# Address to the Club of Rome

## October 2005,

#### Background

In response to the paper "Global Warming" which was circulated in June 2005 as background to the G8 meeting, Prince El Hassan bin Talal, President of the Club of Rome, indicated his commitment to support the work of the Meridian Programme. He subsequently received copy of the first draft of the Meridian Report "The Feedback Crisis in Climate Change" (now much revised and published as "Beyond the Tipping Point: Positive Feedback and the Acceleration of Climate Change"). The Prince then invited me to attend the next Annual Conference of the Club of Rome [Norfolk, Virginia, USA, October 2005]. This paper is the text of my address delivered at that event.

\* \* \* \* \* \* \* \* \* \*

I shall be brief and informal, and address you, if I may, as 'Friends and Fellow Citizens of a Fragile Planet'. I stand among you as a stranger and as a guest, and thank you profoundly for the invitation to attend this conference.

We meet at a point of *kairos* in human history which is rapidly transforming into a *kairos* of Planetary history.

In systems analysis, the conditions and behaviour of a macro-system set the parameters and conditions for the behaviour of all dependent sub-systems. The sustainability of the global environmental and climate systems therefore determines the sustainability of the dependent sub-systems of the human species, be they social, political, economic, educational, developmental, health or military, which have been the subject of our discussions about sustainable development at this conference.

A few weeks ago, "The Independent", one of our established British daily newspapers, ran a full front-page spread with the banner title "Meltdown", and a page-wide picture of melting arctic ice. The supporting lead articles drew the public's attention to the dangers of runaway climate change driven by positive feedback processes. It was followed by the production of a pair of colour supplements on the theme: "Your Planet and how you can save it". They were described as "vital reading for anyone with plans to be alive – or for their children to be alive – in the second half of the  $21^{st}$ . Century". I would like to quote from the opening paragraph of the leading article:

"In September 2003, almost exactly two years after the massacres in New York City and Washington, DC, an even more ominous event occurred, although it featured on no front pages and inspired no rousing speeches from our leaders. The Ward Hunt ice shelf – the largest ice shelf in the Arctic, which had been in place for tens of thousands of years – suddenly ruptured and began to collapse. Warwick Vincent, a professor of biology at Laval university in Quebec, explained: 'We'd been measuring the incremental

changes in the Arctic ice each year. Suddenly everything changed.' The scientists witnessing the event later admitted to weeping with the same shock and grief felt by those who watched the Twin Towers fall to dust: this was global warming happening far more quickly than anyone had anticipated."

Over the past two years, Mr Blair, the British Prime Minister, has consistently claimed global leadership in tackling what he described as "long term, the single most important issue we face as a global community", which he stressed "can only properly be addressed through international agreements". In mid-September 2005, sharing a platform with US Secretary of State, Condoleeza Rice, at the meeting of the Clinton Global Initiative in New York, he confessed "Probably I'm changing my thinking about this", adding that he "hoped the world's nations would not negotiate international treaties". He justified his volte-face, which reversed the commitments he had initiated at the G8 Summit last July, and effectively pulled the carpet from beneath the IPCC Kyoto meeting currently taking place in Montreal, by saying that "countries would not negotiate environmental treaties that cut their growth or consumption."

Early this morning I received an urgent e mail form Peter Wadhams, the professor of Oceanography at Cambridge University who has been responsible for monitoring the thinning of Arctic ice and the reduction of the drivers of the thermo-haline conveyor system which powers the Gulf Stream. He drew my attention to an article published three days ago in Nature, which indicated that rising concentration of atmospheric  $CO_2$  is leading to increased acidity of ocean surface water. Within decades this will reach levels that will start to dissolve the calcium-carbonate-based shells of plankton, so putting in jeopardy a major element at the very base of the ocean food-chain.

In his opening remarks yesterday morning, the President of the Club of Rome drew attention to the Meridian Report "The Feedback Crisis in Climate Change". I will not go into detail, as the full text of the current draft of the Report is now available for you to explore at leisure on our web-site (see: <u>http://www.meridian.org.uk</u>). The Report outlines a new conceptual model of the complex, interactive set of positive feedback mechanisms which are already driving runaway climate change, initially triggered by the still accelerating emission of greenhouse gases. The analysis indicates that there is a critical threshold beyond which the process becomes self-sustaining and can no longer be brought back under control by any reduction in GHG emissions. Should that threshold be crossed, the resultant "extreme event" in the climate system could lead to the extinction of life as we know it within the global biosphere.

This analysis has not yet been taken into consideration by the IPCC or the UNFCCC, nor could it be featured in the "Limits to Growth: the 30 year update" which Dennis Meadows so ably summarised for us yesterday. Climate feedback puts at risk any possibility of achieving a sustainable scenario as we seek to recover from the overshoot of our use of planetary resources. It also raises the possibility that future reality may be far worse than the most extreme "collapse and crash" scenario previously modelled by the "Limits to Growth" team.

We now need to address the issue of responsibility for action. In scenario 10 of "Limits to Growth: the 30 year update", the authors explored what might have happened if the most sustainable solution had in fact been applied a decade after the original analysis was made public. They note that the hypothetical society "has a more pleasant environment, more resources, more degrees of freedom; it is farther from its limits, less on the edge" than the

best scenario now achievable. They concluded: "That future might have been possible once. But the world society of 1982 did not grasp the opportunity".

I question the implicit assumptions about the nature of that "world society" which is apparently to blame for the non-implementation of effective response to the information made public in the original "Limits to Growth" analysis. It is a society which is assumed to act decisively, rationally and effectively on information supplied disinterestedly by the scientific community. "Pure science" must not sully its fingers by dabbling in the dirty waters of advocacy and application. With hindsight we can recognise how naïve those assumptions really were.

Today we recognise that those in possession of the most accurate information share the greatest responsibility for ensuring its most effective application. Change agency and the catalysis of social transformation must go hand in hand with the conduct of the most competent scientific research.

We now face the problematique of the identification of the most appropriate locus of initiative. It seems to me that the most obvious institutions of the UNFCCC, the UNEP, and the IPCC are in trouble. The time-scale of their deliberations, the political control of their decisions, the power of vested interests to which they are exposed, and the absence of channels for effective implementation combine to make it very difficult for them to act decisively in the current situation. The national academies of science and other academic associations are not organised to take the required level of action on an international scale.

The Club of Rome, on the other hand, with its unique constitution, its history, its global connectivity and its reputation for the highest quality of scientific investigation and disinterested application, may well be best placed to take up the critical agenda now facing the global community. It is, however, not clear whether the Club of Rome currently has the capacity, the resources or the will, to shoulder the responsibility for the required leadership role.

I should like to conclude, if I may, by offering some brief suggestions as to the agenda which must now be addressed:

- 1. Recognise that there now exists a state of global emergency.
- 2. Convene, with the utmost urgency, a global analysis and modelling capacity, in order to test the conceptual climate feedback model, to quantify the complex feedback system and to determine the time-frame of its behaviour.
- **3.** Declare excess CO<sub>2</sub> to be an eco-toxin with potentially catastrophic impact on the global biosphere.
- 4. Develop and operationalise an emergency strategy to move our global society towards a zero or negative carbon economy within the shortest possible time-scale.
- 5. Develop and operationalise the most effective institutional instruments to manage the transition.

- 6. Take note of the appropriate developments in:
  - i. complexity science;
  - ii. dynamic cellular networking
  - iii. advanced learning systems
  - iv. psychodynamics of social systems.

### **Postscript.**

We have all been here before, there is nothing new under the sun! The engagement of limits to growth, overcrowding, pollution, resource attenuation, rapid transition.... These are the conditions of full-term pregnancy and normal placental degrade just before birth. What happened next was traumatic for most of us. Its repetition is to be avoided at all costs!

Restimulation of these deep unconscious anxieties and their associated defences is one of the most powerful elements in driving the addiction to growth and the resistance to engagement with the realities of our finite world. The trance state of foetal regression and the defence of denial, constitute a fertile ground for the emergence of global psychosis! Truly, the survival of our species demands a psychodynamic renaissance.

You will remember the old communist slogan: "Now is the time for all good men to come to the aid of the Party". I have news for you: The Party is over.

#### Now is the time for all people to come to the aid of the planet.

The future of the world is in our hands.

Thank you very much.

\* \* \* \* \* \* \* \*

David Wasdell Director, Meridian Programme. October 2005.

> The Meridian Programme is hosted by: The Unit for Research into Changing Institutions Charity Registration No. 284542 Meridian House 115 Poplar High Street London E14 0AE Tel: +44 (0)207 987 3600 Fax: +44 (0)207 515 8627 e-mail: info@meridian.org.uk web-site: www.meridian.org.uk