

Getting the prices and policies right

Innovation and Climate Change

Tuesday morning, 3 June 2008

Moderator: Chris Giles, Economics Editor, *Financial Times*

Asit K. Biswas, President, Third World Centre for Water Management

David Foster, Executive Director, Blue Green Alliance, United States

Lorents Lorentsen, Director, Environment, OECD

Steve Westwell, Executive Vice-President and Group Chief of Staff, BP

Innovation depends on political backing, but it also depends on markets that create the incentives needed to innovate. Getting the prices right is not just a market imperative, but important for finding new technologies either to boost efficiency and stimulate new ways of doing things.

Chris Giles opened the session by articulating everyone's aspiration: a low-carbon economy based on a cleaner technology that will bring about expanded economic opportunities. However, he fears that this is too simplistic a view since dirty "brown" technologies are still cheaper than "green" and will continue to be so until the right mechanisms are put in place that balance the costs of adopting greener technologies against the costs of doing nothing.

Lorents Lorentsen agreed, adding that we have long been sailing under a misguided economic compass where energy prices were not adjusted to economic externalities; OECD countries, for example, still subsidise fossil fuels. Developed countries should instead formulate stable long-term policies, taking into account the notoriously low capital turnover of the energy industry while targeting new technologies for investment to avoid locking in the old technologies responsible for greenhouse gases.

Other measures include a coordinated effort to develop carbon capture technologies (CCT), greater emphasis on nuclear energy, and a more vigorous search for alternative energy sources. At present, only a fraction of energy is produced by renewable energy sources. The bulk of these changes must come from private actors, however public financing instruments have a role to play.

He stressed the need for an IPR system that rewards innovation and provides incentives for investment without hindering the rapid diffusion of climate-friendly technologies. Another possibility is the creation of a fund that emerging economies could use to buy patents on clean technologies return for reducing their carbon emissions. The danger is that scale effects may eat up any gains in efficiency.

Hence "getting energy prices right" is part of the answer. But he also said that a "badly needed systemic change" was needed to reduce the carbon impact. Such changes will

generate jobs, but cautioned that using environmental policies to solve unemployment problems could weaken the efficiency of those policies. Research has shown that revenue-neutral environmental policies have had no effect on over-all employment. He favoured a carbon tax, adding that carbon “was priced too low today”.

Asit K. Biswas felt that a crucial element had been dropped from the debate: the impact of population on future environmental policies. The demand for better standards of living in emerging economies such as China and India cannot be overlooked. The difference between a population of 9 billion as compared to 10 billion is significant and would effect the amount of future carbon emission. Nor can population be separated from the questions of resources, particularly water. Mr Biswas warned that the role of this natural resource in climate change should not be ignored. In India, for example, 22% of electricity is hydroelectric, and in France, the largest consumer of water is the energy sector. In spite of this dependency, our knowledge in this realm is scant. A better understanding is required to plan future water management successfully.

David Foster underlined the imperfection of markets and “the excesses of the last two decades of globalisation”. He said that the Blue Green Alliance supports the introduction of an auction-based system for the distribution of emissions permits, notably in order to avoid global speculation on carbon. He also declared that the organisation regards international trade regulation as closely tied to environmental issues. On the controversial topic of border taxes, he thought that taxes should take into account the entire carbon lifecycle of products. Furthermore, Mr Foster strongly emphasised the social dimension of the climate change and emphasised that greater social equity and workers’ involvement in the innovation process. “Will the global economy...in a post carbon world, both in aggregate and in each country, be more equitable or less?” he asked.

Steve Westwell stated that growth and progress must continue but that its character must change. BP aimed at a 10% reduction in emissions by 2010, and achieved it nine years earlier thanks to stringent targets, innovation at every level of the workforce and the creation of real wealth. Emission reduction initiatives, it turned out, were good for business. The estimated overall discounted value of realised saving came to USD 2 billion. Furthermore, energy conservation alone can amount to some 20% in emission cuts.

As of now 98% of the world’s transportation needs depend on oil, which puts BP in delicate situation regarding the climate change and cleaner energy. BP will invest USD 8 billion over the next ten years to develop wind, solar, and combined-cycle gas turbine power sources. He believes that progress will arise from greater efficiency, biofuels, electrification and nuclear. Carbon removal and sequestration technologies—already existant but requiring further development—will also play a major role.

At the end of the session, the moderator asked the panel how they felt as regards to the

future. Lorents Lorentsen and Asit K. Biswas expressed their optimism. So did Daniel Foster after voicing his confidence in social movements. Steve Westwell, however, answered that he was “less optimistic than five years ago” because he viewed that the world lacks the necessary framework although it has the adequate technology. We have the economics, and the technology would come: indeed, innovation would exceed our expectations, he said. But where were the policy frameworks, and the agreements? Did this require more government mandates? He felt that a fundamental change in behavior rather than any mandate would bring the best results. He put his trust in the “common sense of humanity”.

LT/HEC-VI,PS, YSK