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Energy Security and the OSCE

The Case for Energy Risk Mitigation and Connectivity

Indra Øverland, Ellen Scholl, Kirsten Westphal and Katja Yafimava

The 2016 German Chairmanship of the Organization for Security and Co-operation in Europe (OSCE) comes at a time of increasing awareness about the interdependence between energy security and hard, economic, and human security. Energy risks are endemic in the OSCE area. Because these risks have an impact on regional security, there are good reasons for the OSCE to assume a stronger role in addressing energy security issues and reducing energy risks in the OSCE area. In so doing, the OSCE can utilise its existing capabilities in the areas of awareness-raising, early warning, prevention, mitigation, and crisis management and can build on its missions, tools, and field presence. Furthermore, the OSCE's focus on connectivity can contribute towards reducing energy risks arising from outdated or insufficient infrastructure by addressing physical connectivity jointly with legal and regulatory compatibility to improve the investment climate and foster stable policy frameworks.

Cooperation on energy security in Europe has become a pressing issue amid the deterioration of relations between Russia and the West in the aftermath of Russia's annexation of Crimea and destabilisation in eastern Ukraine, which have drawn renewed attention to energy-security risks. A mapping of energy conflicts carried out for this paper demonstrates that the risks are not limited to Ukraine but are widespread across the OSCE area. Most of these conflicts are of a cross-border nature, thus involving two or more countries (often non-OSCE and OSCE), and the vast majority have regional implications. The challenges related to energy are not only cross-border but also multifaceted. Energy is first and foremost a field of cooperation but can also be either a cause of risk or itself at risk, as well as a cause or consequence of geopolitical turmoil.

Critical Energy Risks in the OSCE Area

Within the OSCE area, natural gas trade via pipeline is most closely associated with conflict, followed by electricity trade. This is cause for concern, as the fixed nature of infrastructure and market sensitivity require stable and reliable relations between parties often interlocked in interdependent relationships, underpinned by long-term contracts and/or intergovernmental agree-

Dr. Indra Øverland, Head of Energy Programme, Norwegian Institute of International Affairs (NUPI); Spokesperson for www.prixindex.com; Professor II at Nord University.
Ellen Scholl, Robert Bosch Fellow, SWP's Global Issues Division.
Dr. Kirsten Westphal, Senior Associate in SWP's Global Issues Division.
Dr. Katja Yafimava, Senior Research Fellow, Natural Gas Research Programme, Oxford Institute for Energy Studies, UK.

ments. The link between these types of energy relations and conflict is also salient from a humanitarian perspective, as electricity and natural gas are vital to provide basic services such as lighting, heating, and cooling and to maintain a robust economy.

Energy flows crossing multiple borders, jurisdictions, conflict zones, or disputed areas are also a source of tension. Energy risks can be found along the fault lines of different jurisdictions and regulatory regimes or in areas where different regulatory, legal, and/or contractual regimes overlap and potentially come into conflict. In the absence of an overarching multilateral regulatory framework, pipeline gas trade across multiple jurisdictions can falter in the event of a bilateral political and contractual breakdown, potentially resulting in the interruption of gas supply and/or transit flows.

Rapid changes in energy markets and price levels are also sources of tension. This is true of changes in legal and political frameworks, as newly-designed frameworks can create unique challenges for public- and private-sector actors alike, particularly with regard to investment climate stability. Transformation of energy markets and systems can cause unpredictability and uncertainty, as evidenced by several European countries, including Germany, which implemented policy changes to phase out nuclear power, or Spain, which rescinded previous policy support for renewable energy.

The *security of critical infrastructure*, whether from physical or cyber-attack, is a concern for many OSCE countries, including the United States, Kazakhstan, Turkey, and Ukraine, among others. This risk is frequently realised, as evidenced by attacks on pipelines and power lines. Examples include the August 2015 explosions along the South Caucasus gas pipeline in Turkey; the November 2015 blasting of power pylons in Ukraine, which caused lasting power cuts in Crimea; and the first assumed cyber-induced power grid blackout, in western Ukraine in December 2015. NATO has warned that energy makes a "tempting target" in hybrid warfare, both for the second- and third-order devastation brought by targeting energy facilities and the possibility of using the provision or withholding of energy services as a tool of coercion or legitimation.

Meanwhile, the issue of *regulatory fault lines* is less understood but perhaps more prevalent, as it involves misunderstandings and disputes when different legal, regulatory, and contractual spaces overlap and are potentially in conflict, or when entities fall outside existing regulatory and contractual spaces. This is particularly salient in the EU and Russia's common neighbourhood, where neither EU nor Russian law applies or is properly implemented and enforced, or where competitive energy regionalism between the EU/Energy Community and the Russia-led Eurasian Economic Union looms. Concrete problems include incompatibility of system operation codes, voltages and frequencies, tariff structures, capacity allocation mechanisms, congestion management procedures, and other technical issues, along with different operational procedures, organisational structures, and working definitions. These incompatibilities may result in commercial and/or technical disputes, which can have a negative impact on broader security issues.

The issue of *pipeline politics* encompasses a broad geographical area, and projects such as BTC, South Stream, and Nord Stream 1 and 2 have often been the subjects of heated political debate. Pipeline politics includes both the long-term risks associated with infrastructure projects spanning multiple countries and jurisdictions, and geopolitical manoeuvring over where pipelines should be located. It also includes risks associated with pipeline ownership, transmission, and distribution of energy through fixed infrastructure, in particular the perceived ability to use pipeline transit as a source of political or commercial leverage. These risks are relevant both for existing and future or planned projects.

Although there is awareness of many *territorial, jurisdictional, and ownership disputes*, the role of energy in these disputes is often

less understood. However, energy conflicts can cause – or result from – these disputes, and can exacerbate existing tensions or contribute towards their resolution. The degree to which energy resources and infrastructure can become intertwined in territorial disputes is evident in conflicting claims by littoral states over maritime boundaries and resources in the Caspian Sea region. Energy is also relevant in so-called "frozen" or semi-"frozen" conflicts, for example the ongoing disputes over Transnistria and Nagorno-Karabakh, which impact the security of energy transit via pipeline and the viability of new transport options. In extreme cases, energy can even be used in hybrid warfare. However, there is also potential for energy to provide grounds for cooperation and contribute to thawing a conflict.

Although the four abovementioned categories encompass some of the most pressing energy risks – and hence should be prioritised – the list is not exhaustive. Energy risks are numerous across the OSCE area, including those emanating from poor grid interconnections; trade, policy, and investment disputes; environmental disputes; domestic energy market governance and domestic politics (including resource nationalism and corruption); energy in warfare, and risks unique to Western sanctions and Russian countersanctions. All of these are also important and should be addressed.

A Gap for the OSCE to Fill

The OSCE has evolved out of the Conference on Security and Cooperation in Europe (CSCE) process as a platform for cautious mediation of the relations between the two blocs of the Cold War. Although not quite at Cold War lows, relations between Russia and the West in the aftermath of the 2014 Ukraine crisis have become more strained than at any point since the end of the Cold War, underscoring the need for such a platform, particularly when it comes to energy. Thus, Germany's OSCE Chairmanship takes place at a critical and unique moment in history. The Eurasian political and economic landscape has become more complicated, with important fault lines emerging inside the former Soviet Union territory, while the EU is grappling with its own internal issues and external relations with its neighbours, and North America is exploring the benefits of energy self-sufficiency.

Global developments are transforming the energy world and shifting the locus and nature of energy production and trade. Notably, the emergence of the United States as a liquefied natural gas and crude oil exporter adds new supply and new dimensions to the global market, whereas the Russia-led Eurasian Economic Union and China's "One Belt, One Road" strategy reflect changing regional developments and dynamics in Europe and Asia. As the world becomes increasingly multi-polar, on the one hand energy trade becomes increasingly interconnected, while on the other hand the emergence of energy regions ("blocs") with different regulatory regimes widens the scope for potential energy conflicts. This makes the adaptation of existing institutional settings and energy governance structures capable of addressing these risks more urgent.

In this new energy world, the OSCE is uniquely positioned and equipped to play a greater role in addressing energy security, which would benefit from the attention of a multilateral organisation comprised of 57 states across Europe, North America, and Asia. Given its geographic reach, its position as a multilateral international organisation, and its historical role as a trusted broker – along with its three-pillar (or basket) structure of politico-military, economic, and environmental cooperation – as well as the human dimension, the OSCE is ideally placed and equipped to assume a stronger role when it comes to energy security.

The OSCE already has a strong track record on the sustainable use and management of natural resources. The OSCE defined energy security at the 2003 Maastricht Meeting of the Ministerial Council as follows: "a high level of energy security requires a predictable, reliable, economically

acceptable, commercially sound and environmentally friendly energy supply which can be achieved by means of long-term contracts in appropriate cases." This definition was reaffirmed in 2006 and 2009. These decisions established the OSCE as a platform for energy security dialogue between participating states – a function that has thus far been underexploited. Energy security has become intertwined with hard, economic, and human security in more complex ways than in the past, and there is a gap to fill that no other existing institution can assume in this area.

The OSCE's geographic scope "from Vancouver to Vladivostok" spans the Northern Hemisphere and includes "partner countries" in North Africa, the Mediterranean, and Asia, and encompasses integration processes in the EU and the Energy Community, the Eurasian Economic Union, and (partially) the Shanghai Cooperation Organization's Energy Club and NAFTA. This gives the OSCE the advantage of being able to provide a forum for dialogue on energy security that involves Canada, the EU, Russia, the United States, and the states of the Black Sea and the Caspian and Central Asian regions as participating states with equal rights.

Although the OSCE cannot provide a panacea for all energy security issues, its comprehensiveness enables it to serve as a neutral platform for dialogue – a role many organisations are unable to fill. Unlike the EU, the Eurasian Economic Union, the International Energy Agency, NATO, and the Shanghai Cooperation Organization, the OSCE includes all countries in the region as members and equals. The Energy Charter Process is currently too weak, given (among other reasons) Russia's withdrawal from the Energy Charter Treaty.

The EU's external energy policy is focussed at exporting its energy *acquis communautaire* to non-EU Energy Community countries, particularly in implementation and enforcement of the *acquis* outside the EU borders. Yet, dissemination of regulatory "software" has to be reinforced by investment in infrastructure "hardware" from the energy industry. The western Balkan countries, Moldova, and Ukraine – all of which are contracting parties of the Energy Community Treaty– serve as important test cases demonstrating the tension between the adoption of legal or regulatory principles and the realities of system transformation. In fact, the EU's transformative role in the neighbouring "ring of friends" is facing limitations in Eastern Europe and the Mediterranean.

Given the lack of an overarching multilateral regulatory framework governing energy across all OSCE parties in Europe and in the former Soviet Union, the OSCE is perfectly suited to play a role where existing (or anticipated) energy risks could impact hard, economic, and human security. In particular, the OSCE can play a role in areas where supranational, national, or regional jurisdictions are unclear or conflict with one another. The OSCE can help to overcome the political and regulatory "disconnect" or "discontinuity" between political or regulatory areas, bridge fault lines, and serve countries that remain outside these areas. Even though the OSCE lacks a legal personality, it can serve as a forum or platform for dialogue and play a facilitating role, particularly when involvement of more than two parties is required, as in gas discussions between the EU, Russia, and Ukraine. Despite these strengths, the OSCE remains an under-utilized resource in international energy governance.

Germany assumed the OSCE Chairmanship on 1 January 2016 for the first time since 1991 with the theme of "renewing dialogue, rebuilding trust, restoring security". As outlined in its stated priorities, the German Chairmanship takes place amid "one of the severest crises in Europe's security order since the Cold War" and Germany aims to "use, maintain, and consolidate the OSCE as a cornerstone of European security". The German government intends to build on the OSCE's traditional strengths in dialogue and confidence-building as well as conflict prevention and management. Thus, the German Chairmanship aims at

enhancing OSCE capabilities through the entire conflict cycle, strengthening the organisation as a platform for dialogue and good governance. Last but not least, the German Chairmanship is strongly promoting the theme of connectivity in the wider OSCE area.

Enhancing the OSCE's Role in Energy: Proposals for Action

Given the unique role the OSCE can play in reducing energy-security risks and the capabilities it can bring to the table, the OSCE should avail itself of its traditional toolbox to help raise awareness of these risks, engage in early warning, prevention, and mitigation, and incorporate energy into crisis management. The OSCE can also expand and apply its methods, procedures, and mechanisms for risk reduction to build on its traditional competencies to apply confidence-building measures to energy-sector problems, achieve peaceful dispute settlement, and incorporate energy into its already strong field presence. The OSCE can also incorporate energy into its robust crisis management capabilities. Moreover, the OSCE can draw on its field presence, as energy risks are concentrated in regions where the OSCE has missions in the field, including the Balkans, Eastern Europe, Ukraine, and Central Asia. Ultimately, the OSCE should pursue broad cross-cutting strategies, relevant across a range of energy risks, along with concrete measures to specifically address the four critical risk categories.

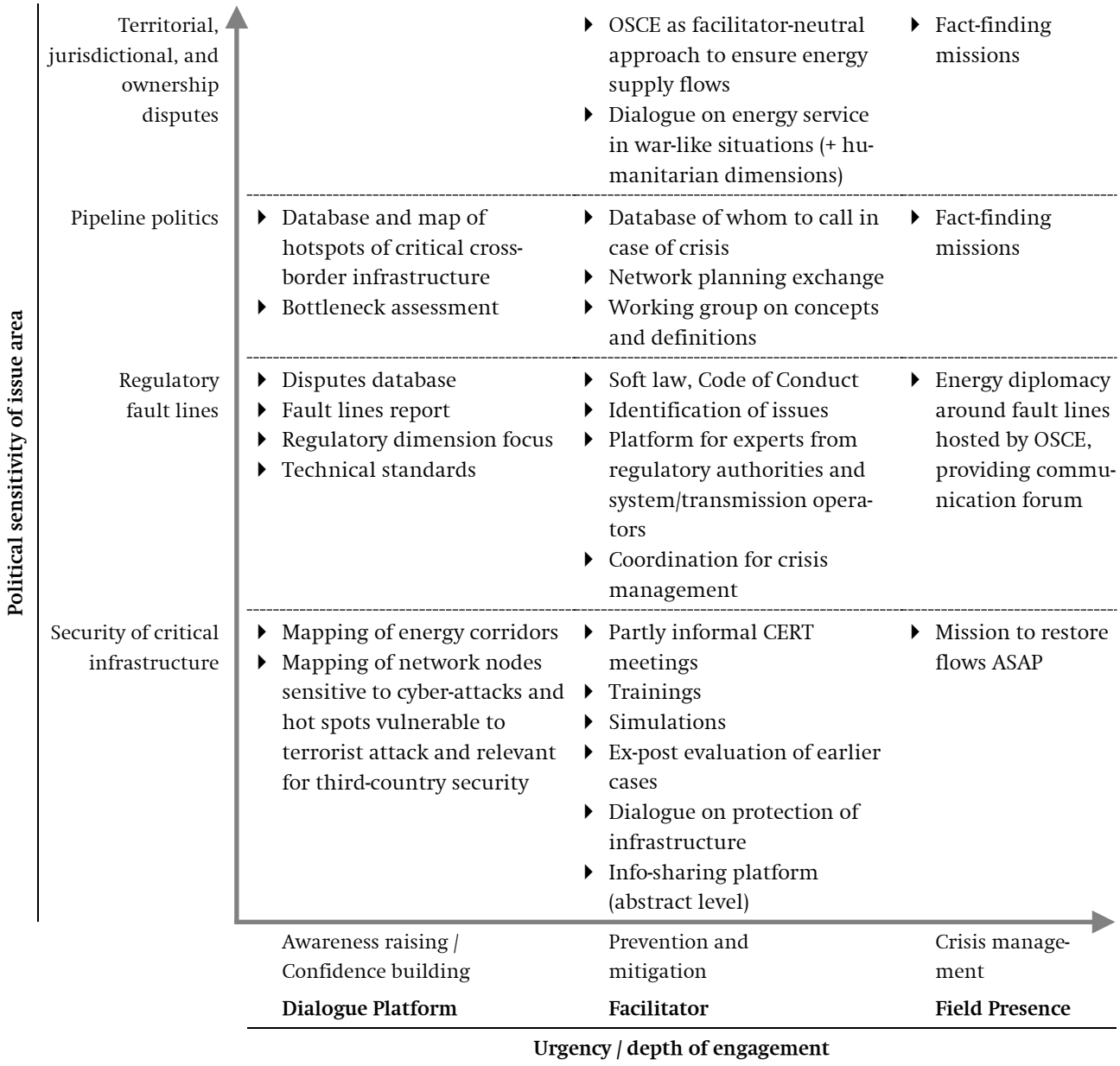
Cross-Cutting Strategies

- The OSCE should *strengthen its role as a forum for energy security dialogue* among participating states and actively engage in and encourage discussion. Such a dialogue could begin with exchanging opinions on how to define central energy terms (e.g. critical infrastructure, regional cross-border energy corridors, infrastructure planning) to improve understanding and create a working vocabulary for cooperation. Based on this understanding, energy diplomacy could build on common views and solidify shared principles on access to critical energy services in conflict and the impact on human security.

- To improve its ability to assess and address energy risks, the OSCE should *develop a database identifying energy disputes and mapping risks* throughout the OSCE area. This database could catalogue and map critical nodes in energy infrastructure; cross-border hotspots, including contractual delivery points at borders (flanges); metering points; infrastructure bottlenecks; and sensitive network nodes relevant for attacks and cascading effects on third-country security. A report identifying regulatory cross-border fault lines and countries located between "energy blocs" could also complement the database and mitigate "energy bloc confrontation". A larger OSCE risk assessment based on the database could shape OSCE energy priorities going forward.

- The OSCE should also pursue the long-term goal of *developing and disseminating a code of conduct*. This is not to suggest the OSCE should develop new rules, as various countries and groups of countries already have legally-binding rules governing energy issues (e.g. the EU energy *acquis communautaire*). However, the OSCE could develop a non-binding code of conduct, or best practice guidelines outlining general principles agreed on by all parties. These principles could reflect provisions on energy supply and transit included in the Energy Charter Treaty, the International Energy Charter, or the WTO. The existence of such a code could help dissuade parties from making arbitrary or unilateral decisions on energy supply and transit while preserving their national sovereignty. This could also help develop a regional energy architecture and clarify specific roles to improve coherence of action in existing fora.

Graphic: Critical Energy Risks and Recommended OSCE Strategies for Engagement



- Last but not least, the OSCE could improve its long-established field presence by *incorporating energy considerations in field operations and crisis management capabilities*. Ongoing and future missions could in this case include energy experts, who could also engage in fact-finding missions following a crisis to improve the OSCE's understanding and expertise. They could also assist in restoring energy flows or maintaining system stability in a crisis.

Targeted Strategies

- An ex-post evaluation of earlier cases of both supply disruption and attack would enhance the *security of critical energy infrastructure* and inform prevention efforts.
An information-sharing platform should be established to share data about energy flows for early warning and crisis management purposes along vital energy corridors. This would add to the OSCE's crisis manage-

ment capabilities and strengthen the understanding of energy risks. This mechanism would only be activated in emergency situations, and would serve to gather information on the event, restore flows and system stability, and provide lessons to inform future crisis prevention efforts. Experts could provide recommendations on how to increase energy-system resilience.

To reduce the vulnerability of critical infrastructure to cyber-attack, the OSCE should build on and expand its previous work in the Good Practices Guide on Non-Nuclear Critical Infrastructure Protection and serve as a platform for informal information-sharing on cyber-attacks targeting the energy sector. Such a platform could serve as a forum to bring together country Computer Emergency Response Teams (CERTs), whereas the information on incidents could remain anonymous and non-attributed to a specific company or country to ameliorate concerns. A mechanism of codified information-sharing – for instance, facilitating exchange by type of attack, sector, and network – could enhance the OSCE's role as a trusted broker. The OSCE could also convene common trainings and simulations, bringing together technical experts to exchange best practices and experiences and build relationships and networks. Such an exchange would build on the OSCE's nascent work in the cyber realm, which includes attack simulations and exercises.

- To address and ameliorate *regulatory fault lines*, the OSCE should create a dialogue platform for experts from regulatory authorities with the aim of establishing a soft-law code of conduct for cross-border energy flows to ensure compatibility and define regulatory roles and functions at each border. The long-term goal should be developing a code of conduct outlining baseline compatible regulatory and technical standards and principles of energy trade. These could include: cost-reflectivity of transport tariffs; technical and regulatory arrangements for congestion management and cross-border capacity allocation; and the roles of adjacent regulators in respect of cross-border issues.

- To mitigate the risks related to *pipeline politics*, the OSCE should map existing energy corridors and relevant infrastructure in the OSCE area, and establish a forum for communication and the exchange of appropriate points of contact for each corridor. This corridor approach would be utilised in the event of a crisis and could include information-sharing and common emergency response protocols. To mitigate risks related to planning future cross-border infrastructure projects or corridors, the OSCE should also establish information-sharing platforms and communication networks.

- The OSCE should acknowledge and address the role of energy in the early phases of *territorial, jurisdictional, and ownership disputes*, and bring together public- and private-sector stakeholders for discussion. It might also play a role in issues related to utilisation of transboundary oil and gas fields. The Court of Conciliation and Arbitration could also be engaged.

In dealing specifically with "frozen" (or semi-"frozen") conflicts, the OSCE can be a facilitator for a status-neutral approach to ensure continued service provision and uninterrupted energy flows in accordance with the OSCE's role in humanitarian issues and human security. Such an approach would leave aside the status of outstanding territorial issues in order to address shared energy challenges and enable cooperation. This is particularly relevant in military conflict or hybrid warfare situations where timely restoration of gas or electricity supply is paramount in order to prevent humanitarian emergency.

Economic Cooperation and Connectivity As the Second Energy Pillar

In the presence of functioning energy markets, the OSCE need not intervene, as ener-

gy should not be overly securitised. In order to strengthen the OSCE's second dimension, energy cooperation should be simultaneously deepened and enhanced. This is both timely and necessary, as all countries across the OSCE area face the challenge of transforming their energy systems, modernising infrastructure, and attracting investment against the backdrop of a capital crisis in the energy sector. There is also a need for political stability and the development of markets of scale. Furthermore, energy transitions will entail a reconfiguration of energy supply, transport, and consumption patterns, thus creating new energy "geographies" and, potentially, new energy risks.

Connectivity should be a guiding principle for cooperation, as poor or deficient interconnections can be a source of tension and endanger system stability. Strengthening physical connectivity can be achieved by jointly addressing legal and regulatory compatibility – a necessity for improving the investment climate and developing markets of scale in the Balkans, the Black Sea, the Caspian region, and Central Asia.

The OSCE should also promote good governance – including the sharing of best practices in domestic energy regulation – in order to build investor confidence. To this end, the OSCE could *establish a platform, bringing together public- and private-sector energy stakeholders* – including policy-makers, regulators, companies, and financiers – to foster the mutual understanding necessary to support a robust investment climate and foster connectivity. The forum could focus on infrastructure improvement and modernisation – important issues across the OSCE area – perhaps in conjunction with international financial institutions such as the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Asian Development Bank (ADB), and the World Bank. Such a forum could contribute to market stability and predictability and catalyse the investment needed to build modern and resilient energy systems in the OSCE area.

Conclusion: Opportunity amid Change

In the current context of rapid change and manifold energy risks, the OSCE can, and should, assume a greater role in addressing energy security challenges and fostering connectivity in order to strengthen hard, economic, and human security in its area. There is a gap to fill, and OSCE engagement is necessary and should be welcomed if and when energy markets malfunction or fail and threaten to negatively impact security in the OSCE area. Going forward, potential cooperation with the Energy Charter Treaty Secretariat and the United Nations Economic Commission for Europe could be explored, given past UN willingness to delegate responsibility to the OSCE on contested issues as a regional arrangement under Chapter VIII of the UN Charter. Given that energy is crucial for the three pillars of OSCE engagement and that it cross-cuts hard security, economic security, and human security, a failure to address energy-related risks could jeopardise all three.

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SWP
Stiftung Wissenschaft und Politik
German Institute for International and Security Affairs

Ludwigkirchplatz 3–4
10719 Berlin
Telephone +49 30 880 07-0
Fax +49 30 880 07-100
www.swp-berlin.org
swp@swp-berlin.org

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