Chapter 11

CLASH OVER ENERGY SECURITY

"Until recently, we assumed that the energy security regime that had come into existence in Europe was an optimal one," reflected then–Russian president Dmitry Medvedev soon after the gas crisis. "It turns out that it wasn't."[1]

In 2011, Russia's new concept was made clear. The setting was Lubmin, a seaside resort on the northeastern coast of Germany that advertises its beaches as "a paradise for families." Gathering there were Medvedev, German chancellor Angela Merkel, the French and Dutch prime ministers, and the EU's energy commissioner. Also attending was Gerhard Schroeder, Merkel's predecessor as chancellor of Germany and now the chairman of a new pipeline company, Nord Stream.

They were obviously not there for the seaside amenities but rather to turn the valve on a $10 billion pipeline called Nord Stream—actually twin 750-mile natural gas pipelines that ran under the Baltic Sea directly from Russia to Germany. Nord Stream was Russia's solution for its own version of energy security, reducing its dependence on Ukrainian transit by building new pipelines that went around that country.

"Its construction meets our long-term goals," said Medvedev at the dedication. And he generously added, "Of course this is our contribution to European energy security." Chancellor Merkel voiced her approval of the project. Europe and Russia, she said, would "remain linked" in a "safe and resilient partnership" for decades to come. The European Union designated the pipeline "a priority energy project" that would contribute to European energy security.

The gas that arrived at Lubmin had been injected into the pipeline two months earlier, at the port of Vyborg, northwest of St. Petersburg. While pushing the button to start the flow, Putin had been more explicit about Russia's view of energy security. Nord Stream, he said, would end Ukraine's "temptation to benefit" from its "exclusive position." He predicted a "more civilized relationship" between Russia and Ukraine would result. As events turned out, that would hardly be the case.[2]

Russia already had built other pipelines to circumvent Ukraine: Yamal-Europe, through Poland; and Blue Stream, which runs from Russia under the Black Sea to Turkey. But Nord Stream loomed much larger.

FOR EUROPE, ENERGY SECURITY MEANS SOMETHING QUITE different—greater flexibility and diversity of supply. For years, the EU had been searching for a common energy policy. But that was very hard to come by with twenty-eight different countries, with different interests, different endowments, different needs—and different attitudes toward Russia. West Europeans generally welcomed Russian gas imports. Eastern and Central European countries, much more dependent on Russian gas, saw their reliance as a source of vulnerability, reminding them of their former thralldom to Moscow when they were satellites of the Soviet Union. They would point to cases in which the Soviet Union and then Russia, they said, used cutoffs and manipulation of supplies to apply political pressure.

As European energy policy evolved, it had two main objectives. The first, dealing with natural gas, was to build resilience and greater energy security into the natural gas system and push for the formation of a single gas market for the entire continent. Companies increased connections among pipelines to make it easier to move gas from one part of Europe to another. They reengineered pipeline systems so that the direction of gas flows could be reversed, if needed. Investment in LNG terminals and storage was promoted. "Destination clauses," which limited the ability to shift gas supplies from one buyer to another, were eliminated. This package of policies and initiatives would end up reshaping the entire European gas system.

European policy also aimed at doing away with the traditional rigid contracts that ran twenty years or longer and in which price was indexed to oil. The European gas system had been built over many decades on the foundation of these long-term contracts with long-term predictability and long-term relationships. Instead, Brussels now intended to promote competition and transparency. It wanted "markets," a world of buyers and sellers, not "relationships." It was not necessarily against long-term contracts, but it wanted market-related pricing—that is, based on the short-term prices that emerged at the "trading hubs"—the places primarily in the UK and the Netherlands, where pipelines, LNG terminals, and gas trading converged. The EU also wanted contracts to be transparent to prevent what it defined as "anti-competitive" behavior, and it prohibited Gazprom from owning the pipes through which its gas moved across Europe.[3]

The second major thrust of the EU was around climate, aiming at decarbonization and efficiency and making a rapid march to renewable energy. At the forefront was Germany. Under the rubric of its *Energiewende*, or "energy turn," Germany provided extensive subsidies for wind and solar development. Although not the intent, it also ended up indirectly providing large subsidies to Chinese solar companies, which became the main low-cost suppliers of solar panels to the world.

By 2019, 33 percent of Germany's electricity came from renewables. But it had not come cheaply. Germany's Federal Court of Auditors criticized government ministries for exerting "no oversight over the financial impact of the *Energiewende*," for not asking "how much should the *Energiewende* cost the state," and for failing to take into account "reliability and affordability."[4]

In March 2011, a giant tsunami, set off by a massive earthquake, inundated a nuclear power station at Fukushima in Japan, resulting in the worst nuclear power accident since the Chernobyl reactor in Ukraine blew up in 1986. In the immediate aftermath of the Fukushima disaster, the German government decided to shutter its biggest source of non-CO_2 electricity—its large fleet of nuclear reactors. To help meet the gaps in electric generation, it temporarily increased its consumption of coal.

For the entire EU, natural gas comprises about 25 percent of energy consumption. That means that Russian gas, at about 35 percent of total gas consumption, provides 9 percent of Europe's overall energy. After Russia, the next largest source of gas is "indigenous" or "domestic supplies," largely from the Groningen field in the Netherlands and the British sector of the North Sea. Norway, though not a member of the EU, is highly integrated with it economically, and supplies 24 percent of the EU's gas; about 9 percent comes from North Africa, mainly Algeria.

The debate about the political risks of importing energy from the Soviet Union and now Russia has been going on for a long time. The surge of Soviet oil exports to Europe in the late 1950s and early 1960s generated great alarm in the United States. A U.S. senator thundered that the Soviets wanted to "drown us in a sea of oil" in quest of "world conquest." Headlines captured the transatlantic dissension: "Soviet Oil Feeds Dispute in the West" and "Oil a New Soviet Weapon." Washington adamantly opposed what was called the "Soviet oil offensive." For the Europeans, it was more a matter of business. The Soviets were planning a new oil pipeline to Eastern Europe, and West Germany planned to sell the special large-diameter pipe that would be required. But the United States succeeded in blocking the sale. It did not take the Soviets too long, however, to master the technology and build their own large-diameter pipes. The embargo had delayed the pipeline for a grand total of one year.[5]

In the early 1980s, in the first years of the Reagan administration, dissension between the United States and Europe again erupted over Soviet energy exports—this time not about oil, but about natural gas. Western European companies, with their governments' support, were working on a big deal to build a new pipeline to import natural gas from western Siberia. The Reagan administration, which was stepping up defense spending, did not want the Soviets earning money that would fund their own military buildup. Washington also feared that dependence on Russian gas, especially in Germany, could help Moscow generate fissures in NATO and provide a major pressure point if East-West tensions worsened. This was the time "to dig in our heels," President Reagan said, and "just lean on the Soviets until they go broke."[6]

When Germany and the other Europeans showed no signs of stepping back from the deal, the Reagan administration slapped an embargo on exports from Europe that used American technology and know-how that was required for the proposed pipeline. The sanctions, although aimed at the Soviet Union, infuriated the Europeans, who were outraged not only over being potentially shut off from the gas but also because of the loss of manufacturing jobs resulting from the embargo on selling technology and equipment. Finally, an understanding was worked out between Washington and the Europeans that capped Soviet gas imports into Western Europe. The pipeline project went ahead, but so did another new pipeline that would bring natural gas from Norway to continental Europe.

The sanctions, meanwhile, had proved to be what Secretary of State George Shultz called "a wasting asset." They had the impact that

sanctions often do—they motivated the Soviets to seek to develop their own technological capabilities to substitute homemade equipment for what was embargoed.[7]

TWO DECADES LATER, NORD STREAM, UNDER THE BALTIC SEA, revived the controversy over pipelines. There was much criticism in Central European policy circles and the media over the political influence that, it was argued, Russia would gain from the deal. The Western Europeans, and particularly the Germans, saw matters differently, as part of a larger complementary relationship involving markets, trade, and investment, a relationship that was made inevitable by geography. Moreover, while they may have depended on the Russians for gas, the Russians depended on them for markets and for revenues. Nord Stream went ahead unhindered, culminating in that inauguration ceremony at Lubmin in 2011.

In the face of all the agitation and criticism that came with Nord Stream, Moscow had a message for the Europeans. At the St. Petersburg International Economic Forum, Gazprom CEO Alexey Miller told a room largely full of Europeans, "Get over your fear of Russia, or run out of gas."

Chapter 12

UKRAINE AND NEW SANCTIONS

On June 23, 2013, whatever remained of the post–Cold War comity began to unravel. On that day, Edward Snowden, a disgruntled contractor for the U.S. National Security Agency, boarded a flight in Hong Kong for Moscow. He was not carrying a valid visa, but the Russians let him in. But he did carry something of enormous value—the "keys to the kingdom" of U.S. intelligence—vast amounts of files he had stolen from the NSA. From that would flow a breakdown and then a crisis centered on Ukraine and its borders that would splinter East and West and jump-start a new cold war.

The theft was a shock to the U.S. government, and the results devastating. A minor amount of what Snowden had taken related to communication between intelligence targets and U.S. "persons"—the reason he gave for the theft. The great bulk, however, had to do with worldwide intelligence gathering, most of which was focused on terrorism and how to counter such threats as IEDs, improvised explosive devices, which were killing and maiming U.S. military personnel.

Snowden's presence in Moscow was facilitated by the Russian government. The source of that information was none other than Vladimir Putin. "I will tell you something I have never said before," Putin told a press briefing on September 3, 2013. Snowden "first went to Hong Kong and got in touch with our diplomatic representatives," who conveyed to Putin that an American "agent of special services" was seeking to come to Russia. Putin recounted that he had said the agent would be "welcome" in Russia provided that "he stops any kind of activity that could damage Russian-U.S. relations." Moscow granted Snowden asylum. Putin did add that he would have preferred not to have had to deal with the Snowden problem. "It's like shearing a pig. There's a lot of squealing and little fleece."[1]

Others, however, thought otherwise—that the Russians must have gotten quite a lot of fleece from Snowden. For, they reasoned, empathy for a "whistleblower" would have hardly been reason enough for Moscow to bear the political cost of offering shelter to Snowden.

The cost quickly became apparent. President Obama was scheduled to meet Putin in September 2013, in Moscow, for their first summit in four years. U.S.-Russia relations had begun to deteriorate after the 2003 invasion of Iraq and had worsened with the 2008 Russian-Georgian War and the 2011 Arab Spring. While the Obama administration had sought to launch a "reset" in the overall relationship, personal relations between the two presidents had been brittle from their first meeting in 2009, when Obama appeared to have been seated in a kiddie chair, while Putin lectured him about the "errors" the United States had made in its dealings with Russia. In August 2013, after Snowden's defection, Obama had reciprocated, saying Putin's "got that kind of slouch, looking like the bored kid in the back of the classroom."

Putin believed that the United States was intent on frustrating his overriding objective—the restoration of Russia as a great global power with a "privileged sphere" in the "post-Soviet space." Yet however fraught the relationship between Moscow and Washington, a summit would have been a path for restoring at least a modicum of a working relationship. But once Moscow had granted asylum to Snowden, who was regarded as the perpetrator of the worst intelligence theft in U.S. history, there was no way that Obama could meet Putin. The summit was canceled. To add an extra sting, Obama would later dismiss Russia as nothing more than "a regional power."[2]

Meanwhile, Ukraine remained caught between East and West. Ostensibly, it was about trade. Moscow was promoting what was called the "Eurasian Economic Union," which would tie together the new countries of the former Soviet Union under Moscow's leadership, inside a common tariff system and a unified economic space. But Ukraine was at the same time discussing with the European Union an "association" agreement for greater economic integration. There was a total incompatibility, indeed a fatal contradiction between the two sets of negotiations, because it was impossible to be inside two mutually exclusive tariff systems at the same time. In other words, if Ukraine completed its negotiations with the European Union, it could not be part of Putin's Eurasian Economic Union.

Moreover, Ukrainian engagement with the European Union would have major geopolitical impact, drawing Ukraine away from Russia. The discussions between Kyiv and the European Union proceeded on a rather technocratic basis, without much attention to the geopolitical issues. For the West, "Ukraine" was only one of many interests that jostled for attention in Brussels and Washington.

But for Russia, Ukraine was, as Obama would later observe, a "core" interest. In Moscow's narrative, it was part of Russia, going back to Kyivan Rus and the Cossack pledge of allegiance to the tsar of Muscovy in 1654. As Putin once summed up this view, "Ukraine is not even a country. What is Ukraine? Part of its territories is Eastern Europe, but the greater part is a gift from us." Later, citing the words of a White Russian commander in the Russian Civil War, he said, "Big Russia and

Little Russia—Ukraine. . . . No one should be allowed to interfere in relations between us; they have always been the business of Russia itself."[3]

Ukraine's economy was a mess, and corruption endemic. The king of corruption was none other than the president, Viktor Yanukovych. Defeated in 2005, the former boxer had climbed back into the political ring and, in a comeback match, was elected president in 2010.

In 2013, Yanukovych was about to sign the association agreement with the European Union when the Russians suddenly realized that it would shut Ukraine out of the Eurasian Economic Union. Moscow raised the ante—and the pressure. It was "either/or." Yanukovych backed out of the EU agreement, his exit lubricated by a $15 billion loan from Moscow.

Ukrainians were enraged. In late 2013, half a million flooded into Maidan Square in Kyiv to protest the abandonment of the European Union agreement and against the rampant corruption and Russian influence. In the freezing December weather, U.S. assistant secretary of state Victoria Nuland passed into the crowds, handing out cookies. Meanwhile, Moscow denounced the demonstrators as "fascists and neo-Nazis."

In February 2014, police opened fire on the demonstrators, killing a hundred of them. Civil war seemed imminent. Three European foreign ministers hurriedly flew in and worked out a deal with Yanukovych and opposition politicians to hasten presidential elections. But the government was disintegrating. Yanukovych's own security detail vanished. Yanukovych abruptly fled to Russia. The United States and the European Union immediately announced their support for the new interim government. One of its first acts was to ban Russian as an "official" language, a position that it had shared with the Ukrainian language. Russian was the prime tongue of many, particularly in eastern Ukraine and Crimea. This unfortunate mistake was quickly rectified, but it had a lasting impact. "The Europeans prevented them from doing that," said Putin. "But the signal had already been sent."[4]

WHILE ALL OF THIS WAS UNFOLDING, THE 2014 WINTER OLYM-pics was taking place in the snow-covered mountains above Sochi, in the south of Russia—a great celebration of Russia's return from the abyss of the Soviet collapse. The chief celebrant was Vladimir Putin. The opening ceremony featured a sweeping musical tribute to Russian history. Many heads of state were in attendance, including Xi Jinping. But not Barack Obama, not with Edward Snowden a guest of the Kremlin and not in light of new Russian legislation on homosexuality that the Obama administration had condemned. Representing the United States instead was Janet Napolitano, a former member of Obama's cabinet and now chancellor of the University of California.

At some point, amid all the glory and glitter of the Olympics, the Russian government—presumably Putin and an inner circle—made a decision. Shortly afterward, perhaps in accord with a preexisting contingency plan, "little green men"—paramilitary forces—appeared in Crimea, the large peninsula that juts out from Ukraine into the Black Sea. These paramilitary forces were there, it was declared, to protect "oppressed" Russians living in Crimea. Russia took control of the peninsula.

Over the centuries, Crimea, with its balmy, semitropical weather in the summertime, had been the favored vacation spot for tsars and nobles, and then communist leaders, and also for millions of ordinary Soviet citizens. In 1954, the Soviet leader Nikita Khrushchev had theatrically "given" Crimea to the Ukrainian Soviet Socialist Republic—ostensibly to celebrate the three hundredth anniversary of the Cossacks' swearing fealty to Muscovy in 1654 and thus, according to that narrative, merging Ukraine with Russia. But Khrushchev was also seeking to ensure the support of the Ukrainian Communist Party in his battle for power in the aftermath of Stalin's death a year earlier.[5]

Of course, the gift of Crimea did not matter in Soviet times. It did matter a lot, however, when Ukraine and Russia became separate countries, and not just for reasons of nostalgia and holidaymaking. The Crimean city of Sevastopol was the only warm-water port for Russia's navy, which was there on a lease from Ukraine.

By the middle of March 2014, a Moscow-organized referendum in Crimea supposedly had 96 percent of the people voting to join Russia. The next day, Putin announced the "reunification" of Crimea with Russia. The United States and the European Union, taken by surprise, declared that Russia had overturned the accepted boundaries of Europe and imposed sanctions.

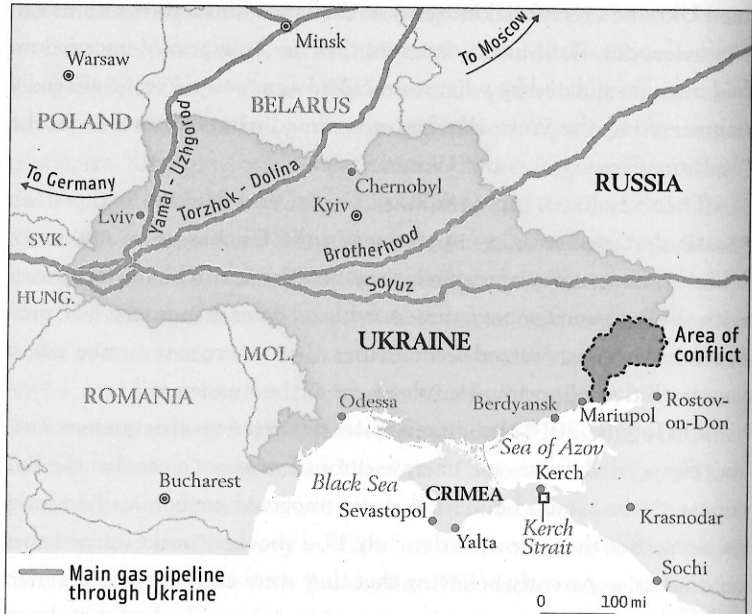
The Ukrainians protested bitterly at the annexation. The Russians had been party to the Budapest Memorandum in 1994, which guaranteed Ukraine's territorial integrity in exchange for its giving up its nuclear weapons. But Moscow insisted that the Budapest Memorandum had been invalidated by what it described as a "coup d'état," allegedly engineered by the West, that had overturned what it asserted was the "legitimate" government of Ukraine.

Then separatists, paramilitary forces, and Russian soldiers "on vacation" started military operations in the Donbas, in southeastern Ukraine, the country's great industrial heartland, still highly integrated with the Russian economy, most notably its defense industry. The pro-Russian separatists seized several cities. The insurgency turned into a war, with the support and involvement of the Russian military.

On July 16, 2014, the United States ratcheted up sanctions on Russia's financial, defense, and energy sectors. It was not clear that the Europeans, who would be more directly impacted economically, would go along. But then the next day, July 17, a shocked world learned that separatists, apparently believing that they were aiming at a Ukrainian troop plane and using a Russian ground-to-air missile, had shot down a Malaysian airliner over eastern Ukraine. All 298 passengers aboard perished, two-thirds of them Dutch. The Europeans joined the new sanctions. In lieu of force, the sanctions became, in the words of Obama treasury secretary Jacob Lew, "the centerpiece of the international response to Russia's aggressive actions in Ukraine."[6]

The war has dragged on ever since, with at least fourteen thousand deaths, widening the split between Russia and Ukraine and between Russia and the West.

One set of sanctions was aimed at specific individuals and organizations that were judged to be either close to Putin or active in Crimea and the Donbas. A second set restricted Russia's access to the global financial system and its ability to raise money in international markets, and at the same time choked off foreign investment into Russia. It made



Sources: IHS Markit; Council of Foreign Relations

Ukraine

Turmoil in Kyiv, the annexation of Crimea, and a war in southeastern Ukraine have led to a new cold war.

international banks very leery of doing business with Russia, for fear of running afoul of sanctions or inadvertently falling short on some compliance rule and becoming subject to multibillion-dollar fines and public shaming. Such financial sanctions depend on the centrality of the United States in the global financial system and the world economy's dependence on the global dollar payments system that flows through New York—and the danger of being shut out of that system.

Yet there is a risk that the commanding position of the United States—derived from its capital markets and the dollar—could be eroded over time by the overreliance on financial sanctions, because nations will find alternatives. Two years after the United States imposed financial sanctions on Russia, Obama treasury secretary Lew himself warned, "The more we condition the use of the dollar and our financial system on adherence to U.S. foreign policy, the more risk of migration to other currencies and other financial systems in the medium term grows. Such outcomes would not be in the best interests of the United States."[7]

The third set of sanctions was aimed at constraining Russia's energy might. Care was taken to construct sanctions that would not hinder Russia's current oil output, for fear of driving up the price of oil at a time when it was already high. Instead, they were aimed at the new growth areas that were deemed to require Western technology and partners. Western participation in the Arctic offshore was banned. Russia's vast Arctic shelf is little explored but is thought potentially to contain very large oil and gas resources. The U.S. Geological Survey concluded that "the extensive Arctic continental shelf may constitute the largest unexplored prospective area for petroleum remaining on earth." But for Moscow, more is at stake. Russia's advance into the Arctic is aimed at confirming its primacy in a region opening up to commerce and political competition and that Moscow ranks as of great strategic importance. This was made more than evident a few years earlier when two Russian mini-subs planted a titanium version of Russia's flag in the seabed fourteen thousand feet below the North Pole. In response, the foreign minister of Canada, another Arctic power, snapped, "This isn't the fifteenth century. You can't go around the world and just plant flags and say 'We're claiming this territory.'" But that is what Russia did.[8]

Also targeted was shale oil and Russia's immense nonconventional resources, including the huge Bazhenov formation, under the West Siberian basin. Whatever the potential, for a long time there was no technology with which to successfully produce from that complex geology.

But the shale revolution in the United States provided a possible solution for the Bazhenov—horizontal wells and multistage hydraulic fracturing. It was not just Russians who came up with that idea. In 2013, the U.S. Energy Information Administration estimated that Russia's "unproved technically recoverable" shale oil resources were potentially greater than those of the United States.

Western partners, with their know-how and experience, could help a great deal. Finding and developing the "sweet spots" is a matter of patience, capabilities, data, and trial and error. As a Russian petroleum engineer in Siberia put it, "We need to gradually, bit by bit, find the keys." Thus the Russian companies enlisted Western partners and technology.

But with the new sanctions, the Western companies had to drop out. As the Russian engineer observed, Western companies were "afraid to touch the Bazhenov as if it were a fire."[9]

So the Russian companies are on their own, advancing by themselves, improving their capabilities. Eventually they will be able to substitute Russian-made equipment for that which they cannot buy from the West, bearing out Secretary of State George Shultz's already cited dictum from the 1980s Soviet gas controversy—sanctions can be a wasting asset. Still, the sanctions probably have set back the Bazhenov development by half a decade or more. But in an era of oversupply and extensive conventional opportunity in Russia, such a delay is not such a bad thing from Russia's own point of view.

Chapter 13

OIL AND THE STATE

The U.S.–EU sanctions, as well as those of other countries, including Japan and Norway, had been imposed at a time of high oil prices and expectations of a continuing tight market. But then in late 2014 the oil price collapsed, delivering a new shock to a Russian economy and national budget so heavily dependent on oil. A severe crisis seemed inevitable. And indeed, the initial impact was great—capital flight, drying up of both foreign and domestic investment, loss of access to international capital markets, plummeting spending by consumers, and a declining GDP.

But the shock was cushioned by the policies of the Russian central bank. It closed insolvent banks, including those owned by powerful figures, and allowed the ruble to float. The currency lost more than half its value against the dollar. But this flexibility helped to steady the economy. Expenditures by the Russian government are largely in rubles. Thus a fall of 50 percent in dollar revenues from oil would, roughly speaking, still convert into the same amount of rubles within Russia as prior to the collapse.