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**Conference Paper**

## Establishing a global climate regime

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## The Global Environment

# Establishing a Global Climate Regime

### The Challenges

There is no doubt that a global climate regime on the basis of international co-operation is needed to prevent some of the disastrous consequences of climate change.

Its challenge is that it must include the commitment of developed countries such as the US and the EU as well as the commitment of large developing countries that have fast growing economies and a rapid increase in emissions such as China and India.



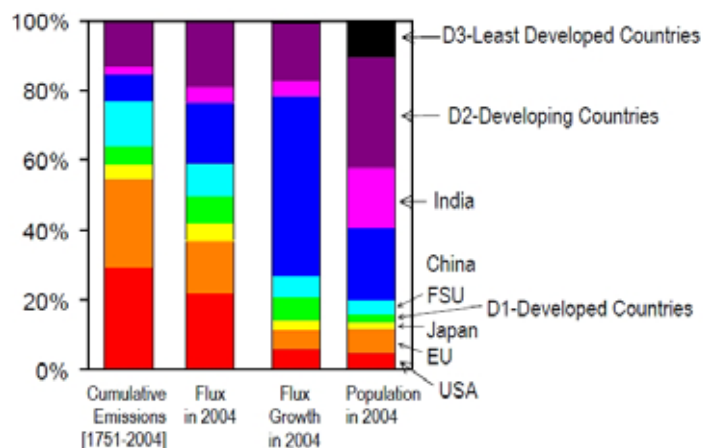
This is difficult because it raises questions of global climate justice, historic liability and equal rights, i.e., whether developing countries should enjoy the same right to economic growth based on fossil fuels as the industrialized countries have experienced over the past century.

In addition to the different levels of historic liability, there is also a large gap between regions what concerns environmental consequences of climate change – some countries face enormous challenges whilst others could even potentially benefit from climate change. Hence, an equitable cost-sharing globally for mitigation and adaption to climate change is one of the greatest challenges of our time.

So far, global responses have materialized in the United Nations Framework Convention on Climate Change in 1992, and its principal update of 1997, the Kyoto Protocol. Even if it introduces for the first time mandatory emission limits, it has large shortcomings: It only mandates minor GHG reductions by the industrial countries, major emitters of the developed countries like the US, Canada and Australia did not sign the agreement and fast developing economies like China and India do not face binding caps. Moreover, the Kyoto Protocol does not include the right of sanctions against non-complying members or against non signatories. Therefore a more efficient climate regime must be developed, and in the light of the forthcoming negotiations in Copenhagen in 2009 it must be discussed if any of the following solutions should be part of an international global climate regime.

### Regional Distribution of Fossil Fuel Emissions

Raupach et al. 2007, PNAS







## **Proposed Solutions**

### **Nadine Heitmann**

*Kiel Institute for the World Economy*

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#### ***A clear commitment by the international community is needed which sets climate change mitigation as a priority despite the financial crisis***

Developed and developing countries must come to an agreement on international emissions reduction before it is too late for mitigation – no member of the international community can be exempt from reducing emissions.

Global climate justice and historic liability must be taken into account, as well as a per capita emission rights, but this may not lead to a leeway for further increase of emissions in some countries. Targets must be at radically low levels, demanding that all countries engage in emission reduction schemes.

#### ***Equitable burden sharing***

A global transfer fund by developed countries for developing countries is required to help them provide the technological requirements of climate change mitigation, and to transfer clean technology, as well as to provide funding for climate change adaptation policies. Further liberalization of trade in environmental goods and services is also needed.

Oxfam has made a suggestion for how adaptation to climate change should be funded: nations should pay according to the amount of carbon they produce per capita, coupled with their position on the human development index. On this basis, the US would supply more than 40% of the money and the European Union over 30%, with Japan, Canada, Australia and Korea making up the balance.

#### ***A deterring sanction system against free-riders***

Unlike the Kyoto Protocol, the next global climate regime needs effective means of enforcement and sanctions against non-complying treaty members and against free-riders (non-members to the treaty) in the international community.

Options include trade sanctions to prevent “carbon leakage” (border carbon tax) or restrictions on trade following the example of the Montreal Protocol – its compatibility with the WTO needs careful revision, possibly the issue must be discussed in upcoming WTO negotiations as well.

#### ***An international environmental organization***

Establishing an international environmental organization with the power to oversee the interrelated issues of climate change mitigation and adaptation, trade liberalization, climate change induced migration and equity issues between developed and developing countries. The organization must conduct a global cost-sharing for mitigation and adaption to the consequences of climate change, and administer a global mitigation and adaption fund.

#### ***A global carbon price should be established***

This can be done through a carbon tax or through tradable permits, whereby other GHGs are converted into CO<sub>2</sub>-equivalents.

Currently, a wide variety of policy instruments is used to reduce GHG emissions: quantitative restrictions, biofuel targets, technological specifications, voluntary restraints, etc. Optimally, all



such instruments should be replaced by a single international carbon price. All policies are to be avoided that do not induce decision makers to pay the appropriate global price of carbon.

## **James P. Leape**

*Director General, WWF*

The latest scientific research tells us that climate change is faster and worse than scientists predicted even a few years ago. It is heartening that the G8 has now agreed that we must find a way to keep global average temperatures from increasing more than 2 degrees Celsius. But there is still little progress toward a global deal that would secure that result.

The Abatement Cost Curve developed by McKinsey and Company frames the challenge. It tells us that we have the solutions we need to meet the 2 degree goal, and that the costs are manageable. It also tells us that we can only succeed if we find a way to capture all available reductions, in all sectors of the economy and in all regions of the world, and to move quickly.

To do that, we need a global deal that includes the following five elements.

### ***Aggressive emission reductions by industrialized countries***

It is agreed that industrialized countries must step up to make big reductions in their own emissions – by 2050, emissions should be 95% below 1990 levels. And to get on to that path, industrialized countries should commit to a target of 40% below 1990 levels by 2020, with at least 30–35% reduction in their own emissions.

### ***Major funding***

Global action on the scale required will only be possible if industrialized countries commit to reliable and very substantial financing – on the order of US-\$160 billion a year. That financing is required to support diffusion of low-carbon energy technologies, to compensate countries for reducing emissions from deforestation, and to support the measures required to adapt to climate change. Funding on this scale can come through dedication of a share of revenues from auctioning emission permits in industrialized countries, and perhaps also a global levy on bunker fuels.

### ***Technology cooperation and transfer***

Success will also require a big investment in technology, and in making technologies available to developing countries. Targeted five-year Technology Action Programmes could help deliver on key technology objectives, aiming to increase cooperation on innovation for environmentally and socially sustainable solutions.

### ***Slower emissions growth in emerging economies***

Between now and 2020, emissions in emerging economies will have to increase, as they continue to develop their economies. But with the commitment of industrialized countries to the emission reduction, financing, and technology measures outlined above, a global deal will need to also include a commitment by emerging economies to decouple emissions from development, to achieve emission levels that are 30% lower than “business-as-usual” projections.

### ***Monitoring***

Ultimately, a global climate regime will succeed only if all parties have confidence that the commitments made – to emission reductions and also to financing – are honoured. So strong mechanisms to measure, monitor, report and verify emissions cuts and financial flows are essential. A new Copenhagen Climate Facility, reflecting a democratic decision-making structure with equitable and balanced regional representation, would make such a system credible.