PRESSING THE SURPLUS RESET BUTTON

APPROACHING THE AAU ISSUE WITH A STRATEGIC COMPLIANCE RESERVE AND OPTIMIZED TRADING

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Introduction and Context

The issue of surplus emissions permits (Assigned Amount Units i.e. AAUs) under the Kyoto Protocol is emerging as one of the crucial sticking points in the negotiations around the future climate regime. Countries of Central and Eastern Europe (CEE) and the Former Soviet Union (FSU) possess billions of "windfall" emissions permits that can be traded internationally, or carried over into a potential second commitment period of the Kyoto Protocol. This is providing cover for arguments by the EU and Japan that the Kyoto Protocol should be replaced; developing countries, while adamant on the continuation of Kyoto, are also becoming increasingly cognizant of this potential threat to the environmental integrity of the regime and to their market share of global emissions trading.

Emissions plummeted in CEE and FSU countries after the collapse of economic activity post-1990. Over the course of the late 1990s and 2000s, economic activity recovered in these countries, while emissions were kept well below 1990 levels. In CEE countries, dramatic reductions in energy intensity were leveraged by (differing degrees of) economic restructuring and energy market reforms.[1] In the case of Russia the dynamic was more spurred by the increase of the value of the GDP relative to energy consumption due to the peaking oil price.[2]

Moreover, if their 2020 emissions caps are set above emissions projections as suggested by their pledges under the Copenhagen Accord[3], countries like Russia and Ukraine could generate significant surpluses in the second commitment period. In total, a surplus of 10-13 Gt could accumulate in the period 2008-2012; and a further surplus of up to 4 Gt accrue to Russia, Ukraine and Belarus during 2013-2020. Theoretically, both these emissions surpluses would equate to a weakening of developed country emissions targets by about 6-12% compared to 1990 emissions levels if traded.[4] Clearly, addressing this problem is both politically and environmentally necessary, if a second commitment period of the Kyoto Protocol is to be agreed to.

The Russian Position

Russia's early reticence towards the international climate regime turned into more active participation as a result of the allocation of the surplus and the potential to use the Kyoto mechanisms offered in the Kyoto Protocol[5]; the issue of surplus allowances has dominated the Russian position ever since. Since the run-up to the Copenhagen climate talks, Russia's preference has been to decline discussing the issue until after 2012 arguing that the AAUs are not linked to the discussion of future commitments.[6] In general, the Russian position in the international talks is characterized by two contradictions, which may indicate potential points of negotiation on the surplus issue. Firstly, Russia is very strongly opposed to a continuation of the Kyoto Protocol, with both Prime Minister Putin[7] and President Medvedev[8] making recent statements to that effect. Yet at the same time, Russia is advocating for recognition of countries' overachievement of their Kyoto targets, and the related operational elements of the Kyoto Protocol (i.e. its Article 3.13 and decisions 13/CMP.1 and 27/CMP.1), in the development of a new agreement to replace the Kyoto Protocol.[9]

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[1] See e.g. the summary in Stefan Buzar, "Energy Poverty in Eastern Europe: Hidden Geographies of Deprivation", Ashgate, 2007, ff. 54.
[2] Anna Korppoo (forthcoming). "Russia's climate commitments: Which GDP growth contributes to emissions?" Accepted for publication by the International Association of Energy Economists Energy Forum newsletter.
[3] Beyond the international analysis of emission projections, two out of three Russian official projections do not reach the -25% pledge by 2020 (see Figure 1).
[4] See e.g. Michel den Elzen, "Too Hot to Handle: The Emissions Surplus in the Copenhagen Negotiations", The Netherlands Environmental Assessment Agency, 2009.
[5] Arild Moe and Kristian Tangen, "The Kyoto mechanisms and Russian climate politics", The Royal Institute of International Affairs., 2000, pp. 15-17.
[6] Earth Negotiations Bulletin, Vol. 12. No. 436, 7 October 2009.
[7] "Tackling global warming requires a new universal agreement, believes Prime Minister Putin. Mere continuation of the Kyoto protocol is absolutely not a solution. 'We believe there is a need to aim at forming a unified universal agreement for a post-Kyoto period, and such an agreement would certainly stimulate real shifts in terms of ecology',² the head of the Russian government said…", http://rt.com/Politics/2010-02-10/putin-extending-kyoto-protocol.html
[8] "All countries, including developed and developing economies, should reach an agreement, or, if we do not agree on this [the common terms of carbon emissions reduction], Russia will not prolong its participation in the Kyoto agreement - you cannot have it both ways," the president said. http://en.rian.ru/Environment/20100416/158607110.html
[9] See a submission by the Russian Federation on the negotiating text FCCC/AWGLCA/2010/6 from 17.05.2010. Available at: http://unfccc.int/resource/docs/2010/awglca10/eng/misc02a02.pdf. "Статья ст. 3.13 Киотского протокола, а также решения 13/CMP.1 и 27/CMP.1 определяют детали переноса единиц сокращений на последующие периоды обязательств. При разработке подходов по установлению обязательств стран по сокращению антропогенных выбросов Российская Федерация полагает целесообразным опираться на проработанные, имеющие практическое применение элементы Киотского протокола, в частности

In the event that Parties choose to pursue a new, universal agreement, Russia would lose its leverage as the key arbiter of the Kyoto Protocol's fate, as well as the legal provisions for the carry over; moreover, doubts have been raised about whether a new agreement would contain international allocations at all. Indeed, Kremlin aide and Russia's G8 sherpa Arkady Dvorkovich has stated "… [a]s we want all countries to take part in the new agreement, it means that we are abandoning the Kyoto protocol, and if we are abandoning it, there's nothing [i.e. surplus AAUs] to move over… ".[10] In the scenario of a one-track outcome, it is thus unlikely that Russia would be able to negotiate itself as advantageous an outcome as that which it currently enjoys under the Kyoto Protocol.

Secondly, Russia is positioning itself as the champion of other Economies in Transition (EITs). It is likely that its voluntary Fast Start Financing[11] will be directed to the region of the FSU, and it consistently calls for mechanisms to aid EITs combat climate change, as well as the simplification of procedures for countries to join Annex B and use the Kyoto mechanisms. Indeed, Russia is also itself showing increased interest in the flexible mechanisms of the Kyoto Protocol, and has just approved its first batch of JI projects. There may be thus an apparent contradiction between Russia's desire to support its fellow EITs, and its goal of replacing the very instrument, the Kyoto Protocol, which recognizes and rewards their "early action". For the EITs, and Russia in particular, the bottom line is an instrument which binds the BRICs to their pledged actions; without progress on this front, it would likely be politically impossible for Russia or other EITs to agree to a second commitment period. Nonetheless, the desire of FSU countries to participate in the Kyoto mechanisms, and Russia's self-adopted role as the leader of this group, may be a potential leverage point in negotiations on Kyoto's future.

The EU's Position

The other major player on the issue of surplus AAUs is the EU, which will accrue a sizeable AAU surplus 2008-2012 as high as 2.5 Gt,[12] mainly but not exclusively to CEE Member States. The EU has already disallowed the use of first commitment period AAUs after 2012, for both ETS and non-ETS compliance.[13] In CEE countries, international emissions trading (IET) of surplus AAUs has so far been backed by Green Investment Schemes which supports low-carbon development in this region. Although marred by early scandal, these Green Investment Schemes are growing increasingly robust and sophisticated, at least in most EU Member States.[14] Due to the low price and increasing confidence in tested GIS in CEE countries, AAU trading is taking on an increasing market share, accounting for USD 2 billion in 2009 compared to USD 3.3 billion in the primary CDM, JI and voluntary offset markets[15]

Yet the EU has been unable to develop a common position on the carry over of AAUs, due to the strident opposition of CEE Member States. CEE Member States have opposed an EU level solution similar to the burden sharing arrangement; instead their strategy is to seek cover alongside Russia on this issue. In reflection of this, the 2009 EU Council conclusions stated that the AAU issue "must be addressed, in a non-discriminatory manner treating European and non-European countries equally…". However, the EU Commission has recently proposed that more cohesion policy funding from the EU budget be directed to low-carbon investment, in part as "an alternative to the use of surplus Assigned Amount Units (AAUs) as a source of funding, which undermines the environmental integrity of the carbon market".

по вопросам соблюдения обязательств". [Article 13/3/ of the Kyoto Protocol and likewise decisions 13/CMP.1 and 27/CMP.1 determine the details of the carry over of reduction units to the next commitment period. During the development of approaches to determine countries' commitments for the reduction of anthropogenic emissions the Russia Federation considers it advisable to be guided by the operational elements of the Kyoto Protocol already developed, in particular concerning compliance with [i.e. previous] commitments]. Authors' translation.

[10] "Roadmap of further talks to be adopted at Copenhagen climate conference – Dvorkovich", 08.12.2009, Interfax

[11] Moscow Times, 18 December 2009, 'Russia to Offer $200M to UN Climate Fund'. Available at http://www.cdi.org/russia/johnson/2009-231-8.cfm.

[12] See a submission by Spain and the European Commission on behalf of the European Union and its member States, in FCCC/KP/AWG/2010/MISC.2, available at http://unfccc.int/resource/docs/2010/awg13/eng/misc02.pdf (Submission received 30 June 2010)

[13] Under the revised ETS direct, ERUs, CERs and EUAs can be surrendered for compliance. In the non-ETS sector, compliance is measured statistically based on annual verified emissions, without recourse to the surrender of units, apart from the use up to defined limits of CERs and ERUs.

[14] See e.g. Andreas Tuerk *et al.*, "Green Investment Schemes: First experiences and lessons learned", 2010.

[15] See, The World Bank, "State and Trends of the Carbon Market 2010".

Without a common position (firewalling EU compliance post 2012 from the first commitment period AAU surplus is not enough) the EU is unable to work towards an international solution to the AAU issue; without EU engagement, no pressure can be brought to bear on Russia and others. Discussions over the EU budget, or effort sharing arrangements as EU climate policy continues to develop,[16] may be options to build a common EU position. It seems unlikely that developed countries will allow first commitment period AAUs into their compliance regimes post 2012.[17] Given therefore the huge uncertainty over the value of AAUs post 2012, CEE member states of the EU might be well advised to engage with negotiations on alternatives in the EU.

A Strategic Compliance Reserve

Russian arguments for the carry over are often based on the supposed difficulty of predicting long term emissions trends, and assumptions of sustained economic and attendant emissions growth post 2012. For example, all emission scenarios from Russia's most recent National Communication do not foresee a peak and decline before 2030, and all exceed Russia's high end Copenhagen pledge after 2020 (figure 1). This was reflected for example in Russian officials' consternation over the 2009 G8 agreement, to which President Medvedev subscribed, that developed countries should reduce emissions by 80% by 2050.[18] Russia's surplus is seen as a hedge against future expected emissions growth. Given this, one avenue may be to establish a non-tradable strategic compliance reserve from the first commitment period surplus.

The validity of these concerns can certainly be questioned: economic growth scenarios may be overly optimistic, and the potential to even further decouple economic growth from emissions underappreciated. Regardless of their validity, the domestic political pressures are genuine. In general, administrations may often be inclined to over-estimate economic growth trends; in the case of transition economies, this may be exacerbated by the high political and social priority given to economic catch up, and the legacy of (optimistic) top-down economic planning. In addition, the perception persists among some policy makers that economic growth is a rigid function of the input of natural resources. The concept of a non-tradable strategic compliance reserve may be attractive because it addresses these concerns which underpin Russian GDP and emissions projections.

In order to establish a strategic reserve, several issues would need to be addressed. Firstly, how large a reserve would be necessary? Secondly, how to ensure that the reserve is non-tradable so as to prevent the "laundering" of first commitment period AAUs through the sale of second commitment period AAUs? Thirdly, how to retain the incentive for transition economies to further mitigate emissions, rather than merely tapping the reserve? Fourthly and relatedly, how to define the lifetime and/or roll-over of the strategic reserve?

One option which might address some of these concerns would be to add the first commitment period surplus to the commitment period reserve for 2013-2020. From the Russian perspective, restricting sovereignty over its surplus would certainly be politically sensitive. However, if Russia were required to maintain a commitment period reserve based on its current emission level plus whatever is carried over from the first commitment period, it would still be able to trade its second commitment period over-allocation (see table 1 below) or leverage deeper domestic emission cuts to make AAUs available for sales.

[16] For a potential 30% target, the EU Commission has proposed to cut the ETS cap by withholding 15% of allowance auction rights in a reserve account, which would then be cancelled; one potential option to explore could be a differentiated abrogation of auction rights, linked *inter alia* to the size of each member state's surplus. This kind of arrangement has president, as the EU already has a differentiated system for allocating auction rights post 2012 as part of its effort sharing agreement.

[17] With the possible exception of Japan. Japan is, however, sensitive to public pressure, and could likely be pressured into a gentleman's agreement not to use first commitment period AAUs post 2012.

[18] "Russia Rejects G8 Emissions Cut Target – Kremlin Aide", RIA Novosti 07.08.2009, http://en.rian.ru/russia/20090708/155474378.html

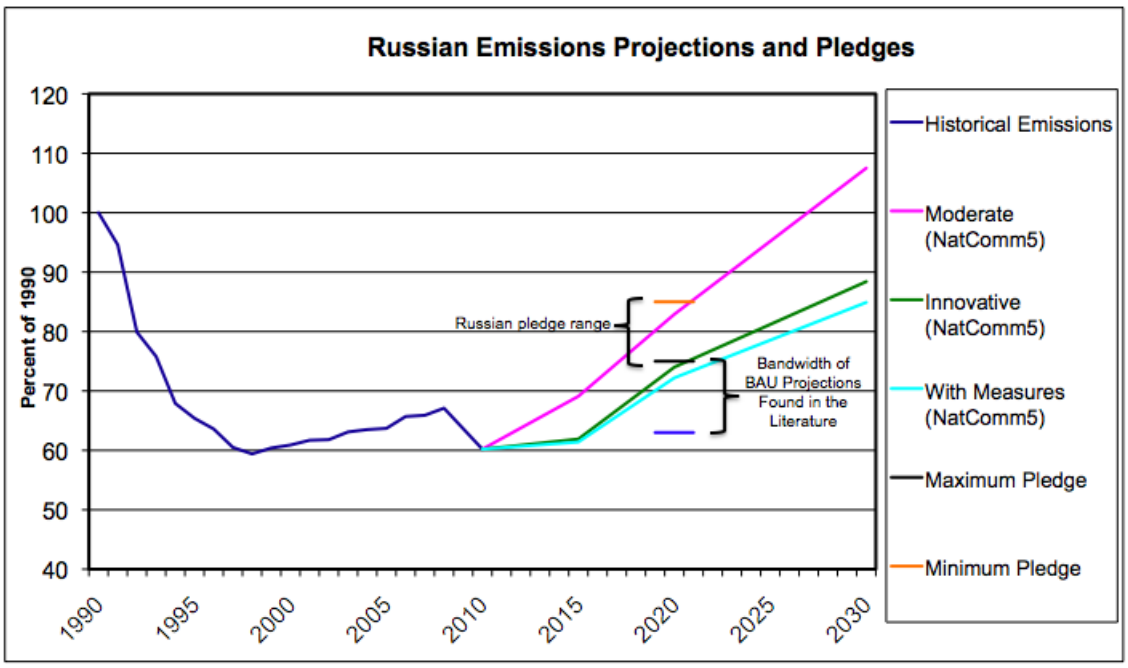

Figure 1: Russian Emissions Projections and Pledges
This graph shows historical emissions and three scenarios to 2030 from Russia's 5th National Communication. It also shows Russia's maximum 2020 pledge of -25% and minimum pledge of -15%, and the bandwidth of BAU emissions projections found in the literature, from -25% by 2020 from the 2009 World Energy Outlook to -37% by 2020 from the Netherlands Environmental Assessment Agency.

Optimized Trading

In Copenhagen, Russian officials gave repeated assurances that Russia was not interested in selling AAUs in quantities that might endanger the carbon market. Indeed, limiting the supply of AAUs to the market would raise the price; theoretical modeling by Den Elzen *et al.* delivers a global carbon price of just 5 USD/ton with full banking and trading in the second commitment period; revenues to surplus holders and the global carbon price are higher under scenarios with a strategic reserve or optimized banking. Setting aside a non-tradable strategic compliance reserve from first commitment period AAUs, and trading instead in the second commitment period over-allocation, may thus be considered akin to an "optimal banking strategy" for surplus holding countries.

As shown in table 1 below, there is a high likelihood of another over-allocation for Russia and other transition economies in the second commitment period. In the case of Russia, this could be exacerbated by windfall RMUs from forest management, estimated at 330 Mt per year or 10% of 1990 emissions. These could be surrendered for compliance instead of AAUs. But it is hard to see Russia and other EITs agreeing to a second commitment period without some form of tradable surplus. Equally, other Annex B countries and developing countries are unlikely to allow the full surplus to remain in the system.

In addition, political tension around the MRV of developing countries' actions (both supported and unsupported) and the lack of transparency around Article 17 emissions trading may arise. Admittedly, developing international modalities to improve transparency and environmental integrity of Article 17 emissions trading may be politically difficult; AAUs are sovereign property and restrictions on the use of revenue from their sale may be seen as an untenable encroachment on national sovereignty. However, greater transparency and environmental integrity in GIS is in the interests of supplying countries, as it is likely to be key to attracting any demand post-2012. Combining the concept of the strategic reserve with an option of voluntarily applying internationally set guidelines for GIS, i.e. optimized trading, might be a feasible compromise.

Table 1: Russian Emissions Scenarios and Allocation, 2013-2020.[19]

Emissions Scenario	Emissions in 2013*	Emissions in 2020*	QELRO§	Annual Surplus 2013-2020[a]
with measures[b]	60.9	72.2	73	252.1
innovative[b]	61.5	74	73	213.5
moderate[b]	63.2	82.9	73	50.7
literature high[c]	64.6	75	73	104.9
literature low[d]	61	63	73	360.4

*as a percent of 1990; §assuming a -25% target and allocation from 2007 levels, expressed as a percent of 1990, see FCCC/TP/2010/3; [a] Mt CO_2eq/yr on average 2013-2020; [b] National Communication of the Russian Federation, 2010; [c] IEA WEO 2009; [d] den Elzen *et al.* "Evaluation of the Copenhagen Accord", 2010.

Conclusion

The issue of surplus AAUs is shaping as a crucial sticking point in negotiations around a future climate regime, and it is hard to see a second commitment period of the Kyoto Protocol being agreed without it being addressed. At the same time, a one track outcome may soften, but still not prevent, the political clash around this issue, as Russia and other EITs are seeking to anchor their interests (specifically the overachievement on Kyoto targets) in negotiations around a potential new legal agreement.

The Russian position contains several contradictions which may provide an entry point for negotiation: on the one hand, it champions the cause of economies in transition; on the other, it is strongly opposing the Kyoto Protocol, which recognizes and rewards their "early action" from the 1990 base year. As discussed above, a new legal agreement is unlikely to be as advantageous to EITs as Kyoto. Framing the approach discussed here (a strategic compliance reserve and optimized trading under Article 17) as an EIT specific mechanism may address the political importance of recognizing "early action", as well as Russia's desire to play a positive role in this region.

Developing countries are becoming increasingly aware of this issue, especially of the direct competition between AAU trading and CDM, as the former picks up since 2008.[20] In this regard, mere insistence on a second commitment period of the Kyoto Protocol may become increasingly untenable; developing countries will need to engage in negotiations to find a workable solution. Likewise, the EU must solve its internal differences around the surplus issue to drive such solution in the international level. It is hard to see how the CEE member countries could really benefit from the carry over given the likely sub-prime value of these assets post 2012, and the fact that they cannot use them for their own post 2012 compliance. Therefore, CEE member states of the EU might be well advised to engage with negotiations on alternatives in the EU.

[19] The estimate given in the National Communication of the Russian Federation for 2010 emissions has been used and extrapolated linearly to the respective 2020 estimates; where intervening data points are given these are incorporated.

[20] The World Bank, "State and Trends of the Carbon Market 2010", pp. 51.

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