
Eight Principles for a Global Agreement on Climate Change

The great challenge for Copenhagen is to fashion an agreement that meets the needs of all participating countries, both rich and poor, and succeeds in creating a framework to head off dangerous anthropogenic interference in the climate system.

28/1-2009, by Professor Jeffrey Sachs

I propose a set of eight principles that I believe can help to bridge the existing wide gaps between rich and poor countries. My starting point is to note that the UNFCCC rightly places climate change squarely within the context of sustainable development, and this remains the key to achieving a global agreement on a Copenhagen Protocol (hereafter, CP) that represents the interests of both developed and developing countries. Since these principles are necessarily quite general, I put them forward to stimulate a constructive exchange of ideas on the “architecture” of the Copenhagen Protocol.

1. Sustainable development lies at the core of climate change control.

A climate change agreement must promote sustainable development of all parties, especially the developing countries, and must be based on the developed countries honoring their various commitments to support the Millennium Development Goals and international financing of development (Monterrey and Doha).

2. Sustainable development should incorporate the concept of economic convergence.

Historical experience, supported by economic theory, demonstrates that poorer countries have the potential to achieve faster economic growth than richer countries, and thereby to narrow the proportionate gap in per capita income with richer countries. This process, known as economic convergence, should be used to anticipate respective trajectories of income growth, energy needs, and emissions changes across countries. The poorest countries need special support to overcome “energy poverty” in order to achieve economic convergence.

3. Climate change mitigation and adaptation should be embedded in an ecosystem approach recognizing the multiple human-induced stresses on the world’s ecosystems

Climate change is one aspect of environmental stresses affecting all nations, and especially the poorest and most vulnerable nations (described in Article 4, paragraph 8 of the UNFCCC). Policies to mitigate and adapt to climate change must take a holistic ecosystem-based approach to environmental threats and challenges. The holistic approach suggests more aggressive mitigation targets in view of synergies between climate change and other aspects of environmental degradation (e.g. groundwater depletion, pollution, land use conversion, loss of natural carbon sinks, etc.)

4. Technological change and technology transfer lie at the core of effective mitigation

The combination of mitigation with economic convergence will require a large-scale transformation of global systems of power generation, vehicle transport, building design, and industrial processes in key sectors (notably steel, refineries, petrochemicals, and cement). Technological transformation will lie at the core of success. The world

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should agree on strategies for: (a) identifying and characterizing best-available technologies (BATs) for reducing emissions; (b) facilitating technology transfers; (c) investing in research, development, demonstration, and diffusion of best available technologies; and (d) global governance and safeguards on potential new technologies, e.g. geo-engineering.

5. National targets should be based on economic convergence and best-available technologies

Every country, both Annex I and non-Annex I, should adopt national targets for emission reduction during each control period. These emission targets shall reflect each country's projected energy needs, based on a scenario of economic convergence, and on the best available technologies. In each period, best available technologies will be defined as those technologies which have already been demonstrated and which can avoid emissions or sequester carbon at a unit cost per ton below an internationally agreed value. For example, best available technologies might include all power plants which can reduce emissions relative to baseline at a cost equal to or below \$50 per ton of CO₂.

6. Financing for climate change control should reflect equitable burden sharing

Since all aspects of climate change control (R&D, mitigation, and adaptation) will require additional public and private outlays compared with the business-as-usual path, the new agreement must ensure an equitable allocation of those added costs. The rich countries will help to finance the incremental sustainable energy needs of the low-income countries, for example defined as those countries eligible for IDA financing at the World Bank. Middle-income countries, by contrast, will be responsible for financing their own adoption of best-available technologies. The rich countries will, in addition, bear the major global costs of research, development, and demonstration of new low-emission technologies and the transfer of successful technologies

to all developing countries, both low income and middle income. [1] Similarly, the rich countries will bear the predominant costs of climate-change adaptation in low-income countries, while middle-income countries will self-finance their adaptation efforts. All burden sharing is also predicated on the rich countries fulfilling their long-standing donor obligations of 0.7 percent of GDP under the Millennium Development Goals and other development objectives.

7. Financing should be based on a robust carbon levy rather than CDM projects or voluntary contributions

Global development financing, including for climate change, is broken. Every major development effort is grossly underfunded, including the MDGs, climate change, biodiversity conservation, R&D, and technology transfer. The reliance on the Clean Development Mechanism (CDM) to fund climate change control is a non-starter, guaranteed to under-fund needed efforts by orders of magnitude. Serious global funding should be based on carbon and other greenhouse levies. Countries can tax carbon emissions or auction carbon permits. Either way, a fixed \$ sum per ton of CO₂ (and other greenhouse gases) should be allocated by each country to global funds for R&D, technology transfer, and adaptation.

8. Adaptation programs should be integrated into the Millennium Development Goals

To an important extent, climate change adaptation is a central feature of overall poverty-reduction and sustainable development efforts. There is no hard line between "standard" development programs and climate change adaptation. Poverty reduction in general reduces climate change vulnerability, by providing the poor with buffers of financial capital and physical capital needed to adjust to climate shocks and to long-term climate change. At the same time, all development programs – in agriculture, health, and infrastructure – need to take into account the future prospects for climate changes and extreme

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weather events accompanying long-term climate change.

Notes:

[1] To illustrate these principles, as a middle-income country, China (a middle-income country) would directly bear the main costs of adopting best-available technologies, but would receive such technologies from advanced countries without bearing the costs of intellectual property. The rich-country governments, for example, might agree to pay the royalties due to patent holding enterprises for technologies adopted in China. India (a low-income country) would receive some direct financial support for adopting best-available technologies, until India graduates from low-income status, which is likely to occur within this decade.

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