# TO MASTER THE THREATS OF CLIMATE CHANGE WE HAVE TO REDEFINE AND REORIENT ECONOMIC GROWTH 

The UN Climate Conference in Copenhagen demonstrated that the threats of catastrophic climate change are still not sufficiently perceived as real and urgent to overcome the entrenched special interests and the pressures of domestic politics. It also clearly showed that concepts, assumptions and processes which determine our policies and action are inadequate to manage the challenges of the $21^{\text {st }}$ century. In common with previous civilisations which have collapsed, we see the threats deepening but we are unable to agree on strong action.

Why have we failed so far?

- We fail because our ideas have been overtaken by reality: we insist on trying to solve connected, systemic problems through partial, incremental and short-term measures.
- We fail because our institutions and policies, designed for a different age, are not adapted to a world in rapid transformation and to the scale of the dynamic, connected challenges of the $21^{\text {st }}$ Century.
- We fail because our model of economic growth, directed to never-ending increases in demand-driven consumption, destroys the natural systems on which we depend;
- We fail because we have not yet accepted that substantial changes in attitudes and beliefs, values and behaviour are necessary if we are to resolve critical global issues.
- And we fail because we have not yet recognised in practice, the reality and urgency of the threats which are fast approaching: we therefore cannot find the will and the public understanding and support to take the necessary action.

Our society has been built on the notion that economic growth is entirely positive. This made sense as long as we were few people on the planet and the global economy was small compared to the natural system. This is no longer the case: more than two thirds of the most important ecosystems are being overused. The present path of development cannot continue much longer. We have to be more concerned about the quality and content of growth, not simply the quantitative increase of growth. This is both a challenge and an opportunity to lay the foundations of innovative, resource efficient, sustainable and socially-just societies.

If we are to succeed in mastering the threats of climate change, we must re-examine the concepts and assumptions which underlie policy and thus the negotiating process.

## 1. We must frame climate change in the wider context of world development

The present path of world development is unsustainable in the longer term. The ecosystems on which we absolutely depend are being degraded at an alarming rate; humanity is grossly overusing the resources of the planet; rising stress on water and productive land, compounded by the effects of climate change, is reducing food security; levels of hunger, poverty and deprivation are again increasing; the global economic and financial systems have proved to be unstable and inequitable; the division between rich and poor is widening; millions cannot find employment; and, in this complex and dangerous situation, it is estimated that an additional 2.3 billion people will arrive on this planet by 2050.

## 2. We must recognise the links of climate change to other critical issues

We are heading into a perfect storm of crises which are so intimately connected that they cannot be resolved separately. Climate change is only one of an array of emerging challenges. The negotiations in Copenhagen demonstrated that climate issues and the related policy responses are vitally linked to the right to development, to social and economic structures, to economic interests and competitiveness, to access and use of energy and resources, to the conservation and renewal of forests, oceans and ecosystems, to issues of fairness and justice, and to the diversity of histories, world views, cultures and aspirations.

It became clear in Copenhagen that such deep and complex issues could not be resolved through technical discussions, and that they extend far beyond the competences of Ministers of Environment. It was a vain hope that they could be resolved by Heads of Government within a few hours. In this respect, the process and strategy of international negotiations to deal with such a complex set of issues must be reconsidered.

## 3. We must change the path of growth to address the root causes of climate change and to achieve sustainable socially just societies

The present concepts of growth, development and globalisation are now proving to be counterproductive. We can no longer accept the long-entrenched concept that exponential, market-driven growth in material consumption is the determinant of human progress: the fundamental purpose must be to make real improvements in the quality of life, the wellbeing and happiness of citizens.

Current strategy relies on the stimulation of demand to renew growth and employment. But it is excessive material consumption, pollution and waste which are destabilising the climate and destroying the life-support systems of the planet. It therefore makes little sense to struggle to return to the pre-crisis path of economic growth which was clearly unsustainable.

This is not a plea for zero growth. We must make a clear distinction between the quantity and the quality of growth which our current concepts of GDP fail to make. Many paths of growth are possible. We must radically restructure our economies onto a path which is fundamentally resource and energy efficient, which respects the value of natural capital and ecosystems services and which includes the poor in the benefits of progress. A strategy which focuses on climate change as a specific issue will for all these reasons not succeed.

## 4. We must mobilize social change for a more equitable and sustainable world

The UN Climate Conference in Copenhagen has demonstrated the difficulties which a divided and unequal world community faces in trying to agree and act on this array of political, economic, environmental and development crises. In the negotiations, international attention has been principally focused on two aspects: the role of government action and regulation and the role of market mechanisms and the private sector. But it is evident that we cannot achieve stable, sustainable and equitable growth and world development without acting on a third aspect: the substantial transformations in attitudes and beliefs, values and behaviour which are a pre-condition for resolving critical global challenges. This core issue of "social transformation" has not received the attention it deserves.

## 5. We must recognise the urgent realities of climate change

A deeper understanding of the historic record and of the systems dynamics of climate change coupled with evidence from across the world show that the risks of triggering catastrophic climate change are real. One of the most critical issues which will determine the outcome is therefore whether the understanding, insights and concerns of science can be conveyed into the policy process. Unfortunately, because of the pressures of special interests and shortcomings in our education system, most people have difficulties in
understanding the scale and urgency of the challenges we face, not least the linkages between the issues.

## An Agenda for Action

## 1. Don't wait, act

The negotiations in Copenhagen are only a small, highly visible element in the vast array of activities in progress across the world at every level in response to the perceived threat of climate change. The results of the international negotiations will be of great importance in establishing a framework for concerted action. But government action is only one part of the solution. The stimulation of efforts throughout society and the economy will be the precondition for success.

New scientific insights into the systems dynamics of accelerating climate change and convincing evidence from across the world underline the urgency of strong action to avert the risk of irreversible, runaway climate change. We have little time to act. Activities must be accelerated in many critical areas without awaiting the outcome of international negotiations. We can move immediately for example:

- to achieve improvements in energy efficiency on a vast scale;
- to increase the resources available for R\&D, particularly to find "breakthrough" green energy solutions;
- to disseminate know-how, skills, best practice and technological solutions and make these affordable and available to developing countries on a wide scale;
- to conserve and restore terrestrial and marine ecosystems across the world;
- to inform and educate the public on these critical issues which will determine the future.

In each of these areas, and many others, concerned governments, corporations and communities can move ahead rapidly. The negotiating process should therefore make a clear distinction between those issues which require wide international agreement and those where action can be launched or strengthened immediately.

To restructure and reorient economies onto a low carbon, green and sustainable path, specific policy measures and lines of action can be launched now, for example to:

- adapt GDP to become a measure of real welfare and progress;
- take proper account of the value of natural capital by assigning a value to ecosystems services and biodiversity;
- introduce targets and policies to improve resource productivity so as to encourage job creation and halt the overuse of resources and degradation of the environment;
- remove all subsidies which harm the environment and encourage the use of energy;
- fully apply the Polluter Pays Principle and the Precautionary Principle to avoid the risk of damaging environmental impacts;
- encourage the development of new business models in favour of new, green economic activities and the move from material-intensive products to services


## 2. Redefine the goals and processes of international negotiation

Even if the all the targets for emission cuts proposed in Copenhagen were agreed and implemented, the threat of irreversible climate change would not be averted. We would still be on a path to a global average temperature rise of between $3^{\circ} \mathrm{C}$ and $4^{\circ} \mathrm{C}$ with devastating consequences. The agreed target of 450ppm is too high and will not guarantee a rise of only $2^{\circ} \mathrm{C}$. The goal of the negotiations must be to achieve deeper cuts, to a level of concentrations of not more than 350 ppm .

Copenhagen demonstrated the intrinsic difficulties of a negotiating process in which all UN Member States are engaged on all issues. The outcome, agreed by a small group of the key emitting countries, did recognise the reality of the threats and the urgency to reach agreement.
But this process marginalized those countries and peoples most directly affected by climate change. The negotiating process, and the ensuing governance structures, must find a suitable balance between the need for urgent, effective action and the need for climate justice, for humanitarian assistance, and for the fair sharing of the costs incurred in the development and application of technological solutions for mitigation, and for adaptation to meet those impacts of climate change which are already inevitable.

## 3. Define and implement explicit, coherent national strategies to achieve sustainable growth.

It will be essential to restructure national economies onto a new path of growth to address the root causes of climate change, and of the other crises which threaten the future. This is a deeper and more extensive issue that moving towards a low carbon economy.
The challenge is to improve real wellbeing and to eradicate poverty while restoring and protecting the natural systems of the planet. The efforts to redefine growth, "beyond GDP" to take proper account of natural capital and ecosystems services must be tested and implemented in practice so as to encourage the development of low-carbon, green economies.

This is a feasible objective: some countries are already moving in this direction. For example, an explicit strategy is emerging in China, the Xiao Kang Programme, to change the orientation of the economy onto a resource efficient, sustainable, equitable and regionally balanced path while in Korea the foundations have been laid to create an information-based, clean economy.

## 4. Re-define the present concepts of growth, development and globalisation

It is essential and urgent that the present strategies and policies for economic growth be radically changed. This has major implications far beyond the methodology of the calculus of GDP, although this must be substantially revised. The failures of the present models of growth must be corrected: the analysis of choices, risks and opportunities must take proper account of externalities; the real value of public goods must be integrated into policy analysis; the interests of future generations and the longer-term consequences of policies must be integrated into the consideration of policy options; and fairness in the distribution of costs and benefits, of income and opportunity must be reflected in the consideration and execution of policy and the monitoring of national and world progress.

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[^0]:    We cannot manage the scale, complexity and dynamics of the $21^{\text {st }}$ Century with the tools of the $20^{\text {th }}$. We are at a turning point in world history where new ideas, new values, new strategies and new institutional arrangements are needed. We have learned that we cannot rely solely on "the magic of the market place." Nor can we rely on technological solutions to save us from ourselves. We know that business as usual will lead to disaster. We must find the vision, the leadership and the creativity to collaborate in developing constructive solutions to offer a decent future to present and succeeding generations. We have the capabilities: we must find the will.

