

and provide technical assistance in adopting the necessary measures.

Finally, the EU should continue to foster small-scale energy efficiency projects. While these will not entail

great impact in total volumes, they may contribute to changing minds and attitudes, and support energy efficiency improvements at the grassroots level.

About the author

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Further literature:

- IEA, *Optimizing Russian Natural Gas. Reform and Climate Policy*. Paris, 2006.
- Petra Opitz: *Energy Savings in Russia – Political Challenges and Economic Potential*, Russian Analytical Digest no. 23, 2007.
- Hella Engerer, Claudia Kemfert: *Russia: Inadequate priority given to energy efficiency and climate protection*. DIW Weekly Report 1 (4), January 15, 2008.

Commentary

European Practices Offer a Good Model for Russia

By Peter Richards, Vienna

Ecocities are mushrooming all over the world. China has a few in the pipeline. Several European towns are aiming for zero carbon emissions. California has huge solar projects and even oil-rich Abu Dhabi is investing in a carbon-neutral city, Masdar. Of the major world economies, Russia is one of the last to embrace renewables or efficient energy.

That is a pity, because its titanic stature in fossil fuel production could easily be matched in clean energy. Yet Russia is, according to Torsten Woellert, energy policy officer with the European Commission's Moscow delegation, wasting more energy flaring gas than it exports to Germany in any given year. The flares, burning millions of cubic meters of gas from oil wells instead of making use of it, are visible to any airline passenger flying over the country at night.

The dilapidated state of many Russian housing estates, a hangover from the Soviet Union days, is also responsible for enormous energy wastage in a country which has been renationalising its energy companies. The result is that energy is supplied by large energy companies having trouble keeping up with growing domestic energy demand but that are, at the same time, slow to cut back on waste. Meanwhile, the vast resources of the nation's forests as a source of biomass fuel remain untapped. Only Ukraine is performing worse, says Woellert.

True, there are some exceptions. Innovative projects include an energy-saving street lighting project in

Arkhangelsk, a biomass power plant in Novgorod, a wind farm in Kaliningrad and a Renewable Energy and Energy Efficiency Partnership (REEEP) project to improve energy efficiency of buildings via building codes. The International Energy Agency (IEA) notes that Russia does take advantage of some well-established renewable technologies, producing 174,600 Gwh of hydropower and 410 Gwh of geothermal power in 2005. However, Russia only managed 7 Gwh of wind power and no solar PV electricity in the same year. By comparison, Germany produced 27,229 Gwh of wind, 1,282 Gwh of solar PV and 26,717 Gwh of hydropower that year.

Russia's weak track record, particularly in energy conservation, has prompted a series of meetings with its European neighbors. The talks began back in 2001, not long after Vladimir Putin took over as president. The dialogue, officially backed by top Russian politicians, aims to improve investment in clean and efficient energy, help the markets to open up and decrease negative environmental impacts. From 2008, the dialogue has converged on climate change and efficient energy, facilitated by an international energy consortium, the REEEP, and other stakeholders.

One of the goals from the European side is to help Russia develop policies that work. "The new Russian renewable energy law, which is more of an amendment to an existing power law, is somewhat decorative legislation that needs additional development," states Svetlana

Frenova, of the Russian Regional Environmental Centre (RREC), which is working with the parties concerned. Market rules still need to be established. Little guidance has been developed on how the market is structured, how to sell, or who can set the pricing.

Unlike many European countries, the central government has not put in place any feed-in tariffs for alternative sources of energy (preferential tariffs for energy produced by renewables that are higher than the price paid to energy produced by fossil fuels) or other support mechanisms or incentives. By contrast, many countries in Central Europe, such as Poland and the Czech Republic, have more advanced laws that are attracting investors into renewable energy.

Thus Europeans are confident they have something to offer Russia. It could benefit, they argue, from adopting its own version of successful European policies. In Europe, refrigerator and other electrical appliance energy labeling has worked well, and the most inefficient appliances have now been taken off the market. The European Union's buildings directive, setting energy efficiency standards, is also a model the Russians could use, they argue.

Russia, on the other hand, has not yet had the time to devise smart policies and they are still a low priority. "They are just not thinking about it, since the government is busy overcoming problems to increase energy production. But less energy consumption could be a relief as they cannot cope with consumption increases," asserts Woellert. These problems led, for example, to planned Moscow blackouts in 2006 to enable key services to get the power they needed.

Europe is still learning how best to incentivize and support renewable energy and energy efficiency. It is open to sharing experiences and providing support to Russia. This is in part due to energy security concerns as by lowering total consumption, there is more fuel for all. European dependency on Russian gas and oil has been well documented; it is Russia's major customer. Woellert

contends that Russian energy efficiency is a key concern for Europe, since it has such major energy security implications. That, as well as climate change, is why the delegation is working on the case. And European countries buying fuel from Russia are, after all, a major source of revenue.

Some progress has been made. RAO UES, the state electricity supplier, has developed a program for renewable energy support and is going to produce about 20,000 MWt of power from renewables by 2020 (4.5 percent of power supply).

But, as with other countries, energy conservation is a headache. Russia will have to approach this particularly complex problem from all sides.

"It's a strategic issue that demands the decentralization and liberalization of the energy sector, so that more competition is allowed in," asserts Mikhail Kozeltsev, head of the RREC. Europe could offer some expertise in this area given its long struggle for liberalization. But, as in Europe, many of the stakeholders are not working together. Most energy conservation campaigning originates in local councils considering housing issues, while the utilities are centralized and not built to accept smaller, alternative supplies. At the same time, big industries, such as cement, need to cut back. Policies are implemented top down in Russia, but demand management is a bottom-up issue. The conflicts are considerable.

Yet new tools have been put in place in 2007. The Joint Implementation (JI) agreements under the Kyoto Protocol, in which the Europeans were heavily involved, are a lever they can now use to assist Russia, too. Russia has established a limit for greenhouse gas emissions reduction and/or their absorption that can be negotiated through JI projects in 2008–12 (300 million t of CO₂-equivalent per year). Several manufacturing, housing and energy sector projects are due to come through. However, approvals have been delayed.

About the author

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