Climate Change and Global Governance

Nick Mabey, E3G[1], October 2009

1. Introduction

The reality of climate change will require fundamental changes in how international relations are conducted; it will alter much of the focus of international policy and require changes in a wide range of global governance institutions. It will change strategic interests, alliances, borders, threats, economic relationships, comparative advantages and the nature of international co-operation, and will help determine the continued legitimacy of the UN in the eyes of much of the world. Climate change geo-politics will extend far outside the environmental sphere, and will link old problems in new ways. Managing the complexity of our collective climate security will become an ever more important part of international policy.

This note gives a brief overview of some of the critical implications for global governance and global politics of aiming to limit the risk of catastrophic climate change to relatively low levels; beginning with defining the aim of a climate change regime, the role of the UN climate change agreement and then moving on to other elements of international governance.

2. Defining the Aims of a Global Climate Change Control Regime

Rapid action is needed in the next decade if we are to lower the risks of the most dangerous impacts of climate change. Current scientific estimates accepted in July 2009 by major economies accounting for three-quarters of global emissions suggest that this requires a reasonable probability of staying below a global temperature rise of 2°C above pre-industrial levels. Even this level could trigger the irreversible melting of much of the Greenland ice-shelf leading to 1-3

[1] E3G (Third Generation Environmentalism) is a European non-profit organisation which works globally in the public interest to accelerate the transition to sustainable development. Further information can be found at www.e3g.org.

metres of sea-level rise this century and the disappearance of several island states.

Maintaining a 50:50 chance of limiting temperature rise to 2°C (which also leaves a non-trivial risk of a catastrophic 4-5°C rise) requires global greenhouse gas (GHG) emissions to stabilise in the atmosphere at 450ppm $C0_2e$. This in turn means that global emissions must peak by 2020 and decline to under half of 1990 levels by 2050. New science suggesting catastrophic climate thresholds occur at lower temperatures than previously thought imply that these targets will be revised downwards in the future. Global cuts in emissions of 70-80% below 1990 levels by 2050 could be needed.

Taking a conservative view of the science, a risk management approach would suggest that to have a good chance of delivering climate security the international climate change control regime should be capable of moving the world to a low carbon economy by mid-century, and of successfully adapting to an average global temperature rise of at least 3-4 degrees C.

3. The UN Framework Convention on Climate Change (UNFCCC)

The UNFCCC – as augmented by the Kyoto Protocol and proposed Copenhagen Agreement(s) – should be considered as the keystone of the global climate change regime. The UNFCCC cannot and will not do everything that needs to be done to deliver climate security. For example, it will not address trade, energy subsidies, environmental refugees and trans-boundary water management in the next decade. However, all actions at bilateral and regional level need a meaningful UNFCCC agreement if it is to make a real difference to delivering climate security.

The core functions that only a multilateral agreement can deliver are:

- **Defining Climate Security**: A global definition of what constitutes as climate security for all, including the most vulnerable.
- **Delivering Global Public Goods**: additional effort beyond domestic commitments and mechanisms to generate global public good elements of a global climate regime; for example, independent monitoring and verification; technology development and demonstration.

> **Operationalising Equity**: in terms of international support for adaptation and mitigation in developing and highly vulnerable countries

The Copenhagen negotiations will define the next stage in the evolution of the multilateral UNFCCC climate regime. They are a set of inter-linked and highly complex negotiations over a very wide range of areas. Success at Copenhagen can be defined at the highest level as the achievement of a set of outcome benchmarks. Benchmarks must be measured not only against actions directly motivated over the coming decade by the agreement, but also by the impact of Copenhagen on expectations for action and investment in enabling conditions, beyond 2020.

The success of Copenhagen will, in large part, be determined by whether it cements a credible expectation for the move to a global low carbon economy in the next decades in all major industrialised and emerging economies. This expectation will in itself change patterns of private sector investment and risk analysis.

Benchmarks for a successful Copenhagen Agreement

1. **Added-value:** The Copenhagen regime can only be considered successful if it delivers more mitigation action than would occur through a bottom-up process of individual country legislation. Current estimates are that existing developed country unilateral mitigation commitments are around 15% below 1990 levels by 2020; developing country pledges of action would reduce their total industrial emissions 4% below business-as-usual (BAU) by 2020.[2] This falls well short of what is required according to IPCC scenarios for GHG stabilisation at 450ppm CO_2e, i.e. 25-40% reductions by 2020 for developed countries and 15-30% deviation below BAU by 2020 for developing countries. If Copenhagen fails to take us closer to the global mitigation effort required to say below 2°C then the international negotiations have been a distraction, draining effort from other more productive activity at regional, national and sub-national level – including bilateral cooperation.

[2] Rogelj *et al*, Halfway to Copenhagen, Nature Reports, June 2009 http://www.nature.com/climate/2009/0907/fig_tab/climate.2009.57_F2.html

2. **High Trust Regime**: As the foundation for a long term international climate regime, it is critical that the Copenhagen agreement establishes a robust, trusted and independent process for coordinating country efforts to tackle climate change. The basic deal structure at Copenhagen will be one of reciprocity of action towards a shared global goal – or "I will if you will". However, since all countries will experience policy failures and difficulties in complying with their obligations, it is critical to establish whether such problems stem from "events beyond their control" or deliberate inaction. Without trust, the regime will collapse in mutual recrimination. Key to this will be accurate, transparent, verified and publicly assessed data covering national GHG emissions, mitigation and finance actions.

3. **Flexibility to move to stronger targets in future**: There is increasing scientific evidence that targets such as 350ppm CO2e and/or limiting global temperature rise to 1.5°C will be necessary to avoid critical tipping points in the earth's climate system. Realistically, these targets are not going to be agreed at Copenhagen, and so a critical benchmark for success is that it does not preclude moving to tighter targets in the future due to inflexibility of the target regime, a long commitment period or an ineffective scientific review mechanism. Specifically, the agreement must include a strong and automatic review procedure for strengthening targets linked to the IPCC scientific process.

4. **Driving Transformational Change**: Most OECD countries could reach the toughest 2020 targets currently under consideration through a combination of relatively marginal domestic policy changes and large scale international off-setting. This would not provide the necessary impetus for a rapid global transition to a low carbon economy. A critical benchmark for success therefore is that OECD commitments motivate transformational change in technology development, infrastructure investment and regulation to catalyse the global transition to a low carbon economy. Practical benchmarks include: strong signals to the global business community about the inevitability of a carbon constrained world; halting of new OECD investment in unabated coal power plants; and rapid, large-scale demonstration of low carbon technologies in both developed and developing countries.

5. **Supporting Future Industrialising Country Caps**: Copenhagen will at best put the world on an emissions path that keeps open the possibility of

staying below 2°C. It cannot guarantee a "safe" trajectory because major developing countries will most likely not be in a position to agree a binding peak-and-decline trajectory as part of any agreement. A realistic but ambitious outcome is that Copenhagen helps drive comprehensive moves towards a low carbon economy in key industrialising countries so they will be in a position to agree binding emission peaking dates in the medium term (2020-2030). This will depend on the scale and form of developing country commitments, and whether financial support is directed at low-cost offsets or higher cost decarbonisation programmes in developing countries.

6. **Ensuring a fair deal for the most vulnerable:** The Copenhagen agreement must be seen as broadly legitimate if it is to command broad political support in all countries and set up the right incentives for future action. It should demand more of countries with greater responsibility for climate change and with higher living standards. It should also mobilise support for adaptation to climate change by the most vulnerable countries which are least responsible for the problem. It is in the interests of both developed and developing countries to ensure that financial transfers drive efficient and effective action. Without a clear "return" on these investments it will be difficult to maintain public and political support for international cooperation.

The Geo-politics of Climate Change

These benchmarks have political as well as policy relevance. The power politics of climate change are perhaps unique among all global problems. Though 50-70% of current climate change can be attributed to OECD countries, the largest global emitter is now China and developing countries will dominate future emissions growth even if their per capita emissions are still relatively low. Developed countries need action by emerging economies to preserve their domestic climate security but cannot force them to deliver it; instead they can encourage action by providing a strong case for financial and technology transfers. On the other hand, developing countries are more vulnerable to climate change than most developed nations, and so have a strong national interest in seeing global action. The danger in the UNFCCC negotiations is that horse-trading arguments over the 0.5% of OECD GDP in financial compensation and transfers needed to cement a deal, will derail the common

need to agree an effective regime to avoid the 5-20% of GDP in climate change costs estimated by the Stern Review.

The Agreement must appear equitable to citizens in developing countries who will face higher future energy costs and structural changes because of the commitment their leaders take on at Copenhagen; even if some support and compensation is available from developed countries. If climate change action is seen to dash the aspirations of the next 1 billion "emergent energy consumers" then it will become politically poisonous in emerging economies. Though they are not major emitters the 100 most vulnerable countries – who have over 1 billion in population – could also derail the UNFCCC talks if they do not receive adequate support to assist in adaptation.

Even a relatively weak Copenhagen agreement will involve taxpayers and energy consumers in developed countries – and some developing countries - facing tens of billions of Euros in immediate extra costs. Though these will be more than balanced over time in reduced energy bills and savings in climate damages, the scale of any meaningful action will mean these costs cannot be hidden from citizens; as they often have been during the first Kyoto commitment period.

Therefore, for Copenhagen to be sustainable (and ratifiable) citizens in all countries who bear the costs must think it is giving good value for money, and is putting the world on a pathway towards true climate security. A weak agreement which seems a step forward and is "politically achievable" but does not credibly achieve this outcome will be highly vulnerable to attack, and risks spreading cynicism and apathy among citizens over the seriousness of intent of global political elites.

The UNFCCC is perhaps more analogous to global arms control than to the global trade regime it is often compared with. It requires far-sighted leadership to overcome immediate differences to avoid mutually assured destruction, but its sustainability will rest on citizen and domestic political perceptions of the minutiae of monitoring, verification and effective implementation.

4. Climate Policies outside the UNFCCC

A wide range of international meetings such as the UNGA, G8, MEF and G20 have been used as informal pre-negotiation and trust-building in front of the

UNFCCC negotiations. However, there are also distinct elements of the international climate regime which are emerging in other fora to supplement the UNFCCC:

- **International Research and Development Cooperation**: the countries in the Major Economies Forum are preparing technology roads maps on areas from carbon capture and storage to energy efficiency with the aim to begin implementation through plurilateral cooperation from November 2009. Given the difficulties in agreeing any meaningful technology agreement in the UNFCCC these may become a major regime element moving forward. Meanwhile World Intellectual Property Organisation (WIPO) is assessing the issue of intellectual property rights over low carbon technologies.
- **Energy subsidies**: the US has placed the highly contentious issue of energy subsidies on the G20 agenda – the first time this has been discussed in such a wide and senior forum. Though there is no expectation of quick progress, the role of the G20 as the world's premier economic forum means that this issue now has a much better chance of seeing effective governance.
- **Trade liberalisation**: liberalisation of low carbon goods and services has languished alongside all other multilateral trade issues in the The *Doha* Development Round negotiations. However, there may be attempts to move these issues forward in bilateral trade and investment agreements by both the US and EU, including as part of the overall Copenhagen deal.

Climate change will require OECD countries to revisit their international industrial policies by sharing advanced energy technologies and funding large-scale investment in economic competitors such as China and India. OECD countries must recognise that achieving climate security is a more vital national interest than the narrow maximisation of domestic company profits.

5. Energy Security

Energy security interests will be increasingly delivered through co-operation with energy consuming countries on technology development and diffusion, rather than through relationships with producing countries on fossil fuel discoveries and delivery. Declining use of imported fossil fuels may cause

tensions with many producer countries; the EU's gas demand could fall by 40% to 2030. Countries will not be able to achieve national energy security by undermining other countries' climate security by using coal without capturing the carbon. There will be no agreement on climate security without guaranteeing all countries' energy security.

Consumer dominated forums such as the G20 are likely to play a far more important role in energy security moving forward than producer-consumer dialogues.

6. Nuclear proliferation

Counter-proliferation mechanisms will need to be greatly strengthened if nuclear power is to be deployed at a scale which would make a real difference to climate change. Climate change will be used as a political mask for some states to acquire nuclear technology for military purposes, and development and sharing of more benign energy alternatives is the best protection against this. A major climate change disaster in the next decade would also drive pressure for a "crash programme" of rapid deployment of nuclear power worldwide; at rates which would compromise the ability of the current nuclear industry supply chain to preserve safety or security. Research and development into the next generation of proliferation resistant and modular safe reactors currently seems unlikely to produce a commercial alternative to current reactor designs before 2025-30.

The UK has already placed this issue on the agenda for the NPT (Non-Proliferation Treaty) Review conference in 2010, and its importance will doubtless rise over the coming decade.

7. Borders and resources

Rising sea levels and melting ice caps in the Arctic are already leading to territorial disputes between major powers. The disappearance of small islands could release valuable marine resources into the already contested waters of the Indian Ocean, Pacific and South China Sea. The rights of environmental refugees and migrants will become a source of national and international tensions, especially in delta regions such as Bangladesh, Nigeria and Egypt. Fisheries stocks will collapse or move, destroying millions of people's

livelihoods and undermining delicately negotiated international management regimes. The EU Common Fisheries Policy will not survive in its present form.

Countries will respond to the forecasts of more erratic water flows in all major river basins by building new upstream dams and water storage. Such "climate change adaptation" will drive cross-border tensions in the next decade, including the potential for armed inter-state conflict. Any international adaptation funding under the UNFCCC which affects transboundary water flows should be made conditional on adoption of a "climate change resilient" water sharing agreement.

Strengthened international rules and more activist preventative diplomacy from the international community will be needed to peacefully manage changes in shared water and fisheries resources, and to preserve the rights of displaced people and states. Many of these issues are likely to emerge in the UN Security Council if not dealt with adequately in specialised parts of the international systems.

8. Preventing Conflict and Instability

Climate change is already increasing conflict risks in unstable regions – especially Africa – as fragile governance systems are overwhelmed by the social stresses released by drought, famine, flood, migration, extreme weather events and rising sea levels.

Over the next decades, the determinant of whether climate change drives serious conflict lies in how political systems respond to the tensions it creates. Too often, analysis of climate change impact assumes that all governments will act to maximise the common good in response to change. But resource management regimes in much of the world are already built upon communal divisions and conflict, and are highly unlikely to respond in a predictable, rational and inclusive manner to climate stresses. Experience of current instability in the Sahel – especially Darfur – shows how quickly disputes over access to resources in times of environmental stress can become politicised and exacerbate existing communal conflicts based on ethnic, religious or other lines. These conflicts develop their own internal dynamics, but will see no sustainable solutions unless the root causes of resource grievances are addressed.

Achieving security in a climate-stressed world will require a more proactive and intensive approach to tackling instability in strategically important regions with high climate vulnerability and weak governance. This will require changes across international, regional and national security regimes, with a stronger incorporation of long-term and structural risk factors into planning and a willingness to engage effectively with tough governance challenges; bringing diplomatic, development, intelligence and law enforcement capabilities to bear. This does not just require implementation of some general 'conflict prevention' agenda, but rather a direct focus on the strategic necessity of managing increased resource use tensions.

9. Conclusion

Climate change could drive a more collaborative approach in inter-state relations or it could exacerbate tensions between and within countries, leading to a 'politics of insecurity' as countries focus on protecting themselves against its impacts. Currently most countries are hedging their bets and adopting both collaborative and competitive strategies in terms of access to resources.

The pattern of cooperation which arises will depend on how effectively climate change is incorporated into mainstream foreign policy and international governance, and actually changes the balance of national interests of major countries across a wide range of security and geopolitical issues.