

**Speech by
Mr. Rodney Chase,
Deputy Group Chief Executive, BP Amoco
at the
Pew Center-Chatham House Conference on 25th April 2000
Washington DC**

Innovative Policy Solutions to Global Climate Change

I am talking to you today from the perspective of an oil company. For us the climate change issue is a strategic one. We must address our own and our customers emissions of greenhouse gases, principally carbon dioxide, while working to deliver an increasing role for renewable energy sources.

BP Amoco is a significant force in the US energy market. We are not waiting but are actively pursuing practical solutions to the climate issue, and that is as true here in the US, where the innovation and skills of our American businesses and people contribute significantly to our progress, as it is elsewhere in the group.

There are two principal questions which I would like to address in my remarks today.

The first is to explain what companies like my own are doing to find “innovative solutions” to the problems associated with global climate change.

And the second is to discuss what policies can help make this happen.

The debate I do not wish to enter in any detail is the scientific debate over global warming.

Not because I don't think it is important. On the contrary, it seems as if recent scientific reports confirm mounting evidence of a human effect on the climate.

But even if this were not so, I'm sure that our customers and shareholders would expect us to take increasing care for this whole area, and to start down the road of addressing our emissions of greenhouse gases.

We are expected to demonstrate that companies like my own are capable of finding ‘innovative policy solutions’ to the problem of climate change.

We must have a strategy. And we must deliver results.

True, it is also in our interests that the debate should be as rational as possible. We shall all be the losers if public policy is driven by emotional perceptions alone.

But I would hope that a genuine readiness on behalf of industry to accept our responsibilities in this area will also provide a measure of defence against demands for a panic-ridden response.

I say this because, in a way, the most contentious question in this whole area revolves around the issue of 'time' - the issue of how fast it is sensible and practical to move.

Some wish to see an immediate and massive allocation of resources into renewable energy - coupled with draconian penalties for use of fossil fuel.

But on the other side of the debate are those who feel this would be counter-productive, and would in the long-term weaken our ability to deal with a problem where at present we still have so much to learn, and where technology has still such a long way to go.

I have no doubt that we shall, in any case, witness an accelerating response from industry over time as our knowledge of the problem increases, and as business succeeds in controlling its own carbon emissions.

But the crucial question today is whether industry is doing enough *at present* to ensure that our worst fears never materialise. And if not, what is needed to encourage industry to do more.

People who work in industry have children too. Surely, none of us wishes deliberately to squander the rights of future generations.

That is why I think it's fair to emphasise that while there may be a debate over 'means', we should all be united in the objective - which is sustainable development.

However, that won't get us very far without results. So, what can industry do? And what is government's role in all this?

On January 4th of this year, the BP Amoco group wide emissions trading system opened for trading. It did not do so for academic or public relations reasons. Its purpose was - and is - to ensure that the BP Amoco group succeeds in meeting our own greenhouse gas target on time and at minimum cost.

The existence of a target is the significant point. We are not advocating emissions trading for its own sake. Rather, we have *voluntarily* committed ourselves to a demanding target which emissions trading will help us to meet, and we can do this without damaging our competitiveness.

And this target is to reduce emissions of greenhouse gases by 10 per cent from a 1990 baseline over the period to 2010. Since our merger with Amoco on 1st January 1999, this target now extends to the whole of the BP Amoco group. And the same will now be true for the Arco operations.

I repeat, it is a demanding target. Given our future business plans, it represents a reduction of over 30 million tonnes over the period to 2010 on a business as usual projection, so this includes the growth we expect from our activities. We cannot use growth as an excuse to escape our targets.

Or to put it another way, it is equivalent to taking 100,000 cars off the road - just from reducing the emissions of a single company.

But motivation is important to us.

Like many other companies, BP Amoco seeks to give our most talented staff maximum discretion and freedom in running their operations, while maintaining their accountability to the shareholders as a whole.

The way we have done this is to create semi-autonomous business units or assets which are almost independent businesses in their own right - but subject to a variety of targets and working within a context of policies and guidelines which are binding upon all parts of BP Amoco.

Both these targets and policies give a very prominent position to the environment. And the specific emissions targets are as precise and as mandatory as any internal financial target. Failure to deliver will disadvantage the asset, and will in particular reflect poorly on the asset manager's own competence and capability. The targets are included in all managers' own performance contracts.

However, internally we have created a system based on 'carrots' rather than 'sticks'. True, there are penalties for failure. But one of the great advantages of emissions trading is that it is incentive driven, and provides real rewards to those who meet their targets efficiently.

Our trading system is founded on a 'cap and trade' concept. An emissions cap - or an allocation - has been set for each business unit based on its emissions level in 1998. This has been chosen as the 'base year' as it contains the most accurate data available and the aggregate total is also very similar to the total in 1990 which is the base year for our Greenhouse Gas target.

Therefore, each business unit has a fixed number of annual allowances to emit greenhouse gases. Those who wish or need to exceed their allocation can only do so through purchasing additional allowances from those who are prepared to emit less.

This is where the incentive element of the package is contained. Costs and revenues from any trade flows through the business unit's bottom line and has an impact upon its overall performance. And therefore the overall result at the end of the year will have a demonstrable effect upon each business unit's performance.

This provides a particular incentive for our business units to find unexpected ways of reducing their own emissions, in order to have more to sell on the open market. And it is in providing an 'enterprising' approach to the issue of emissions reductions where I believe the trading concept offers its greatest potential.

All the evidence to date, and our experience in other areas, confirms our view that this will encourage more ingenious solutions than could ever be achieved under the threat of government taxes or regulations.

And to illustrate the BP Amoco emissions trading market has been surprisingly active with 398,000 tonnes of Greenhouse Gas traded with an average price of around \$11 per tonne.

I have a string of examples from all over the BP Amoco world which illustrate the real savings being achieved in every part of our business, by the men and women who operate them. And we have also influenced our joint venture partners who in some instances were sceptical or opposed.

The examples illustrate what we can do for our by improving our own process efficiencies. But these will not be sufficient in themselves to meet our targets. And they don't help our customers meet their targets either.

It is this reality which underlines the crucial role which technology will play in this whole area. Indeed, if it is 'Innovative Policy Solutions' we are after, it is to technology we must look.

There are various options, which tend to cluster around energy efficiency and flaring; and capture and sequestration. And in the longer term we must explore ways of making less CO₂ ourselves; and investing in new renewable energies and feedstocks.

But this underlines the scale of the challenge we have set ourselves in our internal emissions target. As I've already mentioned, our commitment to reduce emissions by 10 per cent roughly equals 30 million tonnes of carbon dioxide. The first 10 million tonnes can be achieved relatively painlessly. But it becomes much more difficult after that, and the target cannot be reached without technological innovation, and we cannot use that as an excuse not to meet our target..

And it is technological innovation which will in part dictate the speed with which renewable energy is developed.

We are in no doubt, and we need no persuading, that solar power will be a major contributor to global energy supply this century.

BP Amoco, for example, has a commitment to grow our Solar Company to a billion dollar business by 2007. Already, it is growing rapidly - by almost 30 per cent per year.

We now have an almost 20 per cent share of the global market. Our systems and products are in use in over 160 countries and technology will drive this faster, for example as we continue to develop our new thin-film technology, which has been available commercially since 1997.

We want to expand our solar business as quickly as possible. We are committed to expanding all of our crystalline plants and will double current capacity in less than three years. Once we have

completed a review of our thin film technologies, we will expand technology production in this sphere too. We are delighted that the cost of solar is decreasing, and we welcome any removal of government constraints and taxes which inhibit the growth of a solar market and a reliable, cost effective product

And this brings me to the role of public policy in general.

There is an international context and an international negotiating process; not an easy one and certainly not a perfect one. But it is with us and I believe business has to take note. It may not be clear when the Kyoto protocol will be ratified but the signal is there and we in business will be better placed if we recognise and act on that. And governments must ensure that early movers do not get penalised.

At the international level, we will be able to take advantage of the so called Kyoto mechanisms of Emissions Trading, Joint Implementation and the Clean Development Mechanism. They offer the prospect of finding good business answers, whether through opportunities to purchase lower cost emissions credits, or to gain additional advantage from our business projects.

And for the many of us who have international business interests we might recognise that the mechanisms offer mutual benefit for ourselves and our host countries, particularly those in the developing world. A good point at a time when global investment is under some challenge.

So we need to ensure that governments are fully aware of our support for agreeing the necessary guidelines.

But much of the implementation must and will be at national level. There is a clear role for national governments in setting a framework of policies and measures which encourage business and other sectors of society, which recognise the need to support economic competitiveness, the role of technology and the timescale for achieving results.

But in my experience we will do better if we co-operate.

I accept that there is a limit to what firms can justify doing voluntarily to curb their energy emissions, when they lack a government policy, as I accept that there is a role for government in promoting energy efficiency, and as a matter of principle the use of economic instruments.

A tax can undoubtedly be a powerful instrument for changing behaviour, particularly if it is carefully directed and if energy users face genuine alternatives.

But I equally believe that, in many instances, there are other economic instruments which offer greater benefits than taxation. I also believe that some taxes do more harm than good, and that untargeted 'energy' taxes on business could easily fall into this category if we are not very careful with its design.

Obviously, it is very difficult to suggest a tax which works for every type of economy. The United Kingdom Government is currently introducing a 'Climate Change Levy' which continues to be the focus of much discussion, and which it is proper that I should leave to my country's Deputy Prime Minister to explain.

But as a general rule, I believe taxes which create positive motivation are likely to be more effective than those based on penalties.

There are some essential conditions which must be satisfied first, and let's remember that using energy is not a bad thing; the target is the harmful emissions .

For example, consumers must be *able* to change their behaviour. There must be genuine alternatives available to current practices of energy consumption, at least from the technical standpoint.

Equally, the tax must be properly targeted and not driven by revenue requirements. They must be directed at creating incentives for people to do the right thing, as opposed to creating a revenue dependence from people doing the wrong thing.

But provided these conditions are fulfilled, there are a number of possibilities open to governments.

For example, they might consider introducing a reduced rate of corporate or business taxes for companies which actually reduce their emissions by, let us say, one per cent a year from an agreed baseline.

Or, rather than penalise energy use, governments could encourage conservation by agreeing targets for emission reductions, and taxing only the amount by which the target is exceeded.

The real benefit of this last approach is that it would concentrate everyone's attention on the target - and since the target is a percentage, it would not discriminate on the quantity previously consumed. Hence, it would not be unfair in competitive terms. And if companies were allowed rebates for over-achievement, everyone would have a real internal incentive to agree stretch targets and meet them.

There will be those who say such an approach would be impossible to administer.

It seems to me, however, that if we are serious about the march to improving climate, we are compelled to devise an accurate means of measuring emissions, and that this will be necessary irrespective of the policies we favour.

It is equally possible to envisage a whole range of taxes and regulations to encourage, or perhaps even oblige, companies to take actions which governments consider essential.

But I believe this could be less successful and that in the final analysis it will be companies operating with regard to their own self interest which will produce the technical solutions which hold out by far the greatest chance of success.

And here I might make one comment on natural gas. We should welcome it for its preferred characteristics particularly in the climate context.

Some governments are uneasy at the prospect - they fear for the strategic consequences, and regret the social implications, particularly for coal.

This is not the occasion to debate whether these fears are well-founded - or whether, as I believe, they are exaggerated and misdirected.

But in environmental terms, the move to gas must be a reality to be welcomed, rather than frustrated. Solar and Hydrogen will probably one day take the place of fossil fuels. But it is a long way off, and in the meantime, gas has a pivotal role in enabling us to meet our environmental obligations without depriving ourselves and others of economic growth.

But I think companies like my own have a choice in deciding whether to do nothing; something; or substantial in facing up to the energy issues which concern governments and their electorates.

If we fail to respond to this challenge, governments will intervene in ways which we don't like and which I fear will be counter-productive.

But if we take serious action, we may be able to persuade governments to work with us in partnership to produce the solutions we all want, and which governments have a legitimate right to expect.

In the United Kingdom, that is what we are seeking to do in devising an emission trading system for the country as a whole.

If this succeeds, I believe it could be an example for other countries to follow.

The principle is already accepted internationally, let's try and make it work nationally and internationally. But there is scepticism over its practicability. And it is this aspect which ourselves and the British Government are working jointly to overcome.

If I had to pick just one innovative policy solution, it would be this.

And if we can make it work, I think it will pave the way to overcoming the growing public anxiety which exists over global warming.