



Reflections on Kyoto

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• COR HERKSTRÖTER •

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Cor Herkströter was appointed president of Royal Dutch Petroleum Company in July 1992. He has been a Group Managing Director of the Royal Dutch/Shell Group of Companies since July 1989 and Chairman of the Committee of Managing Directors since July 1993. As a Group Managing Director, his spheres of interest include: the USA; Human Resources and Organisation; Legal; and Planning, Environment and External Affairs.

In 1967 Mr Herkströter joined Billiton NV as a business economist and became head of its Financial and Economic Affairs department following the acquisition of Billiton by Shell Petroleum NV. Between 1972 and 1980 he held further Billiton appointments in Switzerland and the Netherlands. Since 1980 his appointments include: Area Coordinator for South-east Asia, Shell International Petroleum Company; Vice-president Finance, Shell Française; Chairman of the Board of Management, Deutsche Shell; Regional Coordinator Europe, Shell Internationale Petroleum Maatschappij.

Mr Herkströter was born in Venlo, the Netherlands in 1937. In 1962 he graduated in economics from the Netherlands School of Economics, where he also qualified as a chartered accountant in 1966. In 1989 he was awarded the Verdienstkreuz 1e Klasse des Verdienstordens der Bundesrepublik Deutschland, and in 1993 he was made Knight of the Order of the Netherlands Lion.

The Kyoto Protocol is a significant signal for change, but the challenges governments will face in meeting their targets should not be underestimated. The issue of climate change is still fraught with complexity and uncertainty. The implicit message from Kyoto is that there are no easy answers or rapid solutions. The Royal Dutch/Shell Group of Companies welcomes this, and believes that continued scientific research – allied with a prudent precautionary approach – is the right one.

Shell companies see affordable, clean and reliable energy products as essential to sustainable development: 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.' They therefore intend to continue to find and produce oil and gas efficiently and responsibly, to move fast in the commercial development of renewables, and to develop their businesses in gas-fired power generation. They will also continue wherever possible to increase energy efficiency and to reduce emissions of greenhouse gases, both in their own operations and in those of customers who are willing to be helped to do the same.

The goal, in Shell's view, should be better living standards for more of the world's people through development which is globally spread and globally sustainable. Kyoto has set useful signposts, and that goal may be more attainable as a result of what was achieved there.

The issue of global climate change, its probable causes and potential consequences has been one of the most widely debated topics of recent years. And rightly so: the state of the world we leave for future generations must concern us. And since the balance of scientific evidence suggests a link between climate change and human activity, we have a responsibility to take prudent precautionary action.

But it is ironic that many of those human activities have also brought huge benefits in terms of economic and social development. Is it now necessary, for the long-term future of our planet, to limit such development? Or will there be technical solutions which allow development to continue? Unfortunately, we cannot wait to have

all the answers, and this dilemma is one which, on balance, has been sensibly tackled in the Kyoto Protocol. Some say that the Kyoto Protocol signals that the world's energy balance is on the verge of a period of evolution.

The outcome of Kyoto

We in Shell, on the whole, welcome the outcome of Kyoto as progress on a long road. Intergovernmental negotiation on this scale was unprecedented. Considering the difficulties, reaching an agreement at all was a considerable achievement. As you know, it was agreed to reduce the emission of greenhouse gases in developed countries by 5% by 2008 – 2012 compared to 1990 levels. Differentiated targets, carbon trading and joint implementation were included in the agreement.

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Of course, there have been criticisms, but this is not an issue susceptible to simple remedies. It is complex, and fraught with dissent on scientific, social and political grounds. Priorities differ according to each nation's economic and social challenges.

In my view, the Japanese hosts and the Chairman of the key negotiating session, His Excellency Mr. Estrada of Argentina, made a highly commendable contribution to the outcome. It is a significant signal for change, and the targets, in general, are far more realistic than anticipated.

Although the full implications still have to be clarified, we believe that certain features of the Protocol offer encouraging opportunities not only for productive action but also for profitable business within and outside our industry. I will come back to that later. First, however, I want to look at the way ahead in the context of the energy future.

Easily available and affordable energy from fossil fuels has shaped the world we live in today - a world that is more prosperous, overall, than at any time in its history. We all know that the fight against poverty and deprivation in so many areas of the world cannot be won without economic development, which again is inextricably linked to the supply and price of energy. But the burning of fossil fuels, together with other human activities such as deforestation, undoubtedly releases greenhouse gases - especially carbon dioxide - into the air. And that has increased the natural greenhouse effect.

We in Shell believe that while continuing research is needed to increase understanding of the scientific, social and economic aspects of the problem, precautionary measures such as the emission limits for greenhouse gases set in train by the Kyoto agreement are necessary. The Kyoto Protocol appears to have provided a basis of flexibility and realism. We should not, however, underestimate the challenges governments will face in meeting their targets.

The role of governments

Each country must consider the implications of its own targets and put together policies and measures to meet them. Naturally, they will do so with due consideration of the impact of potential measures on national economies.

Shell companies will respond according to decisions made in individual countries where they operate, as well as continuing their own reduction measures. Their knowledge of the energy market will also enable them to contribute to the debate on the right sorts of policies, and to discuss practical measures, with the governments concerned.

Policies to achieve greenhouse gas reductions should work with the market, not against it. Basically, business has a tremendous ability to generate technology as needed, but it requires a framework to stimulate this. The removal of subsidies and other market distortions is also important; however, so is encouraging the development of "climate friendly" technologies, and here some market stimulation is acceptable.

I see huge potential opportunities for the kind of creative imagination which, for example, brought us into the information age. That in itself has

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brought environmental benefits by reducing the need to move goods and people. Apparently unrelated technologies often converge to bring about significant advances in products and their performance. There is a constant pattern in market economies: from discovery to technical innovation: greater efficiency bringing lower costs; lower prices bringing increased demand. New, "fast-forward" advances in climate-friendly technologies could bring commercial success as well as climatic benefits.

One of the keys to successful implementation of emission targets is a pragmatic focus on cost-effective measures. We know that details of various aspects of the Protocol will have to be decided through further difficult negotiations to "put more meat on the bones". This will make the Conference of the Parties meeting in November all the more important. However, certain concepts are welcome, such as tradable permits, and joint implementation through the clean development mechanism.

There is no doubt that improving the energy efficiency of developing countries could offer mutual benefits: trading opportunities for the developed world, technology transfer and potential economic transfer into the developing countries. Developed countries must take the lead in reducing emissions. However, this is a global problem which needs global solutions. At some point the developing countries must be involved and committed, although it is understandable that they are concerned about having a brake put on their progress to solve a problem which is not primarily of their making.

What is Shell's approach?

Our thinking on climate change – especially on the action it demands – is influenced by our view of sustainable development and the long-term energy scene. We believe that affordable, clean and reliable energy products are essential to sustainable development: meeting the needs of the present without compromising the ability of future generations to meet their own needs.

In the coming century energy demand is expected to rise steeply, to support continuing improvement in living standards for a growing global population. Today, fossil fuels supply around 85% of the world's primary energy needs. Throughout 20th century as demand increased, energy supplies became more diversified. Today, they are starting to include identified renewables like biomass, photovoltaics and wind energy.

Our studies of the long-term energy future make us believe that:

- Technology will provide us with new solutions, both on the energy demand side – with greater efficiency of use – and on the supply side – with more diversified sources, including new renewables.
- The global use of fossil fuels will increase but may peak towards the middle of the next century. The use of coal will grow as part of this but not to the same level as some others would suggest.
- The relative carbon content of world energy use has decreased steadily over the past hundred years, and we expect this to continue.

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 As a result, carbon dioxide emissions could peak in the period 2020-2030. This would lead to stabilisation of atmospheric CO₂ levels at just over twice the preindustrial level, close to the target proposed by the European Union.

This last point is encouraging, but even against this background Shell companies will certainly play their part in limiting greenhouse gas emissions while continuing to help meet the world's energy needs.

What is Shell doing?

Let me briefly tell you what actions we intend to take:

We will continue to find and produce oil and gas – efficiently and responsibly – to fuel the next 20-30 years of economic growth, particularly in developing countries.

We will provide more natural gas and develop our businesses in gas-fired power generation, for the cleaner production of electricity.

We are moving fast in the area of renewables, with a new core business called Shell International Renewables. We will be investing \$500 million over the next five years, to build a fully commercial business for the future. Among various potentially commercial renewables, we are especially interested in technologies related to solar power and to biomass energy.

We are looking initially at bringing the benefits of affordable power to rural communities in developing countries where there is no electricity grid. In the longer term we can see prospects for large-scale power generation from biomass linked to grids. We believe the conversion of sunlight into affordable

energy through solar and biomass can make a significant contribution to sustainable economic development for generations to come.

We will of course continue wherever possible to increase our energy efficiency and to reduce emissions of greenhouse gases – both in our own operations and in those of our customers who are willing to be helped to do the same.

We measure and report on our own unit emissions of greenhouse gases and have targets for continuous improvement. For example, we have already made commitments to continue reductions in flaring and venting. We look for cost-effective opportunities and new measures to achieve further improvements.

As far as customers are concerned, we contribute to reducing their greenhouse emissions mainly by developing energy-efficient products and promoting their efficient use. At the same time, we are providing customers with lower carbon fuels – especially natural gas – and, as I told you, are developing and marketing renewables.

Every little helps

Our contribution to targets for greenhouse gas reductions may be small in global terms. Greenhouse gas emissions come from so many of society's activities that no single source is ever a large part of the total. But the climate change problem will only be tackled successfully if everyone plays their part.

The issue of climate change is still fraught with complexity and uncertainty. Personally, I welcome the implicit

"We will continue to find and produce oil and gas — efficiently and responsibly — to fuel the next 20-30 years of economic growth, particularly in developing countries." message from Kyoto that there are no easy answers or rapid solutions. A prudent precautionary approach is, in our view, the right one.

We should not forget the speed of technological progress and of advances in scientific knowledge. If governments, in co-operation with industry, implement policies which are appropriate and affordable today, then more resources will be available to fund the research and help develop the technologies which are affordable and effective tomorrow – without unacceptable economic and social consequences.

Shell believes the goal should be better living standards for more of the world's people through development which is globally spread and globally sustainable. Kyoto has set useful signposts, and I hope we will find the goal more attainable as a result of what was achieved there.

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