



What *Meeting the Kyoto Protocol* means for BP

*Speech by Mr. Gerry Hueston
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Thank you very much for the opportunity to participate in this important discussion.

Today I propose to you that in many ways, BP Australia's climate change challenge is a microcosm of that faced by Australia as a nation. For both company and country, we need strong market leadership, technological innovation and good public policy to ensure we make progress. In the short time that we have available I'll address the dilemmas that we face as a company and how they parallel Australia's position, and I'll give some examples of tangible actions we are taking both in our own operations and from the activities of our customers. I will speak from the perspective of companies, in particular my own company BP, that have decided to show leadership and to move forward.

Can I start by saying that we in BP adopted a climate strategy before developed nations adopted greenhouse emissions targets in Kyoto in 1998. Our position then was based on a belief that the harsh trade off between economic growth and protection of the environment was unacceptable; that business and technology could help solve many environmental problems – including climate change; and that precautionary action was justified and necessary to deal with climate change, even though scientific knowledge was incomplete and would probably always be incomplete.

We were the first major oil company to publicly acknowledge the world's concern about Climate Change. We moved quickly to address the need for detailed information about our own emissions and we established a target to reduce emissions by 10% from a 1990 baseline by 2010.

In the mid-1990s we took a range of initiatives and we scored some easy, low cost wins that proved we could diminish the growth of greenhouse gas emissions from our operations.

Then we moved on to a second stage where we sought to further improve energy efficiency, change operating practices and cut costs even if this involved some extra short-term expenditure.

And we have been successful. Today, worldwide, we have achieved a 5% reduction in our emissions from 1990 levels and can see the way forward to achieve more. We have done this while simultaneously growing our business.

I'm sure some people find it surprising that investors are supportive - but the reality is that if you invest in a company like BP you are investing in a long-term future – in projects that will run for 30 or 40 years.

Given that timescale, it is not surprising that investors are likely to respect companies that acknowledge the reality of challenges, and set out to confront them, rather than those who pretend the challenges don't exist.



And we think they are also supportive because the position we've taken is built on optimism – on the conviction that we can make a difference.

I should make it clear that it's not up to companies like ours to presume to direct governments on decisions they should take regarding issues like ratification of the Kyoto Protocol. But we are a global company. How Kyoto – or whatever international framework is decided upon – plays out is critical to how we can respond to the risks, responsibilities and indeed opportunities that the risk of climate change poses for BP and our industry. We don't seek to tell governments what their policy should be, but we do call on governments everywhere to give us stable, forward-looking policy on greenhouse and energy more broadly.

We seek only to continue to grow our business in a truly sustainable way. And it is now more difficult than ever to continue along that path. To make further headway we will need significant technological innovation in our most energy intensive processes, particularly in exploration, production and refining, we will need access to market mechanisms which enable emissions reductions to be sourced at the lowest cost, through such activities as emissions trading and we will need a policy framework that encourages business to address these significant risks.

Significantly, in my industry, we will also need to work closely with associated industries, such as Peter's automotive industry, the electricity industry in Australia as potential consumers of our natural gas and those who seek to implement renewable technologies such as photovoltaic energy from the BP Solar manufacturing plant in Sydney. We also seek to work with our customers to help them reduce their own environmental impact and we seek to work with the representatives of the community – and that includes environmental groups.

Let me step back for a moment to a Global scale.

Today some 65% of the world's energy demand is met by oil and gas. By 2010 world wide demand for oil will probably be 20% higher than today and demand for gas 25% higher than today.

Is the supply there? Yes. The industry has become ever more skilful at replacing reserves more economically. Today there is at least 40 years' of oil supply available, and 60 years' worth of gas. It has often been noted that the Stone Age did not end because the world ran out of stones; neither do we believe that the oil age will end due to a lack of oil.

It is clear that demand for energy will continue to grow, driven largely by population growth and economic activity. The growth will be most evident in the developing world, but in Australia our demand for electricity has increased by 30% from 1990 and is projected to be 60% above 1990 levels by 2010.

Policy makers, however, can influence the choice of fuel and accelerate or retard the rate at which new technology is introduced. Australia must develop an energy policy that is consistent with our national interests, but clearly addresses the risks associated with Climate Change. If a bias develops to low carbon, clean fuels, this will favour natural gas and renewable energy. In Australia, over 80% of our electricity is currently generated from coal



In BP we have adjusted to this global trend. In the late 1980's natural gas was less than 5% of our portfolio and it is now over 40%.

Further, we have invested over \$US 200 million in our solar business in the clear expectation that it will play an important role in the world's energy future. But photovoltaic energy systems are still not competitive for the vast majority of energy needs.

Australian policy is now significantly lagging other countries in Europe and particularly Japan, where domestic programs to install solar electricity on house roofs have led to growth rates of over 50% in the local solar manufacturers such as Sharp and Kyocera. Policy to encourage the emerging renewable energy sector in Australia is sorely needed – especially in roof top programs.

BP signed a cooperative agreement on greenhouse gas emissions with the Australian government in 1996 as part of the Australian Greenhouse Challenge. We undertook to implement a range of initiatives that have now reduced our emissions of greenhouse gasses from about 1.8 million tonnes of carbon dioxide equivalent in 1995 to fewer than 1.6 million tonnes in 2000, or about a 14% reduction. Our two refineries in Perth and Brisbane account for about 95% of our total emissions from company activities.

But Climate Change is not our only environmental concern.

Metropolitan air quality in the cities of the world is a significant problem. Oxides of nitrogen, sulphur oxides, volatile organic compounds and photochemical smog are all associated with our love affair with the internal combustion engine.

The interaction between engine technologies, catalytic converters on exhausts and fuels used has a dramatic effect upon the level of pollutants emitted from our vehicles. BP has made a worldwide commitment, implemented here in Australia to deliver cleaner fuels to our customers. Fuels that have dramatically lower levels of sulphur and benzene.

The availability of these fuels enables vehicle manufacturers to introduce new engine and catalyst technologies that lead to the continuing local environmental improvements in the air quality in our cities.

But manufacturing these fuels and delivering these local environmental benefits comes at a cost to the global environmental problem of climate change. Despite BP's significant greenhouse gas emissions reductions achieved in Australia, we project that our emissions in 2004 will rise to about 9% above the level of our emissions in 1995.

In many ways this problem in BP Australia reflects the dilemma that Australia as a nation is facing as it seeks to address climate change and grapples with the first commitment period target for Australia, agreed in Kyoto, being 108% of 1990 emissions.

And we see the solutions in a combination of technological change, market mechanisms, renewable energy sources, And new and novel partnerships between business and between business and the community.



We are actively seeking technological innovation across all of our businesses to reduce our emissions further. Some of our research is addressing greater energy efficiency in our operations, other research is addressing the possibility of permanent sequestration of carbon dioxide in the same formations deep underground that have held oil and gas for millions of years.

We have also established a market-based mechanism “greenhouse gas trading” within our corporation. So our business units around the world have uniform target emission reduction levels, but have the opportunity to achieve these outcomes through emissions reduction, or through purchasing excess emissions reductions from other business units.

In a very active market, we have traded over 2 million tonnes this year at an average price around \$US 30 per tonne of carbon dioxide. This mechanism gives Business Units the flexibility to choose to implement projects to reduce emissions if their marginal cost of abatement is less than the traded cost, or to purchase emission reductions from some other part of the organization where the costs are less.

We believe that this is a good model for a world where there will not be uniform costs of emission reductions.

In Australia we are also experimenting with carbon sequestration through forestry. The amount of carbon in trees above the ground is usually well known. What is less well known is the amount of carbon stored in root systems below the ground. Several PhD students are studying plantations that have been established by our refinery in Perth, on salt affected lands in southwestern Western Australia.

About 1.4 million trees have been planted since 1998 on 14 privately owned farms. In addition to the carbon studies, the benefits include: mitigating the effects of land salination and salination of adjacent water bodies, helping to protect a (RAMSAR) wetland of international significance at Lake Toolibin and protecting biodiversity through including hundreds of threatened species in the planting program.

We are also partners with the automotive industry in the research currently being undertaken into hydrogen as a fuel source in vehicles, either through the development of Fuel Cell technology, or the direct internal combustion of hydrogen. We will be supplying hydrogen from our Perth Refinery to a trial of Daimler Chrysler busses to be conducted in Perth next year.

However in the life cycle of current automotive fuel, over 90% of the emissions of greenhouse gases occurs in the automobile. A 10% reduction in emissions from our operations is equivalent to only a 1% reduction in emissions from our customers.

So we have launched an innovative program in Australia called Global Choice linked firstly to our Premium unleaded fuel BP Ultimate. We have conducted a complete life cycle assessment of the emissions associated with using BP ultimate, from cradle to grave, or as we like to think, from well to wheels.

And we are purchasing greenhouse gas emissions offsets equivalent to these total emissions, so customers buying BP Ultimate are assured that their fuel purchase is contributing to no increase in the world's emissions of greenhouse gasses. We emphasize in point-of-sale literature that if there is a choice, walking, or cycling are



far better alternative ways to minimize these emissions, but if they must use a vehicle, then BP Ultimate is by far the best alternative.

The offsets that we are investing in include fuel switching from Oil to natural gas; capturing and treating methane from land fill sites, new technologies in industry that reduce emissions, renewable energy and some carbon sequestration in forests. We are well aware of the scientific debates, which continue about the permanence of carbon sequestration in forests, but our customer research shows that the public believes this to be an essential element for any carbon offsets program to be credible.

Global Choice is included in the purchase price of BP Ultimate, which remains competitive with products offered by other companies. In stage two, customers purchasing our other products will be able to buy Global Choice carbon offsets in addition to their fuel purchase.

As I said earlier, it is not up to companies like ours to presume to direct governments on decisions they should take regarding issues like ratification of the Kyoto Protocol. This morning, I have endeavoured to illustrate the dilemmas we at BP are facing in addressing climate change, from a position where we believe that we must take action.

I have illustrated some of the initiatives that we are undertaking in BP, but I must emphasize that to continue to drive this progressive agenda we need to be a healthy, viable and profitable industry. In short, our business must be good and our ongoing investment in addressing climate change has to create value to reward our shareholders.

To be able to deliver the outcomes that the world must have to achieve a sustainable energy future, our industry requires the confidence of stable policy settings that encourage investment over long periods in anticipation of competitive returns.

Good business and good policy will together lead to outcomes that will expand our options for addressing climate change, together with the world's community.

Thank you