

## **Reith Lectures 2000: Respect for the Earth**

### **Lecture 3: Business - John Browne - Edinburgh**

It is a great honour to be giving one of these lectures, and a great pleasure to be doing so here in Scotland, where I've spent a significant part of my working life over the last thirty years.

That experience has been important, and in particular it's helped me to appreciate that Scotland has been at the very heart of the debate on progress. After all, this country has produced a stream of people including John Reith, who refused to accept the world as they found it and instead applied their knowledge and intelligence to create something better.

It is this sense of progress which is the subject under discussion in these Reith lectures.

Is genuine progress still possible? Is development sustainable?

Or is one strand of progress - industrialisation - now doing such damage to the environment that the next generation won't have a world worth living in?

Concern over future sustainability is not new - there's always been something which appeared to threaten it - fears, for example, that the world would run out of wood, coal, oil or fertile land.

And at such times there were, as now, people who responded constructively and optimistically to such challenges - while others were fatalistic - willing to accept decline rather than determined to reverse it.

So are we just then rerunning history .... a moment which, in retrospect, will seem to future generations no different from those of the past?

I'd like to be able to say 'yes'.

But the answer, I'm afraid, is 'No'.

No, because the challenges are now more numerous and more complex. No, because the necessary answers can't be reduced to a single breakthrough.

Fifty years ago, Bertrand Russell broadcasting the first Reith lecture did so to a nation that accepted the potential and the need for economic growth.

But today the potential for growth itself is in question. There is a fundamental concern about the limits to growth, and a feeling that the way we now live is not sustainable.

America still remains predominantly optimistic but in Europe in particular, including Britain, opinion surveys show that almost half the population have lost their faith in

progress. Material living standards may be rising but very large numbers of people no longer believe that the world of tomorrow will be a better place in which to live.

Why? What has created this pessimism? It seems more and more clear to me when I travel worldwide that it is the cumulative impact of key factors such as:

The pressures of population growth. The pressures of urbanisation.

Water shortages.

Environmental challenges. The quality of the air we breathe. The pollution of oceans. The loss of species as habitats are transformed. The gathering evidence of a fundamental change to the climate caused by human activity.

Sustainability is about the environment and biodiversity, but there are other factors as well.

The pressures created by a world in which global markets operate for 24 hours a day, seven days a week. ... and by the removal of the comfort and protection of the old ways of working.

It is as if history were constantly accelerating.

We are in a world without certainty - except for the certainty of change. A world where national cultures and the credibility of institutions of democracy are challenged by global competitive pressures.

The uncertainty and fatalism I've described is also fuelled by doubts about science itself. Some of its uses - such as the genetic modification of crops - produce huge public scepticism, and even fear. Again, while US opinion continues to believe that progress is directly associated with the advance of technology, in Europe two thirds of people are sceptical of the link.

So what can a businessman say or do in response to these challenges?

Perhaps I am expected to make the speech of the accused standing in the dock. That's not how I see it.

I believe business is constructively engaged in resolving these problems ... and I believe that changes in technology and in the way the global economy works are giving the means to deliver genuine progress. If I had to plead from the dock that would be the essence of my case. And it is certainly my motivation.

Business is not in opposition to, but has a fundamental role in delivering sustainable development - to meet the needs of today's world without depriving future generations of their means to do so.

That's a strong assertion and for some counterintuitive - so I realise it has to be justified by something more than an assurance of good intentions.

In essence it is about enlightened self interest.

The simple fact is that business needs sustainable societies in order to protect its own sustainability. All the concerns I have summarised are issues for us too.

And I say this because very few businesses are short-term activities. Most want to do business again and again over many decades.

And this is especially true of the businesses which are most often criticised - those, like mine, which are in the business of extracting and developing the world's natural resources. We are by definition - whether we like it or not - long term players. We have to live with the consequences of what we do for decades. We can't pack up and go home when the going gets tough.

But in order to sustain what we value, we have to be prepared to change. And the sort of change which business promotes is the application of technical advances to meet human needs.

Historically, all the fears of shortage I mentioned at the beginning - of food, of water of land - were disproved by change - by technical breakthroughs which substituted one thing for another, and through fundamental shifts in productivity which moved the boundaries of the possible.

Now to an unprecedented extent, technology has the ability to repeat that process - embracing a radical and transforming change beyond all previous experience - in other words not a rerun of history but something very different.

We face a revolution in the way the economy works driven by new technology. A revolution which I believe will have major beneficial consequences for the environment and indeed for all the issues under discussion in these Reith lectures.

I think of it as a "connected economy " but connected in ways we have never known before. Connected not just from one person or company to another, from one buyer to one seller - but connected as the brain is connected - as a network of multiple and simultaneous linkages.

The connected economy is beginning to give us the ability to create new marketplaces and to integrate and manage complex systems at a distance and with great precision and speed. It is also giving us the ability to spread and share knowledge instantly.

What has all that got to do with the environmental challenges we're facing?

First, the shift in productivity is dramatically changing the way in which resources are being used.

One of the first projects I was involved in as a young graduate was the development of the Forties field in the North Sea - over 2bn barrels of oil in hostile waters one hundred miles from Aberdeen, 120 miles north of us here in Edinburgh.

That development, which itself was revolutionary at the time, required the construction of four large platforms from which the wells went down to extract the oil 7,000ft below sea level. 56,000 tonnes of steel.

Now, a similar development could be done with a single platform - because technical advances now allow us to drill horizontally under the seabed for up to seven miles.

That drilling is not random. Thanks to modern computing and communication we can now steer the drill bit in real time, with information feeding back to a computer screen onshore in Aberdeen as the drilling tip goes through the rocks offshore.

But, and this is the second point, the connected economy isn't just about productivity - it is also about learning and the way in which knowledge and best practice can be developed, disseminated and applied on a global basis. This, after all, is one of the great benefits of globalisation.

One way of seeing this is to focus on two of the problems at the very heart of environmental concern - climate change or global warming ... and the quality of air in the world's cities.

Let me start with climate change.

The latest authoritative scientific reports on climate change make clear - in the most careful, rigorous language - that indications of a human effect on the climate are mounting. Tom Lovejoy, in this lecture series, has already referred to this.

The research goes on. The conclusions so far, of course are provisional - but then as Karl Popper has noted - almost all science is provisional - research never ends.

In the real world we have to act on the balance of the available evidence, and everyone has to do what is in their power to confront the issue. Precautionary action is justified, and even those who disagree should recognise that in a world where knowledge is openly available, the scope to carry on denying a widely perceived problem is very limited.

Whilst some advocate doing nothing, others advocate doing anything. Climate change requires a measured approach that tackles the environmental threat without undermining economic growth. Those who seek to use climate change to push an anti-business agenda damage the prospects for partnership. We're in this together. Theatrical gestures are no substitute for concerted action to find solutions.

So what can we do?

Actually, quite a lot. Let me give a few examples from the experience of the company I work for.

We are progressively extending our knowledge of how to reduce emissions.

Ten or twenty years ago, the oil industry was symbolised by the flares which shone above our platforms. My company's aim is now to eliminate this practice during the next three years, except on the rare occasions when safety is in question.

Or again, the transfer of crude oil from pipeline to tankers in the Firth of Forth caused emissions of as much as 80 tonnes per day.

Now, thanks to technical advance, we have a facility which captures all those emissions. And that is also one technology which will spread around the world as more will through the clean development mechanisms of the Kyoto Agreement.

Another example relates to natural gas.

A project in Wyoming and New Mexico will realise a saving of more than 20,000 tonnes of methane annually which is equivalent to reducing carbon dioxide emissions by more than 430,000 tonnes.

Steps like these are significant contributions to the goal of our company - which is to reduce the emissions of greenhouse gases from all our operations by at least 10 per cent from a 1990 baseline by 2010 - and within a single year we have already achieved almost a 4 per cent reduction.

And, of course, we're not alone. Many, many other companies are taking constructive steps in the same direction. As one example, Shell has just announced plans to build a pilot emission-free gas-fired power station in Norway.

Climate change is one of the two key issues on which I wish to focus. The second is the more immediate reality of air quality - a primary issue of environmental concern to people around the world - and particularly those who live in cities.

There are numerous causes, of which the transport sector is just one. But again, we can't cross the road and pretend the problem doesn't exist.

Our role is about applying technology to produce fuels which are cleaner. The process is progressive and continuous.

For example, we are offering cleaner fuels thanks to advances in refining technology at places such as Grangemouth thirty miles from here.

We've eliminated lead, and lowered sulphur and benzene levels in our diesel and gasoline throughout the United Kingdom. We'll be selling cleaner fuels in over 40 big cities around the world by the end of this year. Technology is delivering.

That in itself is part of the business process - to start from what you know, to deliver that, to spread best practice using all the technology now available, and simultaneously to learn from experience.. and to look for the next step.

It is impossible to predict the next steps with any precision - but some possibilities are already becoming evident. The mix of fuels used to produce energy will continue to change.

The opportunity, for instance, to substitute natural gas as the dominant fuel source in power generation.

That will build on the dramatic advances in the efficiency of turbines which make gas the fuel of choice in both economic and environmental terms.

Or the opportunity to produce cars with engines and fuels designed together in ways which would eliminate virtually all emissions.

We and others are working on that with like-minded people in the car industry.

And in the medium term, to expand the opportunity to produce energy commercially from photovoltaic power - and in the longer run from hydrogen, the cleanest of all fuels.

So it will be clear to you that I believe technological change will help us avoid the harsh trade off which some deem inevitable, between the desire to increase living standards and the desire to preserve a clean environment. But only if we don't kill off our ability to develop new technology. Sustainable development requires successful companies.

The question to the accused is whether business can be trusted to do all this, or to put it another way - what keeps us honest? I believe it is the connected nature of four crucial relationships in which we are involved - with our employees, with our customers, with our shareholders and the public, and with governments.

The first is internal - with our employees - 80,000 people worldwide in our case.

These people care enormously about these issues. They are citizens too. They have families and they have hopes and fears about the future.

Companies are only as good as the people who work for them. The people who make up and shape society are the same sorts of people who work in companies like my own.

When we are competing for the brains and the energy of the brightest and the best against the fashionable and apparently lucrative world of the dot.coms ... we do not ignore the values of society and particularly of that new generation. People want to work for something they believe in.. and to make a contribution to the progress of the world in which they live. And if business is to succeed it has to offer them the opportunity to do just that.

That's why our very commercial targets now themselves embrace environmental and ethical objectives. They do so, partly because our employees demand it. And our customers demand it too. We are all part of a society which wishes to protect sustainability. We have a shared responsibility.

Let me now turn to the relationship with shareholders and the public and how this underpins trust.

An old Russian proverb, quoted by President Reagan to President Gorbachev during a summit on nuclear disarmament captures this perfectly, "trust but verify".

Companies are radically altering their Annual Reports to include detailed information about environmental and social performance alongside their financial accounts. Performance is now measured on many dimensions and success is defined in a holistic way.

I believe this new approach to corporate reporting is also entirely consistent with the economic revolution which is now upon us. One of the great gains from the connected economy is transparency - because that is the key to confidence and trust, and to the granting of permission by society for companies to pursue their activities and to continue to make progress.

It is that sort of transparency which I think will in the end overcome the scepticism and doubts which exist about science and about the linkage between technical advance and genuine progress.

Transparency is not just about publishing numbers. It is also about establishing clarity as to where responsibility lies. This goes to the very heart of relationships with government.

It is said, and I think has even been said in this series of lectures, that the power of companies has increased while the power of Governments has declined. I don't think it is quite so simple. As Bertrand Russell once said, " from any single perspective power always seems to be elsewhere" and that is more true than ever in a connected economy - where every decision is dependent on the decisions of others.

I believe there are some issues which companies should not decide, and where instead we should seek agreement at governmental levels to set some rules and standards. For instance, should exploration and development in pristine and other sensitive areas of the world be permitted?

Companies have a duty to participate in this debate, particularly when it comes to discussing how developments can best be carried out. But whether an area currently closed for development should remain closed forever, or remain a development option for the future, is a matter where the final decision should be left with governments. We have a duty to inform the debate, but not to resolve it.

It would be disingenuous to pretend there isn't a problem here. If companies themselves unilaterally close the option - and take for themselves the decision which should be taken democratically - they run the risk of suffering competitive disadvantage when less scrupulous companies subsequently step into their place and seize the opportunity if and when it becomes available.

In this connected economy companies and governments both need to honour their responsibilities.

The relationship I've talked about should give society the confidence to trust business to deliver sustainable development - on the basis of enlightened self interest. But of course this means that companies must play their full role.

If one were to listen to our sternest critics, the sort of progressive initiatives I've mentioned - such as reducing emissions - shouldn't be happening, because they cost money and they offer no immediate commercial return. They would argue that competitive and commercial pressures militate against such measures. And they would say this is why some countries and companies are unwilling to move in this direction.

But that is to take a very narrow and limited view of what is in our interest.

In my view, such measures are not only desirable on social grounds. They also make perfect business sense.

The enlightened company increasingly recognises that there are good commercial reasons for being ahead of the pack when it comes to issues to do with the environment.

Of course there are valid concerns which exist over the role of business. The track record is mixed and enlightenment is not universal. But if you look objectively at both the technical progress which is being made, and at the impact on business behaviour of the connected, knowledge driven economy the judgement must come down in favour of optimism.

I remain an optimist not because I deny the problems - they are real and substantial as other lecturers in this series have shown. Nor because I believe that the existing pattern and structure of development can be sustained - it clearly can't and shouldn't be.

But because I believe that sustainability is built on change - as it always has been.

Without a green revolution the world couldn't have fed the 2 billion extra citizens who've been added to its population since 1960.

Without the investment in basic engineering which provided sewerage systems and clean water the towns and cities of the world would have been overwhelmed by sickness and disease.

Sustainability is not about freezing a system at a particular moment in time. It is about recognising where the system is close to reaching the limits of its capacity and acting to forestall those risks. And that requires constructive engagement from us all.

My optimism then springs from the fact that such positive change is happening all the time around us. That is what makes this such an exciting time to be alive.