

Energy and the environment: the essential next steps

A Note by the Director (Ditchley 2006/09)

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13-15 October 2006

Ditchley's mid-autumn conference, with the trees beginning to turn and the mist thick on the lake, brought us to perhaps the most important long-term issue of all, secure energy supplies in a clean and sustainable environment. We had hoped that the timing of the event would follow the publication of Sir Nicholas Stern's economic review of this subject, but the calendar for that had changed. We nevertheless developed a vigorous discussion of how climate security and energy security policies could be brought into alignment. There was no doubt at all around the table that urgent progress was essential.

Neither the science nor the economic costs of climate insecurity were contested. It was brought home to the conference at an early stage that, of the last thousand scientific papers on changes in the global climate, all had shown that temperatures were going up and so were carbon emissions. Action had to be taken, whatever the degree of human responsibility for these changes. There was no question of avoiding the conclusion that, while action could now be taken at an affordable cost, the price of inaction would be enormous. Even if governments now implemented most of the best recommendations for action, it would still be necessary to adapt to climate change and mitigate certain of its irreversible consequences. As an example, we were told that the United States, China and India, which together possessed half the world's reserves of coal, would be likely to use it as a major source of power generation. If we did not deal with the carbon emissions that resulted from that, the world might as well throw in the towel on environmental policy. Even if energy consumers cleaned up their habits now, the growth in economic activity, energy use and population would still set an enormous challenge. Yet policy-making, and the political environment within which it worked, were behind both the science and the growing environmental awareness in public opinion. Much of our debate therefore focussed on ways to generate more urgent and more far-reaching government action, nationally and internationally. Even if the UK had started to move, others were lagging.

Participants took a careful look at the reasons why the arguments might not be getting across. For a start, the terminology needed to be altered. Climate change had become a security issue, just as vital as the security of energy supply. Decision-makers had not been mobilised in a catalytic quantity to give climate security the priority which it deserved. Other related policies – on international trade, on investment and on competition – had not adjusted to the need to take the environment into account. Short-term economic arguments, comparing the “sacrifices” that might be made to reduce

carbon emissions but focussing on the near-term bottom line, provided a hiding place from longer-term analysis. International activity (particularly on the Kyoto Treaty) had lost momentum; and national interests in the developed world differed according to each country's energy position. Those able to move were reluctant to do so unless everybody came with them. There was a noticeable gap between rhetoric and action and complacency over partial progress. These factors for short-term inertia were alarming.

Most participants agreed that there was no particular problem about the supply of energy if the world remained reasonably organised. Fossil fuels remained available in enormous quantities, especially coal. The development of a global gas market was under way. The price of oil would support new or unconventional exploration and production. Renewable energy sources would make a contribution, though in the medium term not a huge one. Nuclear energy, while unlikely to become the environmental answer because of its other downsides, would form an increasingly important part of the mix if improved technology on safety and efficiency was taken into account. Demand would rise, but in theory there was no shortage of supply. In other words, it was all about reducing carbon.

There was some concern that the scientific forecasts of climate change covered such a wide range of prediction that governments and public opinion alike were confused as to the real urgency. We were told that forecasting was gradually improving in quality, not least because larger computers were now coming into play. The UK and Japan were cooperating on a programme for the new Earth Simulator Computer which would refine predictions. The best models were beginning to show that the minimum rise in global temperature would be no less than 2°C and could be higher. Human activity undoubtedly carried a large degree of responsibility. The essential point in this area was to convey the broad scientific agreement about the scale of the threat to the wider government and media community, so that the voices of those doubting the need for urgent action could lose any credibility they might have. Then the problem would become more directly one of political will and of understanding the true timescale for action.

We also asked ourselves whether, if the penny had not dropped by now, a real shock was needed to galvanise the necessary action. The phrase "benign catastrophe" entered the room. Some participants asked whether, if Hurricane Katrina was not enough for the US, and if governments in Indian Ocean countries had not felt able to respond to clear scientific warnings about the 2004 tsunami, any single event would generate the catalytic force required. The experience so far of the public effect of Al Gore's film "An Inconvenient Truth" indicated that public awareness was arising fast. Yet Gore had offered no prescriptions for remedial action in that film and governments were still far apart on precise policy. The answer appeared to be that repeated demonstrations of the science, more intensive cycles of education and advocacy and growing public discontent with inaction were all more likely to compel governments to recalculate their priorities than particular examples of environmental threats.

The conference therefore began to examine the areas where action could most effectively be taken, with a strong emphasis on measures and incentives to reduce carbon emissions. Fiscal policy was one important area. If not enough had been done under this heading,

would public opinion bear a more intensive approach? Most participants appeared to think that a gradual scaling up would be the most likely line of action. Funding new technologies, particularly on renewables, was another essential area. Technology on its own was unlikely to solve the scale of the problem by itself and those governments which placed their reliance on this should be asked to think again. But the private sector was highly active in this area and a benign context should be created to encourage companies to continue, not least with R & D. More intensive international negotiations would also be necessary, though the world could not afford to wait for everyone to be on board before anyone moved. Some leadership was necessary. If there were some free-riders, the cost for those who decided to move would not be that great – nothing like as great as the cost of taking action at a later date. Finally, the messages had to be hammered home to the public, to governments and to a broader swathe of the media that inaction or purely adaptive policies were unaffordable.

In looking at the **strategic objectives** for policy changes, the conference emphasised the following:

- Energy security and climate security could not be allowed to compete with each other – they should be aligned;
- A globally efficient market system for energy should be developed with carbon fully priced into the world economy;
- Forecasts should be made more precise and credible;
- There should be a campaign to maximise public awareness of the long-term trends
- And international negotiations should continue for a collective approach at the fastest pace possible.

Within these broad objectives, participants advocated a number of **essential next steps**:

- Public awareness. The window for effective action might be quite short, because if public opinion absorbed the current atmosphere of raised concern without feeling the effects of remedial action, it might become complacent. Pilot schemes

in conservation should be widely publicised. Leading voices should talk about the need to change habits and about the essential requirement to insure against climate change. The true long-term cost of reducing carbon should be constantly mentioned.

- New fiscal instruments should be designed, even if they were introduced at a low cost in the first instance. They should include a carbon tax and/or improved measures for carbon trading, together with incentives for carbon capture and storage.
- Measures to improve forecasting should continue and the message put out that the range of predictions was narrowing.
- The new infrastructure necessary for evolving technological approaches, not least carbon capture and sequestration, should begin to be planned now, given the lead times involved.
- The blockages and obstacles identified should be addressed and priorities should be re-ordered. The European Union should play a role by encouraging member states to take action in areas, such as tax policy, where capitals held the responsibility.
- More deliberate decisions should be taken as to whether action should proceed at the national, regional or global level. The West on the one hand and Asia on the other should not wait for each other to take the first move. China and India, much discussed at this conference, were considered to have their own compelling national reasons for giving climate security priority and would not be far behind in taking action. The mood in the United States was beginning to change. Nevertheless the mechanisms for global debate and broad consultation should be adapted and developed.
- On energy supply, a mix of technologies and different energy sources was preferable to concentrating on the cheapest or the most available in the medium term. R & D should be further encouraged.

- Adaptation to climate change as well as mitigation of the factors driving it should be assumed to be necessary now and detailed planning should accelerate.
- Finally, the crossover between timescale and affordability should be more widely understood and discussed. The terms of the debate was beginning to shift and cycles would develop of learning, correction, questioning, repetition and finally action.

Essential to all these suggested moves was that politics should be braver. Politicians were underestimating the degree of cost which the public would bear if they understood the need. Peer pressures should develop within groups that shared a long-term interest. Industry's worries about competitiveness, which politicians took carefully into account, should only be given a certain weight: at present, they tended to be exaggerated. In short, the boundaries of political imagination should be stretched. What would it really mean if the world failed to respond?

We agreed that none of these thoughts, taken on their own, could be regarded as particularly new. Yet it was generally agreed that not everything that could be done was being done; and that the effect of comprehensive action could be significant. The "snowballs of excellence" should start rolling. While the conference had to recognise that its particular collection of expertise and environmental concern pushed it naturally towards the advocacy of urgent action, the analysis we shared was a reasonably objective one and the result of our failure to convince others would be disastrous. If the Stern Review picked up the same messages, then the chance of a new atmosphere being generated would rise markedly.

This was a good exchange, with a variety of moods: feisty, jovial, poetic, but with a firm pragmatic colouring. It was a particular pleasure for Ditchley to be in harness with the Windsor Energy Group, who do so much to promote sensible international discussion in all these areas. We benefited greatly from the participation of practitioners involved in current policy-making and international negotiation, not least our Chairman, whose experience, firmness and touches of wise guidance helped us to generate a natural momentum in the debate. We now have to see what happens beyond it.

This Note reflects the Director's personal impressions of the conference. No participant is in any way committed to its content or expression.

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