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Editor's note

Kyoto breakthrough

At COP-9 a large number of details were discussed that are relevant for the interpretation of the KP. Serious progress was made with regard to *e.g.* LULUCF projects under the CDM and the special climate change fund for vulnerable regions. Also, serious problems still exist. For example, there is the issue between Japan and the EU about the Japanese 'right' to start JI activities in the EU Accession states (where in my judgement the Japanese have a fairly strong case and the EU would be well-advised to at least give in as far as their broad definition of double counting is concerned; see also p.3 in this issue). Nonetheless, detailed KP negotiations seem rather meaningless if Russia is not going to ratify and the KP thus never will be official and real. This is why I prefer to speculate somewhat about the chances that Russia will eventually ratify.

In fact, I just returned from a lecture by the former Soviet-leader Mikhail Gorbachov at 'my' university (Groningen, the Netherlands), who explained both his mid-1980's and present vision on (the Soviet Union and) Russia. In the 1980's, he believed in the necessity to end the Cold War and to guide the USSR through a peaceful transition towards more openness and market functioning (albeit without expecting that the Soviet empire would disintegrate so rapidly). Regarding the present situation, he argued that in the long run there cannot and will not be a completed European unification without first establishing a stronger association between Western/Central Europe and Russia, eventually followed by a Russian EU-membership. Just as his vision of some 20 years ago has so far turned out to be right and implementable, so may happen with his present vision on Europe. In fact, trading energy and energy technology may well turn out to be the most crucial nexus for both regions.

Gorbachov's long-term view, if shared by the present Russian leadership, seems relevant for Russia's position regarding KP ratification. In this view, the most likely historic pattern is that Russia and the rest of Europe will develope a closer collaboration. This could especially take place in the field of energy - Russia has large surpluses of fuels (think of the unprecedented volumes of Russian gas already contracted by Western Europe) - and of energy technology, which Russia needs for exploration, exploitation and its own energy transition. In this context, not ratifying the Protocol would seem at variance with this likely historic development, if only because the KP - via JI and IET - may typically act as a powerful vehicle to transfer new (and green) energy technologies to Russia. (Note, for example, the EIB announcement (see p. 13 of this issue) during COP-9 of a € 500 m financing initiative for mitigation investments; if implemented the largest mitigation fund thus far.)

Besides, on a shorter notice, even if Russia's economy keeps growing at an annual rate of about 7% for the next decade, Russia would most likely still make a lot of money by ratification. As shown elsewhere in this issue, the most likely projection is that the Russian AAU surplus of about 800 $MtCO_2$ in 2000 (data of Energy Information Administration, USA) will shrink to about 275 $MtCO_2$ annually during the first commitment period if the Russian economy would remain on the presently high economic growth path with a low level of investment in energy efficiency improvement. Relaxing both assumptions would mean that Russia's projected surplus becomes even larger.

In addition, a smaller Russian surplus may well drive up credit prices seriously! To illustrate, the net credit demand and supply positions in the year 2000 (about 1500 $MtCO_2$ net surplus of Russia, Ukraine and Central and Eastern Europe together, against a net shortage of about 500 $MtCO_2$ for EU, Japan and rest of OECD (excl. USA) together) may well change dramatically if Russia and Central and Eastern Europe keep growing at their present rates. My back-of-the-envelope calculations suggest that even if the Ukrainian economy would remain stagnant, the year-2000 net suppliers' position of 1500 Mt CO_2 would fall to less than 700 Mt in the first commitment period, whereas it seems very likely that the year-2000 net demand position of the Western economies of 500 Mt will surpass the 700 level during the commitment period. In other words, the high Russian growth is probably crucial in turning the KP credit market from the present buyers market with rather low credit prices into a sellers market with clearly higher prices!

Of course, the above guesstimate disregards the CDM (as well as any applications of the supplementarity principle), but the perspectives on a serious CDM launch seem to have been reduced given the rather restrictive CDM-EB/MethPanel position on acceptable methodologies and the absence, still, of accepted procedures for standardized baseline methodologies. At the same time, the increasing appeal of the green AAU trading concept supports the acceptability for Western governments of acquiring Russian surpluses for fulfilling their commitments. All this adds up to higher credit prices. If, which seems a fairly reasonable assumption, the Russian annual surplus would eventually amount to about 300 Mt CO_2 and credit prices (per ton) would creep up to the € 10-15 range, ratification would involve - next to increasing technology transfers - an € 15-20 bn bonus for Russia possibly without any extra effort.

So, both long-term historic trends and short-term common sense provide fairly strong arguments for Russia to ratify. My bet therefore is that 2004 will be the year of the Kyoto breakthrough.

Catrinus J. Jepma, Chief editor

In this pre-issue :

Japanese Government Critical on the EU ETS Linking Directive

In November last, the government of Japan provided comments on the proposed Directive by the European Commission to link the EU emissions trading scheme with credits achieved through JI and CDM projects. The bottom line of the Japanese comments is that the 'linking directive' will significantly reduce the potential for JI projects in Central and Eastern European States for non-EU Annex I Parties as it reduces the number of installations that could host JI projects.

Overruling

An important issue in the Japanese comments is the phrase in Article 11(*ter*), para.2 of the proposed Directive. According to this Article, "Member States hosting [JI] project activities shall ensure that no ERUs are issued for reductions or limitations of greenhouse gas emissions from installations covered by this Directive." This provision has been included in the proposed Directive in order to prevent double counting. The idea behind this is to prevent situations in which JI projects directly or indirectly reduce emissions of the installations covered by the EU ETS whereas at the same time ERUs are issued for these projects.

The Japanese government find this reasoning far from persuasive. **Mr. Toshi Sakamoto** (Ministry of Economy, Trade and Industry, METI, Japan) explains why: "Before discussing the double counting issue, let me make a more fundamental point. The Japanese government ratified the Kyoto Protocol on the pre-condition that Japan can implement JI projects in Central and Eastern European countries. However, the linking Directive, which is a local rule in the EU, will drastically change this pre-condition. For Japan, this is an issue of principle and my government can hardly accept such overruling."

"Our Environmental Minister, Ms. Koike, discussed this issue with EU Commissioner Ms. Wallström when they met in Milan during COP-9. The Japanese government look forward to having a constructive dialogue with the Commission to find a solution that is consistent with the spirits of the Kyoto Protocol and Marrakech Accords."

Mr. Sakamoto adds: "In our view double counting under JI can be avoided by deducting the amount of ERUs that the JI host country transfers to the investor, from its allowances under the EU ETS. Or, if the JI targeted facility is not covered by the ETS, ERUs could be subtracted from reserves to be set aside for this purpose."

JIQ: Regarding the first of these options, what would be the incentive for an installation in a Central or Eastern European country to start a JI project (with required government approval) while it could make a similar deal under emissions trading bilaterally with an investor (without government approval) who would be interested in the surplus allowances and willing to install clean technology in return?

Mr. Sakamoto: "Let me make two points. First, Japan has no plan to introduce an emission trading system at this stage. Thus a link between the EU and a Japanese system cannot be an option. Second, Japanese companies need to obtain the Kyoto credits for compliance with their own voluntary targets. Therefore, even though they may be able to acquire the EU allowances from European local firms in exchange for technology investment, such local currency does not help them in Japan."

JI Interest

In its comment, the Government of Japan emphasize that many stakeholders in Central and Eastern European countries have in the past expressed their interest in adopting Japanese environmental technologies and know-how through JI. According to the government, the views of these stakeholders have insufficiently been taken into consideration when preparing the Directive.

The comment even suggests that many stakeholders in Central and Eastern Europe would still prefer JI to emissions trading. For example, several stakeholders feel that JI could help improve the environmental standards of Central and Eastern European countries to the levels of the *Acquis Communautaire.*

JIQ: Would this observation hold for most of the Candidate countries? After all, countries like the Czech Republic, Slovakia and Poland were rather quick with shifting attention from JI to allowance trading.

Mr. Sakamoto: "Before submitting our position paper to the Commission, we visited major Central and Eastern European countries to discuss the implications of the linking Directive for JI investments. Also our embassies in all Central and Eastern European countries and Baltic States explained our comments to government authorities responsible for JI. Their reactions clearly indicate that in these countries there still is a strong interest in JI as it is considered an important means to attract foreign investments, particularly from Japan. They feel that JI will help them comply with the EU regulations and further improve their environmental performance.

The Japanese government very much encourages them to introduce EU environmental standards and, therefore, is deeply concerned that the linking Directive could limit opportunities for the Central and Eastern European countries to realize larger emission reductions, which would contradict environmental integrity."

JIQ: Recently, deals were established between Japanese trading houses (e.g. Sumitomo) and Central European countries on 'green assigned amount unit' transactions. What would be the Japanese government's view on this type of deals?

Mr. Sakamoto: "We understand that in the Sumitomo example there is a clear link between the investment and the AAUs. In fact, the AAUs are transferred to Sumitomo in return for its investment. We consider such 'green AAU' transactions as one of the viable options for countries with economies in transition to reduce their emissions. In this regard, we would like to point out that even though 'green AAU' transactions will cause double counting just as JI does, the linking Directive cannot prevent it at all. This is another reason why the linking Directive has not been adequately designed to address double-counting issues."

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EU ETS: Insufficient Incentives for Renewables

Bernhard Schlamadinger[1], Kees Kwant[2],
and the National Team Leaders of IEA Bioenergy Task 38[3]

The EU ETS will constrain emissions of a few thousands of industrial emitters in the EU-25. Emission rights will be distributed largely through grandfathering, and a small share possibly through auctioning. Within the system, emission reductions achieved by market participants at the margin of their operations will be tradable and will have a market price. This implies an incentive for ETS participants to invest in CO_2-free/ neutral renewable energy.

EU ETS impacts on renewables

Allowances under the EU ETS will largely be allocated through grandfathering. This implies that installations only have to pay when their CO_2 emissions surpass the 'grandfathered' quota. But even then, the average cost of fossil-based energy production will not increase in proportion to the ETS market price for CO_2. For example, a power utility with stable CO_2 emissions receives free allowances at a level of 90% of its past emissions. For compliance it buys allowances to cover for the remaining 10% (or reduces its emissions by 10%). The costs of this can subsequently be spread over all electricity produced so that the cost increase per kWh can be reduced, *i.e.* by a factor of ten in this example.

The system of grandfathering creates an uneven competition between emission-reduction projects set up by ETS installations (generally relying heavily on fossil fuels) and projects undertaken elsewhere (*e.g.* new independent heat and/ or power producers, small wind farms, or local bio-energy cooperatives). For ETS installations, the CO_2 market price (*e.g.* € 10/t) determines the optimal marginal investment option. In contrast, entities outside the ETS that invest in renewables hardly benefit from CO_2 reduction because they are treated as non-emitters. This implies that they cannot claim emission reductions and thus not sell emission quotas. Their only advantage from the ETS will be that the *average* price of electricity or heat delivered by their competitors under the ETS will become somewhat higher - but, as explained above, due to grandfathering this price increase does not fully reflect the actual CO_2 market price.

What about JI?

In addition to the ETS Directive, the European Commission recently proposed the draft 'Linking Directive' to allow JI/ CDM credits on the EU ETS market. With the proposal, the drafters of the Directive, *inter alia*, aimed at:

- providing incentives for emission reduction projects, such as bioenergy and other renewables, by
- making credits from JI/CDM projects fungible with ETS allowances, but with a view to
- avoiding double counting.

The proposed Linking Directive only allows unrestricted crediting for JI projects set up in ETS countries until the end of 2004. After that, JI projects are only possible if they do not "affect directly or indirectly emissions at installations covered by the [ETS] Directive ...". This provision is to prevent double counting of JI credits and ETS allowances.

This restriction will affect the potential for JI projects set up after 2004. For example, if a wind-energy project undertaken by a non-ETS independent power producer reduces electricity demand from the local ETS-covered installation, the wind farm may be excluded from JI as it would indirectly help the ETS participant to achieve compliance. Thus, most if not all JI investment may have to take place in countries not participating in the ETS. Renewable energy projects outside the ETS but inside the ETS-covered countries would loose their eligibility for receiving CO_2-related funding.

Possible amendments?

Above it is explained how the present ETS and Linking Directive texts could result in unequal competition between renewables investments inside and outside the EU ETS. How could the Directives be amended or implemented nationally to better internalise the CO_2 benefits of renewables? We would suggest (one of) the following options:

- Auction all EU ETS allowances. However, this would entail significant cost to ETS participants and is thus unlikely to happen.
- Put aside part of the overall allowances for distribution among renewable energy industries outside the ETS that achieve demonstrable emission reductions. However, double-counting concerns would remain.
- Earmark a share of the allowances allocated under the ETS that could be passed on to local renewable industries not covered by the system. For example, an independent power producer outside the ETS selling CO_2-neutral electricity to the local ETS-covered installation could receive allowances from the installation. The drawback of this option is that there would be hardly any incentive for the installation to purchase power from the independent power producer, because the transfer of allowances would even out with the installation's internal emission reduction.
- Allow crediting of 'domestic offset projects' and JI projects even if they affect emissions from ETS participants. In exchange, the overall ETS emissions cap of the respective country could be strengthened in accordance with the expected (or monitored) level of double counting. This means that in the proposed Linking Directive *indirectly* be deleted from the phrase: "no ERUs be issued for reductions that affect directly or indirectly emissions at installations covered by the Directive", and that domestic project-based offsets would have to be admitted in the ETS.
- Define 'islands' where the impact of JI projects on emissions from ETS participants, and thus double counting, is considered to be minimal. Examples of such 'islands' could be: local district heating networks, projects to reduce emissions of other GHGs, or the production of liquid biofuels.

Conclusion

The present drafts of the ETS and Linking Directives contain insufficient incentives for renewables. Despite the existence of EU Directives supporting electricity from renewable sources and liquid biomass fuels, it is unlikely that these would remove the imbalance between the treatment of those renewable energy investments by sources covered by the EU ETS and those not covered by the system. Therefore, additional policy measures are required.

1 Joanneum Research, Austria, e-mail: bernhard.schlamadinger@joanneum.at
2 NOVEM, Netherlands' Agency for Energy and Environment, www.novem.nl
3 See www.joanneum.at/iea-bioenergy-task38/participants

The **Joint Implementation Quarterly** is an independent magazine established to exchange the latest information on the Kyoto mechanisms and emissions trading. *JIQ* is of special interest to policy makers, representatives from business, science and NGOs, and staff of international organizations involved in the operationalization of the Kyoto mechanisms, including emissions trading.

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Abbreviations

AAU	Assigned Amount Unit
AIJ	Activities Implemented Jointly under the pilot phase
Annex A	Kyoto Protocol Annex listing GHGs and sector/source categories
Annex B	Annex to the Kyoto Protocol listing the quantified emission limitation or reduction commitment per Party
Annex I Parties	Countries with a quantitative CO_2 target (OECD, Central and Eastern European Countries, listed in Annex I to the UNFCCC)
Annex II Parties	OECD countries (listed in Annex II to the UNFCCC)
non-Annex I Parties	Countries without a quantified CO_2 target (also non-Annex B)
CDM	Clean Development Mechanism
CDM EB	Clean Development Mechanism Executive Board
CEE	Central and Eastern Europe
CER	Certified emission reduction (Article 12 Kyoto Protocol)
COP	Conference of the Parties to the UNFCCC
COP/MOP	COP serving as the Meeting of the Parties to the Kyoto Protocol
ERPA	Emission Reduction Purchase Agreement
ERU	Emission reduction unit (Article 6 Kyoto Protocol)
ERUPT	Emission Reduction Unit Procurement Tender (in the Netherlands)
EU ETS	European Union Emissions Trading Scheme
GHG	Greenhouse Gas
IET	International Emissions Trading
JI	Joint Implementation
KP	Kyoto Protocol
LULUCF	Land Use, Land-Use Change and Forestry
PCF	Prototype Carbon Fund (World Bank)
SBSTA	UNFCCC Subsidiary Body for Scientific and Technological Advice
SBI	UNFCCC Subsidiary Body for Implementation
UNFCCC	UN Framework Convention on Climate Change

JIQ Meeting Planner

17-21 January 2004, Berlin, Germany
The European Conference For Renewable Energy: 'Intelligent Policy Options'.
Contact: Mark Timmer, European Forum for Renewable Energy Sources, tel.:+3225461948, fax: +3225461934, e-mail: eufores@eufores.org, Internet: www.eufores.org

29-30 January 2004, London, UK
5th Annual Event: Emissions Trading, Analysing the National Allocation Plans and the Practical Implications of the EU Trading Scheme.
Contact: Ms. Jacquelyne Muhati, Marcus Evans, 4 Cavendish Square, London W1G 0BX, tel.: +44(0) 20 7647 2304, fax: +44 (0) 207637 0843, e-mail: jacquelynem@marcusevansuk.com, Internet: www.marcusevans.com

23-24 March 2004, Brussels, Belgium
IQPC conference: European Emissions Trading 2004.
Contact: Mr Gareth Pearce, IQPC, Anchor House, 15-19 Britten Street, London SW3 3QL, UK, tel.: +44 20 7368 9333, fax: +44 20 7368 9303, Internet: www.iqpc.co.uk

20-21 April 2004, Amsterdam, the Netherlands
Point Carbon: Carbon Market Insights 2004.
Contact: Mrs. Marte Nordseth, tel: +47 907 71 668, e-mail: conference@pointcarbon.com, or Mr. Ian Roch tel.: +4797539036, e-mail: conference@pointcarbon.com, Internet: www.pointcarbon.com

5-7 May 2004, San Diego, USA
GHG Registries, Climate Policy and the Bottom Line.
Contact: Gwendy Donaker, California Climate Action Registry, tel.: +1(213)8916920, fax: +1(213) 6236716, e-mail: gwendy@climateregistry.org, Internet: www.climateregistry.org

24-26 June 2004, Paris, France
Greenhouse Gas Emissions and Abrupt Climate Change: positive options and robust policy.
Contact: International Institute for Applied Systems Analysis (IIASA), A-2361 Laxenburg, Austria, tel.:+4322368070, fax: +43223671313, Internet: www.iiasa.ac.at

January-May, a.o. Egypt, Jordan, Morocco
6 regional workshops from the second phase of the UNEP project: Capacity Building for CDM.
Information: Sami Kamel, e-mail: sami.kamel@risoe.dk, Internet: www.cd4cdm.org

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