Center for American Progress

The Neglected Challenge

U.S.-Russia Climate and Energy Efficiency Cooperation

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The summit between President Barack Obama and Russian President Dmitri Medvedev in Moscow on July 6-8 comes in the middle of a packed international schedule of bilateral and multilateral meetings for the United States on climate change. In the run up to the critical U.N. climate talks in Copenhagen at the end of this year, when the extension or successor to the existing Kyoto Protocol must be agreed upon, it is crucial that the United States and Russia—both major emitters of greenhouse gases and potentially leaders on this crucial issue—explore ways of working together to ensure a positive outcome at these talks. Enhancing cooperation on climate change and energy efficiency should be a major plank of U.S. Russia policy and should be discussed at the highest levels when President Obama meets with President Medvedev next week.

Russia, like the United States, is a significant contributor to global warming. If the European Union is disaggregated, Russia becomes the third-largest emitter of carbon dioxide behind the United States and China and still currently ahead of India. More importantly, Russian per capita emissions are on the rise, and are projected at this point to approach America's top rank as per capita emitter by 2030. Russia is also the third-largest consumer of energy and one of the world's most energy-intensive economies. Making Russia a partner on these issues could be critical in order to advance a sound global climate change agenda.

The Center for American Progress report, "After the 'Reset': A Strategy and New Agenda for U.S. Russia Policy" will be released on July 2 and outlines three avenues of U.S.-Russia bilateral cooperation on climate and energy issues: cooperation on a new international climate change agreement, building Russia's capacity for carbon trading, and cooperating on energy efficiency. Here we expand on these proposals.

Our approach is based on the principle that the best way to engage Russia on global warming is to frame cooperation as a form of advancing economic modernization. We must convince the Russians that joining the community of nations on this issue is in their best economic interest.

Cooperation on Copenhagen

The United States should directly engage Russia on reaching a new international climate change agreement.

The buildup to the climate summit in Copenhagen is making it clear that broad-based involvement by all countries—but especially the developed countries and major emerging economies in the developing world—is needed to create a consensus on global climate change action. Most of the attention is focused on the United States, the European Union, China, and India as the major players necessary to forge a global deal, and there is insufficient thought given to the role Russia could play in a post-Kyoto agreement. There are however at least two reasons—besides the fact that Russia is a Kyoto signatory and a major emitter—to engage Russia directly in Copenhagen.

First, we should expect some resistance to a Russian embrace of an extension to or replacement of the Kyoto Protocol given the unique history of the relationship between the original assessment of their 2012 Kyoto targets and the transformation of their economy following collapse of the Soviet Union.

The agreed-to carbon reduction targets in the Kyoto Protocol were indexed to 1990 emission levels. Those countries signing the treaty were obliged to reduce their emissions to an agreed-upon level by 2012 relative to the baseline of their 1990 emissions. Russian emissions dropped considerably because of the economic contraction that followed the collapse of the Soviet Union. As a result, without any additional efforts Russian emissions will not return to their 1990 levels before at least 2020 and Moscow will not be required to curb its emissions by the end of the Kyoto commitment period in 2012.

This means the Russians are likely to oppose stronger caps on emissions, which will be a necessary part of the hoped-for Copenhagen treaty. Indeed, Russia was the last major economy to announce its proposed post-Kyoto targets of 10 to 15 percent below 1990 levels by 2020. Such a proposed range has left many observers underwhelmed because it will actually allow for absolute increases in emissions from Russia's current state, but the international community should view this as an opening bid rather than final offer by actively engaging with Russia in constructive dialogue.

If we cannot strengthen the treaty and move progressively toward gradual but greater emissions cuts then we will not reach the goal of halving global emissions by 2050, something the Intergovernmental Panel on Climate Change argues is necessary to avoid the worst consequences of climate change. Given the sheer quantities of Russian emissions—regardless of their dip below 1990 levels—the Obama administration should work with the Russians to demonstrate that abatement measures are in Moscow's long-term economic interest.

Improvements in energy efficiency and energy intensity, for example, further economic modernization—one of the Kremlin's oft-repeated goals—and they will promote more

sustainable economic growth. But for the United States to make this argument we must take the lead and make steady progress in adopting strong domestic clean-energy and climate policy, such as the American Clean Energy and Security Act that passed in the U.S. House last week. We must also be prepared to listen to our Russian counterparts and not lecture, since a finger-wagging approach will only backfire in the Russian context.

Second, Russia could be one of the unacknowledged keys to success at Copenhagen given the likely structure of the treaty. According to the architecture of the first U.N. climate treaty the Kyoto Protocol could not have been enacted unless at least 55 countries signed and ratified it representing at least 55 percent of global carbon emissions. When the first round of commitments were announced enough countries were willing to ratify the treaty but their emissions did not add up to the required amount for implementation. So if Russia had not ratified the treaty in November 2004, it would have not gone into effect. Russian participation could again be critical this time because we can expect a similar proviso in the post-Kyoto treaty.

We need to bring the Russians on board for an ambitious agenda before Copenhagen sooner rather than later to avoid a deadlock in the international climate negotiations. Immediate bilateral cooperation and engagement is key in making Russia a partner in addressing climate change—it is not in the U.S. interest for Russia to be a spoiler.

But this cooperation faces significant challenges. There are many in the Russian political establishment who believe that the effects of climate change will be positive for their country. What's more, policymakers tend to view climate agreements in exclusively economic and not environmental terms. Russian policymakers, like their Chinese counterparts, emphasize that any emissions caps should not threaten Russia's economic development. However, Russia has recently released a draft climate doctrine that acknowledges the threat posed by climate change—a positive sign.

Building capacity for carbon trading

The United States should help Russia capitalize on the substantial amounts of emission credits it now possesses with the goal of ultimately reducing its emissions.

Russia currently sits on a veritable treasure of tradable carbon credits—by some estimates 1.5 billion euros. Russia is not linked to any existing emissions trading system, such as the European Trading Scheme, and it lacks the institutional capacity to do so. The United States is in a good position to provide capacity building expertise to Russia in establishing an emissions trading market because of our experience in establishing emissions trading markets, most notably the highly successful sulfur dioxide trading scheme in the 1990s and more recently regional (Western Climate Imitative, Regional Greenhouse Gas Initiative, and Midwestern Initiative) and voluntary (Chicago Climate Exchange) carbon emissions trading initiatives.

The administration should also create incentives for these U.S. trading centers to collaborate with the Russians to launch a pilot emissions trading scheme in one or more of Russia's heavy industry sectors. Such efforts can include guidance on how to set up inventory systems for tracking greenhouse gas sources and sinks and to establish the architecture and infrastructure for the actual trading of emission credits, with the long-term goal of linking Russia (or specific sectors) into broader trading systems.

Developing Russia's capacity in emissions trading will help it to be in a better position to join a large trading scheme as a full participant if and when it agrees to begin stemming its current emissions. This proposal is likely to be met with support from major Russian enterprises, including the state-controlled oil major Rosneft, which has already demonstrated interest in related emissions trading projects. The larger objective of such cooperation should be clear: demonstrating to the Russian government that joining international efforts to solve global warming can be profitable to them by providing a way of joining the international carbon market. The revenues from carbon credit trading will offset the cost of taking on additional cuts at home.

Cooperation on energy efficiency

The United States should also propose a series of cooperative agreements on increasing Russia's energy efficiency.

One of the most striking features of Russia's energy profile is its energy intensity—the amount of energy consumed per unit of gross domestic product—which is higher than any of the world's 10-largest energy-consuming countries, 3.1 times greater than the European Union, and more than twice that of the United States. This massive potential for improvement makes working with the Russians to increase their energy efficiency the most effective short-term way to help them reduce emissions and points toward the clearest path for demonstrating the economic advantages of taking on climate change.

It is important for the United States to adopt this stance to take advantage of the opportunity that has recently opened up in Russia. For the first time the Russian government has demonstrated an interest in increasing efficiency. President Medvedev signed a decree in June 2008 that includes measures aimed at reducing Russia's energy intensity by at least 40 percent by 2020 compared with 2007 levels. And Prime Minister Vladimir Putin issued a government order earlier this year that calls for a significant increase in the energy efficiency of the Russian electric power sector. Medvedev has on several occasions publicly acknowledged the economic benefits of energy efficiency for Russia's economy. As such energy efficiency represents an enormous opportunity for collaboration between our two countries.

Fortunately the United States has a ready and successful model for such collaboration in its experience in working with China on industrial energy efficiency. The Lawrence Berkeley National Laboratory, a research institution supported by the U.S. Department of

Energy, has worked with Chinese scientists and the Chinese government to establish an industrial energy efficiency program that benchmarks China's top 1,000 energy-consuming industries to global best practices.

We recommend that the Obama administration propose a similar type of program that targets Russia's industrial sectors given the potential for substantial financial savings through energy efficiency in Russia's industrial sector and the Russian government's interest. Funding for such a project would come from both the U.S. and Russian governments, working through public-private partnerships, and that any potentially new energy-saving technologies that could emerge from this collaboration be fully shared. We should also frame this project as an opportunity for U.S. and Russian scientists to collaborate on contributing to Russia's innovation agenda and produce technologies that benefit both countries because of the sensitivity of U.S. involvement in the Russian economy.

Further, the United States can play a role in increasing Russian efficiencies by offering expertise to improve energy conservation at Russia's end-user level. The United States has had considerable success with a domestic energy efficiency program called Energy Star, which is administered jointly by the Environmental Protection Agency and the Department of Energy. Energy Star adopts the public-private partnership model—a concept gaining traction in Russia—by pairing up with businesses to develop energy efficiency compliance codes for a full range of products and practices, which now cover buildings and facilities and over 60 product categories, such as home appliances, office equipment, lighting, home electronics, and more.

In over 17 years of operation Energy Star has engendered collaboration among 15,000 private- and public-sector organizations, and led to estimated energy savings that translate to $19 billion in 2008 alone. It will be further strengthened by the aforementioned American Clean Energy Security Act should a companion bill in the Senate also pass. We recommend that the United States and Russia use the American experience with Energy Star to develop long-term Russian institutional capacity for establishing best practices, setting energy performance standards, and monitoring energy consumption across a wide range of end uses in Russia.

Russia and the United States were incapable of discussing important issues in the final months of the Bush presidency. The Obama administration now has the opportunity to build a relationship of trust and cooperation to fight a common threat. Working together on advancing energy efficiency in Russia and demonstrating the economic advantages of attending to climate change offers both countries an ideal platform for a new era of constructive diplomacy and joint action. Climate and energy efficiency can also expand the U.S.-Russia relationship beyond the traditional areas of arms control and nonproliferation. President Obama should capitalize on this opportunity starting next week in Moscow when he meets with Medvedev. Confronting this neglected challenge may very well wind up being a key to solving the climate crisis.