



Speech by John Ashton

# Climate Change: a strategic priority for economic growth

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## Shared Dilemma

Chairman Ma Kai spoke of the dilemma we all share between rising demand for energy, finite and unevenly distributed resources, and the environment. The dominant factor in this shared dilemma is now climate change. It will require a fundamental restructuring of our energy system – a new industrial revolution, as President Barroso of the European Commission has put it.

We all need to keep growing our economies, to create jobs and meet the needs of our people. This requires energy. Much of that will continue to come from fossil fuels. But our common dependence on fossil fuels destabilises the climate, threatening the conditions necessary for continued growth.

The dilemma is getting sharper. Last week the Australian government announced that if the drought in Southeast Australia continues for another six weeks - as seems likely – it will no longer be possible to provide irrigation in the Murray Darling basin, Australia's agricultural heartland.

The Australian drought is entirely consistent with what the climate models are telling us to expect in that region. If the irrigation ban is imposed this will probably be the first example of a major industrialised country having to shut down a core economic sector as a result of climate change. The consequences will not only be serious for Australia. We may see a further increase in the price of wheat on the world market. Wheat prices are already high because of the effects of the drought so far, a factor in the rising price of food in China.

The shared dilemma is that there seems to be a contradiction between energy security and climate security. In reality we cannot achieve energy security unless we achieve climate security at the same time. We have no choice but to resolve the apparent contradiction.

The message of Sir Nicholas Stern's Review of the economics of climate change is that we can resolve it if we act now and act together. If we do not, the economic consequences will be far more damaging for all of us than the effort needed to succeed. We cannot afford policy failure. A rapid transition to a low carbon global economy is an imperative not a choice.

## Investment

At its heart, this is a question of investment. The International Energy Agency has assessed that the world will spend some \$21 trillion on energy infrastructure by 2030. I understand China expects to deploy \$2 trillion between now and 2020.

The question then is: how can we make sure that this investment gives us energy security and economic development, and at the same time delivers a global transition to a low carbon energy system? In effect we need to take carbon emissions by the middle of the century out of three sectors: electricity, transport and heating. This will be a structural transformation of the global economy.

Most of the investment that will drive the transition will be by the private sector, or by quasi-private entities. The challenge for governments, and for the international system, is to design and implement legislative and policy frameworks that will provide the incentives and signals necessary for this river of capital to flow in the direction of low carbon rather than high carbon, without undermining economic growth and our capacity to create jobs.

This seems to me an example of what the Chinese government has referred to as the 'scientific concept of development'. It is just as essential as we consider the global energy economy as it is for China and other individual nations.

## Treaty

Much of the discussion internationally focuses on the need for treaty arrangements based on reciprocal commitments, within the UN Framework Convention on Climate Change and the Kyoto Protocol. These arrangements are indeed very important. They will remain the primary vehicle for international action on climate change. They are essential to provide confidence to investors in a low carbon future. We urgently need to agree how they will develop beyond 2012, and I warmly welcome China's reaffirmation, during the recent visit to Japan of Premier Wen Jiabao, that it will actively participate in the negotiations that will continue at the UN climate conference in Bali later this year.

But the framework we agree in these negotiations will just be part of a complex interlocking system that we need to build of mutually reinforcing policies, commitments, legislation and other arrangements at national, regional and global level. This needs to involve governments and the private sector in what will be in effect the biggest public private partnership ever devised. Crucially it needs to involve the financial sector, so that we can combine capital from different sources in creative ways to reduce investor risk and leverage a faster transition: this will be particularly important in China and I hope the new energy law will

encourage it. We need to create a wide range of convergent forces, all pushing the flow of capital towards low carbon.

So the UN framework will be one of the means we use to achieve our goal. It is not the goal itself. And we will not agree an effective framework unless we see it in this broader perspective, based on a shared vision of the pathways that will lead us to a low carbon future.

## The EU

How is Europe approaching the shared dilemma? Last month, at their most recent Summit, European leaders took a series of critical decisions – some of the most important they have ever taken together. They laid down what in China might be seen as a framework law for a low carbon energy system in our continent, setting ambitious unilateral targets for our overall carbon emissions, energy efficiency, faster deployment of renewables and advanced coal technologies including carbon capture and storage, as well as biofuels.

One consequence of this programme, if we are able to implement it successfully, will be that by around 2020 we shall have a virtually zero emission electricity sector. 20% of our energy will come from renewable sources. Fossil fuels, especially coal, will still dominate; but our aim is that all new fossil power plants should by then be equipped with carbon capture and storage.

Our Heads of Government took this step because it is now coming to be understood across the EU, in government, in industry and in society more broadly that we have to build a low carbon society. Since we have no choice but to achieve it, we need to see it as inevitable. This will require new technology standards across the energy sector. Some will lead this effort and some will follow.

But those who lead it – those who create the intellectual property for a low carbon economy - will achieve enormous competitive advantage. The key political calculation behind the EU decisions was that strong commitments of this kind were not a challenge to our competitiveness. On the contrary, if we want to remain competitive we must forge ahead in our own low carbon transition.

We realise that the transition needs to be global. We want other major economies – the US, Japan, Russia, China, India, Brazil, South Africa and so on – to join us on this long march. If we march together we will get more quickly to our goal. There will be more rewards for all of us and less cost.

But we cannot expect others to join us unless we show commitment ourselves. We have to 'walk our talk'. Our calculation was that we can contribute more to the international transition, and to the prospects for an effective agreement on post-2012, by our own actions than we could just by asking others to act.

## China

It is unreasonable to expect those countries that are not yet fully industrialised to sacrifice economic development for climate policy reasons. No principle is more important in this endeavour than the principle of common but differentiated responsibilities that underpins the UN negotiations.

But China needs to be part of the global transition to low carbon. If it is not then that transition will not succeed and China's own economy will be exposed to serious damage. This will require frameworks that enable China to move to low carbon in ways that are consistent with China's other goals, and which do not impose developmental burdens on the Chinese economy.

The choices China makes for energy security need, in other words, to be the same as those necessary to deliver a transition to low carbon. The cost of low carbon choices in China – what US commentator Tom Friedman calls the 'China price' – needs to be not significantly higher than the cost of meeting China's energy needs as effectively as possible.

To achieve this will be challenging. But it is entirely possible. Our own experience in the UK is showing that it is possible to reduce emissions rapidly without damaging the economy. And in fact, in most areas, the demands of energy security and climate security reinforce each other.

This is obviously true in the case of energy efficiency and renewables. The UK welcomes China's determination to reduce the energy intensity of its economy. We are willing to work with China in any way we can to support this effort.

But energy security and climate security come together in other ways too.

One of the most significant consequences of climate change is its effect on perceptions of risk. As the investment bank Lehman Brothers pointed out in a report that is in its way as important as the Stern Review, climate change exposes investors to uncertainty about the physical impacts of climate change on their assets, about the regulatory framework, about competitive exposure and about reputational exposure.

For an investor less certainty means more risk. Without policy and legislative frameworks that set a clear sense of direction there will be a growing danger of investment chill in the energy sector, particularly in those economies that are moving towards more open energy and capital markets. There have already been signs of this in the EU and US. The way to maintain investor confidence will be through policy frameworks that set a clear direction by adopting an integrated approach towards energy security and climate security: that use energy policy actively to drive the energy system towards low carbon.

A particular challenge will be coal, and the need to move as quickly as possible to the application of carbon capture and storage with all new plants. China is currently installing more than two GW of new coal fired capacity every week. The carbon lock in from these plants alone poses a real threat to China's economy. China needs the additional cost of CCS,

and the associated energy penalty, to come down as far and as fast as possible. We hope that the 12 demonstrations we have announced for the EU, and the plant we are preparing to build as a joint venture in China, will help to pull CCS down the cost curve and hasten its wide application not only in China but also in North America, India and Europe itself.

## EU-China

We will all make more effective policies on energy if we address the opportunities through external engagement better to achieve our domestic goals. That can for example help drive down the cost for our consumers of the energy choices we want to encourage.

Let me illustrate this by looking at the economic relationship between the EU and China. There are growing opportunities in the energy sector to secure our goals more effectively by acting together, harnessing the market power of the world's largest single market to that of its fastest growing economy.

We have similar interests. We both need to accelerate energy investment and face strategic choices about how to develop the infrastructure our economies will need. We both aim to produce and consume energy more efficiently. We both want to diversify, including through renewable energy and other advanced technologies. We are both vulnerable, as consumer economies, to rising dependence on potentially uncertain supplies of imported oil and gas. We have a shared interest in a stable and predictable oil price through a faster global transition to greater fuel efficiency.

These factors give us a common interest in bringing down the relative cost in our economies of certain energy technologies, goods and services. One of the most effective ways to bring down costs is to accelerate the growth in markets. Indeed for many of the technologies concerned the size and rate of growth of markets are key determinants of price.

Vice Premier Zeng Peiyan spoke of China's desire to support its energy policies through international trade and investment. For the EU too, this is an equally important aspect of energy policy.

Well designed measures to stimulate two-way trade and investment in low-carbon technologies, goods and services would make it cheaper for customers in the EU and China to make energy efficient, low carbon choices. It would offer commercial benefits for our companies, since our combined scale gives us the opportunity to set global technology standards. By slowing down the growth in demand for imported energy, it might create more favourable terms of engagement with our main energy suppliers.

These benefits will only arise if cooperation takes place on a strategic scale, with a high degree of coherence across a wide range of policy areas including trade, investment, energy, technology and climate. Strategic cooperation of this kind would put the scientific concept of development at the heart of the economic relationship between the EU and China.

This is only an example of the kind of new thinking we will all need to develop if we want to meet our energy needs while moving towards low carbon. Approaches of this kind would

not of course be a replacement for what we are doing in the UN climate process. On the contrary, we will need such approaches to help us achieve the goals we have set in the UN.

### Implications for China's Energy Law

It will of course be for China's policymakers to decide on the aims and content of China's energy law. But it seems to me that a number of considerations arise from the international context I have described.

Above all it will be important to send a clear signal to investors about the direction in which China intends to go, in the short, medium and long term. That signal should point towards a future for the Chinese economy that integrates energy security and climate security,

In Europe as we intensify our efforts on carbon I believe it will become necessary to retire some of our high carbon capital stock prematurely. For reasons of energy efficiency, China is now shutting down small inefficient coal plants. But with an energy law that encourages early investment in low carbon energy, China now has an opportunity to move quickly towards an energy efficient low carbon infrastructure, minimising the need for costly adjustments later.

Beyond these general points, listening to the discussion so far, it is clear that we are grappling with very similar issues, in the UK as we prepare our White Paper that will set the direction of energy policy for years to come, in the EU as we design the legislation and policies to reach the goals we set last month, and in China as you prepare your new energy law. It obviously makes sense as we do this to share experiences.

It is also clear from the Chinese interventions today that China will adopt an integrated, systemic approach, looking along the whole energy value chain, across the lifetimes of installations and products. So are we. The new industrial revolution will only happen if we adopt whole systems approaches to energy networks and choices. This is indeed a long march, for both of us. But it will not seem so long if we march together.

The biggest challenge of all will also be the most rewarding in success: to achieve energy security through the low carbon transition that will also restore our climate security. Big challenge, yes. But we will rise to it if we see it for what it is: an opportunity to meet our energy needs even more effectively, not an additional cost whose allocation has to be fought over every inch of the way. China is already responding to the opportunity, with the major efforts it is making to produce and consume energy more efficiently.

It might be helpful to finish by identifying some of the more specific issues that we are both addressing, in Europe and in China, or may need to address.

We want to drive investment to accelerate the deployment of low carbon and energy efficient technology, for example through:

the use of market-based mechanisms such as tradeable renewables certificates in the UK. Such instruments can be very useful in growing the market for near commercial technologies, and making them competitive;

regulatory frameworks for carbon capture and storage, which we will need to reduce investor risk for this hugely important technology.

We need policies that make efficient energy choices easier and more attractive, such as:

- > clearly established mandatory standards, with a clear pathway towards rising levels of efficiency;
- > better information so that consumers can make more informed choices, for example through labelling.

We also need to put a value on carbon, to correct the market failure and generate revenues for investment in a faster low carbon transition:

- > fiscal measures are always sensitive but the Assistant Finance Minister spoke this morning of the possibility of a carbon tax to accelerate the uptake of renewables;
- > equally, greenhouse gas emissions trading is rapidly moving from experimental to routine, with the EU's Emissions Trading Scheme leading the way.

An equally important part of the same kit of mutually reinforcing policy tools for energy and climate security is the creation of more open and competitive energy markets:

- > removing barriers to the entry into the market of new providers of energy and energy services; and
- > allowing prices in the energy system to move towards market levels

These are a few of the specific issues that are being or could be considered as we address the shared energy and climate dilemma. But the main message I want to leave is that we in the UK and the EU see a strong interest in close cooperation as we each try to meet the energy and climate needs of our societies.

Thank you for inviting me to take part in this symposium. We in the EU welcome the dialogue you are trying to build, and will do all we can to support it.

**John Ashton**

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