Russia and the Kyoto Protocol:

Seeking an Alignment of Interests and Image[1]

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On November 5, 2004, the Russian Federation ratified the Kyoto Protocol. This act propelled the agreement beyond its threshold requiring the participation of Annex 1 states representing 55 percent of 1990 greenhouse gas emissions and allowed the protocol to come into force on February 15, 2005. At first glance, it is surprising that Russia turned out to be the key ratifying state of the Kyoto Protocol. The Russian government has spent the last fifteen years focused on economic recovery and development, and environmental regulation and treaties have fallen low on its list of priorities. In the 1990s, Russian representatives to climate change negotiations seemed more concerned about negotiating favorable terms for their participation than forestalling climate change. The Russian delegation advocated that language be inserted in the treaty to differentiate participating countries' obligations based on their varying climatic, socioeconomic, and other conditions, and that transitional economies should be allowed a "a certain degree of flexibility" in meeting their emissions targets.[2] Russia and Ukraine also insisted on the 1990 level of carbon emissions as their shared binding target, despite the fact that the two countries' greenhouse gas emissions had dropped substantially in the following decade due to the collapse of Soviet-era industries.[3] More recently, Russia has become the world's largest exporter of natural gas, the second largest oil exporter, and the third largest energy consumer.[4] Russia's economic growth significantly depends on the demand for carbon-based fuel.

Yet for close analysts of the Kyoto Protocol and Russia, there were clear incentives for Russia's participation in the agreement. Russia experienced massive industrial decline in the immediate aftermath of the Soviet Union's collapse. Since 1990 is the benchmark year for emissions limits under Kyoto, Russia has considerable room to *increase* emissions prior to 2012 before it will exceed its Kyoto emissions targets. Russia also can sell its excess credits or attract investment designed to further reduce emissions. The real puzzle is why Russia took so long to ratify the treaty since, to outside observers, its potential for material gains (or at least negligible costs) from ratification seemed clear all along. There were a number of reasons for the delay. First, there was significant pessimism regarding the consequences of Kyoto among some prominent Russian scientists, who doubted the link between carbon emissions and climate change, and economists, who argued that Russia would have to limit its economic growth to avoid exceeding Kyoto emissions limits before 2012 and that direct material benefits from the protocol might not be as great as expected. Second, once the United States announced its decision not to ratify, Russia, responsible for 17.4 percent of 1990 emissions, became the only state with sufficient emissions to bring the protocol into effect, and therefore held a crucial diplomatic bargaining chip. As a result of these two factors, President Vladimir Putin had incentives to delay a decision until he had (a) clarified the balance of evidence regarding causes of climate change and economic consequences of ratification; and (b) secured significant rewards from international partners on other issues in exchange for ratification, while still elevating Russia's image as a cooperative partner in international affairs. These international factors explain why Putin, who in Russia's highly centralized system retains a great degree of autonomy in foreign affairs, made numerous contradictory statements relating to Kyoto prior to ratification and why he allowed Kyoto

[2] Kokeyev 2005. For text, see Article 3, Para. 6 of the text of the Kyoto Protocol.
[3] Moe and Tangen 2000, 15.
[4] Energy Information Administration 2006.

critics close to his administration to continue their negative public statements for so long. Putin wished to maintain a sense of uncertainty about the likelihood of Russia's ratification in order to obtain inducements from other Kyoto-ratifying states.

The factors behind Russia's ratification of the Kyoto Protocol shed light on a lively debate within international relations and comparative politics about what motivates states to commit to international agreements.[5] In this paper, we focus on the roles of interests, ideas, and institutions at the domestic and international levels in shaping Russia's ratification decision. In international relations, typical neorealist and neoliberal arguments focus on a state's interests. Neorealists point to a state's fundamental interest in increasing its relative power; therefore, states will sign treaties only when the terms are advantageous to their economic or military standing relative to other states.[6] Neoliberal institutionalists agree that states conclude agreements when it is in their self-interest, but argue that identifying areas of mutual benefit can lead to agreements that are advantageous for all parties in resolving collective problems.[7] International institutions that develop over time can lead to cooperation on new issues. Those states that have participated actively in resolving collective environmental issues in the past are therefore more likely to participate in new agreements. Constructivists assert that shared norms, transmitted and promoted by networks of nonstate actors, and states' expressions of their cultural identities increasingly serve as the basis for international treaties.[8] Other approaches, deriving from comparative politics, emphasize the roles that domestic public opinion, interest groups, and political institutions play in influencing foreign policy and treaty adoption.[9] Ratification of an agreement may affect the electoral fortunes of a political party or individual; economic interest groups may persuade a government that ratification is or is not beneficial; and political institutions may provide more or fewer veto points in the decision-making process.[10] In the case of Russia, a highly centralized institutional decision-making process provided a filter through which economic interests and foreign policy concerns were weighed to produce a decision in favor of ratification.

In addition to its relevance in assessing the explanatory power of different theoretical approaches, the process of ratification in Russia has significance for the persistence, expansion, and effectiveness of the Kyoto process. First, does Russia intend to participate actively in Kyoto mechanisms and to reduce its own carbon emissions or will it use its generous emissions target merely to comply with, but not actively implement, the agreement? In this early stage of implementation, Russia's commitment to the protocol remains uncertain. Russia's top-down process of decision-making about ratification has slowed implementation, resulting in domestic institutions poorly equipped to take advantage of the agreement's opportunities. Thus, the same institutional context that facilitated ratification may in fact hinder implementation of the protocol. Second, on some political and economic measures, Russia more closely resembles those states that will play a crucial role in Kyoto's future – China, India, and Brazil – than do most other Annex 1 countries. Russia's concern about the protocol's potential to constrain economic

[5] Haggard and Simmons 1987; Roberts et al. 2004; Hall 1993.
[6] Mearsheimer 1994.
[7] Keohane 1984.
[8] Boli and Thomas 1999; Meyer et al. 1997; Katzenstein 1996.
[9] Goldstein and Keohane 1993; Putnam 1988.
[10] Tsebelis 2002; Immergut 1992.

growth is shared by developing states. Politically, decision-making patterns within Russia's government institutions bear a resemblance to China and other non-democracies.

The Politics of Ratification

Despite the long delay in Russia's final decision to ratify Kyoto, there were a number of material factors in favor of ratification from the protocol's conclusion in 1997. Russia's emissions fell by an estimated 30 percent between 1990 and 2000, meaning that in practice Russia could increase significantly its carbon dioxide emissions without violating the letter of the agreement.[11] The great scope for further emissions reductions by Russia's inefficient industrial sectors makes Russia the largest potential seller of emissions credits on the international market. In 2001, estimates of Russia's potential annual income from the sale of its carbon emissions ranged from US $4 billion to $35 billion annually.[12] In addition, Russia seemed a likely beneficiary of Kyoto's joint implementation (JI) program in which states can earn emissions credits by investing in reducing emissions or enhancing removal by carbon sinks.

In April 2002, President Putin announced that Russia soon would move forward on the Kyoto Protocol, leading many observers to expect that Russia would ratify in time for the World Summit on Sustainable Development in Johannesburg in September 2002.[13] Yet Russia did not do so. In order to understand the delay, we need to take a closer look at the debate over the protocol inside Russia, paying particular attention to the way in which ideas, domestic interests, and institutions intersected with international factors.

Ideas

A significant battle of scientific and economic ideas framed the domestic debate for and against ratification. Most climate scientists, ecologists, and environmental economists in Russia agreed that ratification was advisable because (1) greenhouse gas emissions contribute to global warming, and (2) Russia's expected economic growth and carbon intensity trends would not cause the country to exceed the allowable emissions threshold under the treaty, which meant that ratification had little or no economic cost for Russia. In fact, many economists projected that Russia would benefit from Kyoto through treaty mechanisms that would encourage international partners to pay for the modernization of Russia's industrial and energy sectors.[14]

Yet the director of the Russian Academy of Sciences' Global Climate and Ecology Institute, Yuri Izrael, and the president's chief economic adviser, Andrei Illarionov, were two powerful dissenters from these claims. Izrael questioned whether or not climate change is significantly caused by anthropogenic emissions. A Russian Academy of Sciences report spearheaded by Izrael and delivered to President Putin stated that the Kyoto Protocol "lacks scientific validity and would not be effective."[15] Izrael went so far as to ask Putin to revoke his signature of the Protocol and continued his

[11] Dudek et al. 2004, 132.
[12] Victor et al. 2001.
[13] WWF 2002.
[14] Dudek et al. 2004.
[15] Enserink 2004, 319.

opposition to the agreement even after Russia ratified.[16] Izrael's views did not represent the entire scientific community, however. In fact, in reaction to Izrael's position, more than 250 members of the Academy of Sciences signed a petition in 2003 supporting Kyoto ratification.[17]

In the two years prior to the ratification decision, Illarionov developed and publicized an economic model projecting that Russia's GDP was likely to double over the next decade and that the country would then necessarily exceed its 1990 greenhouse gas emission levels. In that case, Russia would shortly find itself a buyer, not a seller, of emissions credits. In the prestigious Russian journal *Voprosy ekonomiki* (Problems of Economics), Illarionov argued that "ratification of the Kyoto Protocol will force Russia's economic actors to face a dilemma: either acquisition of emissions quotas on the external market, or a necessary slowdown (cessation) of economic activity."[18] In an August 2004 paper from his Institute of Economic Analysis (IEA), Illarionov claimed that in order not to exceed 1990 emissions levels by 2012, Russia would be limited to GDP growth of 1.25 percent per year, which allowed neither the doubling of GDP nor, in fact, growth rates that had been typical for Russia's economy since 1998.[19] Elsewhere, Illarionov also pointed out that Russia's burden was unfair, noting that "Russia, which now actually accounts for just 6 percent of greenhouse gas emissions, will have to implement reductions while China, which accounts for 13 percent, has no obligations and the US, which accounts for almost a third, has rejected them altogether."[20]

However, most economists doubted that Russia's economy would grow sufficiently quickly or with the necessary fuel mix to approach 1990 emissions levels. Critics of Illarionov argued that he did not take into account the declining carbon intensity of Russia's economy, and pointed out that there is no direct relationship between economic growth and intensity of carbon usage.[21] Russian industries now produce 3.8 times more greenhouse gases than the leading European countries per dollar of GDP when measured at purchasing power parity, a number that will decline as industries adopt more energy efficient production techniques.[22] In a report directly responding to Illarionov's IEA paper, economists at Environmental Defense estimated that even if Russia experiences robust economic growth with a doubling of GDP by 2012, it will only reach 86 percent of its Kyoto-allowed carbon emissions, and that there is a zero probability Russia will exceed its Kyoto target.[23] World Bank economists similarly cast doubt on the Illarionov model.[24] In spite of these critiques, Illarionov continued to object vociferously to the Kyoto Protocol even after Russia's decision to ratify.[25]

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[16] Authors' interview with Aleksandr Kosarikov, Deputy Chair, Ecology Committee, Russian State Duma, Moscow, 5 July 2005; "Kyoto Protocol to Destroy Russian Economic with Unnecessary Payments," *Pravda.ru*, 5 July 2005; "Climate Change: Not a Global Threat," *RIA Novosti*, 23 June 2005.
[17] Authors' interview with Natalia Olefirenko, Climate Project Coordinator, Greenpeace Russia, Moscow, 13 July 2005; Karas 2004, 6.
[18] Illarionov and Pivovarova 2004, 57.
[19] Institute of Economic Analysis 2004, 55.
[20] Labohm 2004.
[21] Bobylev et al. 2004, 6-8.
[22] Yulkin 2005, 12.
[23] Golub et al. 2004, 26.
[24] Lecocq and Shalizi 2004, 5-12.
[25] "Press Conference with Presidential Economic Adviser Andrei Illarionov," *Interfax*, 16 February 2005.

In addition to these debates about the causes of climate change and the likelihood of ratification constraining economic growth, ideas about how participation in the protocol would affect Russia's international image seemed to be significant in pushing Russia towards ratification. Numerous observers of the debate stated in interviews that they believed President Putin was motivated to ratify Kyoto partly to confirm Russia's identity as a conscientious member of the international community, together with most of the West. We discuss this factor further below in the section on the ratification decision.

Domestic interests

Press coverage of Russia's debate over the Kyoto Protocol was dominated by the pronouncements of Izrael and Illarionov. These opponents, although few in number, were formidable due to their stature as the leading Russian climatologist and the president's leading adviser on economic issues. Many of those involved in the debate also interpreted Illarionov's remarks as representative of President Putin's position. In 2003, partly as a result of the arguments of these vocal critics, the Kyoto decision process slowed down significantly.

In spite of the high profile opposition to Kyoto, however, a number of interest groups worked in support of the protocol. Nongovernmental organizations such as the World Wildlife Fund-Russia, Greenpeace Russia, the Center for Russian Environmental Policy, Eco-Accord, the Russian Regional Environmental Center, and others countered arguments against the protocol, reaching out to government officials and the general public. For example, Aleksei Kokorin of WWF-Russia notes that his organization published more than one hundred articles in favor of Kyoto ratification, in addition to participating in numerous radio and television interviews. At various times WWF also strategically employed up to fifteen contractors who worked inside government ministries to write reports on the legal and ecological implications of Kyoto, which could then be passed on to the relevant government officials. Greenpeace Russia established a joint web page, entitled "Kyoto, yes!" for supporters to post publications and announce Kyoto-related events.[26] NGOs also sponsored independent research. Yuri Safonov, an economist at the Moscow Higher School of Economics and affiliate of Environmental Defense and the Russian Regional Environmental Center, explains "we actually provided [Illarionov] with reports, presentations, and articles showing that there is no serious reason to doubt that Russia would fulfill its commitments on Kyoto and there is no situation under which Russia would not get benefits."[27]

In addition to fighting the domestic "information war," NGOs cooperated with their international allies. Once the United States decided not to ratify Kyoto, the attention of Greenpeace International's Kyoto campaign became focused on Russia. In October 2003, Greenpeace Russia, with the help of Greenpeace International, gathered approximately ten thousand signatures for a letter asking President Putin to ratify the Kyoto Protocol, which was delivered to the president's office and to Russian embassies in more than thirty countries on Putin's birthday. Also in 2003, the Center for Russian Environmental Policy, in conjunction with the US-based organization Environmental Defense, organized the Social Forum on Climate Change. The Forum was designed to

[26] Available at http://kyoto-da.org.ru/docs/kyoto.shtml.

[27] Authors' interview with Yuri Safonov, environmental economist, Moscow School of Higher Economics, Moscow, 14 July 2005.

coincide with President Putin's World Conference on Climate Change and to present expert and public opinion on the question of ratification, addressing the economic, environmental, and social benefits of Kyoto. Ultimately, more than 250 people from 33 countries attending the Social Forum produced a final statement affirming the existence of global warming and advocating Russia's ratification of the Kyoto Protocol.[28]

Yet despite the advocacy of environmental NGOs, the Russian public remained largely unengaged in the debate over ratification. In general, environmental organizations are not well known by the Russian public. A 2005 survey by the Public Opinion Foundation found that even in Moscow, site of the most recognized and active green NGOs, only 33 percent of respondents were aware of the existence of environmental organizations in the city.[29] In addition, in June 2005, the polling agency ROMIR, in a survey of 1500 Russians across the federation, found that the environment ranked ninth in an open question about respondents' current concerns.[30] Knowledge of the Kyoto Protocol also appeared to be low. A 2003 survey arranged by Greenpeace-Russia and executed by the organization Popular Initiative, including 1000 citizens from 18 Russian oblasts, found that 80.7 percent of respondents had never heard of the Kyoto Protocol, and 73.7 percent did not know whether Russia's ratification of it would help to resolve the problem of climate change.[31] Vladimir Zakharov of the Center for Russian Environmental Policy argues that ignorance is not the same as opposition, however, suggesting that "the population…knows little about [Kyoto]. … But when people find out about it, they say: that is a good thing"[32] Many Kyoto supporters attribute the public's ambivalence to the negative media coverage of the issue. Several pro-Kyoto activists estimated that eighty percent of the news coverage was either negative or incorrect.[33]

Some of Russia's most powerful business interests were allies of the Kyoto supporters, which contrasts with many other advanced industrialized democracies, such as the United States, Canada, and Australia, where energy and natural resource sectors in particular have been opposed to Kyoto. Certainly many businesses, such as Norilsk Nickel and oil companies such as Yukos, opposed ratification.[34] Norilsk Nickel was purportedly opposed due to its fear of heightened environmental standards for industry in the Arctic. Oil companies were understandably opposed due to the concern that Kyoto requirements would reduce demand for their products and place further restrictions on their activities. Indeed, according to some observers, the international conglomerate Exxon-Mobil was a strong lobbyist against Russia's ratification.[35] Yet firms such as United Energy System (RAO UES), Russian Aluminum, Gazprom, the service-sector

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[28] Text available at http://www.environmentaldefense.org/subissue.cfm?subissue=13.
[29] Fond "Obshchestvennoe Mnenie" 2005.
[30] ROMIR, Facts and Figures, June 2005, accessed 19 July 2006 at http://www.rmh.ru/en/news/res_results/31.html.
[31] Molnin 2003. Note that this survey emphasized remote cities and urban villages, "rather than big cities where the level of information flow is higher" (Molnin 2003, 17), so the lack of public awareness shown in this statistics may be somewhat exaggerated.
[32] Authors' interview with Vladimir Zakharov, Director, Center for Russian Environmental Policy, Moscow, 28 June 2005.
[33] Authors' interview with Aleksei Kokorin, Climate Change Program Coordinator, WWF-Russia, Moscow, 29 June 2005; Safonov interview.
[34] RIA Novosti, 12 October 2004; transcript of interview with participants in the Social Forum on Climate Change, Radio Svoboda, 6 September 2003.
[35] Olefirenko interview.

giant "Sistema," Siberian Ural Aluminum, and the Russian Union of Industrialists and Entrepreneurs supported ratification and acknowledged the potential advantages of the protocol. The most notable representative of business interests was the National Carbon Union (NCU), a coalition of Russian economic actors who formed a nonprofit advocacy organization after participating in a working group under the Russian president's economic directorate in 2002.[36] The NCU's current members, responsible for more than one-third of Russia's greenhouse gases, advocate market mechanisms for emissions reductions, including a domestic emissions trading program, and seek to attract foreign investment through participation in joint implementation projects. According to its leader, Stepan Dudarev, the NCU supplied the Ministry of Economic Development and Trade with research materials related to Kyoto ratification and implementation.[37] Oleg Pluzhnikov, head of the environmental economics division at the ministry, agrees that business pressure played a positive role in the ratification process, noting that businesses independently arranged projects with potential investors, demonstrating their desire to take advantage of Kyoto mechanisms.[38]

Institutions

During the debate over ratification, various Russian ministries, including the Ministries of Economic Development and Trade, Foreign Affairs, Industry and Energy, Natural Resources, and the Federal Service on Hydrometeorology and Environment Monitoring (Rosgidromet), weighed in on the question of whether to ratify the Kyoto Protocol. It appears that the Ministry of Energy (which was merged into the Ministry of Industry and Energy in March 2004) was in favor of ratification throughout most of the process, seeing Kyoto's joint implementation mechanisms as a route to greater energy efficiency and modernization of energy infrastructure. Yet one former bureaucrat from the Ministry of Energy stated that opinion within the ministry had swung against ratification just prior to Putin's decision to ratify.[39] The Ministry of Natural Resources was reportedly most consistently concerned about constraints on the exploitation of natural resources, and the Ministry of Economic Development and Trade cooled toward ratification in 2002 when it realized that bureaucratic authority to manage the implementation mechanisms could go to the Ministry of Energy.[40] Rosgidromet, although subsumed under the Ministry of Natural Resources, had led the Russian delegation to the negotiations over Kyoto and generally remained positively oriented towards ratification, despite its insistence that more funding is necessary for it to implement the attending obligations.[41] One Ministry of Economic Development and Trade insider recounts that at first an active debate occurred among ministries resulting in a rough balance of opinion; then, however, Illarionov's public statements led government officials to fall silent or adopt a more negative position on the issue of Kyoto ratification. Once Putin announced his intention to ratify the protocol during the fall of 2004, suddenly the ministries were almost unanimous in their support. In the post-ratification setting, it became difficult to find any

[36] Authors' interview with Stepan Dudarev, Head, National Carbon Union, Moscow, 8 July 2005
[37] Dudarev interview.
[38] Authors' interview with Oleg Pluzhnikov, Head, Division of Environmental Economics, Russian Ministry of Economic Development and Trade, Moscow, 19 July 2005.
[39] Authors' interview former senior bureaucrat from the Ministry of Energy, Moscow, 19 July 2005.
[40] Karas 2004, 2-3; Olefirenko interview.
[41] Karas 2004, 3.

ministry spokesperson who would claim that his or her ministry had ever wavered on the question of ratification.

Two parliamentary committees within the lower house of parliament, the State Duma, were responsible for the question of Kyoto ratification – the foreign affairs and ecology committees. Alexander Kosarikov, the deputy chairman of the ecology committee, calls these two bodies the "initiators" of ratification, although he also acknowledges that some committee members feared that Kyoto was part of an international strategy to place pressure on Russian industry.[42] Members reportedly also soured on ratification following the United States' refusal to ratify.[43] The Federation Council, the upper house of parliament, was not a vocal participant in the debate over ratification. For the most part, regional governments did not play a significant role in Kyoto ratification, although in June 2003 the state advisory council, composed of Russia's regional governors, formally supported ratification.[44] A number of regional governments appear interested in using Kyoto mechanisms to attract investment.[45] For example, Arkhangelsk established an inventory system for greenhouse gas emissions from its energy sector in full compliance with IPCC requirements and is experimenting with emissions reduction projects.[46]

Yet in Russia's political system, these bureaucratic battles among ministries, parliamentary debates, and regional interests are less important than the overwhelming power of the executive branch of government. In practice, Russia is a super-presidential system, with ultimate decision-making power in the hands of the executive, and increasingly so. For example, the Federation Council, the upper house of parliament, is now much more loyal to the president than it had been in the past following a 2000 law under which regional governors are appointed by the president rather than directly elected. Governors and the heads of legislative assemblies also have lost their seats in the Federation Council and they must instead appoint representatives, diluting their direct influence on federal policy-making. The party that supports the president, United Russia, dominates the Duma and most regional legislative assemblies. Bills that the president endorses now pass quickly and unchallenged through the upper house as a rule, and with debate but little delay in the lower-house.[47] Finally, according to the Constitution, Putin may not run for the presidency a third time; as such, he has no fear of any electoral consequences from his decisions. Thus, although approval by the State Duma and Federation Council is formally required, because of his institutional power, it was Vladimir Putin's decision alone that would determine the outcome of the ratification debate. This is an exceptionally powerful position compared to other heads of state of Annex 1 countries engaged in ratification debates.

The Decision to Ratify

Throughout the debate over Kyoto, President Putin's position on the issue was ambiguous. The presidentially-appointed prime minister, Mikhail Kasyanov, declared in

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[42] Kosarikov interview.
[43] Buchner and Dall'Olio 2005, 354.
[44] "Putin Tells Government to Get Environmental Act Together," *Reuters*, 4 June 2003.
[45] Kotov and Nikitina 2003, 17.
[46] Yulkin 2005, 10; Pravda.ru, 16 February 2005.
[47] Corwin 2004.

a cabinet meeting in April 2002 that Russia should ratify Kyoto, and then announced officially at the Johannesburg World Summit on Sustainable Development in September 2002 that Russia would indeed ratify.[48] At the 2003 World Conference on Climate Change, more than a year after Kasyanov's announcement, Putin argued that Russia should be "reluctant to make decisions [about the Protocol] just on financial considerations. We should be guided primarily by more noble ideas rather than the consideration of mundane, quick economic benefit."[49] Yet at the same meeting Putin joked that, under conditions of global warming, "We'll need to spend less money on fur coats and grain harvests will increase," though Putin also acknowledged the danger of increased droughts and floods.[50] This ambiguity was disconcerting to protocol supporters given President Putin's high level of decision-making autonomy.

Which aspects of the debate influenced President Putin? With authority concentrated in the executive and loyalty highly prized within the presidential administration, the details remain somewhat opaque. Yet, after a careful analysis of the debate and expert opinion, it seems clear that the decision, as well as the delay, was primarily influenced by international incentives in other policy areas and reputational concerns rather than anticipated benefits from Kyoto itself.

Many potential material benefits did weigh in favor of ratification: the possibility of selling carbon credits for profit on the international market; the modernization of industry that Russia could gain free-of-charge from international partners via Kyoto's joint implementation and green investment mechanisms; and public health benefits from reduced pollutants and particulate matter from a refurbished industrial sector. It does not seem to be the case, however, that the protocol's economic benefits were the primary factor behind the eventual decision to ratify Kyoto.[51] Expected earnings from the sale of emissions credits also plummeted with the US decision not to ratify Kyoto. In 2004, a Cambridge Economic Policy Associates report argued that Russia's potential income from emissions trading is likely to range from US $150 million to $2 billion annually, much less than Russia had expected prior to US rejection of the protocol.[52] Viktor Danilov-Danilian, the former head of the State Committee on Ecology and current head of the Russian Academy of Sciences' Institute of Water Problems, argued, "The money that could be earned thanks to the Kyoto Protocol through selling allowances and receiving investments in Joint Implementation projects is of no interest to the authorities."[53] The economist Yuri Safonov agrees that the economic benefits of Kyoto appear small when weighed against revenue from other sources, in particular from the petroleum sector. In fact, Holtsmark has projected that if emissions permits command a high market price, the prices of oil and gas (and Russia's revenues from them) will likely decrease as states use less carbon-based fuel.[54]

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[48] ITAR-TASS News Agency, 11 April 2002; RIA Novosti, 3 September 2002.
[49] Environmental Defense 2003.
[50] "Counter-attack on Greenhouse Gases," *Izvestiia Science*, 3 October 2003, accessed 2 February 2006 at http://www.inauka.ru/leskov/article36273.html; "Putin Refuses to Say if Russia Will Ratify Kyoto Protocol," *The Independent* (London), 30 September 2003.
[51] Korppoo et al. 2004, 15.
[52] Mirrlees-Black et al 2004, as cited in Korppoo et al. 2006
[53] Danilov-Danilian 2004.
[54] Holtsmark 2003, 410-11.

Indeed, concerns about Russia's international image and progress on other foreign trade issues appear to have played the primary role in the decision to ratify. While domestic attention may not have been focused on the question of Kyoto ratification, international actors took a keen interest in Russia's decision. The European Union was the most active international advocate of the protocol and European leaders personally pressured Putin to ratify Kyoto. For example, in September 2003, Jacques Chirac urged Putin to move forward on the Kyoto Protocol and suggested that such a decision would lead to the "enhanced legitimacy" of Russia-European partnerships.[55] Nongovernmental organizations circumvented super-presidential politics inside Russia by promoting third party pressure on Putin. WWF-Russia used its contacts in European WWF offices to encourage European environmentalists to push leaders including Schroeder and Chirac to press Putin on Kyoto's ratification, arguing that "if you don't ask Putin to carefully consider the Kyoto Protocol, as a friend, then he soon may decide against ratification."[56] Kokorin stresses the importance of this transnational networking and third party influence on Putin by concluding that "it is simply the case that without WWF International we would never have been able to achieve our goal."[57] Safonov agrees that an important factor was "the international image of … Russia and Putin himself… European leaders – I would say world leaders except Bush – always were talking about Kyoto and calling and writing to Putin [asking] why we don't ratify."[58]

Several observers who watched the debate closely argued that Putin was using ratification as a way to signal his unity with "the world community," "European politics," or "Western values."[59] This view is supported by some statements of government officials. Russian Minister of Economic Development and Trade, German Gref, stated shortly prior to ratification that the Kremlin viewed the step mainly as a symbolic gesture to improve Russia's international image.[60] Not only did the decision symbolize Russia's cooperative stance as an international partner, it more specifically signified a degree of strategic distancing from the United States and a closer alliance with Europe. Thus, some delay in the final decision likely came from tensions in Russian foreign policy between these two sets of alliances. Olefirenko of Greenpeace argued that it is significant that Putin began to backpeddle on ratification after meeting with US President Bush in 2003, noting that "Putin does not want to terminate these relations [with the US]."[61] Duma deputy Kosarikov concludes that the main reason for ratification was "Putin's desire not to lose contact, not to move away from a common European politics."[62]

However, Russia's concern with its international image was not merely a selfless desire to develop its "European" identity. Had that concern dominated, the president would have made his decision to ratify much earlier out of a basic normative impulse. Instead Putin's concerns about identity and image were reinforced by the opportunity for a side payment for Kyoto ratification, unrelated to the protocol itself. This opportunity helps to explain why the government delayed ratification for two years beyond President

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[55] "Chirac Presses Putin to Ratify Kyoto," *Agence France Presse*29 September 2003.
[56] Kokorin interview.
[57] Kokorin interview.
[58] Safonov interview.
[59] Zakharov interview; Kosarikov interview; Dudarev interview.
[60] *Russia Journal*, 5 October 2004.
[61] Radio Svoboda, 6 September 2003.
[62] Kosarikov interview.

Putin's initial announcement of his intention to ratify. During negotiations with the European Union, Russia seems to have identified a concession clearly within its national interest that tipped the scales in favor of Kyoto ratification: the EU's agreement to support Russian membership in the World Trade Organization. While the linkage of these two issues was never formally acknowledged by either side, many observers and Russian and Western media sources remarked on the simultaneity of the announcements.[63] Some Russian government officials publicly linked the two issues. In May 2004, Sergei Yastrzhembsky, Russia's envoy to the EU, stated that ratification would depend on the condition that "We would like to see that our interests are welcomed and satisfied in different spheres... for example, the WTO."[64] Putin himself denied that there was a formal bargain struck, but stated that the WTO concession was helpful: "the EU's willingness to accommodate our interests during the negotiations will affect Russia's attitude to the Kyoto question in a positive way. We are going to speed up the pace of our preparations leading to the country's eventual ratification of the protocol."[65] Alexander Golub provides supporting evidence that the two issues were related, noting that Environmental Defense acted as a go-between in the negotiations, suggesting to the European Commission that Russia might be willing to ratify the protocol if the EU retracted its earlier insistence that Russia increase its domestic natural gas prices to world market levels as a condition for WTO admission.[66] The nature of the debate over the potential costs of ratification changed after the May 2004 EU Summit linked the WTO and Kyoto as well. As Vladimir Kotov argues, "the economic benefits for Russia from WTO entry exceed by several-fold its potential losses from surpassing the Kyoto [emissions] targets."[67]

Some observers argued that Putin was largely in favor of ratification all along, but allowed the debate to continue in order to gain as many benefits as possible from other states that had ratified Kyoto, as well as to assure himself that the anti-Kyoto forces were wrong in their cataclysmic predictions about economic constraints imposed by the treaty. Aleksei Kokorin of WWF-Russia reflects: "It's not as if the man slept and then suddenly awoke. He simply acted very slowly, without hurrying. Listening unfortunately to the voices of Kyoto's opponents. Wanting to assure himself that what they were saying was not true."[68] It is clear that Russia's ultimate decision to ratify the Kyoto Protocol was not due to an ideational commitment to resolving the problem of climate change or sustainable development more broadly, nor did the government appear tempted by the potential economic benefits of the agreement itself. Instead ratification was based on a more instrumental view of the protocol as a means of realizing other desirable goals at the international level, while simultaneously enhancing Russia's image on the international stage.

As such, Russia behaved internationally as neoliberal institutionalists would expect, trying to maximize its gains across multiple foreign policy issues while

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[63] *Christian Science Monitor*, 5 December 2003; BBC online, 30 September 2004; *Pravda.ru*, 30 September 2004, 9 February 2005; *Business Week*, 1 October 2004.
[64] "Kyoto, WTO Deal Hangs in Balance," *Moscow Times*, 20 May 2004.
[65] "Russia Traded WTO for Kyoto," *Izvestiia*, 21 May 2004.
[66] Authors' interview with Alexander Golub, Senior Economist, Environmental Defense, Washington, DC, 2 September 2005.
[67] Kotov 2004, 165.
[68] Kokorin interview.

strengthening its long-term reputation with European states as a reliable negotiating partner. At the domestic level, an institutional approach also explains the outcome best. Whereas economic, bureaucratic, and NGO voices were fairly closely balanced for and against Kyoto, the institutional framework in which the president was virtually free from public scrutiny and free of party affiliation meant that he was not constrained by those interests. President Putin could delay, articulate inconsistent policy positions, and make a final decision based on international concerns due to his high degree of decision-making autonomy.

Post-Ratification Politics

The Russian government's motivation for ratifying the Kyoto Protocol has left open a number of questions about the country's implementation strategy. Will Russia merely comply with the protocol's minimal requirements, which in Russia's case do not require emission reductions before 2012? Alternatively, will Russia maximize reductions of greenhouse gas emissions or focus on raising government revenues as much as possible through Kyoto mechanisms?

An institutions-focused approach suggests that Russia will barely comply, since its powerful executive, coupled with bureaucratic disorganization, means that after a decision has been taken single-handedly by the president, there is little momentum within the bureaucracy to develop serious systems of implementation. An interest-based approach predicts that, having ratified largely for the sake of side payments, Russia will attempt to maximize the amount of material gain it can glean from Kyoto flexible mechanisms. In this scenario, efforts to reduce greenhouse gas emissions will only endure as long as funds from other Annex I countries continue to flow into Russia. Finally, an ideas-based approach suggests that there will be significant effort by the Russian government to maximize its emissions reductions in the spirit of Kyoto to retain its identity as a cooperative partner with Europe. This would involve policies like a carbon tax, a domestic cap and trade system, and fines for enterprises that exceed legislated emissions quotas. Evidence thus far suggests that Russia will act according to a combination of the first two approaches and not the third. The current National Action Plan for Kyoto implementation, developed in early 2005, fails to make Russia's overall intentions clear. Safonov argues that the plan is an important first step, but fails to explain what Russia's overall strategy is. "Do we want to establish an emissions trading scheme, cap and trade system, or just focus on investment projects? … We don't know what we want to do and that is the problem."[69] According to M. A. Yulkin of the Environmental Investment Centre, the plan includes only those government initiatives that existed prior to ratification of Kyoto, and they "cannot be taken seriously" since they do not include concrete emissions reduction targets.[70]

At the most basic level, Russia needs to do very little in order to comply with the Kyoto Protocol and could in fact choose "compliance without implementation."[71] Requirements include improving upon the existing national emissions inventory (cadastre) and establishing a national registry in order to track emissions credit balances and transfers. Russia also needs to improve its reporting to the UNFCCC since it

[69] Safonov interview.
[70] Yulkin 2005, 11.
[71] Kotov and Nikitina 2003, 9.

submitted incomplete summary greenhouse gas emissions inventories in its national communications reports between 1995 and 2007, and only submitted its first full emissions inventory in early 2007 – the last of all Annex 1 countries to do so.[72]

Institutions

Russia's path forward on Kyoto implementation may be assisted by the fact that there is no longer an active opposition to the protocol's implementation. However, as Olefirenko of Greenpeace notes, stagnation has now set in: "If earlier the picture looked like a waterfall, a fountain, and everything was bubbling, then now it's a swamp and there is no movement…."[73] Russian observers in both the government and the NGO community generally agree that implementation has proceeded very slowly. This lethargy is variously attributed to the ministries' lack of resources, laziness, or incompetence, but also reflects the mixed signals that state officials received during the ratification debate. Officials who work inside the ministries point out that implementation is a complex process and they are moving forward as quickly as can be expected, a point that is more credible given Russia's lack of detailed planning for implementation.

The February 2005 National Plan of Action on Kyoto Implementation distributes responsibilities across ministries and creates an interdepartmental commission tasked with creating the legal infrastructure to implement the protocol.[74] The Commission is headed by the Ministry of Economic Development and Trade. RAO UES and Gazprom are also part of this commission, the former an electricity company accounting for one third of Russia's carbon dioxide emissions and the latter the world's largest gas-producing company.[75] The plan provides only a vague sense of which ministries and agencies will be responsible for which implementation tasks, with multiple ministries often assigned a single task.[76] Yet in late 2006 and 2007, consolidation of these responsibilities as well as progress on implementation sped up dramatically. The Ministry of Economic Development and Trade obtained responsibility for registering joint implementation agreements. Rosgidromet is responsible for monitoring carbon emissions, although such a system has not been developed yet. The government forestry management agency, Rosleskhoz, is responsible for monitoring forest sinks. The Ministry of Industry and Energy is responsible for decreasing emissions from the energy sector.

Interests

As a result of the uncertainty that preceded ratification and the consequent lack of attention to Kyoto implementation, basic questions related to the interests of various domestic actors have not been decided. For example, the fundamental question of property rights is unresolved: do emissions credits belong to the federal government, regional governments, or to enterprises? Kosarikov questions, "Will the central government have all control over implementation, or will the regions be responsible for developing and implementing their own plans, with overall central government

[72] Korppoo 2004; Webster 2002.
[73] Olefirenko interview.
[74] Yamin and Depledge 2004, 148-156.
[75] Authors' interview with Aleksandr Ishkov, Director, State Environmental Policy Department, Ministry of Natural Resources, Moscow, 18 July 2005.
[76] MERT 2005.

oversight?"[77] Zakharov believes that regional governors and businesses are very interested in opportunities presented by Kyoto, "but without the necessary legislation nothing can be realized … That is, it is possible to prepare projects, but it's impossible to start them while there is no confirmation by the legislature."[78] Lurking behind these legal debates is a concern shared by many that Kyoto implementation will provide an opportunity for government corruption. For example, Dudarev of the National Carbon Union argues that an absence of clear legislation would be "an excuse for abuse, because no one knows the procedure according to which deals must be made, and that means it will be the personal decision of each bureaucrat to determine how it should be done."[79] Pluzhnikov of the Ministry of Economic Development and Trade disagrees, arguing that a transparent process can be designed that will make corruption unlikely.[80]

In spite of environmentalists' pressure for Russia to maximally reduce greenhouse gas emissions, Russia's implementation of Kyoto is likely to focus much more on the strategy of maximizing revenue. Many business and government actors, the strongest interest groups in Russia, emphasize Russia's opportunity to profit from the JI mechanism, as well as from credits for improved forest management practices. Optimism about carbon emissions trading decreased as the market effectively shrank following the US choice not to ratify, removing the largest potential buyer of credits. Yet by many accounts Japan, Canada, and even European states are willing to purchase credits that are the result of documented, contemporary emissions reductions, although they will not purchase Russia's "hot air," or credits that are an artifact of industrial collapse.[81] Russia's delay in developing necessary legislation and monitoring systems may already be limiting its potential for profiting from international emissions trading and other flexible mechanisms under the protocol, however. For example, a 2003 *Climate Policy* article ranked Russia third out of the thirteen Eastern European states in terms of its scope for JI projects, but tenth in terms of its institutional capacity for participating in JI projects.[82] Government officials from Japan, a ratifying state likely to need significant emissions credit purchases, have expressed concern about Russia's poor progress in developing an emissions accounting system and voiced a preference for purchasing credits from Ukraine, which has implemented better accounting systems.[83]

Both scientists and bureaucrats pointed out in interviews that the joint implementation mechanism could be very profitable for Russia since it allows a double gain: improving industrial efficiency to help long-term economic growth, paid for by the direct investments of other state parties to the protocol. Several of Russia's largest firms are prepared to take advantage of JI projects. For example, during the summer of 2005 in one of the first JI agreements, United Energy Systems signed a memorandum of understanding with the Danish government to upgrade technology at two power plants, with an estimated 20 million Euros in investment and a reduction in greenhouse gas emissions of 1.2 million tons to be purchased by DanishCarbon.[84] Currently, however,

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[77] Kosarikov interview.
[78] Zakharov interview.
[79] Dudarev interview.
[80] Pluzhnikov interview.
[81] Golub et al 2004, 29; Lecocq and Shalizi 2004, 17-18.
[82] Fankhauser and Lavric 2003, 429.
[83] *Financial Times* (Asia Edition), 28 June 2006, 3.
[84] DanishCarbon press release, available at http://www.mst.dk/transportuk/01070100.htm.

the implementation of JI projects is constrained by the lack of a legal framework. By January 2007, Russian government ministries had drafted JI project approval procedures, but they had not yet been finalized and approved by government decree.[85] Official participation in Kyoto flexible mechanisms requires that Russia also submit its initial report to the UNFCCC detailing its remaining emissions allowable for the 2008-2012 period, and complete its carbon registry and integrate it with the UN's international transaction log. While it completed the first task in February 2007, work on the second task was only expected to begin in summer 2007.[86] Since Russia has not yet met the eligibility requirements for participating in flexible mechanisms, proposed projects must follow Track-2 JI procedures in which approval is given by the UN JI Supervisory Committee rather than domestic agencies. As of March 2007, 23 project design documents for JI projects in Russia had been officially submitted to the UN JISC, with the potential to generate up to 77.4 emissions reduction units.[87]

Another area of uncertainty regarding the future use of flexible mechanisms is the ownership structure of the oil and gas sector in Russia. Over the past several years, the state has re-nationalized oil and gas sector assets by purchasing or prosecuting private companies, so that now over one-third of Russian oil production is state-owned.[88] It is unclear whether the state or private owners will be keener to take advantage of JI mechanisms. The government has been slow to begin implementation tasks, but, if government ownership of the sector is vast, then it stands to benefit immensely from the efficiency gains that could come from JI projects.

Green investment schemes (GIS) may lead to greater overall reduction in emissions levels by directing investment to the modernization of infrastructure, yet may be less profitable for private sector actors. Such schemes would increase the marketability of Russia's "hot air" emissions credits by assuring buyers in other Annex I states that profits would be directed toward projects in Russia that generate real emissions reductions and are subject to external verification.[89] Helmut Schreiber of the World Bank argues that GIS has several advantages over a JI project-based approach because the approval process for JI projects is likely to be "very cumbersome." GIS also could focus on broader infrastructural problems related to energy efficiency, such as the industry-wide practice of gas flaring and leakage from Russia's domestic pipeline system, which would be beyond the scope of any single JI project.[90] Safonov also notes that residential heating and public transport systems provide scope for emissions reduction through green investment.[91]

Russia does not appear to be preparing other measures that could facilitate greenhouse gas emission reductions, such as a domestic emissions trading system, a carbon tax, or investment in alternative energy sources. An effective internal trading scheme would require a more detailed national inventory of emissions, tracking emissions not just at the national level, but by firm, and the technology to monitor

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[85] *PointCarbon.com*, Interview: JI Rules Seen as Discriminatory, 2 February 2007.
[86] *PointCarbon.com*, CDM & JI Monitor, 21 February 2007, 6; Government of Russia 2007.
[87] *PointCarbon.com*, 30 March 2007.
[88] Baev 2005.
[89] Tangen et al. 2002.
[90] Authors' interview with Helmut Schreiber, Lead Environmental Economist, World Bank, Moscow office, 15 July 2005.
[91] Safonov interview.

changes in emissions levels. The National Carbon Union advocates a domestic emissions trading system, arguing that a functioning domestic market would facilitate Russian participation in the European Emissions Trading Scheme.[92] A carbon tax is an unlikely measure due to the fact that Russia currently sells natural gas domestically at prices below that of the world market. A tax would likely prompt domestic discontent and discourage consumption in a highly energy intensive economy focused on growth. Finally, investment in alternative sources of energy appears negligible; wind and solar energy would likely find it difficult to compete in a market in which carbon-based fuels are subsidized.

Ideas

Russia's shallow ideational commitment to the environment generally and climate change prevention specifically, as revealed by the ratification debate, may affect the implementation of the protocol. While ratification appeared to be driven primarily by international pressure and side payments, implementation is a process that occurs largely outside the public spotlight and, at least in the short term, does little to affect Russia's international image. Nongovernmental organizations have realized that they still need to explain to the general public and government officials alike why Kyoto is worthwhile. Since ratification, WWF-Russia has begun a public education campaign. Zakharov of CREP suggests that an expert scientific council should participate in the interdepartmental commission. Other supporters have suggested that NGOs form a "Kyoto Watch" program that monitors progress or lack thereof in implementation.

Whether the Kyoto Protocol will actually serve to limit Russia's greenhouse gas emissions depends on how the agreement is implemented, but Russian supporters of Kyoto hope that the protocol will serve as a catalyst – encouraging Russian industry to modernize and achieve greater energy efficiency. Safonov asserts that Kyoto could resolve a number of economic, social, and environmental problems simultaneously. For example, by reducing coal use in order to lower carbon dioxide emissions, Russia would also reduce sulfur and particulate emissions, which should have a positive impact on public health.[93] Pluzhnikov of the Ministry of Economic Development and Trade sees a benefit in what he terms the "Kyoto psychology," which directs Russia's attention to a series of important economic and environmental tasks.[94] Ishkov of the Ministry of Natural Resources argues that Kyoto will help to modernize Russia's industry and energy sectors, while providing an economic mechanism for solving Russia's ecological problems, including forest management, "that are not tied purely to climate change – that is, without entering into the discussion of whether or not greenhouse gases cause such changes."[95] Indeed, the protocol may indirectly serve to strengthen Russia's weak environmental protection bodies.

Conclusion

Russia's decision to ratify the protocol was not primarily driven by a sense of urgency about climate change prevention, either at the elite or mass level, but by its ability to

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[92] National Carbon Union Analytical Materials, available at http://www.natcarbon.ru/en/analytical/system/.
[93] Safonov interview.
[94] Pluzhnikov interview.
[95] Ishkov interview.

achieve other desirable benefits from international partners and concern for its international image. The Russian president thus mostly acted to further Russia's material and reputational interests at the international level, taking into account multiple foreign policy objectives, as neoliberal institutionalists would predict. Russia's centralized political institutional context made it possible for the president to decide to ratify based on these international interests. However, this same decision-making context, which did not require "buy-in" from a wide range of actors involved in carbon emissions, may stall domestic implementation of the protocol. These factors create uncertainty surrounding Russia's implementation and plans for the post-2012 Kyoto process.

Russia's failure to participate or its purely symbolic participation in the Kyoto Protocol could be detrimental in two ways. First, those states that need to purchase carbon credits and invest in Russia through JI projects in order to meet their own binding targets will be in a difficult position if Russia fails to develop the necessary internal systems. Second, if Russia does not comply in a serious fashion it sets a worrisome precedent for the future participation of other large states attempting to develop their economies, including China, India, and Brazil.

On the positive side, if Russia invests time and resources in implementing the Kyoto Protocol, it will have a greater interest in the continuation of the system. There are clear benefits, material and ideational, to Russia's new role as a Kyoto ratifier, not least the continued importance of Russia for the protocol's success. Survey data suggest that, as in many countries, the public in Russia is rapidly becoming much more concerned about the problem of climate change. A GlobeScan survey in 2005 – after ratification – found that 59 percent of Russians considered it a "very serious" problem, up from 43 percent in 2003.[96] Aleksandr Bedritsky, the head of Rosgidromet, argues that the next step is to increase the general understanding of "Russia's role as one of the leading international nature donors through its global repository of forests absorbing greenhouse gases."[97] Perhaps independently of the decision-making over ratification, Russia's rhetoric about its international role as an environmental steward will begin to positively influence its behavior in future efforts to address climate change..

[96] GlobeScan Incorporated 2006. Both polls used samples of 1000 respondents nationwide.

[97] Aleksandr Bedritsky, Head, Federal Service for Hydrometerology and Environmental Monitoring of the Russian Federation, written response to authors' questions, 22 June 2005.

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