



A QUARTERLY JOURNAL FOR DEBATING ENERGY ISSUES AND POLICIES

Energy in Russia, the subject of this issue of the *Oxford Energy Forum*, has this year returned to the forefront of debates among academics, policymakers, and those in the industry. Politics, never far from these debates, is a factor: as a result of events in Ukraine, the tension between Russia and the western powers has risen to its highest level since the Cold War. The editors have endeavoured to provide commentary on the political and economic context for energy developments, while also inviting recognized specialists to comment on the host of issues – from long-term upstream oil issues to Russia's domestic electricity market – that are sometimes neglected by big-picture analysis.

Simon Pirani comments on the likely long-term effect of the Ukraine crisis both on Ukraine and on Russia itself. The results of the political and military crisis, he argues, will be to push ahead the decoupling of Ukraine's energy sector and economy from Russia's still further; for Russia, this is part of a centrifugal process that has pulled almost all the other former Soviet states out of its economic orbit. Far from displaying Russian strength, on a longer view the crisis highlights its role as a supplier of raw materials and energy to the world economy – hardly the basis for superpower status.

Chris Weafer also writes about the likely outcomes of the crisis, focusing on Russia's energy exports and how their changing profile will affect investment decisions. He considers the construction of extra gas supply capacity to Europe to be a 'dangerous game' for Gazprom, while the blocking of new pipelines is also 'short sighted' from the European Commission's standpoint. The cross-border gas industry will grow substantially in the next decade, he argues; the opportunities to coordinate the supply side have passed and some sort of free-for-all may ensue.

Readers should note that the *Forum* was at an advanced stage of production when the most recent round of EU sanctions on Russia was announced on 29 July, and these are therefore not dealt with explicitly.

Tatiana Mitrova considers the changing corporate landscape of the Russian energy sector since the turn of the century. Having surveyed the shifts between state and private sectors, she concludes that, in the face of the cooling of political relations with the west, interest in market reform will recede. Mobilization and centralization in response to external enemies will be the watchword; the liberal bloc's time in government has passed and conservatives will guide policy; further shifts in the balance of state and

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private capital will not increase real competition but simply re-divide power within the state.

Maria Sharmina deals with the great elephant in the rooms in which Russian energy policies are decided: climate change. While government, big business, and the state-dependent population all benefit from a thriving oil and gas sector, a shift to a low-carbon economy would have tremendous benefits for Russia, she argues. A 'dramatic' transition away from fossil fuel dependence would inevitably mean a technological and infrastructural overhaul and would provide international leadership.

After these four articles on general political and economic issues, there are two that focus on Russia's energy exports. In the first of these, *Jonathan Stern* and *Katja Yafimava* review the pricing, transit, and regulatory issues, before concluding that – despite political hand-wringing about Russia's annexation of Crimea – Russia will remain the largest source of European gas imports: the buyers' contractual obligations, to say nothing of the lack of alternative supplies, making any substantial reduction in gas flows to Europe very unlikely over the next decade.

Russia's gas exports to Europe may not grow, but, *Michael Bradshaw* argues, the agreement on gas exports finally signed with China in May will be the start of a long-term and expanding gas export trade with Asia. Ninety per cent of future gas demand growth between now and 2050 is likely to be in Asia, he writes, and so the deal should open a new chapter for the Russian producers. Among the wild cards is the role that Rosneft, the state's flagship oil company, may play at Gazprom's expense.

The articles in the final, and largest, group look more closely at the main energy producing sectors.

Arild Moe, in the first of three articles on oil, considers the likely trajectory of upstream development now that the largest fields developed in Soviet times are in decline. The corporate structure of the industry, which is dominated by large companies, means its options for developing new resources are constrained. But even the large new greenfield developments contemplated may work better if the Russian companies cooperate with international partners with the relevant experience; the degree to which such an approach will be adopted remains to be decided, Moe argues.

The potential for some medium-term boost to output from unconventional oil resources is discussed by *James Henderson*. He concludes that while the resource base appears to be very significant, a number of logistical and commercial challenges remain. In particular, it remains unclear whether the service industry will be able to cope with a rapid increase in drilling, and also whether the corporate landscape in Russia, which is dominated by a few key state-owned players, is suitable for the entrepreneurial development of shale oil. He also points out that the tax system is yet to be fully adapted to the commercial realities of unconventional oil investment.

Julia Loe's subject is Russia's Arctic resources. Their true potential remains an open question, she argues: only very sizeable discoveries would justify the heavy up-front investment necessary to develop oil fields in such a harsh environment. She raises the intriguing possibility that joint Russian–Norwegian development of resources in the Barents Sea may be the first entry point into the massive but expensive-to-access resources available.

James Henderson's second article reviews the domestic gas sector. He notes that the Russian domestic gas price has reached an equilibrium level

allowing for competition between suppliers. The continued dominance of Gazprom remains an issue, he argues, despite the fact that its export monopoly has begun to be loosened – and it seems unlikely that this will change, at least until its new infrastructure projects, including the Power of Siberia pipeline, are completed. Nevertheless, the prospect of a fully liberalized market being in existence by 2020 is becoming more of a realistic option than might have been envisaged even three years ago.

Liudmila Plakitkina assesses the position of Russia's coal industry and its prospects up to 2030. The commanding position enjoyed by relatively cheap gas in the thermal power station market has constrained coal demand in Russia, Plakitkina points out, and she enumerates reasons why this is unlikely to change substantially. She is also cautious in her view of possible export growth up to 2030: the 'shale gas' revolution, environmental considerations, and technological change may counteract much of the effect of demand growth in Asia.

Sylvia Beyer, in the final article in this edition, reviews reform of the Russian electricity sector over the last decade and the current (2013–15) measures. She gives a detailed account of Russia's introduction of a capacity market and compares it to the experience of other countries. Beyer discusses how investment in new capacity, and in the no less tricky challenge of decommissioning old plants, might be managed from here: options include introducing a competitive energy-only market, with regulated capacity mechanisms phased out, or using capacity payments targeted at modernization. The wholesale electricity market, she concludes, needs no revolution but an evolution towards greater transparency and efficiency.