Russia can no longer ignore the threat posed by climate change

Climate change is likely to have a profound impact on Russia, with two-thirds of the country's territory lying in the arctic north, and the Russian economy heavily reliant on exports of fossil fuels. Yet until recently, the issue has received limited attention from Russia's political leaders. **Thane Gustafson** explains why despite continued scepticism about global warming, Russia is now waking up to the threat climate change poses to its position in the world.

Soviet climate scientists were among the first to call attention to the warming trend in the Arctic and to speculate that it might be man-made. In the 1970s, as the Cold War too began to thaw, Soviet scientists actively joined their western colleagues in international conferences on global warming, and in 1988, they were co-founders of the United Nations' Intergovernmental Panel on Climate Change (IPCC), the international coalition of climate scientists that has led the way in documenting climate change and its increasingly ominous implications. For half a century, right up to the present day, Russian climate scientists have been major contributors to the global climate story.

But until quite recently, their warnings were ignored in their own country. Suddenly, that has changed. What has caused Russian companies and government ministries to snap awake is not the threat of climate change itself, but the prospect of border taxes on Russian exports, under the European Union's plan for a <u>Carbon Border Adjustment Mechanism</u>, or CBAM. If CBAM is adopted, Russia's carbon-intensive exports, such as ammonia and steel, would be in the direct line of fire. Official Russia does not yet quite believe in climate change, but it definitely perceives the threat to its exports.

Europe looms especially large on Moscow's radar screen because it is far and away Russia's largest trading partner. The centrepiece is gas. Russia has been exporting gas to Europe for over a half-century, ever since Willy Brandt's Ostpolitik in the 1960s. It has been a profitable arrangement for both sides. But in the last two decades the landscape has changed. On the European side, the gas sector has been liberalised, and most gas today is traded on computerised hubs at spot prices (even inside Russia's long-term contracts, most of the gas is traded at spot). This has made the European gas market less stable than it used to be, as evidenced by the current spike in gas prices. Whether the longer-term result will be greater risk for gas buyers or gas sellers remains to be seen. But one thing is clear: under the EU's gas and power directives, if Russia wishes to sell gas in the European market, it must do so by European rules.

On the Russian side, the most important development has been the breakup of the Soviet Union and the advent of an independent Ukraine. Russia inherited the gas, but Ukraine inherited the export pipes. The two have been quarrelling over the division of gas rents ever since, with Europe as a hostage. This famously led to two cutoffs, in 2006 and 2009. But as early as 2001, with the Blue Stream pipeline to Turkey, Russia resolved to bypass Ukraine. Over the past twenty years it has built five new export pipelines around Ukraine, of which the famous Nord Stream 2 is the last. Ukraine has been all but cut out of the gas transit business.

By the mid-2000s, the Soviet-era gas rents from West Siberia were starting to run down. In one of the largest investment projects of the Putin era, Russia began developing an entire new gas province, based on the Yamal Peninsula, to the north of West Siberia. Together with its expanded pipeline system, Russia now has a whole new generation of gas supply to Europe. Nord Stream 2 and its predecessor Nord Stream 1 lie on a 'great circle' between the Yamal Peninsula and Germany, that is, on the shortest route between the two points. Russian pipeline gas from Yamal is the lowest-cost source of imported gas to Europe, and it will remain so for the foreseeable future, well below the cost of imported liquefied natural gas (LNG) from other sources such as the United States.

But now the landscape is shifting again, as climate change becomes an increasingly pressing political issue. European politicians have vowed to cut Europe's dependence on imported gas. Meanwhile, new energy technologies are becoming available. Electricity from renewables is now cheaper than new gas-fired powerplants. Residential heat from electrical heat pumps is becoming an option. Hydrogen, produced from renewable power, lies just down the road. The bottom line is that gas demand in Europe will eventually peak, and then begin to decline. This prospect has not escaped Moscow's notice. It would be ironic indeed, as some Russian commentators have pointed out, if, having invested a fortune in the next generation of gas to Europe, Russia now found itself without a market for it.

But this will not happen right away, indeed not for another decade. For the balance of the 2020s, Europe will continue to need imported gas. Germany is the clearest case in point. Its last nuclear power plant will close at the end of this year; renewables face mounting local resistance from property owners; and the new coalition government in Berlin has vowed to end coal production by 2030. Hydrogen will not be available at scale for another decade, if then. Until the early 2030s, Germany will have no ready alternative to gas, and the readiest source of gas will be Russia.

Nevertheless, Moscow has become acutely conscious of the long-term threat that climate change poses to its traditional gas market, and it is reacting in two ways. The first is to reorient its gas business toward Asia, using a combination of piped gas and LNG. It has built a new pipeline from eastern Siberia to northeast China, and it is negotiating to build another. But Russia's major bet on the future Asian market is LNG. In a remarkable first for Russia, a private-sector start-up, Novatek, has partnered with French company Total Energy to develop LNG exports to Asia. The project has the strong backing of Vladimir Putin, who declares that gas is the future of energy, and that the future of gas is LNG.

Second, hydrogen is suddenly all the rage in Moscow. 'Blue' hydrogen, made with natural gas, is seen as a means of extending the life of Russia's export market to Europe, by mixing hydrogen with gas in Russia's existing export system. ('Green' hydrogen, made with power from renewables, is not on the table, since Russia has yet to invest significantly in renewables.) So far Moscow's interest in hydrogen has been mostly talk, but already Novatek has signed an agreement with Germany's RWE, and other deals will soon follow. It is not too far-fetched to imagine that Russia could play a constructive role in Europe's effort to decarbonise, and at the same time preserve its gas business.

But for that to happen, peaceful relations and trust are a must, and these are presently sorely lacking. In this winter of 2022, as gas prices spike and East-West suspicions of 'Russian politicisation of gas' mount, the contrast with 'Ostpolitik,' when gas served as a bridge to détente a half-century ago, could not be more stark, or less reassuring.

For more information, see the author's new book, <u>Klimat: Russia in the Age of Climate Change</u> (Harvard University Press, 2021)

Note: This article gives the views of the author, not the position of EUROPP – European Politics and Policy or the London School of Economics. Featured image credit: <u>Pavel Neznanov</u> on <u>Unsplash</u>