



**Geneva Annual China Dialogue**  
*China, Trade and Climate Change*

**Organised by**

The International Centre for Trade and Sustainable Development (ICTSD)

**in collaboration with**

Friedrich Ebert Stiftung

**Media Partner**

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## **Background**

The Annual China Dialogue 2008 was organised by the International Centre for Trade and Sustainable Development in collaboration with the Friedrich Ebert Stiftung (FES). The China Initiative of ICTSD aims to promote a better understanding of China's role in global economic governance through dialogues and research.

The dialogue took place at the World Meteorological Organisation in Geneva, Switzerland, on 27-28 November, 2008. It was attended by 240 participants and brought together representatives from international institutions, governments, business and civil societies from China and around the world, to explore issues related to China, trade and sustainable development.

The objective of the dialogue was to explore China's contribution to the economic architecture of a global agreement on climate change. The international community is engaging with the hope of developing such an agreement at the 15th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in 2009 in Copenhagen.

China is at the centre of a range of concerns related to the trade and climate change negotiations, particularly with respect to the distribution of the economic costs and gains from climate change mitigation and adaptation.

While recognising the UNFCCC principle of common but differentiated responsibilities and respective capabilities, China's participation in global efforts to reduce greenhouse gas emissions is regarded by many as necessary to achieve the desired objectives for global cooperative action on climate change. China is also at the centre of concern among policy-makers and industry in industrialised countries about potential loss of competitiveness in their trade-exposed sectors, in the absence of 'comparable action' in large developing countries such as China.

On the other hand, there is agreement in the Bali Action Plan, that in order for developing countries such as China to effectively contribute to global efforts on climate change, they will need support in particular on technology and financing. Moreover, achieving sustainable development objectives, including through trade-led growth, remains a legitimate objective of developing countries that is recognised and supported by WTO Members and Parties to the UNFCCC.

In his opening remarks, Ricardo Meléndez-Ortiz, Chief Executive of ICTSD noted the extremely opportune moment that this dialogue was taking place. A global economic downturn, resumption of the Doha Round of negotiations, and upcoming United Nations meetings on climate change – in Poland this year and Copenhagen next, were the context in which the discussants would be exploring the role of China, a rapidly emerging economy, in efforts to combat climate change.

Winfried Veit, Director of the FES the partner for this conference acknowledged the ability of current events to impact efforts to address other globalised problems. In particular, the financial crisis poses a threat to Germany's participation in climate change mitigation. But this, he said, was "short term thinking." To solve the numerous challenges associated with climate change, people from all disciplines will be needed. With the participation of people from various backgrounds, the Geneva China Dialogue is an important forum to communicate on the subject.

Given this context, key topics addressed at the Geneva China Dialogue included:

- What are the global trade and climate context in which China performs?
- What are the expectations of the international community for China's responsibility in maintaining global economic and trade stability and fostering a multilateral agreement on climate change?
- How can China contribute to achieving successful outcomes under the Doha round of trade negotiations and UNFCCC negotiations?
- What trade-related incentives and enabling conditions can contribute to enhancing the capacity of developing countries such as China to undertake national appropriate mitigation actions and pursue adaptation efforts?
- How can trade-related competitiveness concerns be addressed in an effective and fair manner, taking into account principles underlying both the trade and climate change regimes?

The following summary is organised according to the sessions and provides an overview of the presentations and discussions that took place for each session. As such, the summary does not attempt to provide a verbatim account of the sessions. All speakers and attendees of the workshop participated in their personal capacities.

### **Abbreviations**

CDM	clean development mechanism
CO <sub>2</sub>	carbon dioxide
CSI	Cement Sustainability Initiative
EGS	environmental goods and services
ETS	Emissions Trading Scheme
EU	the European Union
FES	Friedrich Ebert Stiftung
G20	Group of 20
ICTSD	International Centre for Trade and Sustainable Development
IDRC	International Development Research Centre
IISD	the International Institute for Sustainable Development
IP	Intellectual Property
IPCC	Intergovernmental Panel on Climate Change
NAMA	non-agricultural market access
OECD	Organisation for Economic Co-operation and Development
SCM	sectoral crediting mechanism
UN	United Nations
US	the United States of America
UNFCCC	United Nations Framework Convention on Climate Change
WBCSD	World Business Council for Sustainable Development
WTO	World Trade Organisation

## Sessions

### SESSION 1 - Keynote Speeches: China, Trade and Climate Change

**H. E. Mr Zhenyu Sun**, Ambassador of the Permanent Mission of China to the WTO provided an introductory presentation on the current Chinese climate. Mr Sun noted that the financial crisis is continuing to have, a big impact on China. "Many developing countries are being affected more than countries at the epicentre," he said. The Chinese stock-market has dropped by as much as two-thirds and investment decisions are being delayed until better times. The Chinese ambassador said that now the situation is quite different from that in July, when a WTO ministerial meeting fell apart due to major differences on SSM and other delicate issues. "Now everybody is in crisis ... in order to get what we did not get in July, we have to be more realistic on those issues," he said. The Chinese ambassador urged developed countries to bear in mind the development mandate of the Doha Round and not to seek their own comfort without considering major concerns of developing countries. He also warned of a danger that some developed members in the WTO might try to "raise the stake" at this time of financial and economic crisis. Mr Sun called for all members to be realistic. "If you raise the stake at this stage, try to ask for more on the basis of July, that will probably not fly," he said. "That is probably the main problem we are facing now," he added.

On the topic of climate change negotiations Mr Sun stressed the firm Chinese support for the principle of common but differentiated responsibilities. Developed countries, which historically have emitted the bulk of greenhouse gases, should share the main burden in the efforts to combat climate change and lead the way in doing so. Developing countries, he said, require technical assistance, such as clean coal and renewable energies. China has already been proactive in negotiating agreements with European countries on this.

**Harsha Vardhana Singh**, Deputy Director-General of the WTO introduced the thread of climate change and trade. Climate change, Mr Singh said, also offers opportunities arising from trade in clean technologies. Negotiations on environmental goods and services (EGS) in the WTO and other regional forums are therefore important. And China, he said, is key for international exports and imports as well as having an increasingly vital trade role in services. Indeed, a new economic order was recently acknowledged at a meeting of 20 world economic powers in Washington, dubbed the G20.

Trade and climate change have overlapping interests, Mr Singh pointed out. While the end goals may be common in negotiations, the approaches countries adopt depend on their circumstances and national interest. Special and differential treatment encapsulates the roles of countries with different means. On a final point, Mr Singh noted that the special safeguard mechanism, a tool which would allow developing countries to protect subsistence farmers in the event of import surges or price declines by raising tariffs beyond bound levels, in the Doha Round of trade talks is not a stumbling block anymore: "We have gone beyond that."

An overview of China's role in climate change negotiations was provided by **Ji Zou**, a delegate of China's UN climate negotiations and a Professor and Deputy Dean at Renmin

University in Beijing. He pointed out that although China wants to take a strong position on climate change, China has many other concerns. A balance between these needs has to be found. The detrimental externalities associated with climate change suggest, or more accurately, require, international cooperation. But establishing effective international accords for environmental issues are more difficult than national environmental regulation.

Mr Zou stated that the issue of climate change is still young, and the progress made so far has been encouraging. He then turned to what was required by the Copenhagen process. That is, what should the realistic objectives of the UNFCCC meeting in Copenhagen in 2009 be? Should new and specific commitments for the reduction of greenhouse gas emissions be made? Should progress be made on financing issues? Or, should progress be aimed for in institutional arrangements, such as the Kyoto Protocol?

Beijing, he said, encourages developed countries to take a larger leadership role in the climate change arena. But, despite China's status as a developing country, people worldwide ask what commitments China can make. Looking to Copenhagen in 2009, Mr Zou said that it is not imaginable for China to move away from the Convention and Kyoto. Thus Beijing is insisting on sticking to the agreement – not necessarily a successor to the Kyoto Protocol, but fulfilling the Bali Action Plan.

On a national level, Mr Zou pointed to provisions under consideration that would allow provincial and municipal governments to implement climate change policy. In addition, efforts to shut down small scale polluters are in effect throughout the country.

## **SESSION 2 – China in the Global Trade and Climate Context**

The discussion of this panel, chaired by **Isabel Hilton**, focused on China's global trade and climate context. Attention was then turned to investigating what expectations the international community had for China's responsibility in maintaining global economic and trade stability and for fostering a multilateral agreement on climate change.

**Ambassador Sergio Marchi**, former President of the Canada China Business Council and Permanent Representative of Canada to the WTO, gave an introductory presentation on the topic of *Negotiating trade and climate change regimes in a context of economic downturn*. The “global economic system needs a China that is both strong economically and cleaner ecologically,” Mr Marchi said. He noted that the prevailing international context could not be much worse. China is at the centre of international negotiations, both in the WTO's Doha trade talks (indeed, China's WTO Membership coincided with the launch of the Doha Round) and UNFCCC negotiations. On the topic of international trade, WTO's credibility is on the line in the Doha talks, Ambassador Marchi said. Regarding climate change, the global system needs a China that is economically robust and as clean as possible.

China, also, has a large investment in these negotiations. When it comes to the negative effects of emissions, China is one of countries most at risk. Ambassador Sergio concluded by noting that how the world engages China in these multilateral negotiations will greatly affect the outcome. The financial crisis and climate change, he said, are a “two sided coin.”

**Linda Yueh**, fellow in Economics at the University of Oxford and visiting Professor at the London School of Economics and Political Science focused on *Global economy and finance in transition: the role of China*. She noted China’s role is indirect in this crisis through two channels. One is that China production and exports in a globalized world have kept price low which may give signals for central banks to keep low interest rate for too long. The other channel is that China uses its surplus to purchase U.S bonds which prevents from rebalancing. Her solution to current economic imbalance is however to keep such imbalance for a bit longer, because cutting imbalance too soon will damage both developed countries and developing ones. Dr Yueh noted that the financial crisis has pushed the global imbalance of power to the fore. Global institutions are in need of a more representative make-up. The G20 meeting in Washington, in which big developing countries like China, India and Brazil participated, signalled this reality. Yueh highlighted a point that responses to financial crisis shall be coordinated in that what good at national level might not be good for global economy. With the current economic turmoil progressing the Doha Round of trade talks is even more important to ensure that protectionism does not reverse the years of negotiated trade gains. Finally, Yueh pointed out that trade can support efforts to combat climate change, as green investments have long term benefits and positive spillover effects.

Following this, **Mukul Sanwal**, Advisor to New Delhi’s Ministry of Science and Technology, turned the discussion back to climate change and *Key issues for emerging economies in the UNFCCC negotiations*. Sanwal highlighted the view that China and India do not favour committing to hard numbers on climate change – the countries require flexibility for their development. Developing countries are foremost responsible for their sustainable development. Any benefits that may arise on global challenges like climate change from work on sustainable development are positive spin-offs. It is the firm belief of China and India that there should be equal sustainable development potential for all countries. To seriously address climate change concurrently, developing countries need to be enabled and/or supported. Sanwal said that for developing countries to be ‘enabled’ is preferable as it implies amore direct form of assistance. On his final reflection, Sanwal noted that to move forward in international climate change negotiations engaging developing countries needs to move away from a zero-sum game mentality and toward a shared vision.

During the **open discussion**, the topic of whether China is doing enough to curb emissions was raised. It was argued that historical responsibility is an obsolete case, given the necessity for worldwide action. Sanwal highlighted that China has a right to grow (such as purchasing more cars) and questioned the concept of human well-being. The reference by US President Barack Obama to new international cooperation was regarded by the participants as very important and suggestive of a more active role by the US.

### **SESSION 3 – Energy Competition, Sustainable Development and Climate Change**

This panel, chaired by **Mark Halle** from IISD, considered global energy demand and competition, China's challenges related to energy efficiency and renewable energy, and implications for sustainable development and climate change actions.

**Simon Zadek**, Chief Executive, AccountAbility, Senior Fellow Harvard Kennedy School of Governance and ICTSD Governing Board Member gave an introductory presentation on the issue of competitiveness: *Setting context: Competitiveness, China and the World*. Zadek questioned whether a focus on re-regulation of the financial community, which has been given fresh impetus from the financial crisis, should be allocated to the background or foreground of international negotiations. In other words, he asked for everyone to critically examine the purpose of an international systemic restructuring.

Nonetheless, China's emissions will have to be mitigated by profound amounts in the future, regardless of the mitigation efforts of developed countries. It is possible to hope, he said. High oil prices, for instance, caused a 6 to 8 percent reduction in US fuel consumption last year. Yet, more often than not, discussion on trade in climate change negotiations has been pushed aside. He asked, why trade was not discussed.

What role the business community can play regarding trade as a solution for climate change requires consideration. He used Wal-Mart checking carbon levels on its products throughout the supply chain as an example of business-led action. Leadership by the private sector will be instrumental, Zadek pointed out.

**Xiusheng Zhao**, Research Fellow at Beijing's Tsinghua University and Policy Advisor for Chinese government addressed *China's energy development and climate change actions as a developing country* in his presentation. He began by giving an overview of the Chinese economy. China's energy industry has been rapidly growing. In 2006 China's electric industry grew by as much as the capacity of France. Of this, coal fired plants generate about 80 percent of China's electricity supply. This alone is indicative of the importance of engaging China on climate change.

Beijing has incorporated action on climate change into policy. A climate change department has been elevated in status in the Chinese parliament. Zhao discussed in detail what Beijing is doing to fight climate change within Chinese borders. Included are stronger enforcements such as the forced closure of factories. Zhao concluded by pointing out that China is doing a lot to combat climate change, considering its position as a developing country and priority it must therefore give to other development policies.

**Moustapha Kamal Gueye** a Senior Programme Manager of ICTSD's Environment Cluster spoke on *China and the global energy and emissions landscape – with particular regional focus on Africa*. Gueye pointed out the changing dynamics of major emissions emitters.

Countries not part of the Organisation for Economic Co-operation and Development (OECD), which comprises largely industrialised countries, will account for 97 percent of new energy consumption needs – with three-quarters of this coming from China, India and the Middle East. While there are currently many technologies available to fight climate change, innovation, particularly in energy efficiency is needed along with effective deployment of low-carbon technologies. It is clear that OECD countries alone cannot reach the target in world emissions reduction. Therefore ways to enable the developing world develop cleanly is a necessity.

Mr Gueye also addressed the Chinese relationship with Africa in regards to oil trade and investment. China is increasingly turning to Africa to meet its primary energy demand, which is projected to more than double from 2005 levels by 2030. Although the revenues of African governments from oil and gas exports is projected to increase dramatically in this time period, the spillover for African development from this wealth is uncertain. But, Gueye noted, with the right policies these revenues can be harnessed to alleviating energy poverty in Africa and contribute to a sustainable energy transition.

The final discussant of the day Rob Bradley, Director of the World Resources Institute in Washington DC, presented on Obama's energy and climate policy: implications for international cooperation. Bradley said Obama has advocated forceful domestic action on global warming and re-engagement with the international community. "There is a lot of hope and a lot of optimism," Obama made clear that he intends to be taken seriously on the international climate stage. During his campaign, he pledged to set up a federal cap-and-trade system for greenhouse gases similar to the European trading scheme, with reductions to 1990 levels by 2020 and 80% below that by 2050. But there are many uncertainties. First, the impact of economic stimulus is uncertain. It is anticipated that there will be increasing public financing as a response to financial land economic crisis, but most of them may go to carbon intensive projects such as roads, ports and transportation, Bradley said. Economic stimulus is not necessarily helpful for climate. Another concern Bradley mentioned regarding America's international cooperation is that the U.S. does not have a good habit of ratifying international agreements. Meanwhile, the new administration needs to make significant domestic progress. Without having done so at home, it could be hard for Obama to make meaningful commitments at the international table. Given the current financial and economic situation of the US, some are expecting Obama to stress 'green jobs' in the energy sector which could help revive a stalled economy rather than some immediate climate regulation.

In the **open discussion** participants touched upon a wide variety of subjects. The use of sovereign wealth funds to positively combat climate change was discussed as well as how the financial crisis is affecting them. The increasing amount of activity in sovereign wealth funds was pointed out. Norway's fund, it was said, has environmental standards.

The role of the US was among the main discussion points. In general, pessimism for the multilateral climate change process was expressed if strong US leadership is absent. If the US is not going to ratify a global solution, then what track should be taken? Is major unilateral or

bilateral action necessary to compensate? It was also asked, what is more important: binding the US in a possibly weakened agreement, or the agreement itself? On these questions it was pointed out that although the US does not ratify treaties often, it has an official position: not to ratify treaties, but to conduct business in such a way that it was as though they had obliged to the conditions.

#### **SESSION 4 – Engaging China in Climate Actions**

This panel discussed what trade-related incentives and enabling conditions can contribute to enhancing the capacity of developing countries, such as China, to undertake appropriate national mitigation actions and pursue adaptation efforts. This session also addressed specific issues in the area of development, transfer of technology and financing, the liberalisation of trade in environmental goods and services, and intellectual property issues. The discussions on the international regulatory framework for technology transfer and financing were followed by reactions from the business sector. The Chair of the session was Argentinean **Ambassador Alberto Juan Dumont**.

**Veena Jha**, visiting Professorial Fellow, Institute of Advanced Studies at Warwick University and visiting fellow of the International Development Research Centre (IDRC) presented on *China and Environmental Goods and Services*. She outlined the framework policy China is following to control implications of climate change. Recognising the co-benefits that local pollution control has for climate change policy (such as greenhouse gas reductions), Beijing decided to design policies and programmes to maximise this joint benefit, codified in the Chinese five year plan of 2006. Part of the pollution programme has seen reductions in sulphur dioxide, and energy and carbon intensity.

‘Green trade’, encompassing both ‘sticks and carrots’ was another of the measures to achieve the goal of the five year plan. For ‘sticks’ tariffs on exports with high energy and pollution intensity has been suggested. The ‘carrots’ side includes encouraging imports and exports of low carbon goods, environmental goods and services as well as technology, and eco-labelling on exports, among others. Thus, Jha introduced the topic of ‘Environmental Goods and Services’, or EGS, liberalisation.

Agreeing on a standard definition of EGS and how to liberalize them were the central debates. Climate friendly products, including dual use products require identification. The flow of technology has meant that China is both an important exporter and importer of EGS and environmental technology. Jha gave a concise overview of the issues surrounding liberalisation in EGS and summarised results of a study she undertook examining 84 categories of EGS, which products China has a comparative advantage in, the sensitivity of the EGS to tariff changes, and the effects of liberalising EGS before other products.

Finally, Jha touched upon linking trade and EGS to multilateral negotiations. She raised the question of, assuming negotiations on EGS liberalisation, whether the environment or

whether trade would be the central concern. If negotiations on industrial goods (NAMA) in the current WTO trade talks were successful, progress would already be made on a number of EGS.

*Technology Transfer and Financing in the Climate Change Negotiations* was the topic presented by **Ji Zou**, delegate of China's UN climate negotiations, and Professor and Deputy Dean of the School of Environment and Resources at Renmin University in Beijing. In particular, Zou focused on the Chinese stance in climate change negotiations. In these, Beijing maintains the focus that technology transfer is a necessity. Emissions reductions alone do not make sense because complementary technology to support continued development is also required. Zou reminded the audience of the huge challenge developing countries like China and India, which account for 40 percent of the world population, face when balancing the global need to address climate change and the basic needs (i.e., sanitation for rural population) of their citizens. The spirit of the IPCC is that developed countries should take the lead in emissions reduction and the transfer of technology. This is all the more important, considering the implications if developing countries become locked into developing with high carbon technologies.

In particular, research and development and a focus on diffusion and deployment of technology is needed. Although China is a country which has the most advanced technology, the scale of the country is such that it also contains huge amounts of inefficient technologies. And changing from inefficient to efficient technology on such a scale is a real challenge, Zou highlighted.

Zou pointed out that institutional arrangements under the UNFCCC for the development of a mechanism that will enable meaningful technology transfer and development are required. How can COP decisions be implemented?

A financial fund for multilateral technology transfer as a public and private partnership was a solution Zou discussed. He believes that the public of developed countries should take the lead, through revenue raised on taxation such as that through carbon auction, in a mechanism similar to the global environment facility. Based on this, private finance can be leveraged to provide incentives to three important markets: carbon, capital and technology. Intellectual property issues, Zou said, do not present real barriers to growth in trade and investment. But any intellectual property issues that do arise should be addressed on a case by case basis.

The financial crisis offers opportunities, Zou noted. As part of a rescue package Beijing will invest up to US\$ 600 billion by 2010 to stimulate the economy in over 10 focal areas, including infrastructure (i.e., waste water treatment, highways and railways) relevant to climate friendly technology like low carbon and low energy technology.

Zou concluded by warning of the risk if countries like China and India continue to employ conventional technologies and repeat the pathway of developed countries. China and India need environmentally friendly technology for the global public good of the world.

**Naigen Zhang**, Law School Professor and Director at the Centre for Intellectual Property Rights at Fudan University in Shanghai, agreed that developed countries should take the lead in emissions reduction and assist in capacity building to help developing countries mitigate and adapt to climate change. Zhang spoke on *Intellectual Property Rights and Technology Transfer*. According the 29 October, 2008, Chinese White Paper, Beijing will insist upon technology transfer facilitation on an international level in any global climate change response. Nationally, China will promote research and development for a climate change response. But despite the Kyoto promise for developed parties to facilitate the transfer to environmental technology there has been no significant increase in such exchange, Zhang said.

Instead, Zhang pointed out, China must improve its legal system. Indeed, Beijing has established a new position for a Minister to promote and coordinate environmentally sound technology and protect patent rights. Additionally, other IP laws such as the unfair competition law need promotion. While China has an anti-monopoly law to handle misuse of IP, the country has nothing as extensive as the US guideline for IP law, Zhang said. Currently, Beijing is drafting a law to promote technology transfer and protect IP rights.

The *Business Perspective* was the focus of the presentation by **George Weyerhaeuser**, a Senior Fellow for Innovation and Technology at the World Business Council for Sustainable Development. Weyerhaeuser, a self proclaimed “unrepentant capitalist,” offered the practical experience of moving technology around the world. Establishing categories for EGS would be especially important for technology transfers, Weyerhaeuser noted.

Although there are suggestions for arrangements under the UNFCCC to have a central body to guide cooperation and deployment of technology, and shape future research, Weyerhaeuser is of the opinion that it would be disastrous to attempt to centrally manage thousands of worldwide entrepreneurs. He pointed out that a key part of how technology is made and diffused is through failed attempts. But, asking governments for money with such a large number of ‘failures’ would be difficult, indeed. Instead, there is a role for capacity building and finding a way to share best practices. Part of this would include enabling the movement of human resources worldwide.

Weyerhaeuser expressed scepticism at the arguments on certain barriers to technology transfer. Regarding IP issues, tariff barriers in the 4 to 6 percent range will not block the transfer of technology, Weyerhaeuser said. Similarly, royalties will not inhibit the worldwide flow of technology (with the exception of the, perhaps more moral, issue of medicine). Weyerhaeuser pointed out that with so many close substitutes individual patents will not block technology transfer. Patents are refinements at margin, he said.

Weyerhaeuser also expressed optimism for Poznan and Copenhagen. But effective technology transfer requires the learning curve to be cut; deployment at scale is required as cost effectively as possible for developing countries like China and India to perfect these new technologies. Echoing the sentiments of previous speakers, Weyerhaeuser noted that it would

be in the world's best interest to figure out how to harness the growth of these countries. Locking in the most up to date technologies in China now would mean that, globally, we would pay less later. Weyerhauser concluded by urging private sources to be unleashed by sending signals that innovations will be valuable.

In the **open discussion** Veena Jha took the opportunity to clarify the study and said it only involves dual use projects at the six digit tariff level. Her results are relative, rather than absolute, she said, and the gap between OECD countries and China is still large.

### **SESSION 5 – Climate Change, Trade and Competitiveness: The China Factor**

This panel discussed how trade-related competitiveness concerns can be addressed in an effective and fair manner, taking into account principles underlying both the trade and climate change regimes. Chaired by **Ricardo Meléndez-Ortiz** of ICTSD, the session also looked at specific issues such as carbon intensive industries and carbon leakage, carbon barriers at the border and sectoral agreements.

**Joost Pauwelyn** spoke on *Legal perspective on border carbon adjustment*. **Joost Pauwelyn**, Professor at the Geneva Graduate Institute and Senior Advisor of law firm King & Spalding, spoke on *Legal Perspective on Border Carbon Adjustment*. In his presentation, Pauwelyn outlined arguments for carbon border adjustments, which have so far only been used as a 'stick' in negotiations, different forms these adjustments may take, and the WTO legality of such measures. Three main reasons for engaging in border adjustment were presented: economic competitiveness, environmental argument for carbon leakage, carbon accounting based on production or consumption. Pauwelyn elaborated on the different forms of border adjustment – border tax adjustments on imports, emissions allowances and tradable performance standards – using the example of the Chinese cement industry. A tax on Chinese imports could be argued as an anti-dumping duty on Chinese cement, or it could be argued that the absence of Chinese regulation is like a subsidy, so countervailing duties could be imposed. Moreover, the WTO's Appellate Body has confirmed (in the India alcohol dispute) that taxes on imported products can be applied if they are equal to that of domestic products. Potentially, with care in the details, this could work for carbon-related products. Emissions allowances are a different concept from import tariffs. Under this idea, importers of Chinese cement would have to buy emissions allowances. Once again, thought would have to be given to the specifics, such as the rate of allowance – which should be the same as the domestic rate. Finally, tradable performance standards are similar to the carbon intensity standard of the steel industry. Under this scheme, each ton of steel the industry has a maximum amount of carbon. If this standard is not met, the US refuses the steel import. With tradable performance standards a minimum performance standard would be agreed. If the standard is met, trade in the good is allowed. If the standard is exceeded, credits are gained. If the standard is not met, the product can still be sold but an emissions allowance also has to be bought. In concluding Pauwelyn noted that, while border adjustment measures can be

designed to be WTO compliant, WTO legality is the least of the worries. Instead the focus should be on the measures design, implementation and effectiveness.

**Julia Renaud** of the International Energy Agency discussed competitiveness and climate leakage in the context of the European Emissions Trading Scheme. Renaud, in her presentation the *EU Emission Trading Scheme and Carbon Leakage*, noted that the EU has taken the lead on emissions trading, but that similar schemes, or ETS, are also being developed in Australia, Canada, Switzerland, and in various regions within the US. Preliminary discussions on ETS are also underway in Japan, Korea, and in the US Congress. One primary concern of the current situation, Renaud said, was the possibility that emissions that are reduced in the EU are simply transferred, or ‘leaked’ to other parts of the world that do not have active trading schemes. Renaud noted that the direct costs of ETS are borne by emissions-intensive industries that have to purchase emissions allowances, while the indirect costs are manifested in higher electricity prices for consumers.

Renaud pointed out several ways in which a trading scheme could cause emissions to ‘leak’ from one area to another, but she then presented data that show that this phenomenon has not taken place. Using 2005-2006 information on imports to and exports from the EU, Renaud said that she and her colleagues found no statistical evidence of a change coinciding with the introduction of the EU ETS. If the scheme had a real impact, she said, the EU would now be importing more and cheaper products from regions without emissions schemes, and exporting less to the rest of the world.

While this has been a general trend for some emissions-intensive sectors (such as aluminium and steel), the full impact of the EU cap-and-trade system has not been felt until now, Renaud said. An analysis of trade data exposes great differences, and some common features, across sectors.

Cement has a low value per tonne and is not transported easily on land; coastal production may be at risk, provided there is excess capacity in the rest of the world. Iron and steel is much more traded and therefore exposed to international competition, but too many permits were issued in those sectors initially. The refining sector, not unlike steel, has enjoyed growing margins, likely to dwarf any carbon cost introduced by a free allocation of CO<sub>2</sub> allowances. Aluminium, which is not covered by the EU ETS, ought to have felt the pinch of higher electricity prices, Renaud noted, but most smelters still enjoy long-term contracts with their suppliers and when they do not, they have also surfed on the wave of high international aluminium prices. But Renaud pointed out that first phase, Phase 1, of the EU ETS is a poor indicator of what may come: CO<sub>2</sub> prices were very volatile and on average relatively low; many installations in these sectors were granted allowances above their actual emissions; and two years of observations say little, if anything, about where companies will take their next investments.

Given this current scenario, Renaud suggested four actions that should be taken: 1) carbon allowances should be given out for free to sectors that are exposed to carbon leakage, 2) a carbon equalisation system (i.e., a border tax adjustment) should be imposed, 3) different approaches should be taken for different sectors, and 4) the mitigation target should be lowered.

Finally, Renaud noted that tracking climate leakage will require continuous monitoring of trade flows, which will become ever more challenging as other countries and regions begin implementing emissions trading schemes. She also pointed out that policymakers should consider both the effectiveness (or ineffectiveness) of the current EU border adjustment proposal, as well as the constraints of pursuing sector-specific approaches.

**Peter Wooders**, a Senior Economist on the Climate Change, Energy and Trade unit at IISD addressed *Sectoral approaches, trade and competitiveness*. He first presented a number of open questions on the subject, pointing out that policymakers were still deciding the specific options under consideration; still debating how sectoral approaches would affect trade and competitiveness; still wondering whether there will be unexpected benefits; and still determining what would be needed for their implementation.

Wooders next outlined two options that if an international agreement were negotiated, could be under serious consideration.. One approach would be to develop a sectoral crediting mechanism (SCM), a form of ‘extended CDM’ under which a specific sector in a developing country could trade carbon credits if it emitted below its target. Wooders noted that a ‘no-lose’ condition could be added to this so that there would be no penalty for non-compliance. A second option under consideration revolves around intra-sectoral cooperation on technology, Wooders said, citing the Asia-Pacific Partnership Programme as a good example.

Wooders next presented data that demonstrates that the sectoral approaches do not reduce the difference in carbon costs between Annex 1 and non-Annex 1 countries. He also showed that transport costs, carbon prices, and price fragmentation all cause export prices of goods in the sector in question to go up. However, he noted that the impact of a sectoral approach on trade and competitiveness would be limited.

Wooders went on to present several benefits of a sectoral approach. To begin with, focusing on sector-specific initiatives allows countries to progressively engage in the system, he said, giving them the opportunity to focus on key, measurable sectors and develop data, understanding, and capacity. Wooders also argued that a sectoral approach may be more appropriate than cap and trade, for reasons relating to technology and financing. Finally, Wooders noted that better technology gives a range of benefits, including lower production costs, greater energy security, and local air quality improvements.

Turning to the implementation needs under a sectoral approach, Wooders pointed out that substantial political support will be needed to drive negotiations toward an agreement, and that a detailed scheme must be developed so that officials have a substantial starting point in their debates. He also noted that any credits generated under the programme would need to be

guaranteed market access, and that challenges relating to boundaries, data, and benchmarking will need to be overcome.

Outlining the status quo in the cement industry, Wooders noted that the Cement Sustainability Initiative (CSI), which has been active since 1999, has played an important role in the sector. Policy makers are now conducting a major modelling study, and have already been looking into potential new CDM methodologies.

**Jiahua Pan** and **Laihui Xie** from the Research Centre for Sustainable Development at the Chinese Academy of Social Sciences in Beijing presented on *Climate change and competitiveness*. Specifically, they addressed three questions: is the competitiveness concern a real problem; why is a trade restrictive measure proposed as a tool for addressing this problem; and is this really effective and necessary? The speakers highlighted that competitiveness concerns and carbon leakage have been exaggerated. There is no evidence of carbon leakage and it is in the self interest of sectors under regulation to exaggerate the competitiveness concerns. But such measures are proposed as a way to shift domestic conflicts to the international level, Pan and Xie said. However, the benefits for the importing countries of the measures are not evenly spread throughout the national economy, as some sectors will be protected at the cost of others. The taxed export countries will also be hurt, and will experience a worsening terms of trade, among other effects. Pan and Xie concluded by stressing the use of positive, rather than negative, incentives.

**Gary Clyde Hufbauer**, a Reginald Jones Senior Fellow at the Peterson Institute for International Economics in Washington DC gave a frank account on *An American Perspective*. Throughout America, he said, the mood has completely changed since the 1992 Earth Summit. All ears, are tuning into what US President Obama's approach to climate change, which has so far seemed to be a friendly one. The goals Obama has enunciated include for the US to reach the 1990 levels of emissions by 2020 and to be 80 percent down from that level by 2050. Additionally, Hufbauer was of the opinion that it is most likely border measures, albeit with flexibilities, will be part of any future US climate legislation.

Hufbauer noted a number of serious issues surrounding Obama's strategy. These included whether there would be federal pre-emption of all the state and local barriers, the speed of transmission from free allowances to immediate carbon auction, and the use of money that comes from the auction – whether to reinvest in greenhouse gas reduction or to put the money into healthcare and medicare or a combination, for example. Whether Obama is willing to pre-empt state and regional initiatives which are good but which may ultimately frustrate up the goal of a national target, and whether Obama will seek Congressional approval or exert his authority to regulate emissions under the Supreme Court decision in *Massachusetts v the Environmental Protection Agency*, were other issues Hufbauer highlighted. Alternatively, Hufbauer speculated that within the climate change legislation Obama may be granted 'fast-track authority' as a tool to carry out international negotiations. And perhaps more aspects of trade will be piggy backed on this fast-track authority.

*A European Perspective* was then given by **Fredrik Erixon**, Director of the European Centre for International Political Economy in Brussels. Erixon began by cautioning that the EU is a fragment of policy and structures. As such, different branches say different things. Erixon began his presentation by noting one proposition: that Europe wants to lead on carbon-emissions reduction, but that it is making slow progress on that front at home. He presented a graph showing that carbon intensity – the ratio of GDP to carbon emissions produced – has dropped steadily since 1990. He also showed that carbon emissions per capita have fluctuated above and below 9200 kilograms of carbon dioxide per inhabitant for the past 15 years. Erixon's next proposition was that falling prices for raw materials can temporarily increase incentives to lower carbon emissions, since the sectors buying emission allowances are raw-material intensive. Thirdly, he argued that there will be strong pushes for carbon-based trade measures, but that some of the costs of those measures will dampen some of that support.

Erixon next turned his attention to the steel industry. He noted that China's crude steel consumption has doubled in the last five years and represents 34 percent of world consumption, while US and EU steel consumption has been on a gradual but slow growth path. The EU began importing steel from China for the first time in 2005, although the 27-nation bloc has complained about the export taxes that Beijing places on its raw materials. The EU places no tariffs on raw materials, Erixon noted, but Brussels is still looking for better and cheaper access to those goods. Challenges posed by fragmented supply chains still need to be addressed, he said.

In the **open discussion** participants noted that, although currently there is only commitment for a carbon trading scheme, some kind of border adjustment is likely, especially for the EU and the US. But examining it from political and economic points of view, how will the EU react, if the US puts border measures in place? Will this trigger retaliatory measures? How will it play out if a multilateral agreement is forged that the US agrees with, but does not ratify, and then imposes border measures? Thus pro-trade arguments may counter those for border tax adjustments. Discussion also took place around whether there is room for a change in focus from searching for a multilateral agreement to one between industries, and the impact of this on WTO viability.

## **SESSION 6 – Panel Discussion on China's Contribution to Successful Global Trade and Climate Outcomes**

This panel discussion focused on how China can contribute to achieving successful outcomes under the Doha round of trade negotiations and the UNFCCC negotiations on climate change? The session's chair, **Guy de Jonquières**, facilitated interplay between the discussants and the audience. It was structured so the two Chinese panellists, Hongchun Shou and Rengang Huang, and Bernice Lee talked on the question on China's contribution, and the remaining three panellist responded.

**Hongchun Zhou**, Director of the Development Research Centre of the State Council in Beijing, began the remarks on China's contribution to climate change, mitigation and adaptation. In particular, he noted that climate change, even the science of temperature rise, is an uncertainty. Like the way forward, there are many different models. To change the Chinese development pattern is a goal of Beijing, but they require outside help. Trade is a way that could be harnessed to achieve this efficiency change. However, another consideration, other than production, has to be changing worldwide consumption patterns and expectations.

**Rengang Huang**, Minister Counsellor of the Permanent Mission of China to the WTO, constrained his comments to what China can contribute to the Doha Round of negotiations. China, he said, is actively involved in multilateral discussions on a broad variety of negotiations on both trade and climate change as well as energy improvement and technologies – so China is already contributing significantly to the search for solutions. China's positive attitude to this constructive dialogue is an indication of a willingness to find solutions. Huang questioned whether the efforts China is making, given its strong national plan on climate change and multilateral engagement, are being internationally recognised. Finally, he raised the question whether focus on the reduction of CO<sub>2</sub> emissions is the best strategy. Huang was of the opinion that further research will clarify what is being talked about and what can be given importance.

**Bernice Lee**, Research Director of Chatham House's Energy Environment and Resource Governance branch spoke on what constitutes a successful international agreement and how China could contribute to optimal outcomes. The measures of success of a good multilateral agreement are fourfold: whether it advances the rapid diffusion of new technologies through larger trade and investment in environmental goods and services and software; the incentive structure that will launch the next generation of solutions; whether equitable measures can be devised to encourage proper and right trade and investment and early action in developing countries; and finally, the fourth measure of success is the ratification process. Lee warned against addressing political concerns before addressing environmental issues in an international agreement. A weak agreement should not be devised and then open for rejection, this time for the right reasons, she said.

If IPCC assessments and dangerous 'lock in' arguments are believed, the decisions of the next 10 to 15 years are crucial. By committing to limiting temperature rise to 2 degrees centigrade mean that developing countries will be asked to deviate from the only known development model. Essentially, therefore, what is being asked is that developing countries help devise a new low carbon development model. The world would benefit if China would agree to collaborate with the world on this model, and the world would need in turn, to help China transform. To do so requires trust. The Chinese market has helped reduce the production cost of clean technology as well as rapidly bringing the technology to the market. This can continue to be instrumental, Lee said, through investment for production of these goods. China also needs to meet promises made on pricing reforms, government reforms, and reforms in the energy sector to help trust-building. Within China there is recognition that a

shift to low carbon technology is inevitable, but the question is when. And Lee urged the international community to convince China that now is the time.

**José Romero**, Head of Section of the Federal Office for the Environment in the Swiss Confederation, stated that currently China is doing a lot, particularly in the UNFCCC negotiations. But in negotiations, the need to balance development with environmental protection determines the position of the country. China has deviated from business as usual and needs recognition for doing so in order to facilitate cooperation. Finally, he cautioned that cooperation and political willingness is key to addressing climate challenges, and if one cannot participate, then do not hinder others cooperation and progress.

**Georges Landau**, head of Prisma Consulting, Sao Paulo, and Senior Counsellor at the Brazilian Centre for International Relations in Rio de Janeiro, noted that the prospect of 800 additional coal fired plants in China is daunting for both China and the world. China's appetite for natural resources, including oil, takes it throughout the world. Chinese demand may even see Brazil become an oil exporter, despite huge technological and financial challenges. China is involved in financing Brazilian infrastructure, including the possibility of building gas pipelines from the Atlantic to the Pacific and China, as most of Brazil's oil resources are 300 miles off shore.

Additionally, China cooperates with Brazil in biofuels, of which there are two kinds, bio diesel and ethanol. The former is not an economic proposition, but a social programme giving employment in the least developed areas of the country and as the production costs are around three times that of imported bio diesel. The latter is a resource Brazil has been cultivating and researching for the last 30 years. It requires a combination of land, water and technology, which Brazil has. China may contribute to the financing of ethanol production with Latin America. The production of biofuels is a way to reduce carbon emissions. Brazil also has developed a technology for flex fuel cars, a combination of petrol, gasoline and ethanol. The production of ethanol as a commodity is a potential south-south cooperative venture, and the role of the private sector from Brazil and China is not to be neglected.

**Gary Clyde Hufbauer**, Reginald Jones Senior Fellow at Washington's Peterson Institute for International Economics, noted that while US President George W. Bush arguably did not have many foreign policy triumphs, the US relationship with China was one of his few successes. The US shares a bilateral trade deficit with China is around US\$ 280 billion.

But one of the US disappointments with the Doha Development Round, Hufbauer maintained, was the Congress view that China is punching below its weight in pushing Doha negotiations. Beijing's bound tariffs are close to its applied rate, but China's collective tariffs are very small – parts are dispersed in grants, others in corruption. So why not cut the applied rates down, he asked, echoing Congressional scepticism. Overall, Hufbauer said, that comparable efforts in fighting climate change have to be made, along with the recognition that climate change is based in science, not emotion or a sense of unfairness.

In the **open discussion** that followed one focus was on how to engage China. It was asked, how China can do more, in what conditions would this happen, and if China could be more honest about the scale of challenges it faces. It was thought that all numbers pointed to China taking on specific emissions reductions from about 2020 to 2030, but that all must be done to encourage China to start earlier.

Likewise, participants asked how to encourage the US to take the lead in concrete climate negotiations and action. Overall, it was agreed that the US should do more and many were hopeful that Obama would. But both major countries, China and the US, need to fully participate.

The Chair posed the question whether there was enough trust in the climate change negotiations. For this, respect for country circumstances is required: ‘differentiation and cooperation’. Especially as one tonne of carbon dioxide does the same damage to the climate, regardless of where it was emitted. But perhaps there is not only one criterion for deciding the weight of responding to carbon emissions. Development costs shall be taken into account, and it is in the global common good to help development be as climate friendly as possible.

### **Closing Remarks**

In closing, **Ricardo Meléndez-Ortiz**, noted that there remains a gap of trust, which will need to be bridged in order to successfully and cooperatively address climate change. This event is aimed at building trust through the exchange of information and frank dialogue, where international negotiation in a formal setting fails. Ricardo Meléndez-Ortiz formally concluded the dialogue by thanking the discussants, participants and organisers for their participation.