# RUSSIA-EU COOPERATION ON ENERGY EFFICIENCY

### ENTHUSIASM AND CHALLENGES AHEAD

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- Russia's government has given its energy efficiency policies a hard push forward; the new policy initiatives are being driven largely by the imperative of technological modernization and rising energy prices at home.
- Energy efficiency is an area where practical cooperation between the EU and Russia may expand, but the progress is still limited to pilot projects. The biggest potential for cooperation is on the regional level of cooperation between Russia and individual EU member states.
- Progress in cooperation depends on the successful implementation of Russia's energy efficiency policy, the power sector reform and other factors not related to energy per se (such as a clear institutional set-up, local expertise, and high-level political involvement). The bulk of the work needs be done by Russia alone with only limited input from the West.
- Cooperation on the high EU-Russia level could focus on legislation, common standards and good practices. Bilateral projects between individual member states and Russia could focus on technology transfer, the training of Russia's energy specialists, and investment projects.
- There are no guarantees that cooperation on energy efficiency, even if successful, would have a positive spillover effect on other areas of the Russia-EU relationship. In general, improving energy efficiency might bring Russia closer to the EU and the OECD countries in terms of compatibility of standards, technologies, and energy management.



A fresh start?

The adoption of the new energy efficiency legislation in Russia in 2009 has led to anticipation that a new exciting avenue of cooperation is about to open up in Russia-EU relations. The EU has been called upon to support the Russian initiatives as they would make its energy relations with Russia more stable. Furthermore, because both Russia and the EU are working towards the same goal of making their respective economies more energy efficient, the two are natural partners. This partnership is often postulated in terms of transferring European investments and technologies to Russia's emerging energy efficiency market.

Despite the surge in enthusiasm, energy efficiency is not an entirely new item on the Russia-EU agenda. In fact, it has featured since the beginning of the Russia-EU Energy Dialogue in 2000. Some member states, such as Finland, have had bilateral projects with Russia dating back to the mid-1990s. However, there has been very little practical cooperation in this area. The Thematic Group on Energy Efficiency, which is the main institution of cooperation in the framework of the Energy Dialogue, is often criticized for being merely a bureaucratic body with little added value. The bilateral projects of the 1990s, e.g. grants and loans for public housing at the regional level, yielded mixed results, and some even failed. The lack of progress was due to the fact that on the Russian side the incentives to increase energy efficiency were lacking, energy prices for domestic consumption were low, and there was little political will to change the situation.

#### A policy shift

Since 2008, the issue of energy efficiency has enjoyed something of a revival in Russia. President Dmitry Medvedev has made several statements linking the competitiveness of the Russian economy with increased energy efficiency.<sup>1</sup> His rhetoric was echoed by other key officials, most notably by former president and incumbent prime minister, Vladimir Putin. Energy efficiency became intrinsically linked with the policy discourse on Russia's modernization, an ideological cornerstone of Medvedev's presidency.

In November 2009, Russia's parliament passed legislation laying out a legal framework for improving energy efficiency.<sup>2</sup> The new law superseded the legislation adopted in 1996, which was largely of a declarative nature and not supported by effective implementation mechanisms. The legislation of 2009 is a Framework Act which includes several bylaws and regulations.

Among other aspects, the new Framework Act included amendments to existing legislation on the labelling of goods and equipment, housing, and taxation to introduce or enforce energy-saving regulations. It also established a general rule that buildings and other structures should meet energy efficiency requirements and indicate it clearly on

<sup>1</sup> MEDVEDEV D. Energy efficiency is a strategic theme for the country's development. http://www.finam.ru/analysis/ newsitem40Ecc/default.asp

<sup>2</sup> The Federal Law "On Energy Saving and Increasing Energy Efficiency".

their facades (in the form of special "energy efficiency classes") when they are commissioned and during their subsequent operation. The law included tax cuts for energy efficiency improvements and fines for violating its provisions. It also comprised deadlines for the implementation of its provisions, many of which would need to be fully implemented by 2010–2011.

The new legislation and other programmatic documents, such as the Energy Strategy for 2030, set an objective of reducing the energy intensity of the Russian economy by 40 %, and increasing the share of renewable energy in the total generation to 4.5 % by 2020.

Indeed, Russia has enormous potential to improve its energy efficiency. According to the European Bank for Reconstruction and Development (EBRD), the economy uses more than seven times as much energy per unit of GDP than the average for West European economies. Energy wastage in public sector buildings and in households is significant (notably in heat distribution) although most of the wastage is associated with the energy production sector (for example, gas flare), various industries, and transport. Russia's inefficient use of energy is still a legacy of the Soviet economy, when energy was cheap, subsidized and plentiful. Although domestic energy prices and tariffs are still subsidized (for example, gas tariffs) they have risen considerably compared with the Soviet era. Tariffs, in particular for the industrial sector, have been rising steadily. Among other reasons this was due to the strong interest of energy producing giants such as Gazprom to decrease the subsidies for consumers inside Russia in order to gradually decrease the gap between the domestic and export prices for energy.

The current energy efficiency policies are therefore driven by these purely economic considerations. Indeed, for an economy that is still muddling through a serious economic slowdown after a decade of rapid growth, a more effective use of existing resources, energy conservation measures and the shift to new technologies could constitute a possible path to recovery. Furthermore, according to experts, a significant part of the existing industrial equipment is antiquated and inefficient.<sup>3</sup> The energy infrastructure (generation and distribution) demonstrates clear signs of deterioration and risk of failure. This indicates a limited capacity to produce and transport energy and eventual losses to Russia's economy as a result.

Such a shift in attitude towards energy wastage might come as an incentive for cooperation with the EU. However, the practical realization of this possibility depends to a very large extent on the implementation of the nascent Russia's energy efficiency policy. Besides that there are other factors that are not directly related to energy polices but are crucial for practical cooperation such as the functionality of the administrative structures and institutions, availability of local expertise, and top-level political involvement.

#### **Slow implementation**

Nevertheless, the suggestion that there is enormous potential for energy efficiency in Russia is not to say that this is an easily attainable goal. Implementing the legislation has proved problematic. First, as is typical of many of Russia's policy initiatives, the implementation approach is strictly top-down, with supervision stemming from the Kremlin and the prime minister's office. The focus is on federal-level ministries, whereas most of the energy efficiency measures are, in fact, dependent on municipalities and regional government. It is quite revealing that at the beginning of 2010 President Medvedev met with the governors in Khanty Mansiysk, where he noted that only 12 of the 83 subjects of the Federation had taken action on energy efficiency.

Second, the new market for energy efficiency services and technologies has been developing very slowly, the idea being that the energy efficiency market would become the basis for the development of energy saving mechanisms (such as energy saving companies) and so the government would not have to incur excessive budget costs. However, the ownership rights for the energy delivery and distribution infrastructure are legally complex, in particular in

<sup>3</sup> ASTRASHEUSKAYA, A. (2010) Foreign capital wary of Russia's infrastructure plans. http://in.reuters.com/article/ idINIndia-49170520100609



Photo: ivvo (flickr)

the housing sector. The key elements of a working market—clear regulations, as well as tariff and price competition—are still lacking. This immediately raises the question of whether the emerging market is going to prove attractive to European investors. Then again, if viewed from the European perspective, it is still unclear whether the Russian market is going to be compatible with the energy efficiency markets existing in the EU, where energy service companies, or ESCOS, are a key element.

Third, there are only limited incentives for energy consumers and producers alike to implement energy saving mechanisms. Likewise, incentives for small and medium-sized enterprises (SMES) and individual households to implement the new energy standards (e.g. labelling for household appliances, and metering) are lacking.

Finally, public awareness is relatively low. The government is likely to face difficulties justifying to the population why they need to pay more for heating and electricity, fuel for cars, and many other goods. But more importantly, Russians need to be informed about how they can minimize energy-related costs within their household or municipality.

The government's response to implementation problems has been mostly bureaucratic. When referring to the issue, Prime Minister Putin stated that the "executive discipline" for putting the policy into practice was very low. This is not surprising given the ineffectiveness of Russia's bureaucratic machine. On the other hand, even with more stringent executive discipline, the implementation is likely to be problematic due to general emphasis on "sticks" (fines, regulatory measures) rather than on "carrots" (market-based incentives, tax cuts) in the existing framework legislation.

#### What can the EU do?

Given the current momentum, the existing cooperation with several EU member states is likely to continue with more pilot projects (e.g. financing of energy efficiency measures at the municipal level in Russia). This would also chime with Russia's own thinking and preferred mode of interacting with the European states on a bilateral basis. In 2009–2010 Russia signed a series of memorandums of understanding in the field of energy efficiency with several European countries including Finland, Germany, the UK, Denmark, and France. These documents reflect the importance of European investments and business involvement for Russia.

The bilateral approach is being embraced by the EU governments themselves. Some have been well exposed to the Russian scene, and have acquired a widespread network of Russian partners. This applies in particular to Northwest Russia and its EU neighbours: Sweden, Denmark, and Finland. In general, the bilateral channels are less bureaucratic than the EU-Russia level. At the same time, the line between bilateral and multilateral cooperation is difficult to draw as bilateral cooperation exists within the EU-Russia interface, for example in the case of the Northern Dimension. Several EU member states are members of ND partnerships (environment, and transport and logistics) alongside the Commission and Russia.



Photo: Thomas Claveirole

At the end of the day, it is not that important whether cooperation on this issue is organized in accordance with bilateral or multilateral principles. Of greater importance are the priorities that are set and the way in which the actual cooperation is implemented. In this regard, a useful division of labour can be found between the EU-Russia level (such as the Energy Dialogue, and the Partnership for Modernization) and the bilateral level. The EU-Russia structures can focus on the harmonization of standards, and the transfer of best practices in energy management, whereas bilateral programmes can be geared towards the European companies and specialists in the Russian market and vice versa.

Another issue where bilateral cooperation is necessary concerns the European companies and banks taking part in energy efficiency investment projects in Russia. There are obvious major players such as Finland's Fortum or Germany's Siemens which have made vast investments in the Russian energy sector, if not in the energy efficiency sector per se. In addition, there are the medium-sized companies that sell energy-saving technologies and services. There is also a small group of consulting companies that provide energy audit and various project assessments. All these actors need support from their national governments when entering the Russian market. In order to start operating in Russia, foreign companies need a special licence. They also have to undergo a compulsory certification procedure for their equipment. As experts note, one of the specifics of the Russian certification system is that the imported equipment should undergo the same certification procedure as the domestic one, even if it has already been certified abroad. This certification

process can often take up to one year. In this regard, the bilateral memorandums on understanding that Russia signed with European countries are important as they provide some sort of welcome note to the foreign companies. However, they are of little help when companies have to deal with the bureaucratic intricacies on the Russian side.

That said, one should be aware that the EU will have only a limited role as regards Russia's energy efficiency reform. The issue of improving the usage and distribution of energy is obviously one of Russia's internal development goals, and the bulk of the work will have to be done by Russia alone.

#### Knowledge transfer: crucial but still very problematic

The most important input that the EU could provide regarding Russia's quest for energy efficiency would be to offer the expertise and practices of managing the use of energy that will help Russia to reach its targets. However, it has proven to be the most difficult part of cooperation. It is unlikely that change of legislation will be sufficient to radically improve the situation. The problems lie in the applicability of EU's practices and the fact that all too often they are understood very differently in Russia. The energy service companies (ESCOS) is a case in point.

Many EU member states, particularly the Scandinavian countries, have very long experience of successful energy management, dating back to the 1970s energy crisis. What is more, these countries have harsh climatic conditions not dissimilar to those of Russia. The energy efficiency practices carried out in these countries, and in the EU at large, include energy service companies (ESCOS). In fact, ESCOS have even cropped up in Russia, although they are still few and far between. These local ESCO-type companies are not yet able to provide well-developed energy saving services and they remain clustered around Moscow. In Europe, private ESCOS use their own funds to implement energy efficiency measures in public buildings, for example. The investments they make are then repaid through achieved energy savings. In this regard, ESCOS are different from consulting firms, which are typically paid a fee for their advice without making any initial investment. Obviously, financial institutions and banks are essential for the development of an ESCO market.

Importantly, the Russian government does recognize the practical value of these instruments, and ESCOS are mentioned in the new legislation. Currently, Russia's Sberbank is tasked with devising a special financing scheme for ESCOS in Russia's regions. Still, as a recent study points out, the majority of existing ESCO-like companies are organized on the basis of energy saving equipment production and work on non-recurring contracts which do not include long-term programmes for providing services to customers.<sup>4</sup> The main barriers to development of ESCOS in Russia are poor monitoring of savings, lack of information, absence of effective stimulation and comprehensive legislation.<sup>5</sup> The absence of these

5 Ibid. p.94

elements has been one of the barriers to Russia-EU cooperation in this field. It was also one reason why cooperation remained restricted to pilot projects often initiated by European actors, but sometimes left incomplete.

Russia-EU cooperation on energy efficiency should therefore proceed to facilitate the development of ESCOS industry in Russia. However, the involvement of external actors is not likely to make the emerging Russian energy efficiency market a suitable environment for investments and technology transfer. While limited progress can be achieved in some areas through concrete projects, it will not redefine "the rules of the game" or the general institutional environment. In this regard, cooperation between Russia and the EU on energy efficiency is not dissimilar to other areas of cooperation where the progress of cooperation depends on key factors such as functionality of institutions, proximity of standards and legislation, and common interest.

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<sup>4</sup> HANSEN, SH., LANGLOIS, P., BERTOLDI P. (2009) ESCOS Around the World: Lessons Learned in 49 Countries. The Fairmount Press. p.92