

bp



SPILLCON 2004 – PARTNERSHIP IN PRACTICE

**Brett Whiteoak
Australasian Shipping Regional Manager
BP Shipping Limited**

Rather than submitting a pre-worded paper, Brett has submitted a speech delivered by Lord John Browne (Head of BP) last month to the United Nations "Council on Foreign Relations".

This speech is most relevant to his subject matter, and as he will be talking around slides on the day rather than delivering a pre-worded speech, felt that this would make more interesting reading for the attendees.

His presentation will be referring to both the recent UN conference and Lord Browne's speech attached.

**Lord Browne's speech to the Council on Foreign Relations (UN)
June 24, 2004**

“BEYOND KYOTO”

Chairman, Ladies and Gentlemen

It's always a privilege to be invited to come and speak at the Council.

The topic of energy security has become an issue of high salience over the last few years.

In part, of course, that has been driven by combination of growing demand, instability and terrorism in the Middle East and rising oil and gas prices, and in part by the increasing awareness that within ten years time growing world oil demand in particular will have to be met with supplies from a limited number of exporting regions.

By 2015, on the estimates of the International Energy Agency, 80 per cent of the oil traded globally will come from just three areas – Russia, the Persian Gulf and West Africa. The world will need around 65 to 70 mbd of traded oil on their projections – and at least 1 barrel in every 5 will come from Saudi Arabia.

That's part of the energy security issue.

But there's another element – which is the environmental impact of burning hydrocarbons and in particular the potential effect on the world's climate.

The detailed science is still provisional. There are many things we don't know. But science is always provisional and in business we are used to working in circumstances where we don't know all the facts for certain.

You have to make judgments in conditions of uncertainty and in my view the right judgment on the basis of the available evidence is that there is a powerful case for precautionary action.

It would be too great a risk to stand by, do nothing and to wait so long that when the impact on the climate really does begin to be felt, you have to take action which is so disruptive as to cause serious damage to the world's economy.

There is a very strong case for precautionary action and I believe the aim of that action should be to limit any increase in the world's temperature to around 2 degrees Celsius.

That translates into a stabilisation of green houses gases in the atmosphere at around 500 to 550 ppm sometime early next century.

That is the best current estimate and, of course, as knowledge advances that estimate could be adjusted and refined.

Can that stabilisation be achieved?

The answer is yes. It would mean putting ourselves on a trajectory to the point where in 2050, 50% of global needs would be met by conventional fossil fuels and the other 50% would come from fuels with lower carbon emissions – in some cases with zero emissions. Each of those two halves would be about the size of today's energy industry.

I believe that is achievable.

A great deal of work and experimentation has been undertaken over the last few years – by governments, by academics and in the business world. We may not have an international agreement as anticipated at Kyoto but we have a great deal more knowledge and experience than we did seven years ago.

People have demonstrated that emissions can be reduced, at a very low cost – simply by reducing waste and inefficiencies. We did that in BP, and we found that we actually made money in the process.

Cutting out waste is a first step, but beyond that people have also begun to demonstrate that there are practical ways of managing the problem.

I think the most interesting work is that done at Princeton which identifies a range of opportunities each of which could contribute to meeting the overall challenge.

They are wide ranging – and have all been demonstrated at scale. None of them would require a material advance on currently available technology – just a continued reduction of the engineering cost curve, comparable to the gains the energy industry has achieved over time for instance in arctic and deep water oil production or the long distance transport of gas as LNG.

The task is to reduce by 2050 the amount of carbon dioxide which on current projections would be entering the atmosphere each year by half - some 25,000 million tons.

Is such a reduction feasible? Yes. Numerous different steps could contribute to the displacement.

Each of the following could reduce emissions of carbon dioxide by one billion tons per year. And each could be scaled up from there.

- 400 power plants using natural gas rather than coal each generating 1,000 megawatts – that is in total roughly equal to China's current power capacity.
- 200 coal fired power plants using carbon capture and storage.
- 600 million cars, that is a third of the world's anticipated car numbers by 2050, each running at 60 mpg rather than 30 mpg using hybrid engine technology.
- The replacement of 200,000 megawatts of coal generated power with nuclear.
- A 20 fold increase in wind power capacity.
- A 12% per year growth in solar power, half that of the last 25 years.

And there are many other things which could be done to improve the efficiency of energy use – from the development of “smart grids” making more efficient use of electricity transmission, to a greater use of waste heat in factories and homes, from the development of coal gasification technology to the construction of more energy efficient buildings – an important step given that a third of all energy is used in buildings.

Of course, there are many uncertainties. The decisions that require changes in life style may be unacceptable. The technology of carbon sequestration may be unattainable. The development of a new generation of nuclear stations may raise unacceptable risks of proliferation and terrorism as well as raising again the question of nuclear waste disposal.

But equally there are uncertainties on the positive side. Technology is moving very quickly and will almost certainly offer new opportunities over the next half century – possibilities we can't even envisage now.

The important thing is to recognise the challenge and to make a start.

Different countries and different industries can do different things. I've no doubt given the depth and quality of technical base here in the US that much of the technology that will make this possible will be America.

But everyone can make a contribution and the best way to encourage that is to have all the alternatives valued through a cap and trading mechanism.

In particular that is what will encourage business to use its knowledge of technology, markets and consumer preferences to transform possibilities into reality. That is the key contribution which business can make – the commercialisation of better choices.

That applies both to the application and development of existing technologies and to the process of finding longer term solutions.

Valuing carbon through a cap and trading mechanism will encourage the development of a new set of energy sources – from photovoltaics to fission based reactor technology to energy from biomass to the use of hydrogen.

These new technologies, as they are developed, should compete with each other – and with fossil fuels.

This shouldn't be about subsidies. The objective should be to encourage open competition in a free market.

Of course it would be unrealistic to expect to see a single global trading system overnight but a good business principle is to start from where you are and to build from there.

I believe the European Trading System, though it still needs to be completed in full, is a pretty effective base from which to begin. It can be developed and strengthened and eventually linked to various creative schemes which are being established in different parts of the United States and elsewhere.

A cap and trading system initiated successfully in the developed world can also be extended over time to the emerging economies whose current per capita energy consumption is low but rising.

To expect such countries to participate immediately when their priority is to lift their populations out of poverty is unrealistic. But equally unrealistic would be a system which looked to the developed world for the entire solution. An effective system, gradually extended, is the equitable answer.

All in all then, I believe there is a case for cautious optimism.

I know many people who care about this issue are dismayed by the fact that the Kyoto agreement has never been ratified.

I understand that disappointment but I still believe that the whole process is a very long term enterprise, comparable in many ways to the development of GATT and the WTO after the Second World War. That process took decades and is still incomplete.

But progress was made – starting with the 23 countries who took the first decision to reduce tariffs between themselves when they met here in the United States in the spring of 1946. Gradually people saw what was possible, and the benefits it could bring.

In terms of climate change, and long term energy security, we are now beginning to see what can be done. There are ways to meet the challenge – at a manageable cost.

I do think that one of the real challenges of this issue is that it seems almost too big, too global and too full of uncertainty to be susceptible to the normal policy process. That's why I think the answer lies not in finding a single instant solution but in taking an incremental approach supported by market forces. Setting some objectives, doing what we know we can do, learning from experience, and then doing more.

This isn't an insoluble problem. We can find a solution. And we should start now.

Thank you very much.