

**Synopsis of the International Conference on “The Economics of Climate Change”
The New School April 9-10, 2010**

The 2009 United Nations Climate Change Conference in Copenhagen has been perceived as a failure, while the consequences of global warming continue to mount. Weather patterns are changing radically, natural disasters grow more frequent, sea levels rise, cultural and biological diversity becomes more endangered, and economic prosperity decreases. The leading nations of the world, however, hesitate to commit themselves to climate change mitigation measures.

Attempting to establish both the urgency of the issue and to help overcome the standoff in international negotiations, The New School hosted a high level international conference on the “Economics of Climate Change” on April 9 -10, 2010. The conference was organized by Willi Semmler, professor of Economics at The New School for Social Research. It was jointly sponsored by the Economics Department and the Schwartz Center of Economic Policy Analysis, and gratefully supported by the Walker Foundation, the Thyssen Foundation and the German Consulate.



Deputy Consul General Dr. Stephan Grabherr (left) hosts dinner for conference participants at the German Consulate. Pictured are Don Harrison, NSSR Dean Michael Schober, Hirofumi Uzawa, and Economics Professor and conference organizer Willi Semmler.

The conference brought together well-known academics, influential policy advisors and policy makers of different countries. Among the most prominent participants from abroad were Damien Meadows, Head of the Unit International Carbon Markets at the European Commission; Ulrich von Weizsäcker, a former member of the German Parliament; and Hirofumi Uzawa from Japan, author of a ground breaking work on global warming. Renowned international economists Alfred Greiner of Germany and Franz Wirl of Austria also participated. The United States was represented by top policy analysts, geoscientists, and economists, including Michael Oppenheimer from Princeton, Michael Greenstone from MIT, Peter Schlosser and Geoffrey Heal from Columbia, Klaus Keller from Pennsylvania State, Ali Khan from Johns Hopkins University and Edward Nell, Willi Semmler and Lopamudra Banerjee from The New School for Social Research. The agenda of the conference can be downloaded from www.newschool.edu/scepa.

The conference addressed five fundamental questions:

1. Where does the world’s climate now stand with respect to global warming? Are we already at or beyond the “tipping point” beyond which there is no return?
2. What can economists tell us about the costs and benefits of mitigation policies? What measures are most efficient from an economic perspective and in terms of carbon reduction? Proposals include cap and trade, carbon tax, development of renewable energy, new technologies, energy efficiency and changing the patterns of consumption.
3. How can we best address the employment effects of these diverse climate proposals given the fragile states of the world economies?

4. How does international policy ensure justice and fairness in global warming policy measures? To what extent do the proposed measures imply a just distribution of burdens and benefits for developing countries?

5. If mitigation policies are too little and/or too late, what are realistic adaptation strategies that address the needs of poor countries and poor areas of rich countries burdened more than others?

The conference commenced with a discussion of the status of climate change post-Copenhagen from the perspectives of the European Union and the United States. Through a video conference, the head of the EU Unit on Carbon Tax, Damien Meadows, presented the EU position both during and after the Copenhagen negotiations. Despite a general perception of overall failure, Mr. Meadows presented an optimistic evaluation regarding the achievability of the 2 degree Celsius limit agreed upon at the Copenhagen conference.

Michael Oppenheimer, a geoscience professor at Princeton and lead scientist of the Intergovernmental Panel on Climate Change (IPCC) matched Mr. Meadows' optimism, while his fellow panelist, Michael Greenstone, a former member of President Obama's Council of Economic Advisors and a professor at MIT, disagreed. He argued that the temperature most likely would rise above 2 degree Celsius and would affect the developed and less developed countries differently. In short, the developed world would use more energy to mitigate global warming effects, leaving developing countries tremendously exposed to the temperature increase.



Professors Oppenheimer and Greenstone debate policy options for developed countries after the Copenhagen conference.

The subsequent papers by Klaus Keller, Willi Semmler, Alfred Greiner, and Geoffrey Heal demonstrated that CO₂ emissions and temperature increases are at a tipping point beyond which a return to normal, pre-industrial temperature levels will be enormously difficult to achieve.

This was corroborated by several studies on the link between economic growth and climate change. The facts are as follows:

- Industrial production and output is accompanied by CO₂ emission.
- In the advanced countries, the output per person has gone up by a factor of 15 since the end of the 19th century.
- Population has increased. In the US, for example, it has increased by a factor of six.
- Economic growth is usually accompanied by more energy efficiency, but rough estimates would say that the annual CO₂ emission has increased by a factor of three to four since that time.
- Thus economic growth does increase the annual volume of CO₂ emission.

Implementing mitigation policies is urgent. Speakers discussed the following mitigation policies: cap and trade, carbon tax, increasing energy efficiency, and increased development and use of renewable energy resources. Speakers addressed whether greater energy efficiency could substantially contribute to a reduction of CO₂ emission (Ulrich von Weizsäcker) and whether there is a single global solution, or if country-specific mitigation policies should be pursued.



In the latter context, Hirofumi Uzawa (*left*) demonstrated that cap and trade will unfairly burden developing countries; the dollar price of a carbon ton will imply a much bigger percentage penalty in low income economies. He thus argued in favor of a carbon tax proportional to income, combined with an international financial fund helping developing countries to adopt mitigation and protection policies.

Finally, a report by a research team directed by Stefan Mittnik and Willi Semmler was presented that studied the impact of mitigation policies on employment. The report identified that certain mitigation policies might generate a double dividend and not necessarily reduce economic growth or employment. Researches concluded that only a few countries will experience a slight reduction of growth and employment. Overall, employment and output is likely to rise if the income from carbon tax or cap and trade are used to subsidize less carbon intensive industries or develop renewable energy sources.

The conference revealed a professional preference for dealing with climate change. Economists tended to suggest a carbon tax as the main pillar of serious global and national mitigation policies, while politicians and policy advisors shied away from taxes and the double dividend argument. Economists argue, however, that the problems associated with cap and trade - high price volatility, perverse incentives, unfairness between developed and developing countries, and its bad performance in history - are not well understood. Overall, the conference illustrated the need to implement a well-designed mix of such mitigation measures to avoid the negative effects of temperature rise on growth and welfare.



Nathaniel Keohane of the Environmental Defense Fund discusses efforts to pass cap and trade legislation in Washington, DC. He is joined by fellow panelist Ernst U. von Weizsäcker.

All participants agreed on one thing: the need for the United States to abandon its hesitation on climate change and take a leadership position both at home and abroad. While the U.S. Congress seems likely to combine some aspects of both cap and trade and carbon tax, with the use of the resulting tax revenue targeted towards new technology and energy saving measures, participants doubted if anticipated measures would be sufficient.

Economists, concerned geoscientists and engaged policy analysts called for the need to raise public awareness, pressure policy makers, and demonstrate successful mitigation policies.

In this respect, the international conference on the “Economics of Climate Change” was a great success, as it furthered the post-Copenhagen debate in the public. It discussed important new measures to mitigate climate change and pointed to the urgency of implementing them.