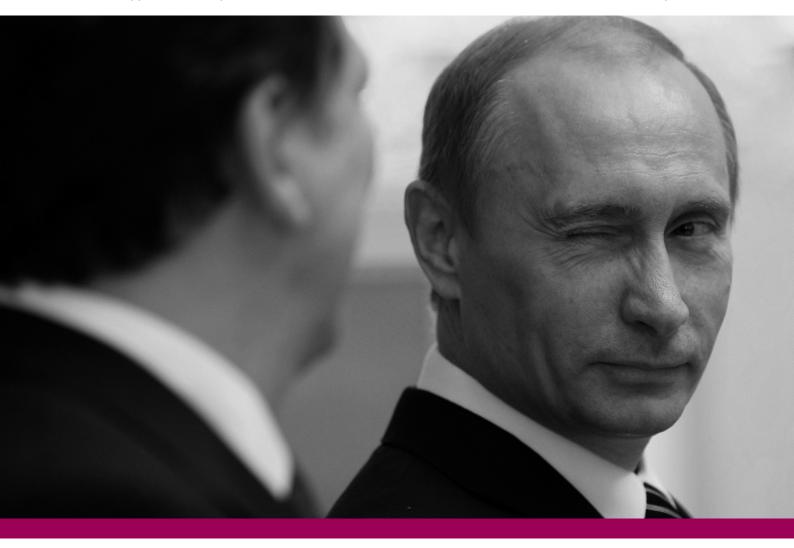
THE DEAD SOULS:

HOW TO DEAL WITH THE RUSSIAN SURPLUS?

Anna Korppoo, Thomas Spencer

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HOW TO DEAL WITH THE RUSSIAN SURPLUS?



Anna Korppoo Senior Researcher The Finnish Institute of International Affairs

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Thomas Spencer Advisor on Russia's climate policy Germanwatch

- The 10-15% reduction target by 2020 announced by Russia reflects neither the country's efficiency potential, nor modeled emissions trends. With emission reduction measures, Russia could commit to a target of ca. -30% by 2020.
- Transferring the surplus emission allowances Russia gained under the Kyoto Protocol due to the economic restructuring of the 1990s represents an extreme threat to both the environmental and market integrity of the Copenhagen agreement as it could be used to offset real domestic emission reduction measures in other countries. But it seems politically unlikely that Russia would join without transferring the surplus under the Copenhagen agreement.
- Countries should recognize the threat posed by the surplus, and offer a cooperative strategy to deal with it. However, pushing through a 'cancel or discount' approach to the surplus problem by three-quarter majority, which could be brought together without the co-operation of the surplus-holding countries, should be kept as a reserve strategy.
- More ambitious targets beyond the 25–40% suggested by the IPCC for the Annex I industrialized country group, especially for the surplus holding countries including Russia, could absorb the transferred surplus. However, given the current low pledges of Annex 1 countries, higher targets are unlikely to absorb the whole surplus, and therefore, a basket of approaches should be applied.
- To gain credibility on this issue of vis-à-vis Russia and to avoid Russia setting the tone, before Copenhagen the EU must adopt an internal solution to deal with the surplus of its new member states.
- If expecting to transfer the surpluses, the other surplus holding countries including Russia could announce national surplus use plans prior to the Copenhagen climate talks.
- In order to minimize a scenario of Russia blocking the Copenhagen process in the final hours, key countries should publically engage Russia on climate and the Copenhagen talks. Important Annex I countries, especially the US, should send very high-level representatives to Moscow like they have sent to China and India.

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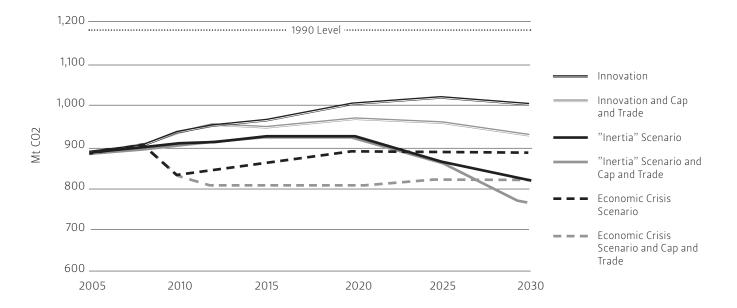


Figure 1: Effect of The Crisis on Russian Emissions Projections in the Energy Sector
Source: Presentation by George Safonov, Moscow High School of Economics, Side Event at the UNFCCC Talks, Bonn, June 2009.

Russia is the world's third largest emitter of greenhouse gases, and an important exporter of fossil fuels. However, in the international climate negotiations, the dialogue of the US with both China and India is seen as the key to success. Even though this has sidelined Russia in comparison to its decisive position in bringing the Kyoto Protocol into force, it will be difficult to come to an agreement in the Copenhagen climate talks without Russia. The absence of meaningful participation by Russia could weaken the ambition of other developed countries, and possibly lead to emerging economies refusal to commit. Under the Kyoto Protocol Russia and several other countries received large surpluses of emissions allowances, due to the collapse of their emissions following economic restructuring in the 1990s. The highly politicized issue of whether these surplus allowances will be transferred to the subsequent commitment period is likely to be one of the crunch issues in Copenhagen. This paper outlines options how the surplus could be dealt with.

During a TV interview in June 2009, President Dmitry Medvedev announced that the Russian Federation could limit its greenhouse gas emissions growth to -10 to -15% by 2020, compared to 1990 levels. At the most recent UN climate negotiations in Bonn in August 2009, the Russian delegation confirmed this as Russia's mid-term target, which was heavily criticized, especially by developing countries.

At the G8 Summit in L'Aquila, Russia signed on to an 80% emissions cut for developed countries by 2050. However, shortly thereafter Russian Sherpa Dvorkovich called this target "unacceptable and likely unattainable"; two days later President Medvedev clarified Russia's position by saying "we are ready to make our contribution – at least 50% by 2050 in comparison with 1990".

Economic Modeling of Russia's Emissions

The Moscow Higher School of Economics runs a TIMES partial equilibrium model, and uses the official economic forecasts. Modeling of the economic effect of the crisis suggests a significant fall in emissions due to the current economic downturn (see Figure 1), forecasting that Russia's emissions could be -30% compared to the 1990 level by 2030.

The Moscow Center for Energy Efficiency's ENERGYBAL-GEM-2050 model outlines four scenarios for emissions growth, three ranging from "highly unlikely", "less likely", and "most likely", and one including a low-carbon Russia scenario with additional low-carbon policies and measures. According to this scenario, Russia could reduce its emissions to around 25% of 1990 levels by 2020 (Moscow Centre for Energy Efficiency, Low Carbon Russia). This model does not include the effects of the economic crisis.

Economic Crisis and Surplus

The dramatic post-1990 restructuring of the Russian economy came with economic, social and political hardship and upheaval, which contributes to Russia's sense of entitlement to economic growth and recovery; it also led to a collapse in Russia's emissions. In 2007, Russian greenhouse gas emissions were 34% below its emissions in the Kyoto baseyear, 1990. The surplus emissions allowances, which were allocated under the Kyoto Protocol to cap industrialized country emissions, can either be sold on the international carbon market or potentially transferred to the next commitment period of a post-2012 climate agreement.

Clearly, for Russia the treatment of surplus emissions allowances (AAUs) is of crucial importance in the climate talks. At the UN talks in Bonn in June 2009, Russia's head of delegation stated that the fall of emissions, "to a significant extent compensated for the growth of greenhouse gases ... of other countries". Russia views its AAUs surplus as a rightful and strategic asset. Hence, it seems unlikely that Russia would agree to a deal in Copenhagen, which completely divested it of its AAUs. However, in the event that surplus AAUs are used to offset higher emissions in other Annex 1 countries, any historical environmental benefit from the emissions collapse would be nullified.

Russia's 2020 emissions target unrealistically implies an accelerated growth in annual emissions from approximately 1% between 1999 and 2007 to 2-2.5% between now and 2020. The global economic

downturn, which took hold during the second half of 2008, has continued to decrease Russian economic activity in 2009. In a preliminary estimate by the Institute of Economy in Transition, GDP has fallen by 10.2% over January-May 2009. Russian industrial production fell 17.6% in January-June 2009, in comparison to the corresponding period in 2008.¹ This indicates that Russian emissions have most likely declined since 2008, further exacerbating the size of the surplus. Although verified data is not yet available, Russian experts estimated that Russian emissions may have fallen to ca. -40% or more, compared to 1990 levels. Loose targets under the Copenhagen climate agreement could thus perpetuate the surplus problem.

Whereas in 2008, estimates of Russia's surplus of AAUs for the period 2008–2012 were at the range of 3,3–4 Gt², updated 2009 figures suggest a surplus of 3.5–5 GtCO2e.³ This may even be a conservative estimate, and certainly further implies the extent of the fall in Russian emissions.

- ¹ "Russian Economy: Trends and Transitions", Institute of the Economy in Transition, June 2009.
- ² Laing, Tim; Junankar, Sudhir, Pollitt, Hector and Grubb, Michael, Global Carbon Mechanisms Annex II: Emissions and demand projections to 2020. Climate Strategies, March 2009.
- World Bank 2009, Quoted in Mark Larzarowicz, "Global Carbon Trading: A framework for reducing emissions", United Kingdom Department of Climate Change, June 2009, pp. 19.

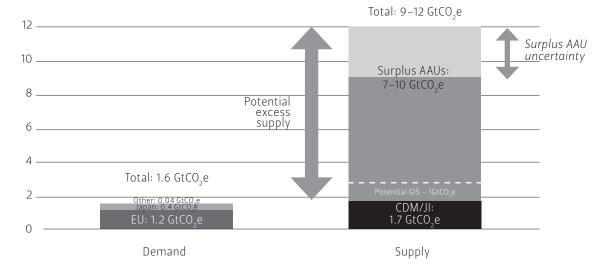


Figure 2: Potential Size of the AAU Surplus in Relation to Demand, for the Period 2008–2012. Source: World Bank (2009) and Point Carbon (2009)

Table 1: Pros and Cons of Individual Strategies to Deal with the Surplus

| Strategy | Advantage | Disadvantage |
|--|--|---|
| Allow transfer, but do nothing to address concerns | Minimizes risk of Russian induced political collapse in Copenhagen around this issue | Potentially unacceptable to developing countries, hence collapse of Copenhagen deal; Potential to collapse the carbon market; Large risks to environmental integrity |
| Amend Article13.3 of the Kyoto Protocol to forbid the transfer | Strengthens environmental and market integrity; Can be achieved with a three-quarter majority under Article 20 of the Kyoto Protocol, hence legally and politically possible | Likely to be politically unacceptable for Russia, and other surplus countries, hence leading to Russian non–participation |
| Allow the transfer, but require higher Annex 1 targets, and proportionally higher targets for surplus countries | Strengthens environmental and market integrity | Politically difficult given current pledges, especially as a stand-alone option |
| Restrict surplus for use for domestic compliance | Potentially surplus would not enter the market | Does not address environmental concerns; In the case of weak targets, even larger surplus in the future; Potential that surplus could be "laundered" through fresh AAUs |
| 'Store and Save' – Allow transfer, but use only for domestic compliance beyond 2020 | Addresses concerns in the short term by putting surplus away; Gives surplus countries a long-term buffer; Gives opportunity for stricter targets in the future to absorb the surplus bit by bit | Merely puts off the problem of environmental integrity; Limits sovereign ownership over the surplus |
| Linking surplus sales in emission reduction projects independently or through an external operator (Green Investment Scheme) | External operator addresses transparency problems 'greening' has experienced; Partly addresses environmental concerns | Large quantities of 'greened' AAUs can overwhelm market; Generates new AAUs under the cap |
| Monetize surplus to fulfill financing obligations of surplus holding countries | Partly addresses environmental concerns if the greening ratio of reinvestments exceeds 1:1; Does not generate extra AAUs under the cap; Addresses transparency problems 'greening' has experienced | Politically, using the "proceeds" of its own economic collapse to finance developing countries may be impossible for Russia to accept; Could only address a small volume; Potential market risk |
| Buy and cancel surplus | Partly addresses environmental and market concerns | Difficult for buyers to accept; Could probably only address a small volume |
| Discount transfer | Depending on the discount rate, partly addresses environmental and market concerns; Can be decided with threequarters majority of COP-MOP | Maybe politically unacceptable for Russia, and other surplus countries |

The surplus is a significant potential threat to the environmental integrity of the post-2012 climate regime. Worldwide, the World Bank estimates that the surplus of AAUs, mainly from Russia, Ukraine and the new EU member states, could be as large as 7-10 GtCO₂e for the period 2008-2012. If transferred, 700 – 1000 million AAUs would be available to replace domestic emission reduction measures in industrialized countries each year up to 2020. In total, this represents ca. 4-6%

of total Annex 1 emissions in the base year, i.e. ca. a sixth of a 30% Annex 1 target or a third of the existing 10–16% reductions pledged by Annex 1 countries.⁵

A 4-6% weakening of Annex 1 reduction targets for the period 2013-2020 would threaten the environmental integrity of the climate regime. Moreover, the presence of such a surplus poses significant risks to the integrity of the carbon market. Finally, the surplus issue is

⁴ Based on calculations of the EC, assuming that the surplus AAUs under the Kyoto Protocol are consumed for compliance purposes at a constant rate over the period 2013–2023.

⁵ Joeri Rogelj, "Halfway to Copenhagen, No Way to Two Degrees", Nature Reports, Climate Change, Vol. 3, July 2009.

politically extremely sensitive, and could potentially collapse the Copenhagen negotiations. The table on the previous page sets out the pros and cons of individual strategies.

There are three broad approaches to the surplus problem: a) negotiate and co-operate (scenario 1) b) cancel and discount (scenario 2 and scenario 3) ignore the problem and hope the surplus does not enter the market (scenario 4).

Scenario 1: Negotiation and Cooperation

Countries should begin with a cooperative approach to solve the surplus issue. The basket of options listed below could absorb the surplus out of the regime. Future work could seek to calculate the potential contribution that could be made by each of the options listed below.

- Deeper Targets Annex 1 countries accepting deeper targets could absorb the surplus. As surplus-holding countries would also profit from the sale of the surplus, they should strengthen their targets more than other Annex 1 countries, and use part of the surplus to achieve these targets. In the light of its emissions trajectory discussed above, and Russia's enormous potential for energy efficiency, economically Russia would be able to accept a significantly deeper target than -30% by 2020, compared to 1990, if it were allowed to use the surplus.
- 'Store and Save' beyond 2020 Based on the Russian government's highest emissions growth scenario, emissions are expected to reach ca. 1990 level by 2020. Because these emissions scenarios are very unlikely to be realized due to over-optimistic assumptions, Russia could possibly commit to "storing" the equivalent amount of AAUs in a reserve account: having a buffer in the longer term may be an attractive option for Russia. Likewise, AAU prices are likely to be higher in the future, and higher targets may also be more negotiable for subsequent commitment periods, which could address environmental concerns.
- Discount surplus Any transfer of the surplus from the first commitment period of the Kyoto Protocol should be discounted under the

Copenhagen agreement in order to limit concerns related to environmental integrity. Likewise, transactions with the surplus could involve a discount factor from the demand side.

- Link sales to domestic emission reductions the original idea of a Green Investment Scheme could be used. In the case of governments, which lack credibility and capacity, an external operator could be required to manage the 'greening' activities. This would at least ensure that the money for AAUs is invested in a climate-friendly way. The problem of the newly created AAUs generated by this approach could be limited with a discounting approach.
- Finance developing country mitigation instead of allocating financial resources for international climate mitigation and adaptation, Russia could earmark some of its surplus for this purpose and allow an external operator to monetize it. Due to lower marginal abatement costs in developing countries, this option could address issues of environmental integrity especially if combined with a demand-side discount factor on AAU purchases.
- Buy and cancel Purchasing and cancelling the surplus in order to remove it from the market could be a last option. Various governments have suggested purchase-and-cancel schemes, or cancelled their surplus allowances unilaterally.

Scenario 2: "Cancel and Discount"

The option to not allow the transfer of the surplus, or to heavily discount it, offers an opportunity to significantly strengthen the integrity of the Copenhagen deal. Amending the Kyoto Protocol to deal with the surplus would require a three-quarter majority, which could be formed against the will of surplus holding countries.

For Russia, which sees itself as a "great power", the threat of marginalization from a major geopolitical issue would carry a certain weight, particularly as high level forums such as the Major Economies Forum and G8 will continue to give high priority to climate change. Likewise, low carbon will be big business in the future, and transition economies certainly have a large potential for abatement and efficiency,

corresponding to their own domestic priorities. Here there are synergies, and significant opportunities, between domestic interests for these countries and international climate mitigation.

The significant risks of this strategy should be acknowledged. There is the risk that Russia could refuse nonetheless to participate in the agreement; in turn, it could be possible that major emerging economies would not accede to a meaningful agreement, which did not include the world's third largest emitter. Nonetheless, a 'Cancel and Discount' approach should not be disregarded, given its potential to strengthen at a stroke the Copenhagen agreement. Further, given the size of the surplus and the risk of loose targets generating new surplus, an agreement could be stronger environmentally if a long-term, "architectural" solution could be found for transition economies and their surplus.

Scenario 3: Abandoning the AAU-based System

Some countries are currently seeking alternatives to the AAU-based system to operationalize country targets. A future regime without AAUs would ipso facto resolve the problem of surplus AAUs. However, the Russian sense of entitlement to the surplus is likely to remain, and thus, equivalent concessions may be sought. This should be considered alongside the issues of robustness of global ambition and the compliance regime, if parties choose to explore this option further. Moreover, shifting from the AAU system might have implications for possible financing mechanisms (auctioning AAUs) in the post-2012 regime. Hence this nexus of potential risks and drawbacks must be weighed up alongside the possible advantages of this approach vis-à-vis the surplus of AAUs, and the chances of US ratification.

Scenario 4: Auto-Regulation

Currently, little interest has been shown in the Russian surplus, which would be available – at least in theory – in the international carbon market, if the Russian government chose to sell it. The fact that Russia has not sold any of its AAUs may be based on four factors: first, the Russian budget was awash with hydrocarbon revenues, which reduced the need to sell AAUs. Second, the absence of buyers given credibility issues.

Third, legal difficulties in transferring Russian state assets. Fourth, Russian "disdain" for the Kyoto Protocol due to perceived broken promises after the Russian ratification.

Hence, it could be argued that a possible option to deal with the Russian surplus would be to allow the transfer, and assume that potential buyers and the Russian government would continue to avoid surplus transactions for environmental/political reasons. Several strong reservations need to be underlined in this regard. Firstly, there is a risk that countries could buy surplus AAUs despite the factors outlined above. For example, 2009 has seen a significant increase in surplus transactions. Secondly, as shown above, potentially weak targets, combined with lower than projected emissions, could exacerbate the surplus problem in the future. Thirdly, for moral and competition reasons developing countries may not accept the transfer of AAUs. Therefore, it must be considered whether ignoring the surplus would be easier and safer than negotiating a solution with surplus holding countries.

Conclusion

Russia is one of the potential blockers of a deal in Copenhagen. In order to minimize a scenario of "abstain and abduct", whereby Russia maintains a low profile and then hijacks the Copenhagen process in the final hours, key countries should publicly engage Russia on climate and the Copenhagen talks. This high-level strategy can strengthen the importance of the talks to the Russian government while delivering analysis of the strategies to minimize the risk of last minute blocking.

The current emission trends illustrate that the 10-15% reduction target announced by Russia is scientifically insufficient, and reflects neither the country's efficiency potential, nor modeled emissions trends. The target was also heavily criticized by developing country parties at the Bonn climate talks in August. Technically Russia could commit to a target of at least -30% by 2020, without any surplus buffer. This may require additional climate policy measures.

The AAU surplus represents an extreme threat to both the environmental and market integrity of the Copenhagen deal, if transferred. Theoretically, there are three broad approaches to deal with the surplus: a cooperative approach (scenario 1), a 'Cancel and Discount' approach (scenario 2 and scenario 3), or auto-regulation (scenario 4) i.e. ignoring the problem. Countries, especially the US, should approach Russia with an offer to cooperatively deal with an issue, which presents real environmental and market risks to the Copenhagen deal. A confrontational, 'take it or leave it', approach to cancel or heavily discount the surplus should be kept in reserve, but not discounted out of hand.

Under a cooperative approach, the most practical method of dealing with this transfer would be to accept deeper targets in Annex I, with surplus holding countries accepting proportionally deeper targets. 10% of surplus-holding countries' base year emissions equate to roughly 0.5Gt. If all surplusholding countries' targets were set such that they were required to consume on average this amount each year, in total 2.5 Gt could be consumed in a five year commitment period, 2013-2018. Likewise, if targets were set such that the remaining Annex 1 countries were required on average to consume AAUs equivalent to 5% of their baseyear emissions, in total 3.3 Gt could theoretically be consumed 2013-2018. 1.2-4.2 Gt would remain of the initial surplus. The starting point for reduction pathways (e.g. 2012 emissions, Kyoto target levels or 2010, the midpoint of the Kyoto Protocol's first commitment period) can contribute to the consumption of AAUs post 2012, or exacerbate the AAU problem in the case of the transition economies.

As a stand-alone strategy, this approach seems politically difficult given the current unambitious pledges of Annex 1 countries and the shear size of the surplus. Thus, higher post-2012 targets are unlikely to absorb the whole surplus in one go, and a basket of approaches could be applied as outlined in scenario one above.

Abandoning the AAU system has no precedence and entails potential, unknown risks to the post-2012 regime. Concerning Russia, this scenario is tantamount to divesting Russia of its surplus and is hence politically risky, unless coupled with comparable concessions. Ignoring the problem by relying on auto-regulation (scenario 4) should be avoided.

Due to the distrust amongst the former Soviet bloc, it seems unlikely that Moscow would try to build a direct coalition around the surplus issue to gain a better deal in Copenhagen. Also, given the marginality of the issue of climate policy in Russian politics, such an approach seems far-fetched. However, smaller surplus-holding countries, especially inside the EU, are waiting for the Russian position on the surplus issue prior to announcing their own position, as they believe that Russia's political weight in the climate negotiations is likely to lead to a better deal for all of them.

Based on this analysis, we recommend that:

- Countries, in particular the US, should recognize the threat posed by the surplus, and offer a cooperative strategy to deal with it. A 'take it or leave it' approach should be kept in reserve.
- In order to facilitate the formation of the Russian position, important Annex I countries, especially the US, should send very high-level representatives to Moscow like they have sent to China and India.
- To gain credibility on this issue vis-à-vis Russia, before Copenhagen the EU must adopt an internal solution how to deal with the surplus of the new member states. This could, for instance, include discounting and absorbing the transferred allowance with deeper targets as discussed above. This would lead to the EU setting the tone.
- Before the Copenhagen climate talks, the other surplus-holding countries including Russia should announce national surplus use plans should they push for transferring the surplus.

Anna Korppoo
Senior Researcher
The Finnish Institute of International Affairs
Thomas Spencer
Advisor on Russia's climate policy
Germanwatch
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