carbon Pollution Reduction Scheme will have maximum coverage and features allowing it to link with other trading schemes as the global market matures.

The Scheme will create a new type of financial commodity in Australia which – over time – will become a global commodity traded on world markets.
Australia can play a key role in this global development.

Australia is well placed to provide the necessary services to support developing carbon markets in the Asia-Pacific region.

We are a regional commercial centre with world-class financial institutions, developed capital markets, a skilled workforce, high standards of corporate, financial and regulatory governance and political stability.

The potential value of such a hub in Australia could have significant benefits for our economy.

The World Bank recently reported that current carbon markets around the world were worth a total of 64 billion US dollars in 2007.

This market has more than doubled in just one year from 31 billion US dollars in 2006.

In addition, the volume of carbon traded almost doubled from 1,725 mega-tonnes of CO2 equivalent in 2006 to 2,983 mega-tonnes in 2007.

The Australian Government takes the view that we stand to benefit from significant economic opportunities as the world acts to address climate change. Swift action on our part to capitalise on increasing low emissions energy demand and providing the necessary services to support a global carbon market could be a tremendous boost to our economy.

**Helping to shape a global solution**

As I mentioned earlier tonight, Australia needs a global solution to climate change because we know we will be one of the hardest hit developed nations.

And as I’ve just highlighted, we have taken a robust, market-based approach to reducing our domestic emissions because we want Australia to be in a position to capitalise on new opportunities in a carbon constrained world.

Nevertheless, it is not uncommon still to hear some in Australia argue that there is no point in reducing our emissions because we contribute only 1.5 per cent of total global emissions.

But let me be clear: this is not the view of our Government.

Australia, although responsible for only 1.5 per cent of global carbon emissions in absolute terms, has relatively high per capita emissions.

Our domestic effort to take responsibility for our own carbon emissions through the Carbon Pollution Reduction Scheme is central to our willingness and commitment to the global effort.
We understand that we cannot seek to play a valued role in international negotiations if we do not take action at home. We need to play our part.

The complex challenge we face as negotiators from across the globe will be to ground what the science is telling us in the realities of the global political economy.

I spoke earlier about the importance of continuing our efforts to take action on climate change in the face of the global financial crisis and other present-day challenges that could be used as an excuse to give up.

But it is equally important in moving forward on a global deal that we take account of national circumstances and the political economy of countries seeking to transition to a low-carbon future.

That is not an excuse for inaction – either from developed or developing countries, all of whom can point to varying degrees to national circumstances which affect each country’s efforts to reduce emissions.

Rather, it is an acknowledgement that any global deal will only achieve its purpose if it is implemented. We must realise that the climate change cause will suffer more damage than good if an agreement goes un-ratified or fails to be turned into action in key countries.

This means we need to build a global agreement that is informed by science, and which is also politically and economically sustainable in each of the countries responsible for implementing it.

**Kyoto to Copenhagen – what’s changed?**

There have been dramatic shifts in scientific knowledge and in the economic circumstances of the Parties to the UN Framework Convention on Climate Change and to the Kyoto Protocol since they were negotiated in the 1990s. Many of the principles on which they are based are, in the face of current evidence, now open to question.

The distinction drawn between developed and developing countries is an example. While it remains true that developed countries are responsible for most of the climate change now in train, developing country emissions are now driving global trends.

Assuming a ‘no mitigation’ scenario, the Garnaut Climate Change Review found that developing countries as a group will account for about 90 per cent of emissions growth over the next two decades and beyond.

These facts lead inexorably to the view that a sustainable global solution will require actions and binding commitments by *all* major emitters, both developed and developing.

On the equity principle, we would expect developed countries to take the lead, setting economy-wide emissions targets. We would expect developing countries to make specific commitments to action designed to generate a substantial deviation from business as usual emissions. As we agreed in Bali, these commitments should be measurable, verifiable and reportable.
It is worth bearing in mind that the ‘developing country’ group is now far less homogeneous than it was when the Kyoto Protocol and UNFCCC were cast in the 1990s. There is now much greater diversity in terms of economic capability and development, population profiles, per capita emissions reduction efforts, exposure to climate change impacts and adaptive capacity.

Again, it is very important that we consider capacity and national circumstances in determining if commitments are equitable.

Any viable global solution to climate change must support the aspirations of developing countries to continue to raise their standards of living, while helping find less carbon-intensive pathways to development. The key to this will be decoupling growth in emissions from increasing prosperity. We need to work with developing countries to ensure less carbon-intensive growth. This will need to include investment in technology and other support from developed countries.

**The role of the private sector in delivering a global solution**

I cited earlier the International Energy Agency’s estimate that it would take 45 trillion US dollars in investment to halve global emissions by mid-century.

The scale of financial transfers required means that public sector finance, while important, will not be sufficient to achieve this transformation, particularly in developing countries. We will need the involvement of carbon markets and private investment to help bridge this gap.

The finance sector has an enormous role to play in channelling funds to the industries that will thrive in a carbon constrained world. For financial markets and business, the better they understand the shape of what is to come, the more effective they will be in seizing the opportunities offered by the transition to a low carbon economy.

The development of international carbon markets will help drive investment into the areas where the largest cuts in pollution can be achieved most quickly and at the lowest cost.

In designing the post-2012 framework we - as ministers and government negotiators - need to consider private sector views on what kind of mechanisms will best unleash the necessary capital flows.

These opportunities for private sector financing are in addition to, but not a substitute for, government financing. Governments will need to continue to play a role where markets cannot.

The Australian Government remains active in promoting and financing mitigation technologies and activities. Our support of Carbon Capture and Storage (CCS) technology is a clear example of where it is appropriate for government to provide assistance to overcome market barriers and support a public good.

On 19 September 2008, the Australian Prime Minister, Kevin Rudd, announced the launch of an Australian Global Initiative on Carbon Capture and Storage.
Among other activities under this Initiative, the Government proposes to establish a Global Carbon Capture and Storage Institute. We have committed 100 million Australian dollars annually to accelerate the development of CCS demonstration projects and to improve knowledge about the commercial viability and safety of CCS technologies as a way of helping facilitate investment.

The Australian Government has made substantial bilateral and multilateral commitments to promote recognition of the mitigation potential from Reducing Emissions from Deforestation and Forest Degradation (REDD) in developing countries. Deforestation activities account for around 20 per cent of global emissions.

We were one of the first countries to commit funds to support REDD capacity building and readiness activities in our region through establishing a 200 million dollar International Forest Carbon Initiative. The Initiative funds demonstration and other activities in Indonesia and Papua New Guinea and supports forestry action under World Bank activities.

**Conclusion**

The Australian Government is firmly committed to acting to combat climate change and to playing our full and fair part in the global effort.

We are committed to achieving emissions reductions of 60% of 2000 emissions levels by 2050 that, given Australia’s domestic circumstances, will be ambitious and challenging to achieve.

We believe that the best way to achieve such an ambitious goal is through developing the market-based Carbon Pollution Reduction Scheme which will drive economic transformation and leave us better equipped in the future to deal with the economic challenges and opportunities that climate change will bring.

Taking action to respond to climate change is the economically responsible thing to do.

But there is also a moral and personal dimension to this debate. Ultimately, we are not doing this only for ourselves. We have a responsibility to future generations to tackle climate change while we can, and to ensure that they are well equipped to deal with its effects.

The pace of climate change is accelerating and so are its effects.

It is now more urgent than ever to act on climate change.