# Keynote Address

# "The Kyoto Protocol and Northeast Asia"

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#### Context

How will the Kyoto Protocol and the current carbon market change from 2012? How may they change? The Copenhagen climate conference did not reach any agreement that impacts the Kyoto Protocol for further commitment periods. Therefore, this keynote address will not be able to present a "new framework." Nevertheless, many of the issues "on the table" will be agreeable on in one formulation or another, hopefully sooner rather than later.

After lengthy and difficult negotiations, even with 115 heads of state attending, only a general non-binding political statement, the Copenhagen Accord, was agreed at the last-minute (and that only by five countries<sup>2</sup>). Many observers believe that the Accord did not "seal the (sort of) deal" that was hoped for and that Copenhagen did not turn out to be Hopenhagen (as widely advertised in the city). The reverberations of what many call a failure, and some a small but promising first step, are still echoing through the press.

The future of the Kyoto Protocol and the carbon market as well as their post-2012 architecture therefore remains in limbo for at least another year while the two working groups (AWGs) continue their deliberations, refining their respective draft reports for submission to the Parties in December this year. It is therefore still unclear, at the time of making this presentation, if there will be a new Protocol that covers all Parties, a continuation of the Kyoto Protocol with "alterations", or two (or more) separate Protocols. Parties, in the meantime, will decide whether or not to accede to the Accord or indeed, as some surmise, to continue with one or more separate, politically-led process outside of the UNFCCC.

The United Nations Secretary-General, in his briefing to the UN General Assembly on the outcome of the Copenhagen Conference, identified a number of tasks that the international community should now undertake and suggested examining its lessons and consider how to improve the negotiation process. In that respect, and given the Convention- and Protocol-related positions of the countries attending this conference, there is an opportunity in the coming months, perhaps under the auspices of this Institution<sup>3</sup>, to hold *indicative* discussions leading

to a deeper mutual understanding of the positions of the different negotiating groups. Such discussions could lead to proposals for formulations that satisfy each group, the results of which could be communicated by the participants to their respective group leaders to bolster common positions in advance of the Mexico COP. Such a pro-active and timely approach may help to relieve the tensions and lack of faith in the UN-led process that have built up over the last 12 months and could go a long way to making COP16 a much-needed success.

But I am getting ahead of myself! Nevertheless, I ask that you keep the foregoing ideas in mind as I continue.

After setting the scene with the foregoing appetizer and the following introductory remarks, this keynote address takes a look at the Kyoto Protocol as currently configured and practiced, highlighting the involvement of the countries represented here today. The focus will be upon the carbon market that has emerged since the entry into force of the Protocol in 2005 and the "effect" that the "flexible (market) mechanisms" have had on the countries of North East Asia.

The address will then turn to those results from Copenhagen that may eventually be part of the future regime that may have an impact on the mechanisms of the Kyoto Protocol and the carbon market; this review will include the CMP decisions on the Clean Development Mechanism (CDM) and (briefly) Joint Implementation (JI) as well as the Copenhagen Accord and the draft texts of the two AWGs but in reverse order so as to end on a "high-note". Other important Convention issues such as adaptation, financing and technology will only be addressed in so far as they may impact these mechanisms, and then only in passing.

To add further perspective to tomorrow's discussions, the address will review publicly-announced, post-Copenhagen, national "commitments" from countries of this region; the stress on the word "commitments" is deliberate and its meaning will become apparent later.

A few observations arising from the analysis will conclude this address.

#### Introduction/ background

As recorded by ERINA, the region of Northeast Asia

<sup>&</sup>lt;sup>1</sup> 15<sup>th</sup> Conference of the Parties to the Climate Convention (COP), 5<sup>th</sup> Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP or CMP), 10<sup>th</sup> Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) and 8<sup>th</sup> Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA)

<sup>&</sup>lt;sup>2</sup> China, USA, India, Brazil and South Africa

<sup>&</sup>lt;sup>3</sup> The Economic Research Institute for Northeast Asia (ERINA)

is "diverse in terms of ... socio-economic development and industrial structures" <sup>4</sup>. That diversity translates into different "positions" of these countries in the Kyoto Protocol as all are Parties that have ratified it and established the required institutions

As you will all know, the Protocol has three "flexible mechanisms"; Joint Implementation (JI/ Article 6); the Clean Development Mechanism (CDM/ Article 12); and Emissions Trading (ET/ Article 17) and the Parties to the Protocol are divided into geographic groups that determine for which mechanisms they are eligible. Japan is an Annex I country (AI to the Convention but Annex B to the Protocol) and is therefore eligible to take part in all three mechanisms. Russia, also an Annex I/Annex B country, but one flagged as an "economy in transition", is currently only associated with two of them (JI & ET). The remaining countries of the region (China, Mongolia, the ROK and the DPRK) belong to the non-Annex I (NAI) group and are only eligible to take part in the CDM.

These distinctions are further reflected in the countries' respective roles within the carbon market and the types of carbon credits they can either utilize as part of their efforts to reduce national emissions or benefit from in terms of obtaining carbon finance or cleaner technology. In concrete terms, Annex I countries can buy or sell Assigned Amount Units (ET/ AAUs) and buy Emission Reduction Units (JI/ ERUs—note that Russia can also sell ERUs) and Certified Emission Reduction units (CDM/ CERs) but only to the extent that their national legislation allows. NAI countries can only generate and benefit from the "sale" of CERs.

# The Carbon Market

The "carbon market" is currently a misnomer as there is not (yet) a single market; rather it consists of a number of disparate elements some of which are currently interlinked (i.e. consist of "fungible" carbon instruments), some with relatively lengthy existence and experience (e.g. the European Emissions trading Scheme (EU ETS)), others in early stages and yet others (hopefully) soon to come into existence. It is generally hoped that these separate systems will eventually merge into one global carbon market that will send sufficient carbon price signals and provide the sort of incentives that the private sector requires to participate in emission-reducing activities in a significant manner. This slide [shown as Figure 1 in the Japanese version] shows a mixture of allowance-based (cap-and-trade), project-based, regulated and voluntary market components.

The carbon market was valued at US\$126 billion in 2008 and, according to some estimates, is likely to reach \$670 billion by 2013 and \$1 trillion by 2020. The figures in this slide [not shown] start at entry into force of the Protocol in 2005 with \$11b; thereafter, the market trebled in value the first full year of operation and doubled each year from 2006 up to \$126b in 2008. But the exponential growth stopped in 2009 (current estimate is \$136b) and is forecast to grow at a much slower rate until 2012 partly due to the economic crisis and partly because of post-2012 uncertainties. Thereafter, the belief is that rapid

growth will again be seen but this will largely depend upon the decisions and subsequent rules and regulations implementing them that will now have to be made at a later Conference of the Parties, hopefully at COP16/ CMP 6 in Mexico.

At the time of writing, the carbon market is depressed following the failure of last December's negotiations to conclude an inclusive and legally-binding agreement; European carbon prices crashed by almost 9% on the first day of trading after the Accord was announced. The market is expected to remain "bearish" throughout 2010. While there have been increasing calls for post-2012 clarity in the market over the last year market participants will undoubtedly exert further pressure on the negotiators in the coming year.

We can see from the next slide [shown as Figure 2 in the Japanese version] that the EU ETS dominates the carbon market in terms of the different carbon certificates currently being traded through its internal compliance (capand-trade) certificates—European Allowances (EUAs) the value of which was \$91.9 in 2008 as shown in the previous slide [not shown]. In addition, Kyoto certificates (CERs and ERUs) are allowed into the EU scheme through the European Parliament's Linking Directive (2004/101/ EC); these currently represent 26% of the 2008 value of the carbon market (primary CERs/ pCERs and secondary/ sCERs being 6.5b and 26.2b US\$ respectively). The remainder of the carbon certificates traded in 2008 were in much smaller volumes: ERUs (from JI) at \$0.3b; \$0.4b in the voluntary market; in the USA the Chicago Climate Exchange traded \$0.3b and the East Coast Regional Greenhouse Gas Initiative (RGGI) \$0.2b; in New South Wales (Australia) it was \$0.1b. European governments and Japan started purchasing AAUs from a couple of former Eastern European countries in 2008 to the tune of \$0.2b.

Five of the six countries covered by this conference are currently only "vendors" (i.e. they either already own or can generate) carbon certificates that they can sell to the carbon market. Japan is the only current "buyer" in the region although the ROK is gearing up to become a major regional buyer and trader. Both countries have established national carbon trading platforms.

As is widely known, China dominates the CDM host-country market; 84% of the CER volume in 2008 were transacted there and there are 1,700+ Chinese projects in the "pipeline"; half of these have been recorded since 2008. At the time of writing, the CDM Executive Board has issued 174,537,938 CERs (that is 47.6% of all issuances). Even from different perspectives such as number of registered projects (currently 724) or CERs expected until 2012, China is a long way ahead of other countries.

While the ROK has only a few registered projects (35), it has still generated a significant number of CERs (47,664,437) mostly coming from large-scale, industrial gas projects.

The remaining two NAI countries from the region are still in the very early stages of entry into the CDM market with Mongolia having only 3 registered projects that

<sup>4</sup> ERINA

will generate 71,000 CERs until 2012; the DPRK has no projects so far.

Moving on to JI, Russia has a 68% market share of transacted volumes from a total pipeline of 95 projects with an estimated volume of 198 million ERUs; however, all are still at the "determination" stage so none have so far been registered. Also, despite a huge surplus of Russian AAUs (50% of the estimated potential supply), none have so far entered the market due to there being no clear system in the country for allocating carbon revenues to "green investments" (GIS).

Japan, as a buyer of carbon credits, so far only accounts for 5% of purchases from the project based mechanisms (CDM and JI) as the main buyers of these certificates are European due to the early implementation of the EU ETS Linking Directive and the aggressive entry into the market of a few EU countries with the UK well in the lead. The Japanese government has only recently started to purchase AAUs through its Kyoto Mechanisms (KM) Credit Acquisition Program and has secured two transactions of 70Mt to help towards its Kyoto target. CERs are all being purchased by the private sector in Japan with entities such as Mitsubishi and Marubeni being among the top ten largest buyers. Japanese companies have purchased credits from over 250 registered CDM projects with a 2012 value of 553 Mt CO<sub>2</sub>e. According to the reports from which this data was obtained, Japan has so far purchased carbon credits valued at 620 Mt CO<sub>2</sub>e (i.e. there are some CDM and JI projects that have not yet been registered). Should the Kyoto Protocol be extended in its present form until 2020 and the CERs from the projects carried forward, the value of the currently-purchased CERs bought by Japanese companies from registered projects would rise to 1.3 trillion tons (1,325 Mt).

From the foregoing it is clearly apparent that most of the countries in this region have a significant interest in the regulated carbon market under the Kyoto Protocol.

# The Future Regime?

I will now take a look at issues under negotiation among the Parties to the Convention and the Kyoto Protocol that are likely to be relevant to the carbon market.

As previously mentioned, there were several parallel sessions going on at the same time at COP 15 and, contrary to the generally negative impression that the press is giving, progress was made in some areas, even under the Ad-hoc Working Groups that were unable to finalize their reports and submit them to the COP and CMP for decisions; both AWGs were given a further year for their deliberations<sup>5,6</sup>.

Therefore, we will have to read between the lines of the current "state of play" as reflected in the reports of the various negotiating sessions to get an idea of the types of changes that may eventually occur. I hope that the following will provide useful input to tomorrow's discussions on this topic.

#### The Ad-hoc Working Groups

As previously indicated, there are two ad-hoc working groups, one deliberating under the Convention track, the other under the Protocol track.

#### **Kyoto Protocol**

The draft report of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) still includes a great deal of bracketed text and blank sections; issues relevant to the carbon market include:

- Amendments to the Protocol
  - Text and tables on revised and new emission reduction commitments for the second commitment period (until 2017 or 2020)
  - Carry-over of AAUs into the second commitment period (especially important for Russia)
  - Consideration of carbon units generated from new market mechanisms under the Protocol or Convention;
- Land-use, land-use change and forestry (LULUCF)
  - Making it more inclusive and reducing risks under the CDM
  - Improving and increasing available methodologies
  - Accounting and inventory issues;
- The market mechanisms
  - The possible inclusion or exclusion of carbon capture and storage (CCS), nuclear energy, nationally appropriate mitigation actions (NAMAs), and standardized baselines in the CDM
  - Special attention to countries with less than 10 registered projects
- Simplified modalities for demonstrating additionality and
- Provision of up-front financing for transaction costs (both adopted under the CMP decision on the CDM)
  - Inclusion or exclusion of nuclear energy under Joint Implementation
  - To limit or fully allow units to be banked for future commitment periods
  - Deduction of a share of proceeds for adaptation from AAU transactions
  - Establishment of new market mechanisms under the CMP that allow voluntary participation of Parties and
  - Supplementarity.

In addition, greenhouse gas values, calculation and reporting issues are included as well as a new gas, nitrogen trifluoride (NF3).

# Cooperative actions

The main sticking points in this year's negotiations, still not resolved, are related to capping global emissions (including the "historical responsibility" of developed countries) and actions taken to mitigate them (especially those by developing countries). The former even led to a walkout by the G77 as they considered that insufficient attention was being paid to this issue. In relation to the

 $<sup>^5</sup>$  http://unfccc.int/files/meetings/cop\_15/application/pdf/cmp5\_awg\_auv.pdf

 $<sup>^{6} \; \</sup>underline{\text{http://unfccc.int/files/meetings/cop\_15/application/pdf/cop15\_lca\_auv.pdf}}$ 

former, a few pledges were made in advance of the conference but are widely considered to be cumulatively less than required to stay below a 2°C threshold (more on this later). On the other side, it seems that there is an emerging consensus for mitigation actions by developing countries in so far as actions taken domestically need only be reported through a NAI country's National Communication and those supported by international partners should go through a measurement, reporting and verification (MRV) process and be recorded in a registry on nationally appropriate mitigation actions. How these issues will play out and eventually impact upon the carbon market remains unclear at this time.

The draft conclusions proposed by the Chair of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) also contain a significant number of bracketed and blank sections. The draft includes items directly or indirectly relevant to the Kyoto Protocol and the carbon market such as:

- Financial resources and investment;
- Technology development and transfer;
- · Capacity-building;
- Nationally appropriate mitigation actions by developing country Parties;
- Forestry;
- Various approaches to mitigation, including opportunities for using markets;
- Sectoral approaches and sector-specific actions in agriculture.

I will now briefly take a look at the potential implications of some of these issues but only as they might relate to the post 2012 carbon market.

The draft report, "without prejudice to the possible form and legal nature of the agreed outcome"—i.e. no decision on the form of an agreement has as yet been made—recognizes that the Kyoto Protocol is playing an important role in contributing to the ultimate objective of the Convention and goes on to present various expectations under a future mitigation regime.

Provision of **financial resources** is, *inter alia* closely related to the discussion of internationally-supported NAMAs in NAI countries. The draft report discusses establishment of a climate fund that would support the various initiatives under the Convention; the fund would channel "new and additional, and adequate funding" supplemented by funding from the private sector and "other innovative sources". A Finance Board would monitor financial flows and could, *inter alia*, assist NAI Parties find financial support for mitigation actions and that may, in turn, lead to increased financial flows of project finance; a significant barrier for many CDM and JI projects.

Actions in the **forestry** sector through reducing emissions from deforestation and forest degradation (REDD) are reported to be closer to agreement than other aspects of the draft reports of the AWGs. REDD will most likely be introduced in phases, starting with policies, incentives, strategies, plans and capacity building and demonstration activities. There is a significant interest in REDD from both AI and NAI countries but, as the issue is being considered under the LCA umbrella it is not clear if

or how REDD will relate to the carbon market; however, the AWG-KP is working on an expansion of LULUCF so it is possible that these two related approaches eventually find common ground.

The consideration of sectoral approaches has so far made most progress in the agriculture sector where they are considered in the light of food security and sustainable livelihoods from the perspectives of both mitigation and adaptation. This issue may eventually feed into the carbon market as it is categorized as "sectoral" and could reduce a significant volume of emissions. The whole question of sectoral CDM is still open to debate with strong views for and against. Those against are mostly NAI countries not wanting to take on "commitments" so their antipathy may be mitigated as progress is made under the NAMA discussions. Those that promote sectoral CDM see it as a means of scaling up emission reductions and reducing the transaction costs and approval processes.

Technology development and transfer has the potential to feed into new methodologies and mitigation projects in the carbon market so it is worth keeping an eye on developments under this rubric and the work that would be undertaken in a Climate Technology Centre/ Network, should they be initiated. This development has been particularly lobbied for by China for several years. **Capacity-building** is closely related to technology transfer and the proposed network of centres as well as to most of the other issues under the Convention therefore continued calls for support can again be found in this draft report. Capacity-building is also relevant for mitigation activities and for development of CDM and JI capabilities in many NAI countries, but any support given will be dependent upon the availability of financial resources and, in some cases, to up-front funding of CDM transaction costs (more relevant to Mongolia and the DPRK).

Other aspects of mitigation that are included in the AWG-LCA draft report relate to: "various approaches, including opportunities to use markets" that leaves room to carry on with the market mechanisms of the Protocol, whatever legal form that may eventually take. While aviation and bunker fuels/ shipping are specifically mentioned here, it not clear what other sectors or types of activity that may be relevant to carbon markets, would be included.

Some other issues that have not been resolved include: supplementarity (i.e. the discussion of purely domestic measures in AI countries vs. more flexible approaches such as inclusion of the CDM—for instance, Japan plans to source a high percentage of its future commitment from offshore projects while the EU is considering restricting access post-2012); the role of LULUCF (apart from afforestation/ reforestation and sectoral approaches in agriculture); MRV and compliance.

Once adopted by the two groups of AWG negotiators, the reports will be presented for decisions at COP 16 in Mexico at which time it should be clear whether or not separate tracks will be maintained post-2012 or if there will be a convergence on some or all issues under discussion in both groups.

#### The Copenhagen Accord<sup>7</sup>

The much-maligned Copenhagen Accord is a non-binding political statement that, as such, does not provide a platform to change, expand, extend or replace the Kyoto Protocol in a post-2012 climate change regime. It remains therefore unclear from this document whether an additional, new, protocol is likely to emerge from the negotiations; or indeed, whether a politically-driven, largely bilateral process will take over from the multilateral negotiations under the UNFCCC. Given the way COP 15 moved towards a political summit, that is certainly going to be one of the means of continuing discussions in 2010.

As mentioned earlier, the Accord was reached between the USA, China, India, Brazil and South Africa as a last ditch effort to achieve a result in Copenhagen and was only "taken note of" by the final plenary of the UNFCCC. No "decision" was taken on the Accord. However, it was supported as a compromise document by Japan, Russia and the EU that, together with the ROK, participated in the process.

The unprecedented agreement between the USA and four major NAI countries, represented by the content of the Accord, is arguably the main achievement of COP 15. Several of the issues that are included in the Accord would have an impact upon the carbon market if it becomes legally bonding. More importantly, most of these issues are also contained in the draft reports of the AWGs in nascent form so could very well emerge from negotiations in another form should there be continued dissent around the Accord. Among the issues are:

- Agreement to enhance long-term cooperative action to combat climate change (as indicated in the previous section of this address);
- Recognition of the 2°C ceiling for temperature rises due to global warming;
- Non-Annex I "nationally-appropriate mitigation actions" (NAMAs)
  - If nationally-supported only domestic MRV will be needed
  - If externally-supported, they will be recorded in an international registry and subject to international MRV.
- Incentives for forestry, especially REDD-plus;
- Consideration of "various approaches", including markets.
- Incentives, including the provision of financing, a "significant portion" of which will flow through the "Copenhagen Green Climate Fund"
  - \$30 billion would be available for the period 2010-2012 (as a quick start package) and
  - o \$100 billion a year by 2020; and
- Establishment of a Technology Mechanism.

The Accord is considered by a few heads of state to be a "small but necessary step" but the jury is still out on whether or not this will be sufficient to maintain momentum in 2010.

The final Accord document includes tables for pledges by Annex I and non-Annex I Parties that included those previously announced through the press. China, Japan, Russia and the ROK are Parties from the North East Asia region that have publicly stated their intentions and are already included in those tables.

It should be re-stated here that the Accord is not (yet) an official document of the UNFCCC and is therefore not binding. Should there be insufficient support for it from other Parties in the coming year (e.g. Cuba has already announced it will not accede), it will not be the basis for the post-2012 UNFCCC architecture; neither will the promise it holds for funding and other support be realized through this potential instrument.

#### Other decisions

While the foregoing results of the Copenhagen conference are not as encouraging as many had hoped for, the work of other bodies under the Convention did bring results and progress was made on a number of fronts. For instance, a CMP decision<sup>8</sup> on the CDM made further adjustments to its functioning including issues relevant to the countries of this region that are related to:

- Governance, by requesting the Executive Board (EB) to
  - Take national legislative requirements into consideration but to make sure that these do not create perverse incentives (a reference to the feedin tariff argument that affected the wind power project submissions in China);
- Methodologies, especially as they apply to underrepresented project types and countries
  - SBSTA has been requested to further examine standardized baselines;
- The demonstration of additionality. In this respect
  - There is a new simplified rule that covers renewable projects under 5MW and energy efficiency projects that save up to 20 GwH/ year (may be relevant for Mongolia and the DPRK)
- The EB has been requested to further examine carbon capture and storage (CCS) (a technology that would reduce significant emissions from all countries in this region);
- Registration and issuance in relation to
  - Programmes of activities (PoAs) and
  - o Establishment of an appeals procedure;
- Geographic distribution; for countries with less than 10 registered projects (i.e. Mongolia which has 3 and the DPRK none)
  - Deferring the registration fee until after the first issuance
  - Allocation of loans to support project development, validation and verification that is to be repaid after the first CER issuance.

The COP decision on Joint Implementation<sup>9</sup> was largely about progress in development of its facilities and procedures.

<sup>&</sup>lt;sup>7</sup> http://unfContinuation ccc.int/files/meetings/cop\_15/application/pdf/cop15\_cph\_auv.pdf

 $<sup>^{8} \</sup>overline{\text{http://unfccc.int/files/meetings/cop\_15/application/pdf/cmp5\_cdm\_auv.pdf}}$ 

 $<sup>^9~\</sup>underline{\text{http://unfccc.int/files/meetings/cop\_15/application/pdf/cmp5\_ji\_auv.pdf}$ 

### **Emission Reduction "Commitments"**

Unfortunately, the Copenhagen discussions did not lead to what many had originally hoped for since the Bali forward-looking decisions (Bali Action Plan and Bali Road Map) with predictions being progressively scaled down in the run-up to the conference, then suddenly hope being expressed as so many world leaders agreed to participate, only to be let down in the end by the last-minute Accord developed by so few countries.

The issue of binding emission reduction "commitments" remained a major sticking point in the negotiations; rejected out-of-hand by those countries that are not an Annex I Party. Over the last year however, a new term has emerged among the negotiators that might replace "commitments"—although the application of the word "binding" is still being debated. "Nationally appropriate mitigation actions" or NAMAs are different to "commitments" in so far as the term applies the concept of "common but differentiated responsibilities" so it is not surprising that this approach has gained a broad acceptance among non-Annex I countries.

While negotiations continue at various levels, some countries continue to work on their own policies and legislation supporting their climate change actions. For instance: Brazil has announced that it will maintain its emission reduction target (36.1% - 38.9% below businessas-usual projections by 2020) to be regulated by its new National Policy on Climate Change; Mexico has committed to reduce its emissions by 50 Mt a year starting in 2012 with its own means and funds; South Africa said that it would undertake mitigation actions which will result in a "deviation below the current emissions baseline" of around 34% by 2020 and by around 42% by 2025; and India has set a voluntary target to cut its carbon intensity by 25% by 2020 from 2005 levels. Meanwhile, Australia, Canada, Papua New Guinea and the Maldives have already announced that they will accede to the Copenhagen Accord; presumably they will also announce their pledges at that time.

According to the "Climate Action Tracker" pledges so far put forward by industrialized and developing countries show that the world is headed for a global warming of 3.5°C - 4°C by 2100; much more than the 2°C rise above pre-industrial levels, the widely accepted boundary beyond which scientists do not recommend going and the target mentioned in the Copenhagen Accord. The slide [not shown] shows the reference scenario for emissions (i.e. business-as-usual) at the top, followed by the trend line in red that current pledges will follow and how they are expected to impact global average temperatures. These are compared to targets of 450ppm and 350ppm that are expected to lead "only" to a 1.5°C rise.

The global volume of emissions is, now, not just a problem being caused or continued by developed countries; developing countries currently emit as much as developed countries and therefore have an equal potential and opportunity to mitigate those emissions and that more cost-effectively than the former.

It is worth noting at this point that the countries of this region cumulatively represent almost 34% of global carbon emissions, largely due to China's "leading position"! Considering that agreeing to a maximum overall global temperature rise and consequently to mitigation actions are key issues in the negotiations and that the results of this discussion will affect the future of the carbon market, countries and regions such as this one, that have significant emissions, as well as a keen interest in the carbon market, clearly have a major role to play and interest in the outcome of negotiations.

Now to some related observations on the individual countries in this region.

#### Japan

As mentioned earlier, Japan is an Annex I country. When signing up to the Kyoto Protocol, the country agreed to a target reduction of 6% from its 1990 level of 1,261 Mt<sup>11</sup> CO<sub>2</sub>e/ year. Prior to COP 15, Japan, reported as being a supporter of the Copenhagen Accord, proposed to decrease emissions to 25% below 1990 levels by 2020 and to 60-80% below 2005 levels by 2050. Recent government announcements reconfirmed that the country will stick to its 2020 target and that this pledge will be registered with the United Nations, under the Accord, by the end of January. However, the goal, considered to be "sufficient" by the "Climate Action Tracket" is conditional that all major emitters commit to ambitious targets.

Japan is also in favour of the international carbon market mechanisms and has stated that it would cover up to 60% of its 25% emission reduction target through their use. The country's trial domestic emissions trading scheme, based on voluntary participation and launched in October 2008, should provide sufficient experience upon which to base a transition to mandatory participation and a full-blown scheme that will provide a cost-efficient means of moving towards achieving their target.

#### Russia

As the other Annex I country in this region Russia was allowed to retain its level of 1990 emissions that was 3,323 Mt  $\mathrm{CO}_{2}\mathrm{e}/\mathrm{year}$  and has also been reported to have supported the Copenhagen Accord, even though it is not shown as an originator of the final text.

Russia announced target emission reductions ahead of the Copenhagen conference that were 10-15% below 1990 by 2020<sup>13</sup>, and 30% below 1990 thereafter. But, according to figures recorded by the UNFCCC, Russian emissions are already 33.9% below 1990 levels<sup>14</sup> largely due to the contraction in its economy; therefore, the Climate Action Tracker considers this pledge to be inadequate<sup>15</sup>. The

 $<sup>^{10}~\</sup>underline{\text{http://www.climateactiontracker.org/}}$ 

 $<sup>\</sup>overline{\text{http://unfccc.int/ghg\_data/kp\_data\_unfccc/base\_year\_data/items/4354.php}}$ 

 $<sup>^{12}\</sup> http://www.climateactiontracker.org/country.php?id=1165$ 

<sup>&</sup>lt;sup>13</sup> Another figure of 20-25% has been announced

http://unfccc.int/files/ghg\_data/ghg\_data\_unfccc/image/pjpeg/changes\_in\_ghg\_excluding\_lulucf.jpg

Russian President, in addition, recently announced a long-term goal of 50% reduction from 1990 levels by 2050.

As the last country to ratify the Kyoto Protocol in early 2005, Russia was widely applauded as this led to its entry into force. However, the country has been relatively slow in implementing procedures and measures necessary to benefit from the carbon market. A recent decree<sup>16</sup> and anticipated amendments to a previous resolution<sup>17</sup> are expected to facilitate procedures that will finally open the carbon market for the country.

In addition to the potential for gaining carbon credits under Joint Implementation, Russia could also benefit from the sale of its surplus AAUs. This potential has so far been unrealized as the country has not developed any Green Investment Schemes (GIS's) that would allow the incoming funds from their sale to be "greened"; a condition that buyers are imposing on vendors with AAUs resulting from contractions in the economy rather than from specific measures taken to reduce emissions. However, a recent press report indicates that Russia and the European Bank of Reconstruction and Development (EBRD) are exploring opportunities that will channel funds from AAU sale into an energy efficiency programme.

Given the large volume of surplus AAUs, Russia is naturally interested in an option to carry them forward into future commitment periods; one of the issues still under debate.

#### China

China is one of the authors of the Copenhagen Accord and it has become clear, since the closing days of COP15 that the country is in a very good negotiating position! However, it has been criticized by many of its former Group of 77 colleagues for agreeing to the Accord and for other positions taken during the Conference; but one needs to look at the broader picture that shows an initiative that may pave the way for an inclusive agreement in 2010.

China and the other three NAI author-countries (India, Brazil and South Africa) are key developing countries and the largest in their respective geographic regions. Together with the USA, the other author-country, they represent close to 50% of the world's carbon emissions, notwithstanding the fact that China's emissions per capita are far lower than in the USA. Apart from these NAI countries "politically" agreeing (albeit non-binding) to take on a form of emission reduction commitments (the NAMA discussion), the Accord may also provide the essence of what legislators in the US need to finalize their domestic legislation. This could well be the key to breaking the long-standing deadlock between NAI countries and the USA, not to mention the problems this issue has caused with the Parties to the Protocol, as well as being an extremely

contentious issue that nearly derailed the Copenhagen talks.

"In 2006, China's five-year plan set a target for a 20% cut in the energy intensity of GDP by the end of 2010. ... by the end of last year (2008) it had managed 10%"18 (according to reports this was extended to 16% by the end of 2009). Given that achievement it is perhaps no surprise that China's pre-conference announcement to reduce its CO<sub>2</sub> emissions per unit of GDP by 40% - 45% from 2005 to 2020 was widely thought to be close to business as usual. The Climate Action Tracker rates this target as inadequate<sup>19</sup> given that this would probably be achieved through implementation of current national policies<sup>20</sup> anyway. However, as this is China's own proposed contribution to mitigate climate change according to its national circumstances and will be by its own efforts, further reductions should be possible if financial resources and technologies are made available from AI Parties. And that seems likely given the pre-COP bilateral discussions China held with various developed countries including with the USA and the EU, the latter agreeing to cooperate on CCS that alone would lead to significant additional emission reductions in the country given its current heavy reliance upon carbon-intensive energy production.

# The ROK

The ROK, still a NAI Party although a member of OECD, is also reported to have been involved in discussions of the Accord and recently announced that it will publish its emission reduction target, of 30% below "reference emissions" in 2020 (4% below the 2005 value), under the Accord. According to the Tracker, this pledge is considered to be "medium"<sup>21</sup>.

In addition, the country is widely expected to become an Annex I country post-2012 and is already preparing itself to become a key player in the carbon market. A pilot emissions trading scheme will start operations this month with a target of reducing 1% of 2005 emissions from the installations covered. The country already has a carbon fund. A number of institutions are also actively sourcing projects in the Asia/ Pacific region intent on investing in suitable projects as well as in obtaining carbon credits from them.

Neither Mongolia nor the DPRK have come forward with proposals for emission reduction targets.

#### Recommendation

In conclusion, it is clear that the larger countries in this region have not only the potential to influence negotiations under the UNFCCC and its Protocol, but also to gain significant benefits from the resultant mechanisms: China and Korea embraced the Protocol and the CDM early on; Japan is a major buyer of carbon credits and is

 $<sup>^{15}\</sup> http://www.climateactiontracker.org/country.php?id=1168$ 

<sup>&</sup>lt;sup>16</sup> Decree No. 884-r, 27 June 2009

<sup>&</sup>lt;sup>17</sup> Resolution No. 332

 $<sup>^{18}</sup>$  A long game: China sees opportunities as well as dangers in climate change, The Economist, December  $5^{th}$ - $11^{th}$  2009

 $<sup>\</sup>underline{\text{http://www.climateactiontracker.org/country.php?id=}1152}$ 

<sup>&</sup>lt;sup>20</sup> China has agreed and is implementing a domestic energy efficiency target (-20% per unit of GDP from 2005 to 2010) and a renewable energy target (15% of primary energy by 2020) and various other measures which have an effect on reducing greenhouse gas emissions

http://www.climateactiontracker.org/country.php?id=630

further gearing up its facilities; Russia is poised to enter the market. Only Mongolia and the DPRK have not benefitted but may well do through reforms and future developments of the flexible mechanisms.

Perhaps, considering the Convention-related positions of the countries attending this conference, and their obvious interest in maintaining the market aspects of the Kyoto Protocol despite their different viewpoints, the coming months could be utilized to hold indicative discussions. These, held under the auspices of this Institution<sup>22</sup>, could lead to a deeper mutual understanding of the positions of the different UNFCCC and other negotiating groups.

The objectives embedded in the Copenhagen Accord, co-authored by China with the tacit support of Japan, Russia and the ROK, could be a starting point. Discussions could also review the negotiating texts under the AWGs and suggest alternative formulations that would satisfy the Parties in each group. Results could be communicated by

the participants to their respective group leaders to bolster common positions in advance of the Mexico COP. Such a pro-active approach (if timely) may help to relieve the tensions and lack of faith in the Convention process that have built up over the last 12 months. It could also go a long way to making COP16 a much-needed success while re-directing attention back to the multilateral table. This in turn, could help to avoid a "de-railing" of the Convention process through bilateral or plurilateral negotiations that have already started.

Whatever legal form the discussions in this group and under the UN take, it is in everyone's interest to find common ground and formulations so that acceptable processes can be established that build upon the foundation laid in Kyoto in 1997. Perhaps Japan, again, with its neighbours from this region, could be recognized for being instrumental in bringing a new era of international climate cooperation to bear.

<sup>&</sup>lt;sup>22</sup> The Economic Research Institute for Northeast Asia (ERINA)