

Energy as a Tool of Hybrid Warfare

by Michael Rühle & Julijus Grubliauskas¹



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Printed copies of this paper can be obtained by contacting Mary Di Martino at m.dimartino@ndc.nato.int

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Research Division
NATO Defense College
Via Giorgio Pelosi, 1
00143 Rome – Italy

Jeffrey A. Larsen, PhD, Division Head
website: www.ndc.nato.int
Follow us on Twitter
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Introduction: energy lessons

The Ukraine crisis offers some important energy security lessons: when it comes to energy, geography is still destiny. Pipelines still mean both economic and political power. The struggle between Moscow and Kiev over the price of gas is more instructive in this regard than a thousand economy textbooks. The Ukraine crisis was also a reminder that energy security is an integral part of national security; that dependence on Russia can be a strategic liability; and that interdependence between the producer and the consumer will not encourage stability, as long as the producer can go longer without revenue than the consumer can go without gas. But there is more. To destabilize Ukraine, Russia applied a combination of military, semi-military and strategic communication tools. But it also managed to integrate energy (via the expropriation of Ukrainian energy assets and pressure on gas prices) into this strategy. Hence, if NATO wants to be serious about countering “hybrid threats,” it must include energy in the equation. This will require NATO to enhance discussions on the security implications of energy issues, and step up Allied political dialogue and strategic analysis in line with the emerging environment.

¹ The authors both serve in the Energy Security Section, NATO Emerging Security Challenges Division, NATO Headquarters. The views expressed are solely those of the authors and do not necessarily reflect the official policies of the NATO Defense College or the North Atlantic Treaty Organization. This paper is a substantially expanded version of an essay published in January 2015 on www.energlobe.eu. The authors would like to thank Diego Cordano for his invaluable assistance.



The hybrid war challenge

The events surrounding Russia's illegal annexation of Crimea have given prominence to a term that was previously known only in specialist circles: hybrid warfare. By overtly and covertly employing military and paramilitary forces, supplying separatist groups, staging cyber attacks and waging a massive propaganda campaign, Russia provided a textbook example of how non-traditional warfare can be effectively employed to achieve political objectives. Against this background, the references in Russia's new military doctrine to the "integrated use" of military and non-military measures are more than a mere description of the characteristics of modern warfare: they accurately describe Russia's actions. Predictably, the discussion focused on the most outrageous aspects of Russia's hybrid approach, such as the appearance of "little green men," i.e. soldiers without national insignia, as well as Russian troops allegedly "vacationing" in Eastern Ukraine. By contrast, energy was not seen as part of the hybrid warfare narrative. While the struggle between Kiev and Moscow over gas prices became a matter of international concern, it seemed just another chapter in the never-ending story of Russian-Ukrainian energy disputes.

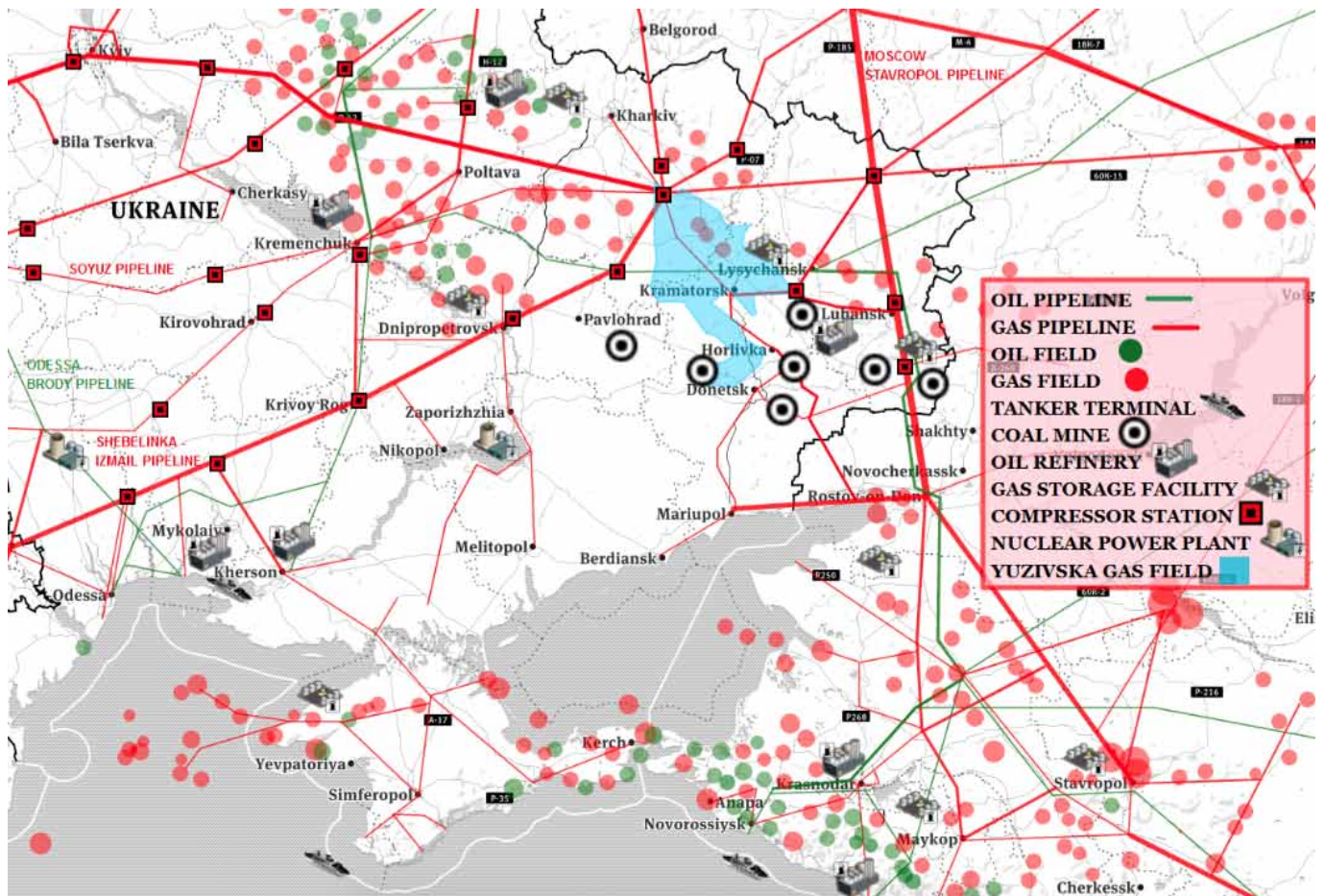
A closer look, however, reveals that energy was – and continues to be – a far more important factor in hybrid warfare than is commonly acknowledged. Russia occupied Ukraine's gas fields, in and around Crimea, by traditional military means. It exerted economic pressure on Ukraine, including by gas cut-offs, while trying to deter other European countries from assisting Ukraine with reverse gas supply. Russia also pushed a narrative about her irreplaceable role in Europe's energy security, and about the risks Europe was creating for itself should it support Ukraine. Each of these steps deserves closer examination.

Military action: occupation of Crimea's gas fields and war in Donbass

Before its annexation by Russia, Crimea received almost all of its energy from mainland Ukraine. In order to establish effective political control of the region, Russia "nationalized" the Ukrainian company operating in Crimea – Chornomornaftogaz – together with all its energy assets, both onshore and offshore. Given the vast asymmetry in the military forces of both countries, Ukraine stood no chance of preventing this. The move allowed Russia not only to ensure a stable supply of energy to the region, but also to make it independent from mainland Ukraine, which is critical for effective control of the territory.

Since some of these offshore gas installations – four natural gas fields, with drilling rigs – extend from the Crimean coast all the way to the maritime border with Romania, their nationalization by Russia also significantly extended that country's geographical dominance in the Black Sea area off the Western coast of Crimea. Hence, in addition to previously Ukraine-owned energy infrastructure and the Chornomornaftogaz company, estimated to be worth around USD 1.2 billion, and over two billion cubic metres of natural gas storage in Crimea, Russia has acquired a massively extended maritime zone with the claim to underwater resources potentially worth trillions of dollars.² Russian interlocutors have pointed out that Russia's enormous energy reserves make its newly acquired options around Crimea not especially relevant. For Ukraine, however, the loss of its opportunities to exploit what may amount to the best deep oil and gas reserves in the Black Sea is a massive setback to its future economic prospects and its hopes of achieving energy independence.

² See William J. Broad, In Taking Crimea, Putin Gains a Sea of Fuel Reserves, *The New York Times*, 17 May 2014 (http://www.nytimes.com/2014/05/18/world/europe/in-taking-crimea-putin-gains-a-sea-of-fuel-reserves.html?_r=0).



Eastern Ukraine's energy infrastructure map, compiled by Diego Cordano using "Petroleum Economist," "East European Gas Analysis" geographic data, and open source information.

With regard to the Donbass region, energy plays an even more important role. The region is rich in energy resources and infrastructure: it produces 90 percent of Ukraine's coal, has both conventional and unconventional gas fields (including the massive "Yuzivska" shale gas deposit area), several underground gas storage sites, and transit pipelines. As a result, by losing control over this region, Kiev became even more dependent on imported energy. In addition, some of the energy infrastructure located in the Donbass region is of particular strategic importance to Russia. The Stavropol-Moscow and

Krasnodar-Moscow gas pipelines transit the Donbass region and there are several compressor stations on Ukrainian territory. In addition, branches to Luhansk and Donetsk enable the provision of Russian gas to these cities independently from Kiev.

When it comes to territorial control, energy infrastructure is both a key requirement and an enabler. For Moscow, it was impossible to organize an operation to illegally occupy Crimea without ensuring the independent energy supply of the region (the main requirement of which would be hundreds



of diesel-powered generators). Moreover, the control of offshore gas sites enabled the expansion of the Russian zone of dominance off the coast of Crimea. Likewise, the control of energy infrastructure in the Donbass area, especially around Luhansk and Donetsk, is critical for wresting authority in the region away from Kiev.

Economic pressure and deterrence: no more energy for Ukraine, reduced gas supplies to Europe

Ukraine's high energy inefficiency and dependence on Russian gas imports have made energy a tempting tool for Russia to exert pressure. The Ukraine crisis, however, brought this pressure to a new level. Since the illegal annexation of Crimea also "returned" the important Sevastopol naval base to Russia, Moscow no longer felt obliged to grant Ukraine lower gas prices or to pay Kiev over \$600 million annually for use of the base and the right to use Ukrainian waters. As a result, Ukraine was faced with a loss of revenue coupled with increased energy costs. When Ukraine refused to pay the increased price, Russia turned off the gas. Even with respect to coal, where Ukraine used to be self-sufficient, the crisis provided Russia with additional leverage. The fighting in Eastern Ukraine affected both the coal mines in that region and the railway lines needed to transport coal to the power plants. In late November 2014 Ukraine, which used coal to generate about 40 percent of its electricity, had to declare a state of emergency in its electricity market.³ Russian pressure on Ukraine was accompanied by attempts to deter other European countries from supporting Ukraine. Several countries in Central and Eastern Europe were warned not to allow the reverse flow of Russian gas to Ukraine. The reduced pressure in certain pipelines, which led to

a reduction of supplies, was also widely believed to constitute a warning to some of Russia's customers not to interfere with Moscow's Ukraine policy.⁴

Strategic communication: the Russian narrative about the West shooting itself in the foot, and "Gas Aid" to Donbass

Propaganda is a key ingredient of the hybrid approach. From the beginning of the Ukraine crisis, Moscow made a tremendous effort to promulgate its own version of ongoing events. The clumsiness of Russia's attempts to persuade Western public opinion often backfired: many of the stories carried by media outlets such as "Russia Today" were far too outrageous to be convincing. As far as the energy dimension was concerned, however, Moscow's narrative stood on firmer ground. By focusing on the objective consideration that Russia plays an indispensable role as an energy supplier for Europe, that narrative implied that the European countries pressurized by the United States into supporting Ukraine were acting against their own long-term interests.

While Russia took great care not to undermine its image as a reliable supplier vis-à-vis some European customers, its message of the West shooting itself in the foot by helping Ukraine came across: many European observers repeated the message, thus reinforcing its credibility. Finally, Russia also used its gas deal with China to demonstrate to the West that it now had an alternative customer, while Europe remained dependent on Russian gas. As one "Russia Today" op-ed pointed out, "Russia's pivot to the growing markets of the east is in full swing. The West may yet rue the day it sent its politicians to address the crowds of the Maidan."⁵

³ See Andy Tully, State Of Emergency In Ukraine As Russia Cuts Off Coal, Oilprice.com, 27 November 2014. (<http://oilprice.com/Latest-Energy-News/World-News/State-Of-Emergency-In-Ukraine-As-Russia-Cuts-Off-Coal.html>).

⁴ Poland resumes gas supplies to Ukraine, *Reuters*, 12 September 2014, (<http://uk.reuters.com/article/2014/09/12/ukraine-crisis-gas-idUKL5N0RD1MT20140912>).



Propaganda is also used by Russia to justify its support to the separatists in the Donbass area. In February 2015, Kiev reportedly stopped the gas supply to Donbass due to damaged gas infrastructure. Although Naftogaz stated that the supply disruption was temporary and that Gazprom had supplied less gas than agreed, Moscow used this incident to launch a massive information campaign against Kiev. The Chairman of the Russian State Duma blamed Kiev for an economic blockade against Donbass, while President Putin commented that the stopping of the gas supply to Donbass “smells of genocide.”⁶ As a result, Russia’s subsequent decision to provide gas to the Donbass area directly from Russia through the metering stations that are not controlled by Kiev was presented by Moscow as “aid to these regions in the form of natural gas supplies.”⁷

As later events unfolded, the Russian natural gas “aid” began to take on the shape of a Trojan horse. First, Gazprom explained that Naftogaz would need to pay for the gas supplied to Donbass. Second, though Naftogaz was later able to repair the damaged infrastructure, Gazprom did not allow Naftogaz to keep gas supplies to Donbass at previous levels. Instead, the supply to the metering stations controlled by Naftogaz was cut, while the supply through the separatist-controlled metering points was increased.⁸ Third, Moscow threatened to cut the gas supply to Ukraine if Naftogaz did not pay its “Donbass” bill. As a result, Kiev was trapped: it could not pay for the gas supplied by Gazprom to Donbass beyond Naftogaz’s control, while the debt to Gazprom would keep mounting, since Moscow claimed that, as long as Kiev considered Donbass as part of Ukraine’s territory, Naftogaz had to pay for the region’s gas.

Those who follow Russia’s gas disputes with its

neighbours will notice similarities to the dispute between Russia and the Republic of Moldova regarding the gas bill of the Transnistria region. Since Tiraspol refuses to pay for Russian gas, Gazprom sends all the bills to Chisinau. Over the years, Moldova’s “Transnistria gas debt” has accumulated to over \$4 billion, around half of the country’s GDP. If this scenario repeats itself in Ukraine, it will be a textbook example of how energy supply chains can be manipulated to exert economic pressure and territorial influence.

Six lessons for NATO

NATO is not an energy institution, nor is Ukraine a NATO member. Nevertheless, NATO must confront the challenge of hybrid warfare, including its energy dimension. While this type of warfare can succeed only against states that are internally fragile and divided, it could introduce sufficient ambiguity to make NATO’s strategic assessment and decision-making difficult, while at the same time marginalizing elements of the full spectrum of NATO’s defensive capabilities. Six areas of adaptation appear most obvious:

First, intelligence sharing and strategic analysis.

By bringing together over 60 intelligence services from 28 nations, NATO provides a unique forum for exchanging information relating to hybrid threats. To further enhance situational awareness, NATO Headquarters and the Strategic Commands have significantly increased their in-house analysis capacities in recent years. This anticipatory approach needs to be further developed by adapting NATO’s political decision-taking processes to ambiguous warning situations, for example by pre-delegating the authority to initiate certain crisis response

⁵ Patrick L. Young, Russia-China deal: Even energy pivots East, *Russia Today* (online), May 21, 2014 (<http://rt.com/op-edge/160212-russia-china-gas-deal-east>).

⁶ <http://www.euronews.com/2015/02/25/kyiv-s-suspension-of-gas-flow-to-eastern-ukraine-smells-of-genocide-says-putin/>

⁷ <http://rt.com/politics/233743-russia-ukraine-heating-medvedev/>

⁸ http://www.ecft.eu/article/commentary_ukraines_gas_federalisation311253



measures to SACEUR. There must also be a constant evaluation of how the political process and the information gathered through intelligence-sharing are aligned, and how eventual disconnects can be overcome.

Second, political dialogue on energy developments.

In recent years, Allies have demonstrated a greater willingness to regularly discuss non-military subjects such as global energy developments, acknowledging that these can have major security implications. However, some Allies still approach such discussions only hesitantly, worrying that any such debate might be viewed as being only the precursor to military engagement. The danger of provoking such misperceptions must be taken seriously, all the more so as they could affect the nervous energy markets. However, curtailing NATO's agenda for fear of sending the wrong signals would condemn the Alliance to an entirely reactive approach. In order not to miss the essence of hybrid threats, Allies must discuss energy issues with a view to enhancing anticipation, prevention and resilience.

Third, training and exercises.

The growing importance of energy considerations in the international political debate is making energy security a permanent fixture in NATO's education and training programmes. Diplomats and military leaders alike must be given the opportunity to develop a better understanding of energy and related issues, such as resource competition and climate change, as drivers of future security developments. In addition, energy supply disruptions and critical energy infrastructure failures could affect not only the normal functioning of the economy, but also a country's ability to effectively organize defence. Energy is therefore a tempting target in hybrid warfare, and preparedness for energy-related incidents through training and exercises is key for a comprehensive defence. To this end, new energy security courses are being set up at NATO's training facilities as well as the NATO Energy Security Centre

of Excellence in Lithuania, and existing courses and exercises are augmented with appropriate energy-related elements.

Fourth, strategic communications.

As an alliance of 28 sovereign democracies, NATO does not engage in propaganda campaigns, nor can it react as rapidly to Russian propaganda as one may wish. However, in the Ukraine crisis NATO has been able to react quickly to rebut false Russian claims, for example by SACEUR releasing photos of Russian military equipment on Ukrainian territory. Even on energy issues, which – unlike soldiers or tanks – do not lend themselves to a “visual” narrative, NATO must at least be able to counter the Russian version of events with accurate facts and figures and the assertion of its own energy interests. What matters most is the willingness to “name and shame” the perpetrator – and to do so rapidly enough to establish an image of NATO as an institution that reliably provides accurate information. Given the increasing need to address the challenges in the information space, the establishment of the NATO Strategic Communications Centre of Excellence in Latvia could not have been timelier.

Fifth, reaching out to the private sector and energy institutions.

As in the case of cyber, the private sector owns most of the energy infrastructure that could be affected by hybrid war. At the same time, most of the relevant energy data is being collected and analysed by specific institutions, notably the International Energy Agency (IEA). As a military organization, NATO cannot afford the analytical resources the IEA has in the area of energy. However, NATO also cannot afford to miss important energy elements in assessing the wider security picture. In order to stay up to date in the rapidly changing security environment, NATO will need to deepen interaction with these players, both through regular dialogue and by shared participation in certain exercises. This will contribute to a consistent evaluation of energy risks, including



those with a hybrid dimension. Enhanced situational awareness will benefit all actors alike.

Sixth, closer relations between NATO and the European Union.

The Ukraine crisis demonstrated the EU's growing effectiveness as an energy actor. The Union's role in brokering a deal about the price of Russian gas for Ukraine, as well as its success in organizing the reverse flow of Russian gas to Ukraine via Poland and Slovakia, were impressive examples of an emerging European energy solidarity, in this case even for the benefit of a non-EU neighbour. Against this background, NATO-EU discussions on hybrid threats, staff-to-staff collaboration, and the search for greater synergies in training and education efforts appear both urgent and feasible. While Norway and Turkey remain outside the EU for the time being, their respective roles as an energy producer and energy hub for Europe would suggest that a NATO-EU dialogue is fully in line with their own security and economic interests.

Conclusion

In sum, the Russia-Ukraine crisis demonstrated the effectiveness of hybrid war, including in its energy dimension. While Ukraine's unique geographical position as well as its energy dependence allowed Russia a degree of influence that it may not enjoy vis-à-vis many other countries, there are nevertheless reasons for Western concern: as a single state and "managed democracy," Russia controls the whole array of available tools (economic, military, strategic communications, etc.) to achieve its goals. By contrast, the West has to negotiate a common position not only among many states but also among different institutions. This asymmetry will always work to the initial advantage of the aggressor. Whether it will still work in the longer run is less clear, however. In

the end, the West was deterred neither from assisting Ukraine nor from imposing sanctions on Russia. Moreover, currently low oil prices have emerged as a major challenge for Russia's economy, while the crisis has given Europe an additional incentive to diversify its energy sources and distribution networks.⁹ In short, while hybrid war can achieve a lot, it cannot overcome what Clausewitz aptly labelled "the fog of war": in other words, once the first move has been made, events tend to evolve in unforeseen ways.

⁹ See the interactive map in Georg Zachmann, Can Europe survive without Russian gas? *Bruegel blog*, 21 March 2014 (<http://www.bruegel.org/nc/blog/detail/article/1283-can-europe-survive-without-russian-gas/>).

