

Russia's Post-Paris Climate Policy: Slow Progress and Problems

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Abstract

The Paris Agreement is exerting a positive influence on Russia's climate policy: the country's response is in the right direction, but progress is significantly slower than what is actually possible. Although the main problem is that Russia relies on a fossil-fuel-based national economy, the slow progress is also the result of objections from high-carbon businesses, and complications in figuring out how to account for forest CO₂ absorption and large methane emissions in the natural gas sector.

Background Aspects

The Paris Agreement reflects a growing global desire to lower carbon emissions, though it did little to guarantee enforceable commitments. Nevertheless, the agreement catalyzes domestic activities in countries, including Russia, that do not accept the climate problem as a primary policy driver.¹

In recent years, the Russian government has gradually accepted warnings that burning coal is no longer desirable and that the post-oil era is coming. Nevertheless, there is considerable room for improvement. Firstly, the government response is rather slow and limited mainly to preparations for the future.

Secondly, the official response is focused on implementing a wide range of more modern technologies as part of a comprehensive effort enforced by carbon regulation (i.e. regulation is accepted only as a tool for implementing new technologies). The Ministry of Energy has undertaken some efforts to expand the use of renewable energy, but after Paris it did not significantly accelerate this process because it was not recognized as a priority. Low-carbon development is mainly considered to be a mixture of increasing energy efficiency and energy-saving measures through the expansion of large hydro and nuclear energy generators.

Thirdly, there are at least two issues adding complexity: accounting for CO₂ fluxes in managed forests and the problem of huge methane emissions by the gas sector. Therefore this brief article firstly describes the recent steps taken by the government; and secondly addresses the forest and methane problems.

Creation of a "Platform" and First Steps

Before 2016 there was no official body in Russia for brainstorming and consensus-building in finding ways to address carbon issues. The "Interagency working group on questions of climate change and ensuring sus-

tainable development" established under the Administration of the President brought together mainly representatives of federal bodies to coordinate a wide range of efforts, including issues related to BRICS and the G20². Therefore, it was important that, just before the Paris conference, the Ministry of Economy established a special "Interagency working group on economic aspects of environmental protection and regulation of greenhouse gas emissions" (WG)³. This group brought together officials, a variety of businesspeople, and experts. The WG was "born" in hard debates, because high-carbon business (mainly coal and metallurgy producers) strongly objected to the narrow focus on carbon regulation. After Paris the group works in an atmosphere of debates between economists and the businesses that emit large amounts of carbon in the course of their activities. Despite the differences, the WG has become a real platform for consensus-building.

The WG continues the activities of the Ministry of Natural Resources and Ecology (MNRE), Ministry of Economy, and Ministry of Energy in 2014–2015 to organize mandatory carbon disclosure, i.e. full and transparent reporting by large (>150kt CO₂-eq/yr.) and middle size (>50kt CO₂-eq/yr.) enterprise-emitters beginning in 2016 and 2018 respectively. The decision was made as a pre-Paris policy⁴, but its implementation has to be monitored and improved on a continual basis. One shortcoming is that the current reporting system excludes auto transport and gas and oil pipelines. However, significant improvements were made in May 2016, when the MNRE ordered that guidelines describing how to account for indirect energy greenhouse gas (GHG)

1 A.O. Kokorin. New Factors and Stages of the Global and Russian Climate Policy. *Economic Policy*. 2016. Vol. 11. No 1. pp. 157–176 DOI: 10.18288/1994-5124-2016-1-10. <<http://www.ep.ane.ru/pdf/2016-1/kokorin.pdf>>

2 Responsibilities and content of the group: <<http://www.kremlin.ru/structure/administration/groups#institution-1003>>

3 Order of the Ministry of Economy defining the responsibilities and membership of the group (author of the given article is a member of the group) <<http://merit.consultant.ru/documents/78256?items=1&page=6>>

4 Decision of the Government No 716-p 22.04.2015 on adoption of the "Concept for system of monitoring, reporting and verification of greenhouse gas emissions in the Russian Federation".

emissions (i.e. electricity bought by an enterprise from an external grid) should be put in place by June 2017⁵.

Going forward, the first step to be taken is to amend the “Law on environmental protection” to provide definitions, reporting and monitoring mechanisms, and regulations for GHGs, because currently CO₂ and other GHGs, which do not pose a direct hazard for health and the environment, are absent from the national system of laws. Following strong objections from high-carbon business, the proposed amendment was revised and now excludes regulation. Currently it is under final consideration by the office of the prime-minister and will eventually be passed to the State Duma. The parties have come to a consensus that “carbon” will be regulated by a new law. This consensus took concrete form in May 2016, when the government made the decision that “the draft concept carbon regulation law” should be prepared by the middle of 2018 (the long drafting process is also a matter of consensus)⁶.

A second step is the development and introduction of standards for specific GHG emissions (i.e. per unit of product) for a wide range of energy and industrial activities. These standards should solve the problem that Russia only recognizes carbon regulation as a tool for implementing technologies. By 2014 the best available technologies (BAT) for environment protection were collected into a set of about 30 volumes organized by sectors of the economy and adopted as national standards for 2015–2018. The relevant amendment was included in the “Law on environmental protection”⁷, but with an exclusive focus only on air or water pollution, waste, human health, etc., because the law does not include GHGs yet. On the other hand, the concept of BAT is currently the only legal norm which the Ministry of Economy can use for regulation. Currently there is a deadlock, which high-carbon business tries to maintain by insisting that future regulations follow the BAT model. It is likely that specific GHG standards will be introduced, but it will take 2–3 years to develop a set of quantitative parameters, ensure that businesses accept them, and finally adopt the necessary regulations.

The third step is the Paris Agreement plan. The Working Group, Ministry of the Economy and MNRE are proceeding now in accordance with the “Plan of measures to ensure GHG emission reduction to 75% of the 1990 level by 2020” and plan to amend this document⁸, but it

cannot provide enough reduction in terms of scope and time period to meet the Paris requirements. National activities that include adaptation and national goals to be achieved by 2030, should be included in the Paris Agreement plan. The draft of the “Plan of activities on ratification and further implementation of the Paris Agreement” was prepared by the MNRE and includes the necessary items, but it drew heavy criticism from business lobbyists, who charged that the document was a tool to destroy the national economy⁹. On the other hand, economists and ecologists generally support the plan, noting only that deadlines for some items are too far in the future¹⁰. By the middle of May 2016, the draft had been affirmed by all relevant ministries and sent to the prime-minister’s office on May 23. There is a good chance that it will be adopted soon. As a result, Russia will make the decision that its National Adaptation Plan should be developed by the middle of 2018, the national GHG goal for 2030 adopted in 2019, and the relevant system of measures developed by 2020. Thus, the first practical measures for carbon regulation are expected after 2018, though it is still not clear what form they will take—tax, fees, trading systems, or something else.

Accounting for Forests

The second part of Russia’s Paris commitment (Intended Nationally Determined Contributions, INDC), which is listed in the following way, “Limiting anthropogenic greenhouse gases in Russia to 70–75% of 1990 levels by the year 2030 might be a long-term indicator, *subject to the maximum possible account of absorbing capacity of forests*,”¹¹ generates questions from different audiences. Does the 70–75% *include* or *exclude* land-use, land-use change and forestry (LULUCF)? What is the *maximum possible account*? In 2015 Russian forest experts encountered significant misunderstandings with the government and media, and they undertook efforts to clarify the situation. They delivered a special report to the World Forestry Congress¹² and a Russian side event at

5 Decision of the Government No 877-p 11.05.2016.

6 Decision of the Government No 877-p 11.05.2016 on adoption of the correction to the Decision 504-p 02.04.2014.

7 Federal Law No 219-FZ 21.07.2014 “On amendments to the Federal Law on Environment Protection”

8 Adopted by Decision of the Government 504-p 02.04.2014, amended by Decision No 807-p 06.05.2015 and Decision

No 877-p 11.05.2016.

9 Lobbyists also illegally leaked the plan to the media (<<http://regnum.ru/news/2104864.html>>) and criticized the signing of the Paris Accord in April 2016 (<<http://regnum.ru/news/society/2121936.html>>).

10 For more details, opinions and citations see: <<http://kommersant.ru/doc/2951538>>

11 <<http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx>>

12 D. Zamolodchikov, A. Kokorin, E. Lepeshkin. Dynamics and projection of carbon deposition function of Russian forests in relation to Climate Change problem. 8 pp. Proceedings of the XIV World Forestry Congress, Durban, South Africa, 7–11 September 2015 <<http://foris.fao.org/wfc2015/api/file/>

the Paris Conference was focused on answering these questions.

The key point is that the difference between “including” and “excluding” is large now (between 56% and 69% of the 1990 level in 2014)¹³, but it will decrease to about 5% of the 1990 level by 2030 and then to zero if Russia continues routine forestry practices. The reason is the gradual shift in the age structure of managed forests combined with fires and poor cutting practices. In the case of very large-scale measures on approximately 100Mha, the difference may be larger and up to 10% of the 1990 level in 2030. However, such a situation requires a ban on commercial clear-cutting in all primary forests (intact forest landscapes) with a simultaneous increase in the efficiency of secondary forest-use by 2–3 times. This is an enormous task, which is recognized by ecologists, foresters and the Federal Forestry Agency (FFA), but it requires outstanding efforts over the course of many years. It is likely that the difference will be close to zero already by 2030, if fires, clear-cutting and pathological disease will follow the business-as-usual (BAU) path¹⁴. Therefore, the Ministry of the Economy, MNRE and Ministry of Energy prefer to use the goal as “70–75% *excluding* LULUCF” for planning of *domestic* measures (see Figure 1 on p. 13). On the other hand, the political authorities prefer to keep the goal as “70–75% *including* LULUCF”. It is a “safety cushion” for *international* purposes, which does not generate problems or spoil domestic measures.

The “*maximum possible account*” means only the absence of any artificial limitations on the offsetting of results (as it is in the Kyoto Protocol for forest management projects in Art. 3.4). Special modalities for specific forests are not required; instead, the science-based principle “*what the atmosphere sees*” should just be applied to any anthropogenic activities on lands¹⁵. The Russian delegation is not going to carry on special LULUCF negotiations because nothing new is required. Evidently the “*maximum possible account*” will not increase CO₂ uptake above numbers already reported in the Russian National

Inventory Report (NIR) to the UN Framework Convention on Climate Change (UNFCCC).

On the forest issue, the WG sees two needs: firstly, to develop and adopt a detailed methodology for CO₂ accounting (“*what the atmosphere sees*”) for different types of national measures and projects, which are above business as usual¹⁶; secondly, create incentive for forestry projects, i.e. induce businesses to use emission reductions in forestry projects for compensation of emissions in the industrial sector. Simultaneously MNRE, FFA and many others, including the World Wildlife Fund, are going to do their best to ensure the survival of most valuable forests, improve forestry practices, and protect the forest carbon sink to the extent possible.

The Methane Problem

According to the recent submission to the UNFCCC¹⁷, in 2014 methane (CH₄) contributed 45% of Russia’s GHG emissions, including LULUCF (36% excluding LULUCF), while the global contribution of methane to GHG emissions is 20–25%. Russian methane emissions are more than 1,000 MtCO₂-eq. or about 2% of all global GHG emissions, which is compatible to global international aviation. This fact is not clearly understood by Russian authorities, who are used to speaking only about CO₂. Moreover there are two complications. The first is the high level of uncertainty in the oil and gas sector that is the main CH₄ emitter; and second is the UNFCCC decision-making by 2030 based on the most recent reports of the Intergovernmental Panel on Climate Change (IPCC).

The gas and oil sector contributes up to three-quarters of all CH₄ emissions in Russia (see Table 1 on p. 14). It is important to note that recently emissions from this sector increased dramatically. In the NIR submitted in October 2014, CH₄ emissions as a whole were about 500 Mt CO₂-eq., but in the NIR of February 2015 they rose to more than 1,000 Mt CO₂-eq. mainly due to use of other emission coefficients¹⁸ recommended by the UNFCCC for the oil and gas sector. The UNFCCC

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13 The National Inventory Report to the UNFCCC (CRF-common reporting format tables submitted 15.04.2016) <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/9492.php>

14 See footnote 12.

15 Seminar “Optimization of Russian forests protection and use as part of the national contribution to the Paris Agreement” Centre for Forest Ecology and Productivity of the Russian Academy of Science, 29.03.2016. The resolution developed by the seminar was reported and adopted by the Science Council of the MNRE (section responsible for GHG issues) at 14.04.2016.

16 Experts are going to use internationally approved methodologies of the Verified Carbon Standard <<http://www.v-c-s.org/methodologies/find>> as a basis (one of them, VM0010 Methodology for Improved Forest Management: Conversion from Logged to Protected Forest, has been used by the WWF in the Russian Far East).

17 Common Reporting Format (CRF) tables to the National Inventory Report submitted 15.04.2016 <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/9492.php>

18 The UNFCCC or IPCC method is the following: (Activity data, e.g. gas transported by pipeline, Mm³)*(Emission coefficient, e.g. %) = (Emission, Mt CH₄), while direct measuring is encouraged to get more precise results.

proposed using such coefficients for *developing and transition economies*, if these countries do not develop their own parameters and publish results in scientific journals. Gazprom strenuously objects to the estimates submitted to the UNFCCC in 2015–2016, stressing that emission coefficients for natural gas extraction and transportation in *developing* countries are not applicable to Russia. According to the company, its CH₄ emission is just one-eighth or less of what was reported in the recent NIR, while Greenpeace insists on an independent assessment of results by a third party¹⁹.

Considering the goals for 2030 and beyond, we have to predict the use of modified coefficients for the conversion of 1 ton of CH₄ to 1 ton of CO₂-equivalent. Currently, the UNFCCC uses Global Warming Potential (GWP) at 25 as the appropriate conversion factor (according to the IPCC Fourth Assessment Report, AR4), while several years ago it was 21 as it was in the Third IPCC report. Evidently, in the future, the UNFCCC will use a figure from the most recent AR5 report and it is GWP = 28 or 34 depending whether indirect effects are taken into account. A conversion of 34 is scientifically more correct and likely. Use of this number will produce significant “growth” for Russian CH₄ and GHG emissions.

However, there is a larger problem. The AR5 directly shows that GWP is not the right approach to achieve

the goal of the Paris Accord. GWP is based on average effect in a period, e.g. GWP₁₀₀ means average in XXI century, GWP₂₀ means effect in next 20 years. The Paris goal is “<2 C deg.” (i.e. limitation of global warming at the end of the XXI century), which requires another coefficient—Global Temperature change Potential (GTP₁₀₀). Its value is only 4 or 11 depending on whether indirect effects are taken into account²⁰. Thus, the UNFCCC decisions on GWP or GTP can crucially influence Russian climate policy (see Table 2 on p. 14).

Conclusion

Russia is part of the global trend toward low-carbon development, but progress is slower than possible due to the influential objections from high-carbon businesses (coal, metallurgy, etc.) as well as the continuation of fossil fuel development as a whole²¹. Moreover, there are specific problems in measuring the contributions of forests and methane, which have to be addressed in decision-making on the CO₂/GHG goal by 2030; and in the long-term low-carbon strategy required according to the Paris accord. The main recommendation is to speed up movement in the right direction toward carbon regulation and forestry measures. It is clear that such a policy requires a balance of interests among the different businesses and government. Finding the right mix is not an easy task, but it is one that has to be solved.

About the Author

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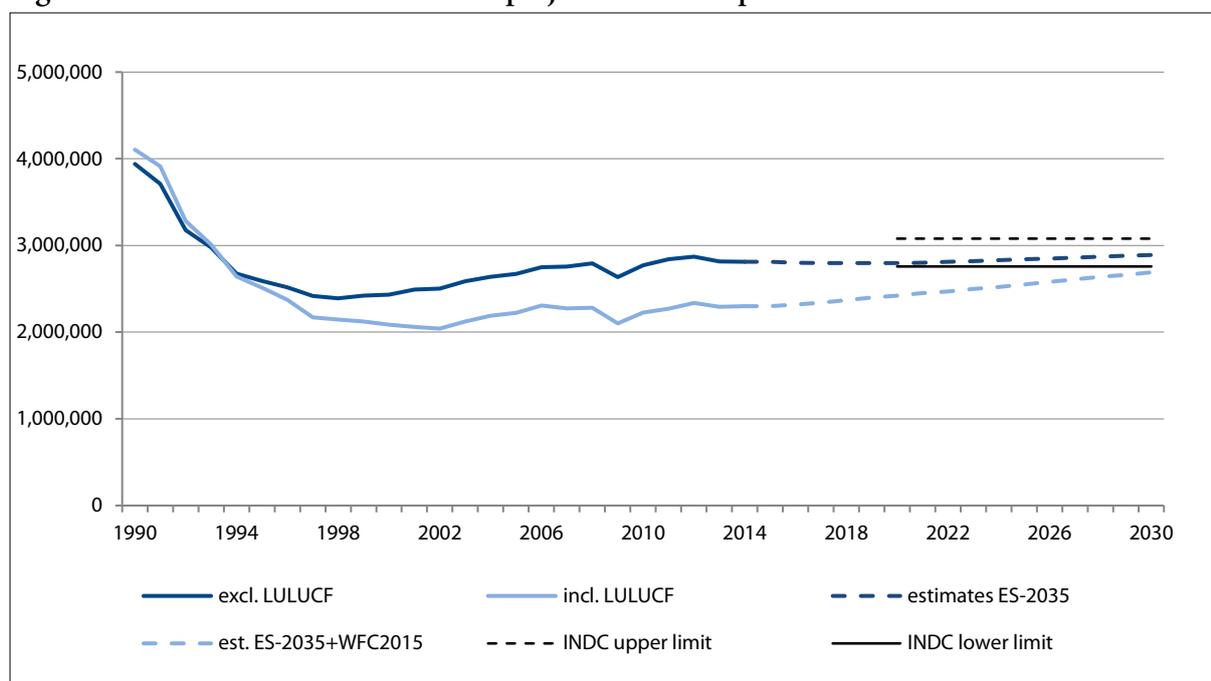
Further Reading

Korppoo A., Kokorin A., Russia’s 2020 Greenhouse Gas Emissions Target: Emission Trends and Implementation. *Climate Policy*, 2015, 20 pp. DOI: 10.1080/14693062.2015.1075373 <<http://www.tandfonline.com/doi/pdf/10.1080/14693062.2015.1075373#Vd2ZzrkVg5s>>

19 More on disputes on methane emissions and opinions see: <<http://kommersant.ru/doc/2984626>>

20 IPCC AR5. Climate change 2013: The physical science basis. Contribution of working group I to the Fifth assessment report of the Intergovernmental panel on climate change. T. F. Stocker et al. (eds.) Cambridge and New York: Cambridge University Press, 2013. pp. 710–714. <www.ipcc.ch>

21 Problems of the Russian fossil-fuel-based economy as a whole are not considered in the given article; see the recent publication Korppoo A., Kokorin A., Russia’s 2020 Greenhouse Gas Emissions Target: Emission Trends and Implementation. *Climate Policy*, 2015, 20 pp. DOI: 10.1080/14693062.2015.1075373 <<http://www.tandfonline.com/doi/pdf/10.1080/14693062.2015.1075373#Vd2ZzrkVg5s>>

Figure 1: Russian GHG emissions and projections in comparison with INDC

Sources: 1990–2014: Russian NIR (CRF) submitted 15.04.2016 <www.unfccc.int>; ES-2035: most recent draft of the RF Energy Strategy by 2035. Ministry of Energy (first dep. Minister A.L. Teksler) Presentation of the draft of the RF Energy Strategy by 2035. Analytical Center of the Government. 18.09.2015. WFC2015: report of the RF on the XIV World Forestry Congress. D. Zamolodchikov, A. Kokorin, E. Lepeshkin. Dynamics and projection of carbon deposition function of Russian forests in relation to Climate Change problem. 8 pp. Proceedings of the XIV World Forestry Congress, Durban, South Africa, 7–11 September 2015 <<http://foris.fao.org/wfc2015/api/file/552d70ba9e00c2f116f8e5fa/contents/618f549a-1e69-4a1e-952a-988103f27f2a.pdf>> INDC: calculated on the basis of Russian NIR (CRF, 15.04.2016) and INDC submission <<http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx>>

Note on the Data

The data on p. 6 are from the 6th Russian National Communication (2013). The data on p. 13 are from the most recent official data submitted by Russia in 2016 (CRF) to the UNFCCC. Therefore, the data on p. 13 covers the years up to 2014, while the data on p. 6 only goes up to 2012. In 2015–2016 Russia recalculated the whole sequence of GHG data from 1990 up to the recent years (mainly due the new global warming potential—GWP—for methane, as discussed in the Kokorin article). Therefore, there are differences between the data up to 2012 on p. 6 and p. 13. The p. 13 data is more correct, but it is not a crucial difference and the conclusions drawn from the p. 6 data in the article are correct. The projections on p. 6 are the suggestions of the authors. The projections on p. 13 are the expectations of the Russian ministries expressed in draft (current) version of the Energy Strategy to 2035 (excluding the LULUCF). The LULUCF projections are those of the Russian scientists who prepare the National Inventories (all references are provided in legend).

Table 1: Russian Methane Emissions in 1990, 2008 and 2014 Made by “Old” and “New” Recommendations of the UNFCCC on Emission Coefficients

Mt CH ₄ /yr.	Data from NIR submitted in 2010 (UNFCCC rules before 2015)		Data from NIR submitted in 2016 (UNFCCC rules from 2015)		
	1990	2008	1990	2008	2014
<i>Oli and gas sector</i>	<i>16.0</i>	<i>15.4</i>	<i>32.0</i>	<i>31.4</i>	<i>31.8</i>
Coal sector	3.6	2.5	3.5	2.4	2.4
Fuel combustion	0.5	0.15	0.55	0.15	0.15
Agriculture (mainly dairy cattle)	5.2	2.1	5.5	2.2	2.2
Managed forests and other lands	1.0	0.9	0.85	1.0	0.9
Waste	2.5	3.3	3.0	3.65	4.35
Total	28.8	24.4	45.4	40.8	41.8

Source: Common Reporting Format (CRF) tables of the Russian National Inventory Reports submitted to the UNFCCC in 2010 and 2016, <www.unfccc.int>

Table 2: Influence of the UNFCCC Decisions on Russian Methane Emissions

The UNFCCC purpose (potential decisions made by 2030)	CH ₄ in CO ₂ -eq. ^a	Impact on Russian climate policy
Minimize climate impacts for <i>XXI century as a whole (on average)</i>	GWP ₁₀₀ = 34	Methane is about ½ of national GHG emissions. Emissions in the gas sector should be clarified in all details; effective measures to reduce all CH ₄ emissions should be included in the Paris plan of implementation
Minimize climate impacts <i>on average for the next 20 years</i> (as the period for current financial support of adaptation and mitigation measures)	GWP ₂₀ = 86	Methane is about ¾ of national GHG emissions. Urgent investigation of methane sources and emission reduction options should be undertaken (as top priority of the Paris plan of implementation)
Precisely follow the goal of the Paris agreement (i.e. minimize global warming <i>at the end of XXI century</i> as well below 2 C deg.)	GTP ₁₀₀ = 11	Share of methane is about ¼. Gradual measures to reduce emissions in the gas sector should be included in the Paris plan of implementation

^a Source: IPCC AR5 with accounting of indirect effects as more science-based option