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## What to Do in Copenhagen

Posted on **October 15, 2009** by [Dominik Zimmermann](#)

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By [Graciela Chichilnisky](#)

The global summit in Copenhagen in December will decide the fate of the Kyoto Protocol, the only international agreement we have ever had to combat the dangers of climate change. But the Protocol expires in 2012 and – like Cinderella – it will become a pumpkin as the clock strikes 12. The Danish capital city is the last stop on the rollercoaster ride of hope and despair since the Protocol was signed by 160 nations in 1997. Partial attempts to move negotiations forward limped from failure to failure in recent years. The world's two largest emitters – the US and China – cannot agree on limits, and the outlook looks bleak.

Yet, as an insider in the Kyoto process with 25 years of UN experience, I can read the smoke signals. I believe that Kyoto is worth saving, and it can be saved. The failures so far are meaningless because nothing at the UN happens until the 11<sup>th</sup> hour, when we are forced to reach a decision. Every nation has an incentive to procrastinate: nobody wants to reduce carbon emissions on its own. Yet every nation is needed to reach a resolution. Global warming is the first true global problem we ever faced and we need every nation to participate or else there is no solution. By burning its own fossil fuels, Africa could unwillingly cause trillions of dollars worth of damage to the US when sea levels rise and polar caps melt. There is nowhere to hide.

But UN negotiators are sophisticated diplomats who will not break cover. Without compulsion to agree, there will be no agreement. The Berlin Mandate in 1995 committed the world to an agreement, and the Kyoto Protocol was born in 1997.

In 2007, the Bali gathering concluded that this year's meeting in Copenhagen would resolve the problem of Kyoto post-2012. So, in this context, Copenhagen is "do or die". As the nations get ready for the Danish showdown, the pieces are falling into place for a major confrontation between the two largest emitters, the US and China.

This is where the environment meets geopolitics. The two nations alone could cause catastrophe for the world. The US does not want to limit its emissions unless China does, but developing nations are not required to reduce emissions without compensation. They need energy to stave off poverty, and 89% of the world's energy comes from fossil fuels. More than 50% of the people in the world live on less than \$2 per day, and in excess of 1.3bn people are at the edge of survival with \$1 per day. Developing nations house 80% of humankind but emit only 40% of the world's emissions, while 60% of global emissions originate from the rich nations that house 20% of the world's population. Poor nations can hardly reduce energy use and compromise economic growth that is sorely needed to eradicate poverty.

The stand-off between the US and China is reminiscent of the Cold War between Russia and the US in the middle of the 20<sup>th</sup> Century. Russia and the US both refused to limit their nuclear arsenal unless the other did first. The times are different, the weapons are different, but the situation is the same.

### A new type of market

Kyoto is the first global agreement based on a global market solution – one that changes the value of the global commons. For the first time in history we are enlisting financial innovation for the conservation of the planet's global commons, and our species' survival. 99.9 percent of all species that ever existed have become extinct. The challenge is to be the exception not the rule. The United Nations is our only hope and its Kyoto Protocol is due to expire on 2012. It is a close call.

The Kyoto Protocol took almost 13 years to negotiate and ratify. As one of the main architects of the carbon market, I know how it originated, the main protagonists behind its creation and the current issues that threaten to undermine it when it expires in 2012. [\[i\]](#) Key to the survival of the Kyoto agreement, and that of the Earth as we know

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it, is a greater co-operation between developing countries and the West, closing the global income divide whilst simultaneously resolving the climate crisis. The growing wealth gap between the rich and the poor nations is not incidental to this situation. It is its root cause. It is at the foundation of an unsustainable use of the earth's resources.<sup>[ii]</sup>

This post proposes modest changes in Kyoto's carbon market that could shift the playing field on which the Copenhagen agreement will be negotiated – making it much more likely to have a successful outcome, one that is more advantageous to the US, EU and Japan and is acceptable to China, India, Brazil, Mexico and all the developing nations – and fits the needs of the small island nations whose survival is directly at stake. Oil nations could benefit from the technological innovation I propose – Saudi Arabia is on the record espousing a commitment to become a leader in solar power in this century.<sup>[iii]</sup> Significantly, a representative of the China delegation at a recent UNCTAD meeting of experts April 2009, has gone on the record agreeing to this proposal in principle and several members of the US Congress have expressed support.<sup>[iv]</sup>

However, there is a stark reality that is pointed out by conservatives in the US Senate: there is no point for the US and other rich nations to reduce emissions on their own. The developing nations contribute today a minority of the emissions, but in 20 or 30 years as they grow, they will hold the deciding card on global warming.

### Small Island States, Africa and Latin America

The carbon market that I designed and crafted into the Protocol is key because \$60bn in carbon credits is traded each year in the EU's Emissions Trading System (ETS) and this promotes accelerated clean technology and financial assistance for sustainable development. It is the basis for a solution.

Developing nations do not trade in the carbon market because they have no limits on emissions, but they use the Clean Development Mechanism (CDM), which compensates (with carbon credits) private investments from industrial nations that reduce emissions.

According to the World Bank – this has led to more than \$23bn in successful, productive and clean transfers.

Yet so far, more than 60% of all CDM funding has gone to China, because the CDM is designed to reduce emissions and China – as the largest emitter – has the most to reduce. Africa is responsible for only 3% of the world's emissions and therefore has obtained very little CDM funding. Same is true for Latin America. This needs to change.

The risks are not equally distributed. Small island states face the worst risks, as hundreds of millions of people face the relentless and implacable rising seas. They also emit almost no carbon dioxide and therefore they have little to gain from the Protocol's Clean Development Mechanism. They get no help from the Kyoto Protocol's Mechanism. This also has to change.

Is it possible to find a solution to this dilemma? Can one find a solution that is acceptable to both wealthy and poor nations? Yes. A solution was achieved in Kyoto when the carbon market became the two-sided coin that allowed the Kyoto Protocol to be signed by 160 nations in 1997. The carbon market starts from bounding wealthy nations' emissions, and therefore was supported by the developing nations. Yet the carbon market offers flexibility since some nations can be above their limits and purchase rights to emit from others that are below – so the world implements important and needed reductions limits. The market flexibility appealed to the US and to other industrialized nations. This is how the Protocol was born in 1997.

### It is possible forge a similar solution now?

The interests of the industrialized and developing nations are so opposed that we need a solution that is truly a "two-sided coin" one that looks the opposite to each party. We need a solution that targets the nations that are most at risk from global warming.

We need a coin with two sides. Indeed, it is the only type of solution that will work in Copenhagen. This is what I propose here.

How can we reach a consensus between the industrial and the developing nations?

### Consensus between Industrial and Developing Nations

There is a formula that uses the Protocol's own structure and updates it to overcome the impasse and forge a consensus between rich and the poor nations. In addition it targets precisely the nations who need it most: small island states, African and Latin American states.

The formula proposed here has two aspects, financial and technical assistance, both of which were highlighted at July's G8 summit by the G77, and it has been officially supported by the Chinese delegation at an UNCTAD Meeting of Experts last April.

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The financial part is an interpretation of existing law – Article 4 of the Convention – engineered so that both sides get what they want – and the technological aspect makes sure that the reductions are feasible. The former is a modest extension of the carbon market, and the latter a modest extension of the Clean Development Mechanism (CDM). Both are reasonable and acceptable interpretations of existing law.

The Convention does not say that China and the developing nations should never have limits – it says they should have no limits unless they are compensated. This is quite different. What we need, therefore, is a form of “compensation” that fits the bill, and eliminates the opposition from both sides. I am talking about trade rather than unilateral compensation – and in the US we are very comfortable with that term. Nobody needs to be the first mover – a simultaneous financial solution makes this all possible.

For example, the US can buy an option to reduce Chinese emissions, thus obtaining what it wants, while providing “compensation” to China as is required by the UN Convention for developing nations.

At the same time, the Chinese can secure a minimum price for the credits, ensuring that they would not be selling economic growth for a pittance. The entire transaction could involve little in terms of monetary exchange but it will set emissions limits on both nations at the same time. Secondary markets can trade the corresponding options, thus providing liquidity and stability to the carbon market and its Clean Development Mechanism.[\[v\]](#)

The proposal allows the US and China to save face by each saying at home (truthfully) that they are sticking to their original position – while at the same time both countries may also say (truthfully) that they got what they want from the other.

In the G-8 meeting of July 2009 developing nations were loath to accept any obligation without specific commitments of financial and technical assistance – and failed to agree on a formula. This is the sticking point in the negotiations. The formula proposed here provides financial and technical assistance that should work for both sides.

Compensation can also take the form of export credits for ‘negative carbon technology’ that makes emissions reduction possible beyond what a region emits. Negative carbon means that Africa can reduce 20% of global carbon in the atmosphere, while it emits only 3 %. The Clean Development Mechanism can certify new technologies that produce energy while reducing carbon from the atmosphere, funding poor nations who adopt this solution.

When used in Africa, the technologies can help the region reduce more carbon than it emits, meaning the continent can attract significant CDM funding that was not possible until now.

For rich nations, this involves US\$43 trillion in energy infrastructure – the right size to stimulate today’s world economy – creating technology jobs, increasing exports and stimulating trade.

Copenhagen is the “do or die” mission for the climate negotiations. The price of failure could be catastrophic but there is a solution available.

Will the international community step up to the plate, and save Kyoto?

#### Next Steps

A modest extension of the Kyoto Protocol carbon market, which would fix a heretofore intractable impasse, won’t itself solve all the political challenges that still remain. However, I believe it is necessary to have any chance of a successful outcome.

Of course there are many terms to determine here, when and how and how much. But this is good, not bad – it provides a framework that can be established in principle and allows for serious negotiation in Copenhagen and beyond. This is what happened after the Kyoto Protocol in 1997.

The United States has a unique political opportunity to be the nation spearheading the push for this critical change. We need a solution to the zero-sum game of escalating emissions. Otherwise, we face a new cold war, all about warming. Copenhagen could be the dawn of a new cooperative global future.

Will the international community step up to the plate, and save Kyoto?

Professor Graciela Chichilnisky is UNESCO professor of mathematics and economics, director of Columbia Consortium for Risk Management and professor of economics statistics at Columbia University, NY. Her new book *SAVING KYOTO*, co-authored by Kristen A Sheeran, is published in September by New Holland, £8.99. Professor Chichilnisky will be visiting the UK in early October; see weblinks for details of her keynote speeches.

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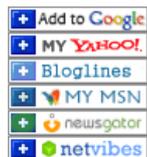
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[i] See Chichilnisky and Sheeran, Saving Kyoto (2009).

[ii] Chichilnisky and Sheeran, Saving Kyoto (2009); Chichilnisky and Heal, Environmental Markets: Equity and Efficiency (2000); Chichilnisky, Beyond the Global Divide: From Basic Needs to the Knowledge Revolution, to appear; Chichilnisky, Development and Global Finance: The Case for an International Bank for Environmental Settlements (1996).

[iii] This statement was made by Ali Al-Naimi — Minister of Petroleum and Mineral Resources, Saudi Arabia, at the Energy Pact Meeting in Geneva, 2009, <http://www.energypact.org>.

[iv] This is Article 4 of "United Nations Framework Convention on Climate Change (UNFCCC)" (1992).

[v] This was proposed earlier by the author in Chichilnisky, "The Greening of the Bretton Woods" (1996).

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### 4 Responses



[Joe](#), on [October 16, 2009 at 12:23 am](#) said:

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I still think the gap between the richest and poorest countries will never be conducive to the spirit of anything like Kyoto. Too many countries have too many different needs.

[negerihijau](#), on [October 18, 2009 at 2:32 pm](#) said:

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...The formula proposed here has two aspects, financial and technical assistance, both of which were highlighted at July's G8 summit by the G77, and it has been officially supported by the Chinese delegation at an UNCTAD Meeting of Experts last April....

[Climate Change: December feels cold in Copenhagen | European Alternatives](#), on [November 10, 2009 at 3:42 pm](#) said:

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[...] to Chichilnisky the United States has a unique political opportunity to be the nation spearheading the push for this critical change, a role the European Union itself [...]

[A cold war of climate change? | Centre for Sustainability and Social Innovation](#), on [February 3, 2010 at 7:08 pm](#) said:

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[...] As Prof. Chichilnisky of Columbia University notes that "there is an historic standoff between China and the US on the issue of global warming" (see here): "the times are different, the weapons are different, but the situation is the same." (see here). [...]

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