

# **POLICY BRIEF**

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# Russia's nuclear energy diplomacy in the Middle East: why the EU should take notice

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Russia is not a new player in the energy sector of the MENA (Middle East and Northern Africa) region. However, its nuclear energy diplomacy in the region received a further impetus in the aftermath of the Arab Spring and the Russian military intervention in Syria. This paper first outlines Russia's predicament and political priorities in the MENA after the Arab Spring; second, it describes the state of play with respect to Russia's nuclear energy diplomacy in the region; finally, it puts into perspective the effectiveness of the energy tool for Russian political ambitions. It is argued that, despite several complementarity factors between Moscow's political and commercial interests and those of several MENA leaders, a transactional political environment and uncertain market dynamics complicate the prospects for long-term energy deals that require huge investments, and suggest that it is up to Europe, in its own interest, to offer a better vision for the region's energy future.

#### BACKGROUND

#### Moscow and the Arab Spring: challenges and opportunities

The Arab Spring and its consequences were and are still seen by Moscow as a challenge and, at the same time, an opportunity. Russia reads the events of 2011 as a Middle Eastern version of the coloured revolutions in its near abroad. In the Russian foreign policy establishment's view, the uprisings were carried out by US-backed civil society organisations whose ultimate aim was to overthrow legitimate governments and replace them with US-sponsored vassals. This process, the Russian discourse goes, started with a regime change in Iraq; the following instability poses a threat to Moscow's interests and influence in the region, and raises the possibility of radical Islamic outbreaks within Russia itself. The longstanding position of Russia is that the defense of sovereignty always precedes the promotion of democracy and human rights, and authoritarianism in the region is necessary to prevent chaos.<sup>1</sup>

Rebel movements in the region – from Libya to Syria – see Russia predominantly as an enemy. However, with some few exceptions, which have either led to democratic transitions (Tunisia) or civil war (Libya, Yemen, Syria and partially Iraq), the post-2011 regional leaderships remain authoritarian and in many ways share with Russia the fear of external interferences and street protests. Also, many Arab leaders are increasingly skeptical about the future of the US' security commitment to the region. Even worse, some of Washington's traditional Arab allies fear that the Obama administration was engineering a new regional setting, together with their Iranian archenemy. This perception is also encouraged by the US' shift towards energy self-sufficiency, which is expected to reduce the strategic significance of these countries for Washington<sup>2</sup>, and might be confirmed by the Trump's administration domestic focus regardless of what its policy towards Iran will be. In such a situation, it does make sense for the countries of the region to demonstrate that they can resort to other partners. All this comes as an opportunity for Moscow, which wants to be recognised as an indispensable actor for any kind of effort aiming to settle the future of the region. Putin has used energy cooperation to break the isolation of Iran and obtain a role in the negotiation of the nuclear deal. Such a model could be replicated with other countries that are uncomfortable with the perceived shift of the Obama administration in the region, such as Egypt, Turkey, or the Gulf countries, as they

need to provide affordable energy to a growing population (primary energy consumption rose by 56% over the last decade in the Middle East) and some of them intend to catch up with Iran's nuclear capabilities.

Although Russia is well-known for using gas pipeline politics to advance its foreign policy agenda, it is increasingly using its other energy asset – nuclear energy – to reconnect with the MENA region. State-controlled nuclear energy giant Rosatom was authorised by the Kremlin to invest up to USD 350 bn for the coverage of upfront costs of new power plants, in Russia and abroad.<sup>3</sup> Rosatom, led until 2016 by former prime minister and Putin's close ally Sergej Kiryenko, is the world's only 'full cycle' nuclear firm, operating under a 'build-own-operate' model aiming at building up a strategic presence and locking partners into a long-term mutual dependence. A number of deals and memorandums have been signed with almost all MENA countries, with the exception of Israel, which is not a signatory of the Non-Proliferation Treaty.

## **STATE OF PLAY**

#### Russia's nuclear deals in the MENA

Iran represents the most successful model for Russia's use of nuclear energy cooperation to advance its strategic priorities *vis-à-vis* Washington. Rosatom completed the first 1 GW power plant at Bushehr in 2011, which was connected to the grid and started operations in 2013. A contract was then signed in 2014 for the construction of four more reactors at the same site. Russia enabled Iran to advance its nuclear programme despite the sanctions, becoming *de facto* an indispensable part of the negotiations leading to the nuclear deal. Remarkably, Russia has economically suffered from this development. Teheran's desire to restore its oil output to the pre-sanction level of 4 Mbl/d contributed to the oil price war triggered by Saudi Arabia in late 2014, which brought the Russian economy to its knees. However, the Russian leadership sees the strategic benefits as more important.

Russia was the first country visited by President al-Sisi after seizing power in **Egypt**. Moscow praises his repressive restoration of order, seen as an antidote to the rise of the Muslim Brotherhood. By approaching Russia, Sisi signaled to the US that it will be difficult to isolate Egypt even in case of embarrassing authoritarian spirals. The country's nuclear ambitions gave Russia a perfect opportunity to start cooperation. In 2014, the two countries signed an inter-governmental agreement for the construction of a power plant in El Dabaa, including four reactors of 1.2 GW each. The plant is supposed to start operations in 2022 and relies upon Russian upfront financing.

With scarce resources and a 7% annual increase in electricity demand, **Jordan** selected Rosatom for the construction of the USD 10 bn Qasr Amra power plant (2GW), which should cover up to 40% of the country's generation capacity. The deal entered into force in 2013 and the plant should be ready by 2022, with Rosatom funding 49% of its construction. In this case, Russia provided a second-best option after Jordanian attempts to develop a nuclear partnership with the US were frustrated by the American opposition to indigenous uranium enrichment.

**Algeria** has been planning to build up nuclear reactors since 2001, and the government is now establishing 2025 as a deadline for the completion of a nuclear power plant. An intergovernmental agreement with Russia was signed in 2014, although Algeria is keeping other options open, and small research reactors were developed in cooperation with China and Argentina.

Despite evident rivalry ranging from the support to opposit sides in Syria to the oil price war triggered by Riyadh, Russia and **Saudi Arabia** have always avoided an excessive deterioration of their bilateral relationship. Russian diplomacy is carefuly monitoring the worsening relations between the former US administration and their traditionally closest Arab ally in the region. Saudi Arabia plans to build up 17 GW capacity of nuclear power and 41 GW of solar power by 2032. The Saudi's distrust of the US-Iran deal has increased Riyadh's interest in developing domestic nuclear civilian capabilities to catch up with the technological state of play of its archenemy. A cooperation agreement was signed with Russia in 2015, and a joint nuclear coordinating committee was established.

The **United Arab Emirates (UAE)** are in the final phase of developing their first reactor, expected to start operations in 2017 and aimed to provide 25% of the country's electricity needs by 2020. The country undertook the most credible long-term commitment to a civil nuclear programme, developed with the Korean KEPCO. Even though Rosatom is not building the plant, it managed to secure a fuel lease deal on the model of the Iranian one – as a US-UAE agreement in 2009 prevents the Emirates from enriching uranium or reprocessing spent fuel on their territory. An agreement that the UAE is calling into question after the Iran deal.

Energy vulnerability is particularly acute in **Turkey**. The country depends on Russia for 70% of its gas supply. Pipelines are often the target of non-state-actors' attacks in the east, and storage and re-gasification capacity is limited. In 2010, Russia and Turkey agreed to build up a four-unit nuclear power plant in Akkuyu, for USD 20 bn and 4.8 GW of capacity, expected to start operations in 2033. The deal unraveled in the aftermath of the downing of a Russian jet by the Turkish air force in the context of the Syrian crisis. However, Russia proved reluctant to abandon the project despite the political standoff, and cooperation resumed as the two countries mended their fences.

Considering the region's political instability, and the growing competition of gas and renewables, most of these deals should be read as diplomatic posturing, satisfying occasional common diplomatic interests rather than laying the bases for an energy overhaul of the Middle East within the framework of stable political partnerships between Russia and these countries. However, Europe should be concerned by the fact that Russia is playing opportunistically in the MENA with an energy instrument that nourishes local autocrats' designs, introduces elements of risks related to the proliferation of nuclear material in a region plagued by terrorism and sectarian violence, and complicates efforts to build up a pragmatically crafted regional security architecture – one of the long-term ambitions of the recently released EU Global Strategy. The next session will focus on the unlikelihood of a nuclear future for the region, and on why it is fundamental for Europe to offer an energy alternative.

## **PROSPECTS**

#### Has nuclear energy a future in the MENA?

The long-term nature of investments in nuclear energy, reflected by high upfront costs (planned reactors in the MENA show an estimated capital expenditure ranging between USD 20 bn and USD 80 bn), does not fit well in an increasingly unstable region. The Akkuyu plant ordeal in Turkey demonstrates how unstable political relations are likely to affect economic links. Beside fluctuating relations between states, one should also consider the growing threat of non-state actors targeting critical infrastructures – a risk that could be better weathered by smaller and easily deployable energy facilities, like gas and renewable energy (RES).

Combined-cycle gas turbines (CCGT) power plants can be more rapidly built and operated, at a lower cost. In the Gulf Cooperation Council (GCC) region, with current technology and under the assumption of 22 USD/ton CO2 emissions price, total generation costs are estimated at 52.4 USD/MWh for gas and 60.5 USD/MWh for nuclear.<sup>6</sup> It was calculated that – considering a 10% discount rate – nuclear may become convenient in case of a hypothetic carbon price above 30 EUR/ton across the region, which is nowhere to be seen at the moment.<sup>7</sup> Renewable energy is also gaining traction in the region. Long-term contract prices for newly commissioned RES installations range from 41 and 77 USD/MWh, lower than in any other region in the world.<sup>8</sup> Still, non-hydro renewables accounts for about 1% of power generation in the MENA, which still prefers oil and gas to accommodate rising electricity demand.

#### Redesigning the EU's approach

The EU and its members have at their disposal more sophisticated and diversified instruments than Russia to address the MENA's growing energy needs. These should be used to enhance stabilisation and prevent opportunistic incursions of more politically agile – but ultimately destabilising – actors such as Russia in a region that is vital for the Union's long-term strategic interests. However, this requires a redesign of current European energy policies towards the Mediterranean.

So far, the EU approach to Mediterranean energy cooperation focused on a regional governance approach as opposed to targeted commercial diplomacy. The EU tried to promote its regulatory *acquis* in the region, notably through network efforts (such as the MedReg initiative, aimed at enhancing technical cooperation in policy networks), with the objective of making the local regulatory environment more attractive to investors. It did not apply means of commercial diplomacy, which rely on targeted and coercive state instruments<sup>9</sup> and is therefore rather associated with the foreign policy interests of state actors.

So far, the EU approach had a poor record in the MENA region, as it operated under less than ideal conditions: little regional integration, no conditionality, a lack of ownership by member states, and a focus on the EU as a market outlet rather than local needs.

A more effective approach should ideally combine governance (in terms of objectives) and commercial diplomacy (in terms of targeting and conditionality) on the basis of a proper understanding of the regional energy

priorities and ongoing political re-profiling. In order to do so, the EU needs to develop a shared narrative, clear focus, and a coordinated methodology.

The narrative promoting rules diffusion should focus on supporting and enhancing the ambitions of MENA countries' decarbonisation pledges presented in Paris, rather than on the implicit virtues of EU regulation. This would contribute to the Union's climate leadership in a moment where multilateral climate efforts are undermined by political shifts in the US.

In terms of focus, action needs to concentrate on specific local barriers to RES deployment<sup>10</sup> and energy efficiency, such as institutional capacity, grid inadequacy as well as uncertainty about investment returns and market access. This requires technical assistance – notably in the public procurement area, and risk-mitigation instruments.

In terms of methodology, a coordinated and consistent division of tasks is needed between multilateral financing vehicles focusing on risk-mitigation for investors, the diplomatic intruments of member states targeting specific MENA partners with incentives and conditionality, and EU assistance in improving institutional capacity. To this extent, the focus of the EU's Energy Diplomacy Action Plan<sup>11</sup> on "underpinning initiatives that promote sustainable energy markets in partner countries and in key third countries, based on EU know-how using safe and sustainable low-carbon technologies and system solutions" is a step in the right direction. However, it needs ownership by member states and coordination with initiatives such as the External Investment Plan<sup>12</sup> proposed by the European Commission in 2016 and funding instruments such as the European Fund for Sustainable Development<sup>13</sup>, which should earmark part of the EUR 3.35 billion forseen budget for a socially sustainable energy transition.

All in all, Europe needs to upgrade its external energy actorness in the MENA for the sake of its own stability. The historic pattern of developing bilateral hydrocarbons' trade between European and MENA countries under a security umbrella provided by the US needs to be revised. This needs to be done not only because of Washington's increasingly erratic role and the consolidation of the presence of third actors – not necessarily benign – such as Russia, but also due to the challenges and opportunities provided by the climate agenda and the rising MENA energy demand. If the Union and its members do not live up to the task of responding to MENA pressing energy needs, it will miss an opportunity to shape the future of a strategic neighbourhood, to the benefit of new international competitors.

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The views expressed in this PolicyBrief are the sole responsibility of the author.

- 1 P.K. Baev (2011), "Russia's Counter-Revolutionary Stance toward the Arab Spring", *Inside Turkey*, Vol.13, No.3, pp 11-19.
- 2 K. Westphal, M. Overhaus, G. Steinberg (2014), "The US Shale Revolution and the Arab Gulf States", *SWP Research Paper*, 11/2014, Berlin.
- 3 IAEA Country Profile, Russian Federation, available at: <a href="https://cnpp.iaea.org/countryprofiles/Russia/Russia.htm">https://cnpp.iaea.org/countryprofiles/Russia/Russia.htm</a>
- 4 Including uranium mining, sale and shipment, fuel conversion and enrichment, plant construction, power generation, waste management, and decommissioning.
- $5 \quad \underline{\text{https://europa.eu/globalstrategy/en/global-strategy-foreign-and-security-policy-european-union}\\$
- 6 R. Druce, "The role of Nuclear Power in the Middle East Electricity Industry", NERA Economic Consulting, 23 October 2015, available at: <a href="http://www.nera.com/content/dam/nera/publications/2015/PUB\_Middle\_East\_Nuclear\_A4\_1015.pdf">http://www.nera.com/content/dam/nera/publications/2015/PUB\_Middle\_East\_Nuclear\_A4\_1015.pdf</a>
- 7 C. Nakhle (2016), "Nuclear Energy's Future in the Middle East and North Africa", Carnegie Middle East Center.
- 8 C. Philibert, "Renewables in the MENA Region", IEA presentation during COP21, available at: http://www.iea.org/media/workshops/2015/cop21/otherevents/5DecPhilibert.pdf
- 9 E. Stoddard (2016), "Tough times, shifting roles: examining the EU's commercial diplomacy in foreign energy markets", *Journal of European Public Policy*.
- 10 R. Poudineh, A. Sen, B. Fattouh (2016), "Advancing Renewable Energy in Resource-Rich Economies of the MENA", OIES Paper 15/2016, available at: <a href="https://www.oxfordenergy.org/wpcms/wp-content/uploads/2016/10/Advancing-Renewable-Energy-in-Resource-Rich-Economies-of-the-MENA-MEP-15.pdf">https://www.oxfordenergy.org/wpcms/wp-content/uploads/2016/10/Advancing-Renewable-Energy-in-Resource-Rich-Economies-of-the-MENA-MEP-15.pdf</a>
- 11 Council Conclusions on Energy Diplomacy, 10995/15, 20 July 2015, http://data.consilium.europa.eu/doc/document/ST-10995-2015-INIT/en/pdf
- 12 https://eeas.europa.eu/sites/eeas/files/4\_external\_investment\_plan\_3pg.pdf
- 13 <u>http://www.consilium.europa.eu/en/press/press-releases/2016/12/01-efsd/</u>

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