# Policy Brief

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## Issues, Obstacles and Outlook for the Copenhagen International Climate Change Negotiation

Sean Walsh and John Whalley

The climate change negotiation currently underway and set to conclude in Copenhagen late in 2009 marks the continuation of a change in the global landscape in terms of trade, politics and the entire international system that began with the Kyoto and Montreal Protocols or, arguably, with the first suggestion that humanity was altering the world's climate. According to our current understanding of the past and the science, a successful outcome to this negotiation is critical to maintaining a stable climate. In this policy brief, we briefly set out some of the critical issues and obstacles standing in the path of a successful conclusion in Copenhagen.

# The Concept of "Common Yet Differentiated Responsibilities"

Perhaps the largest obstacle is the imprecision in the negotiating mandate. The negotiation is taking place under the UN Framework Convention on Climate Change (UNFCCC) charter. A critical and contentious concept within the charter that has been applied to climate change negotiation is that of "common yet differentiated responsibilities." In the Kyoto Protocol, this concept was interpreted to mean that developing countries did not have to participate in efforts to mitigate climate change since they were viewed as largely not responsible for emitting the greenhouse gases (GHGs) currently impacting the climate. But now, with the escalation of climate change concerns and rising emissions levels in developing countries, this position is no longer seen as satisfactory and it is accepted that the concept needs to be reinterpreted. Though a critical component of the negotiation, this bedrock principle still remains without a firm and accepted interpretation despite the fact that only a few months remain before the scheduled conclusion of the negotiation in Copenhagen, thus creating a schism between developed and developing countries over the question of who is responsible for what level of action on climate change.

#### **Issues Surrounding Greenhouse Gas Measurement**

This debate on common yet differentiated responsibilities overarches several related and contentious issues, such as the question of how emissions should be measured – by country, per capita or per unit of GDP. Emissions levels on a per country basis (also referred to as a level basis in the negotiation and literature) are the easiest to relate to the levels of emissions in the atmosphere. However, this measure ignores country size and social circumstances, and so tends to favour smaller and/or well developed and/or less populous nations. A "per capita" or "per unit of GDP" basis for measurement is more accommodating of the social circumstances in individual countries, although care must be taken in measurement since it is possible for these two alternate measures to fall (through increases in population or GDP) while total emissions are still on the rise.

Another issue is the basis of responsibility for emissions: consumption or production of carbon-emitting goods. That is, should emissions be counted on the basis of where the emissions and associated goods are produced or where those goods are consumed? This is a critical issue for countries that export or import goods with high carbon content and for those with trade surpluses, as the level of emissions which these countries are officially responsible for significantly differs between the two bases.

These two issues, of measurement and responsibility based on production/ consumption, are particularly critical for China and other countries with large populations and rapid growth rates, as the perceived responsibility these countries have for mitigating climate change alters greatly depending on the metric used to measure GHGs. These countries generally want emissions measured on a per capita and consumption basis, which is viewed as less restrictive of developing country growth, while developed countries generally prefer a per country and production basis of measurement. As with the more general "common yet differentiated responsibilities" debate, neither of these issues has been resolved. The involvement of the larger developing countries in the Copenhagen negotiation potentially hangs in the balance – an unfortunate situation considering that China's emissions are roughly on the same level (on a per country basis) as those of the United States, making them the two highest emitting countries in the world.

With much depending on the metrics to be used for GHG emissions, it is worth noting that the actual measurement of GHGs is also problematic. It is difficult with the current infrastructure to measure emissions from all (or even just the major) sources and, thus, assign the associated proper level of responsibility for an individual source. No method of measuring carbon emissions perfectly on a wide scale yet exists, and this is a complicating factor for several issues in the negotiation, particularly metrics, enforcement mechanisms and issues of finance.

#### **International Funds**

The Copenhagen negotiation will focus on separate international funds for adaptation and innovation. Several prior international funds totalling several billion US dollars have been created for use in facilitating the adjustments needed to combat climate change. There are arguments that the current level of funding for climate change mitigation is insufficient, with some even

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Copyright © 2009, Sean Walsh and John Whalley. This work was carried out with the support of The Centre for International Governance Innovation (CIGI), Waterloo, Ontario, Canada (www.cigionline.org). This work is license under a Creative Commons Attribution — Non-commercial — No Derivatives License. To view this license, visit (www.creativecommons.org/licenses/by-nc-nd/2.5/). For re-use or distribution, please include this copyright notice. suggesting the same level of funding be applied to this initiative as was appropriated to deal with the financial crisis – several trillion US dollars. However, this is presently a moot argument, as no money has been released, due to the parties' desires for assurances that the funds will be used effectively. With the current managers of the funds, particularly the World Bank, not wanting to take on a new role supervising their effective use, and given uncertainties in the measurement of emissions (which creates uncertainties in cost-benefit analysis, making the effectiveness of projects difficult to judge), a deadlock has been created. This impasse must be overcome in some manner before any action utilizing these funds can be taken; these funds are meant to support both those countries that will be hardest hit by climate change effects and the development of new technologies to combat climate change. The international funds are a key component of an effective agreement.

#### Enforcement

Likewise, on the issue of enforcement, the concept of "measurable, reportable and verifiable" reductions has become key to the agreement and whether a party has fulfilled its Kyoto obligations or not, and determining more accurately just what those obligations are. This concept highlights the fact that this is essentially an issue of property rights, of damages done and of figuring out who is accountable and for how much, but on an international scale where there is no clear mechanism to resolve the issue beyond an international treaty. Thus, adding an element of certainty into issues of measurement through "measurable, reportable and verifiable" reductions has become a cornerstone of crafting any credible agreement. This added certainty is largely seen as necessary for the agreement's enforcement mechanism and, given the lackluster enforcement and level of compliance seen with Kyoto, effective enforcement now seems to be viewed as a necessity in this successor treaty.

Indeed, the failure of Kyoto to enforce its measures and the backlog of unfulfilled commitments left behind by most of the developed world under the Protocol has become problematic in and of itself, as many countries without such backlogs question the credibility of those that do to enter into any further (and likely stronger) emissions reduction agreements in Copenhagen, adding yet another degree of complexity and division among negotiating parties.

## Linkages to the International System

Finally, there are questions as to whether these climate change negotiations should be held in isolation from other international negotiations. The current international system, which originated in the Bretton-Woods Conference in 1944, does not account for physical linkages between countries, as is the case with climate change. The current Copenhagen negotiation is effectively linked by its nature to several other international treaties and practices, notably trade, but at the same time those treaties and practices do not have provisions for such a link, putting strain on the international system. Thus there are, at the least, calls for greater levels of innovation within existing international institutional architecture. These calls however, great and small, are tempered by the short time horizon for the current round of negotiation to conclude (in December 2009), but future rounds may see greater change.



#### Sean Walsh

Sean Walsh has worked at The Centre for International Governance Innovation (CIGI) since May 2007. He holds a BA and MA in Economics from the University of Waterloo, where his major fields of study were labour and environmental economics. He has worked with numerous professors at the University of Waterloo and is currently John Whalley's research assistant at CIGI, working on the rising power of developing nations in the global economy, with a focus on China, as well as climate change negotiations. He attended an official session in Copenhagen on the challenge of reconciling the global environmental and trade regimes.



#### John Whalley

John Whalley is a CIGI Distinguished Fellow and a Fellow of the Royal Society of Canada. The author or coauthor of dozens of scholarly articles, he is one of Canada's preeminent experts in the field of global economics. His current academic positions include William G. Davies Professor of International Trade and Co-Director of the Centre for the Study of International Economic Relations, Department of Economics, University of Western Ontario; Research Associate, National Bureau of Economic Research in Cambridge, MA; and Coordinator, Global Economy Group, CESifo, University of Munich. Dr. Whalley is a former Visiting Fellow at the Peter G. Peterson Institute for International Economics, Washington, D.C. He holds a BA in Economics from Essex University (1968), and an MA (1970), M.Phil (1971) and a PhD (1973) from Yale University.

Meanwhile, climate change related issues in the area of trade in particular have multiplied. Completely outside of the World Trade Organization (WTO) system, there have been calls, most notably in the EU, for border tax adjustments and other forms of green protectionism such as tariffs to offset the additional production costs in those countries that perceive themselves as global leaders on climate change action (see Lockwood and Whalley, 2008). A measure of integration seems in order between WTO policy and the current environmental regime to help mitigate this, and there are hopeful signs that this may happen in the current Copenhagen negotiation process, with several interim meetings being dedicated to resolving this issue. It is certain that the advent of the financial/ economic crisis and the inherent instabilities associated with it will add impetus to ensuring that the climate change debate does not destabilize the global economy further. Whether this outlook harms or helps the chances of success in Copenhagen or the chance for the successful integration of the two international policy spheres remains as an open question.

#### Uncertainties in What is at Stake

With the above outstanding issues and several others besides, the successful conclusion of the Copenhagen negotiation becomes critically dependant on the perceived severity of climate change effects and the damage they will inflict. This may be measured through several lenses, such as the reports on the earth science itself, including those by the Intergovernmental Panel on Climate Change and in the Stern Review (2006). High levels of unilateral action on climate change also seem to be happening in lieu of an international treaty, or in response to perceived acute effects of climate change, such as more severe storms, droughts and floods; the migration of diseases into new areas; rises in the sea level; or the complete melting of the Arctic ice cap. What damage these events will ultimately cause remains highly uncertain.

The Stern Review predicts damages totaling up to 20 percent of global GDP by 2050, while several independent studies, such as Mendelsohn (2006) and Bosello et al (2007), have analyzed the problem and found that damages will be insignificant: roughly 0.1 percent of global GDP. This range of views on the potential damage caused by climate change may contribute to divisions seen within the negotiation. A full melt of the Arctic ice cap, predicted to happen in either a few decades or as soon as five years from now, is generally accepted to be one of the key tipping points of no return in the climate change process. Against this backdrop, with some climate change effects (such as those listed above) becoming increasingly evident, most of the parties involved seem to wish to err on the side of caution and thus the political will towards reaching an agreement remains strong, despite the numerous obstacles.

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#### Who We Are

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CIGI was founded in 2002 by Jim Balsillie, co-CEO of RIM (Research In Motion), and collaborates with and gratefully acknowledges support from a number of strategic partners, in particular the Government of Canada and the Government of Ontario. CIGI gratefully acknowledges the contribution of the Government of Canada to its endowment fund.

Le CIGI a été fondé en 2002 par Jim Balsillie, co-chef de la direction de RIM (Research In Motion). Il collabore avec de nombreux partenaires stratégiques et exprime sa reconnaissance du soutien reçu de ceux-ci, notamment de l'appui reçu du gouvernement du Canada et de celui du gouvernement du Canada pour sa contribution à son Fonds de dotation.

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