

Changing course: A sustainable energy future for Australia

An abridged version of this speech was delivered by Greg Bourne at the Towards Opportunity and Prosperity Conference, Melbourne University April 4-5, 2002

I'VE enjoyed listening to today's proceedings. To Kyoto or not to Kyoto reflects even bigger questions for Australia's future around energy policy. Some big decisions have to be made soon by Australia, and in Australia's best interests. With that challenge in mind I've found my thoughts drifting to my sporting passion, ocean-yacht racing.

When a skipper knows there's a big storm over the horizon he can make for a safe harbour, at the risk of being hit anyway, or sail on making the best preparations possible. The latter choice means relying on your crew's skill, your vessel's soundness, the latest technology you have available, your own bold leadership and a bit of blind good luck as well. If he ~~---~~ or she wants to emerge a winner, however, the only choice lies in ploughing ahead.

Right now there's a big storm brewing for the world's carbon-based energy economy. I call it the "carbon shock". Unlike the dramatic and genuinely surprising "oil shocks" of the 1970s and 1980s, this one is very clear on the forecasters' radar screens. Our generation can prepare for it, but to do so requires vision, leadership and plenty of action.

Of the large fleet approaching this storm. I'm most interested in just two vessels - my company, BP, one of the top three oil and gas companies in the world, and my country, Australia. BP is pushing ahead boldly towards the carbon shock. We are not afraid. We plan to be a leader going into this storm, and a winner on the other side. I wish the same could be said for Australia.

BP has spent the last five years getting ready for this storm. I fear, however, that the good ship Australia is in disarray, becalmed in an energy policy vacuum even as the storm draws closer. Leadership is lacking from both of the co-skippers, government and big business. Consequently the crew, let's call them the wider community, are confused about the ship's destination.

I see strong similarities in the challenges faced by my company and our country. Both are significant energy-based economies, both need to keep growing and both are significant greenhouse gas polluters. Australia emits about 400 million tonnes of carbon equivalent greenhouse pollution a year – not counting its land-clearing impacts. BP emits about 80 million tonnes from its own global operations, but when our customers use our oil and gas products the emissions they release total about 800 million tonnes.

We now face a shared future where the traditional key drivers of energy policy – low cost and supply security – have been joined by a new one, environmental protection. There are a number of very important environmental issues associated with burning fossil fuels,

including urban air quality, but the most powerful of all is international concern about climate change. There is mounting evidence gathered by hundreds of the world's most reputable scientists that people burning low cost, readily available, carbon-rich fossil fuels are contributing to climate change.

While in a sense, all science is provisional, BP accepts that there are serious risks from this global trend – with its now familiar list of major threats to environmental and human health and security - and it accepts the need for sustained precautionary action. On this we are unequivocal. Leadership in business, or any other field, demands a willingness to act effectively in the face of risk and uncertainty, backing intuition, judgment and your team's skills.

In the climate change dock are the fuels that have powered the post-industrial revolution global economy. Coal, the fuel of the 19th Century ... oil, the fuel of the 20th century ... and even gas, the somewhat cleaner fossil fuel of the 21st Century. As I say, the carbon shock is coming, blowing on a green wind. BP's business judgment is that the inevitable outcome is a higher price on burning carbon. The price may be set by market-driven emission trading, by regulatory-driven taxes, by other measures, or by a hybrid set of the available options. But come it will.

A yacht race is over in days, or weeks ... or perhaps months with one of those epic around-the-world affairs. But planning and executing sound energy strategies, whether for a company or a country, needs much longer horizons. Twenty years is a minimum, and even 50 years is a realistic timeframe. BP has a 50-year course plotted. We know where we are going. We are mainly an oil and gas company, but we are already working towards a future *beyond petroleum* far on the other side of the carbon shock, in a new low-carbon world.

Australia by contrast is still grappling with a future *beyond coal*, the 19th Century fuel, which we have and use in vast quantities, and which gives us some of the cheapest electricity in the industrialized world. Unfortunately this comes at a greenhouse pollution cost that many nations are increasingly unwilling to pay. More forward-looking players – companies and countries - are already focusing on the more diverse technologies of the 22nd Century, which will be the century of renewables like wind, solar and tidal power generation, as the fossil fuel era fades into history.

IT is worth reflecting on the diverging routes that BP and Australia have been taking, while recognising too that companies and countries have some clear differences as well as some strong similarities. We're all in the same boat race but are sailing in different classes with different handicaps. Australia can learn from us, and I'm sure we can learn from Australia. Ultimately, however, we are both trying to get to the same destination – not Hobart ... but a sustainable energy future, offering opportunity, prosperity and I hope, greater equity as well.

Australia's energy journey until now has been a relatively easy one, with abundant coal, considerable oil reserves and a growing number of gas discoveries. We have some hydro, and plenty of uranium too, although bountiful coal has meant we've never had to seriously contemplate the nuclear option, the most controversial power generation technology, for our domestic electricity consumption. Inexpensive power from coal-fired stations has been a magnet for energy-intensive industries like aluminum, just as gas is now drawing a new generation of industrial ventures to Australian shores.

Even in a higher carbon-cost future, as renewable energy sources become more important, Australia has vast solar potential and plenty of wind, tidal and sustainable biomass options as well. I might be an oil and gas man, but I'm also chairman of Australia's biggest solar energy company, BP Solar, and the solar cells on the roofs of many BP service stations around the world make us one of the top global producers of power from the sun. I soak up our sunshine, and look around our rooftops, and I see the future of electricity generation everywhere. That future may still be two or three decades away, but come it will.

From time to time Australia's energy "comfort zone" has been pierced. There's been long-running latent concern about oil imports, those occasional oil shocks, petrol price hikes like those that stirred consumer unrest a year or so ago, and power outages in hot summers when one or another state has fallen behind on developing its generating capacity to match growth in demand.

Right now we are being warned by the electricity industry of a looming Californian-style power supply crisis, and by the aluminum industry of the loss of energy-intensive industry to developing world nations if Australia ratifies the Kyoto Protocol. This concern arises because the first round of Kyoto commitments would reduce greenhouse emissions in many developed nations, while apparently leaving the Third World free to pollute. I'd be naive to dismiss such fears, and I don't. Good energy policy-making requires constant attention to the supply and demand equation, and Kyoto doubtless will produce both winners and losers.

But in times of great and disruptive change, as we face now from the carbon storm, there is no guarantee that past winners will remain winners in the future. The jobs, export opportunities and environmental gains from a renewable energy future may well far outweigh a role for coal over time. Planting trees in well-managed forests to sequester carbon and fuel biomass generators may create far more value in the next 200 years than clearing our native trees has in the past 200, given the toll on our landscape through salinity and other land and water degradation.

THE fact is that for the first time in Australia's history our coal-based energy comfort zone isn't just being pierced by the climate change threat, it's being punctured. When I compare BP with Australia I see that my company had its decisive greenhouse debate six years ago, in the mid-90s. Australia is still having it, though the tempo has finally picked up over the past year.

In 1997 BP's Group CEO, Lord Browne, gave what became recognised as a landmark speech at America's Stanford University. In it he announced that in spite of scientific uncertainty, the company accepted that the risk of climate change warranted action. He spoke out boldly, and he spoke out before the Kyoto summit on climate change at the end of that year, which produced the United Nations greenhouse treaty of the same name.

Ever since BP has acknowledged climate change as the biggest of all public issues for the hydrocarbon industry. While Australia still argues about the Kyoto Protocol nearly five years on, BP has moved *beyond Kyoto* – beyond the Protocol's modest first target of reducing developed world greenhouse emissions by 5 to 6 percent by 2012, and even that assuming the US could and would participate.

In 1998 BP set its own target of reducing its greenhouse emissions by 10 percent of 1990 baseline levels by 2010. Browne's authority meant this had to be treated like a hard financial target, not a soft environmental one.

A few weeks ago Lord Browne, speaking again at Stanford, announced that we'd achieved our corporate target eight years early. We've created value for our business while doing it, totaling about \$US650 million at last count, while learning invaluable lessons for the coming carbon price shock. Among other things our internal carbon trading system has made us a world expert in this potentially massive market opportunity. Now we aim to hold our emissions flat up to 2012 while continuing to grow. We don't think that will be the end of action because the carbon shock is still to come – it is only the start.

A British Royal Commission on Environmental Pollution has been examining how the UK can deliver greenhouse cuts of about 60 percent by 2050 as science is indicating that that is what will be needed to stabilise the Earth's atmosphere at double pre-industrial revolution carbon levels. This is a figure that the British Government's current energy policy review is taking seriously. So is BP. As I've said, we're already focused *beyond Kyoto*.

I have to be clear that we don't seek to tell the Australian Government one way or the other what it should do about ratifying Kyoto. But don't confuse this policy with any doubts on BP's part that greenhouse action is needed. As we see it, if Kyoto goes ahead it will be a beginning not an ending.

Wherever we operate in the world we welcome vigorous national debate around greenhouse issues and energy policy. In the US, where BP is the largest single supplier of oil and gas, there is intense political debate occurring around the Bush Administration's energy policy legislation. The UK has a major energy policy review under way and is contemplating tough targets to raise the energy efficiency and renewable energy generation capacity of the nation.

Where it is appropriate for a company to do so, and particularly where we can usefully contribute to the development of good public policy, we participate in such energy debates. Whatever the outcomes, in whatever part of the world, it is highly likely that a trans-national like BP will be affected in some way at a business level. Sometimes we'll gain, and sometimes we'll lose, but nor are we sitting around waiting for governments to act on our behalf.

Now, after an eight-month delay, the "urgent" energy policy review announced by the Council of Australian Governments or COAG in the middle of last year is finally up and running. Submissions are due later this month and I've entertained some hope that this inquiry will finally light a fire under energy policy debate in Australia, because frankly it's a debate that has been missing in action for far too long.

At BP Australia we want to be a strong and progressive voice in an emerging energy policy debate. We hope it will be one that looks to a sustainable energy future in terms of economic growth, environmental protection and social equity; one that includes all of the key issues and all of the key voices; one that tackles greenhouse issues front and centre, and; one that looks not just *beyond Kyoto*, but *beyond petroleum* and *beyond coal* too.

I couldn't help but worry, however, when last month's COAG energy review briefing paper came out. It concentrates heavily on the domestic electricity market, limits its scope to less than 20 years and leaves environmental protection sounding like a second tier issue at best. It doesn't even deal with transport issues, one of the fastest growing area of greenhouse pollution, and an area that the original COAG energy policy details released last June named as an "essential underpinning of Australia's economic, environmental and social goals".

Of course transport is an area of vital interest to BP's downstream petroleum business. I make no apology. We would like to see our issues on the agenda, we want to share our experience with Australia, and we also want to do much more than just talk. As I outlined earlier, we see strong parallels between the challenges that we face as a trans-national corporation operating here, and those Australia faces as a net energy-exporting nation integrated into the global marketplace.

Locally, we are investing in mega gas projects, like Australia's largest-ever resource development, the North West Shelf Gas project; in solar manufacturing, marketing and technology commercialisation (in the form of photovoltaic cells); and in the upgrading of our refineries to produce the cleanest transport fuels in the country.

We've developed a diesel fuel that is 100 times lower in polluting sulphur than the current legal standard; and our Federal Government Greenhouse Friendly-certified *Global Choice* offering, attached to high performance BP Ultimate98 petrol, guarantees customers that all of the greenhouse pollution from their fuel use will be offset through innovative carbon reduction projects. Products like these help us to tell our customers that we know the world is changing, and they allow our customers to respond to that change.

These are examples of things we can do as a company and we believe they help to propel Australia along the path towards opportunity, prosperity and greater equity, and a sustainable energy future. But in some areas we need help from government, for example with a tax and excise regime that rewards good environmental performance, such as our investment of over \$500 million in cleaner fuels. We believe that policy interventions like this can pass the test of being openly evaluated on a cost/benefit basis when the value of cleaner air and water, the enabling of new engine technologies, less greenhouse pollution and better human health outcomes are taken into account.

VISION and leadership have unleashed a powerful business response at BP that recognizes the potency of the looming carbon shock for our company. Don't forget that fossil fuels are our main business, and will remain so for a long time to come. The great strength BP has gained from acting on climate change - while Australia still agonises about what to do about Kyoto - is that the future holds few if any fears for us.

Let me give you some examples of what we don't fear here in Australia, or anywhere else, in terms of energy policy options; and also what our global experience tells us can be important ingredients of good energy policy deliberations as our nation's debate evolves.

Engaging stakeholders. We welcome the broadest possible participation in this vital national debate, including for example activist green groups and other non-government organisations. We ourselves are seeking to engage progressive players regardless of whether they come from politics, bureaucracy, business or the community. This needs to be a whole-of-economy and indeed a whole-of-society debate, not one confined to narrow and vested interests.

Improve the pricing of energy. BP believes harnessing market forces by sending the right price signals, is the best way to ensure that cost, security and diversity of supply, and environmental and social equity concerns are addressed, efficiently and effectively. Experience shows however, that prices alone are not sufficient to efficiently and effectively deliver all energy policy objectives – measured regulation is also required.

Fundamentally improving energy pricing means leveling the playing field across the energy sector by internalising the cost of carbon – to facilitate a shift to low-carbon growth. Several policy tools are available – the most common are indirect subsidies, a differentiated fuel excise regime, revenue neutral energy taxes, and cap and trade emissions trading systems.

BP has considerable experience in emissions trading, supports the adoption of similar systems in the markets that it operates in, and has already shared its experience widely. We encourage Australia to explore the trading path first, and to weigh trading implications carefully as it re-evaluates the pros and cons of Kyoto.

BP also believes better use can and should be made of revenues generated by existing policy tools, such as fuel excise. Indirect subsidies and support programs can accelerate the shift to low-carbon growth – in renewable energy, and in other clean and efficient energy uses.

Energy efficiency. BP knows from its own experience that significant cost savings are available through greater energy efficiency, and Australia is far from world's best practice in this arena. The UK's energy policy review is canvassing energy efficiency targets of 20 percent improvement by 2010 with another 20 percent by 2020. There are many voices in Australia calling for strong national targets here as well and BP is one of them. Better energy efficiency is the "low hanging fruit" of this whole challenge.

Renewable Energy. We have to be more ambitious with renewable energy. Electricity accounts for 40 percent of Australia's greenhouse emissions. We need to speed the shift to renewables – wind, solar, tidal, mini hydro and sustainable biomass are key technologies - and we need more challenging mandated government targets to do it. Major green groups and the green power industry are advocating an additional 10 percent of Australia's energy from renewables by 2010, and the UK energy policy review has put forward a similar target. BP believes in setting challenging targets, and we could support this one.

Creative solutions. We face big challenges, but also have some big opportunities for win/win solutions. Precisely because energy is such a broad topic, the stage on which the debate plays out and on which the action unfolds has to be broad too. Solutions lie in better transport and land use planning, better public transport options, new technologies and knowledge-based industries, land and water restoration projects, regional development plans and many other areas. We should look everywhere, and not be afraid of change. For example, strong cooperation between oil companies and car manufacturers could produce big environmental gains, but it needs political leadership to make it happen.

A national stretch goal? To the extent that there has been an energy debate in Australia recently, much of it has focused on Kyoto and the perceived threats it poses to Australia's existing industrial base, especially around coal. But the post-carbon shock future that BP and many others envisage is full of business opportunities too. The Renewable Energy Action Agenda is aiming at a \$4 billion industry by 2010. The Prime Minister's Science, Engineering and Innovation Council three years ago foresaw a global marketplace for environment industries, including clean and efficient energy solutions, worth \$US500 billion a year. It suggested Australia pursue a five percent share of this. I have no doubts about it. Australia needs a bold target. Bold targets help you to shape a better future.

RIGHT now, I can tell you, Australia is missing out on opportunities for greater prosperity because we lack alignment on energy policy across the nation. We don't have clear coordination of the nation's energy challenge across key Federal portfolios like industry, foreign affairs, trade, environment, natural resources, science and others;

between the Commonwealth, the states and territories and even local government; within business; and within the community.

The collective fault for this lies with all political parties, with business and even with civil society, made up of the people who can send messages to government at the ballot box and to business at the cash register. We in Australia just haven't given energy the priority it deserves and we absolutely have to do so now.

Here's one example of how easy it is to lose an opportunity. Some years ago BP was involved in a solar power project in the Philippines that was made possible by funding from Australia's overseas aid program, and which sourced solar technology from Australia. Then pressure from NGO watchdog groups pushed the Federal Government to change a policy of tying aid to Australian industry opportunities in favour of untied aid – a policy approach not shared by many of the nations with which Australia competes for economic opportunities around the world.

Recently the Philippines sought a second stage of the highly successful project. Australia's new aid policy meant it could not help with funding, so the Spanish Government stepped in with aid funding for the \$40 million project. The solar technology being used still originates from Australia, but now the hardware is being supplied from a BP Solar factory in Madrid. Australia is the loser, because solar is a major commercial technology of the foreseeable future, and potentially a significant earner of carbon emission rights under the Kyoto Protocol's Clean Development Mechanism for developing world projects. Spain and the Philippines are winners.

I fear there will be many more such stories, on many fronts, if Australia doesn't change course soon.

IN summary, I know that the sheer enormity of the energy and greenhouse challenge can be quite paralyzing. In this sense defending the status quo can seem a safer, more appealing option than embracing a challenging future. BP made its choice five years ago, looking firmly to the future to frame its business and policy responses to climate change, not to the past.

But we can all look to the past to find reassurance that pro-actively meeting inevitable change is preferable to waiting for it to hit. It's better to aggressively manage a major transition, to meet the storm head on, than to be a passive victim. Australia's economic strength now, in the face of a global downturn, owes much to tough measures taken over the past two decades – in particular financial and industry deregulation.

In the past, Australia also has made some far-sighted and pro-active decisions in the energy policy arena, including on environmental issues. In that regard the decision to encourage uptake of unleaded petrol by using the excise system to create a price differential with leaded fuel stands out. But there was a bolder decision more than two decades ago. It came in response to the oil shocks.

In the late 1970s, despite an outcome that entrenched higher prices at the bowser, the government(s) of the day saw the (painful) move to import parity prices for indigenous crude oil as being in the long term national interest. The fear then was that Australia was at grave economic risk if it failed to come to grips with the new world reality of higher international energy prices - albeit one dominated by the new geo-political mechanism of OPEC.

The policy faced enormous backlash from sectional interests, particularly in the rural and manufacturing sectors, and not without reason based on dislocation of our then way of life. But the foresight and the policy has served Australia extremely well - in the medium and long term. In terms of our security of supply we're still 90% self sufficient in crude oil 20 years after Bass Strait was forecast to be depleted! And it created Australia's reputation as a significant gas province - material enough to meet the future energy needs of Australians and growth in Asia.

Good energy policy-making in the 21st Century, in the face of the carbon shock, will demand many more decisions like that, by governments and by business. Vision, leadership and action are all required. A price on carbon is coming, and once again Australia can ill afford to be out of step with a new world reality for energy.

I repeat. BP knows where it is going. Whether Kyoto enters force or not, we are acting as though carbon has a value. We have vision, leadership and action, which is exactly what the community can rightly expect from one of the world's biggest companies. We are ready for whatever lies ahead *beyond Kyoto, beyond coal and beyond petroleum*. That's because we also are *beyond fear*. We intend to lead and to win.

Clearly I doubt that Australia, and many of its major corporations, can say the same. But I hope that there is still the time, and the will, for them to change course, to be forward-looking and to meet the carbon shock head on.

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