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The climate crisis – a Russia-EU cooperation opportunity

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Due to the global decarbonisation transition, Russia is likely to lose its coal, oil and maybe even natural gas export markets in the EU over the next 30 years. If badly managed, this development could eventually lead to the further deterioration of Russia-EU interlinkages and shared interests and might intensify the existing structural conflict between both sides. At the same time, this situation represents a theoretical chance to develop the bilateral trade, economic and science relations for the common benefit. In the mid- to long-term, Russia might become a major renewable energy exporter to the EU and it actually seems to be in the clear interests of both Russia and the EU to intensify bi- and multilateral cooperation on the curbing and managing of climate change. Although other issues are likewise important and need to be solved, such cooperation has the potential to significantly enhance political relations between Russia and the EU.

Since 2018, global warming – or the climate crisis, as it is now often referred to – has become one of the top political issues in the EU. Throughout 2019, millions of ordinary people have made an impact by marching through the streets of EU countries and demanding that their governments take accelerated action on curbing greenhouse gas emissions. As a result, a number of EU member states and the new European Commission – already dubbed "the Climate Commission" by many – have started processes to set more ambitious emission reduction targets and implement additional transformational policy instruments.

For instance, the EU has now started the internal procedure to increase the ambition of its 2030 greenhouse gas target. EU institutions and member states plan to change it from the current figure of minus 40 percent below the 1990 level to minus 50 or even 55 percent. A more ambitious long-term climate target of greenhouse gas neutrality for 2050 (up from the former figure of "minus 80 to 95 percent") has been adopted by the European Council in mid-December 2019.¹ Both target increases follow requirements by the UN Paris Climate Agreement of 2015.

Other developments are of similar significance: With its European Green Deal, the new EU Commission has proposed additional investments into the climate neutral industry, agriculture and transport system. At the same time, Germany is introducing a domestic price on CO2 emissions that are not yet covered by the EU emissions trading system. While German industry is shifting significant resources into developing low-carbon electric transport, supported by its government, big investors in the EU are beginning to pull their money out of companies that do not have a carbon neutrality strategy.

If implemented, these targets, policies and investment strategies will lead to a significant lowering and possible phase-out of fossil fuel imports from any country into the EU. Coal and oil imports will likely decline already in the 2030s or even the 2020s and virtually stop in the 2040s, if not earlier.² Traditional pipeline

² European Commission (2019): Clean Energy for All Europeans package EUCO Scenarios (to estimate the potential impact of the EU's climate and energy targets for 2030), https://ec.europa.eu/energy/sites/ener/files/technical_note_on_the_euco3232_final_14062019.pdf



¹ Only Poland asked for a postponement of the national implementation until June 2020 and maybe longer. Experts doubt Warsaw will be able to avoid the domestic implementation of stronger climate policy measures. Most likely, after more bargaining, even heavily coal dependent Poland will join the rest of the EU in following the new target.

and liquefied natural gas imports may continue for longer. Although, judging from currently available knowledge, even they may well end around 2050 or in the 2050s.³

Betting on the EU to miss its current climate and energy targets does not seem to be a smart strategy. With droughts and other extreme weather events becoming more frequent in Europe, reducing greenhouse gas emissions is likely to remain a top political issue in Brussels and many member states. As a result, the EU will continue to strive to be a global leader on climate policy. These developments will be supported by the declining costs of generating and storing renewable energy. These costs are already very low.

Carbon capture and storage (CCS) as an end-of-pipe technology for reducing CO2 emissions from burning fossil fuels or industrial processes will not come to the rescue of EU fossil fuel imports. CCS may play a role in the production of carbon-intensive materials, such as cement or steel. However, it is unlikely that CCS in the EU will ever be widely used to reduce emissions in the power, transport or heat sectors, due to negative public sentiment.⁴

Areas of cooperation

This development does not mean that Russia will necessarily lose the opportunity to export large amounts of energy to the EU. In 2017, 55 percent of the EU-28's energy needs were covered by imports.⁵ Even in the case of complete carbon neutrality, the EU will most probably continue to import significant parts of its energy. However, this energy will have to be climate neutral.

One currently discussed and potentially viable option is the so-called blue hydrogen. Blue hydrogen is produced by taking the CO2 out of natural gas and storing it (Carbon Capture and Storage - CCS), for instance at the extraction site. The hydrogen would afterwards be transported to the EU. Gazprom has reported that it is developing blue hydrogen technology. Doubts remain, however, whether EU customers will want to buy Russian CCS hydrogen in similar amounts compared to natural gas imports today, inter alia due to the image problem and environmental risks connected to CCS and natural gas extraction. The same applies to nuclear energy. It is difficult to imagine the European Commission supporting nuclear power imports. After the rather pro-nuclear United Kingdom has left the EU, this option will become even less likely. Regarding climate neutral coal and oil use, there is currently no credible indication this option can become viable any time.

Consequently, most EU member states and Brussels will presumably continue to support renewable energy as the energy choice of the future, also for their imports. The scarcest resources for producing renewable energy with current and future technologies in the densely populated EU are not wind or sunshine – but land and public acceptance. Therefore, competition for domestic EU land and offshore surface in the 2040s, when the EU's energy system will most likely be dominated by renewables, will make the import of vast amounts of renewable energy an extremely interesting option. The demand for renewable energy imports might already start to rise in the 2020s, provided affordable amounts of renewable energy are available in the EU's neighbourhood and there is a credible certification system.

³ Neumann, A., Göke, L, Holz, F., Kemfert, C, von Hirschhausen, C (2018): Erdgasversorgung: Weitere Ostsee-Pipeline ist überflüssig, https://www.diw.de/documents/publikationen/73/diw_01.c.593445.de/18-27-1.pdf. Hainsch, K. & Löffler, K (2018): Modeling the low-carbon transformation in Europe and Germany – Developing paths for the European energy system until 2050. DIW Berlin Discussion Paper.

⁴ Most CCS pilot projects in the EU have been stopped due to massive protests by local residents. This has made EU policy makers wary of any kind of CCS technology development.

⁵ Eurostats (2019): Energy production and imports, https://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports

With its low population density, **Russia is theoretically well placed to become a major renewable energy exporter** to the EU, along with Ukraine, Belarus and other countries in the EU's neighbourhood. The options for exporting renewable energy to the EU include two choices that are already available today: biogas and renewable electricity from wind or solar.⁶ Further technologies are currently being developed, such as renewable or green hydrogen produced with electricity for example from wind farms or solar panels. Green hydrogen may be imported via pipelines or vessels. The technology already works locally in several EU countries with wind or solar power units producing hydrogen for applications in transport, industry or energy storage.⁷

There are more options available than just energy deliveries when it comes to mutually beneficial multiand bilateral cooperation on the climate crisis. Every country with a strong science base can play an important role in developing the **breakthrough technologies needed for the carbon-neutrality transition** of the world economy and specialise in a set of new technologies that will be in demand from global markets. No country or region will be good at everything. Furthermore, dialogue and cooperation between countries can help to clarify future economic needs and facilitate mutual investments for the common benefit. For instance, EU car manufacturers will at some point start to look out for zero-carbon aluminium and steel that the EU might not be able to produce at a competitive price and in the necessary amounts. Russian companies could be natural suppliers. As a country with a strong engineering base, Russia could theoretically also become a supplier for renewable energy technologies.

Climate science is another underdeveloped field of mutually beneficial Russia-EU cooperation. This particularly applies to research into the social, geographical and economic dimensions of climate change.⁸ Finally, Russia and the EU have a common interest in mitigating the risks posed by the **effects of global heating on security** in already unstable world regions, as well as on migration and terrorism.

The Paris Climate Agreement: A stronghold of multilateralism

The Paris Climate Agreement of 2015 is a cornerstone of multilateralism and has so far proved to be surprisingly successful. In Paris, almost every country subscribed to tackling the most pressing issue of our time in a collective and responsible way. After extensive domestic discussions, Russia fully joined the Agreement as one of the last countries in October 2019. This has opened up the opportunity for Russia and the EU to develop the Agreement jointly towards, among other things, enhanced collaboration between countries that export and import fossil fuel in order to decarbonise their energy relations for the common benefit.

If compared to its predecessor, the Kyoto Protocol, the Paris Agreement already gives higher priority to implementing its goals through cooperation and partnerships between countries (see e.g. Art. 6, 10, 12). The specific rules of the Paris Agreement implementation partnerships are currently being negotiated,

⁶ Boute, A., & Willems, P. (2012). RUSTEC: Greening Europe's energy supply by developing Russia's renewable energy potential. Energy Policy, 51, 618-629. https://doi.org/10.1016/j.enpol.2012.09.001

IRENA (2017), REmap 2030 Renewable Energy Prospects for Russian Federation, Working paper, IRENA, Abu Dhabi. www.irena.org/remap

⁷ Van Hulst, N. (2019): The clean hydrogen future has already begun. IEA Commentary, https://www.iea.org/commentaries/the-cleanhydrogen-future-has-already-begun

⁸ Assessment based on conversations with social science researchers, inter alia at the Institute For Advanced Sustainability Studies, Potsdam.

while the first countries are already setting up bilateral partnerships. This could become an interesting option for Russia on the one and the EU as well as individual EU member states on the other side – albeit very likely not before the end of the Russian-Ukrainian conflict and the lifting of at least some of the sanctions.

Reviving the OSCE

A multitude of statements and reports has been published about the current low relevance of the Organisation for Security and Co-operation in Europe (OSCE).⁹ Nevertheless, founded in 1973 as an East-West forum during the Cold War, the OSCE looks like a suitable platform for advancing dialogue and tangible cooperation on the carbon-neutrality transition of the economies of its member states, as well as their climate security (security issues evolving out of the climate crisis, e.g. on the OSCE's southern border). Although it is especially underdeveloped within the OSCE institutional framework and little used by member states, the 2nd OSCE Dimension of Economic and Environmental Cooperation could be the host for the issue of common climate and energy security. Climate security could also play a role in the 1st Dimension of politico-military cooperation.

Promising areas of cooperation under the carbon-neutrality transition agenda include:

- 1. Best practice exchange and joint projects on the transition of regions and sectors that will be especially affected (e.g. coal regions or the automotive sector).
- 2. The implications of evolving carbon-neutral trade relations, with an optional focus on developing standards and infrastructure for green energy certificates.
- 3. Advancing education and science cooperation.

Establishing the Organisation for Security and Co-operation in Europe as a climate security and carbon neutrality cooperation organisation does not only seem to be a reasonable answer to what is one of the most serious security and cooperation threats Europe faces in the 21st century. It may also breathe new life into an actually important international organisation that has become less and less relevant over the years. Moreover, linking the OSCE's agenda firmly to cooperation on the climate crisis may resonate well with citizens who increasingly feel that their governments are not doing enough to address climate change.

Russia-EU bilateral cooperation on the future of energy relations

Apart from engaging within multilateral frameworks, the EU and Russia should strive towards establishing a structured dialogue on shaping the future of energy-related economic and trade relations. Building upon first results of this dialogue, both sides should then aim at developing their cooperation. Climate policy measures, such as carbon pricing, could become part of this structured cooperation. By following a three-step approach and depending on the overall state of relations, the initial structured dialogue could, in the medium term, develop into a fully-fledged partnership with its own institutions.

Step 1: The cooperation could kick off with a bilateral dialogue. This **"Russia-EU climate change and economic relations dialogue" could start at a non-official level** and, additionally and to a lesser extent, in the framework of suitable official work formats, where exchange currently continues (for instance, the

⁹ For instance Smolnik, F. (2019): Cooperation, Trust, Security? The Potential and Limits of the OSCE's Economic and Environmental Dimension. SWP Research Paper, https://www.swp-berlin.org/en/publication/the-potential-and-limits-of-the-osces-economic-and-environmental-dimension/

Gas Advisory Council). The non-official group would involve mainly think tank and NGO experts, as well as business associations and possibly trade unions from Russia and EU member states. It should be checked whether members of parliaments and officials from Russian and EU member state regions as well as the municipal level could be included from the beginning. The group would need a secretariat. It should meet regularly over the course of at least 2 years and aim to formulate joint recommendations. Discussions would focus on decarbonisation and energy scenarios as well as the trade and cooperation potential of renewable energy technology or other low/zero-carbon materials and products. The priority goal of the dialogue would be, on the one hand, to reduce uncertainty about energy demands in the EU and, on the other, to look at Russia's carbon-neutral energy (technology) export potential. Ideally, it would also discuss tangible options on how a Russia-EU cooperation in this regard could be further developed.

Step 2: After a significant alleviation of the current crisis in Russia-EU relations, a **fully-fledged official dialogue between Russian federal ministries and the relevant Directorate Generals** of the European Commission could complement the informal group. This could be done through a bilateral inter-services climate and economic relations working group that would meet regularly – following the model of the recently introduced Franco-German Inter-Ministerial Working Group on Climate. Its main task would be to develop next steps for deepening and possibly further institutionalising the cooperation, while taking into account bilateral interaction between EU member states and Russia. Overall, the dialogue should build upon the experience of – but not simply continue – the EU-Russia Energy Dialogue¹⁰, which the EU suspended in 2014. The official dialogue would only make sense, if a significant number of experts and decision-makers from outside the traditional oil, gas, nuclear and coal communities will be included.

Step 3 would consist of specific cooperation projects. The **options for concrete (state) cooperation** could include:

- 1. Incentivising joint research and development projects of Russian and EU companies that work on carbon neutrality technologies and business models.
- 2. Joint research projects on hydrogen and other power-to-X infrastructures.
- 3. Feasibility and potential studies for the production and export of different renewable energy technologies in Russian regions.
- 4. Building high-voltage power links between the Murmansk Region as well as the Republic of Karelia on the one and Finland on the other side to connect new wind parks in the Russian North to the EU electricity market.
- 5. The creation of exchange programmes on climate change, renewable energy technologies, environmental science as well as policy instruments for students and researchers.
- 6. A border carbon tax agreement and the coordination of carbon pricing.

For such a cooperation to be successful, it is crucial not to intend to reproduce the one-directional asymmetry of the 2010 EU-Russia Partnership for Modernisation, when only the EU offered solutions to the other side. The dialogue and subsequent partnership should be based, on the one hand, on Russia's interest in understanding early on the changing dynamics of the EU's carbon neutrality transition, in preserving its own export market and advance innovation domestically. On the other hand, it should be based on the EU's interest in not losing the option of energy and low-carbon material imports from Russia and in gaining a future renewable energy technology partner. Thirdly, its foundation should be the common interest of both sides to secure a minimum amount of mutual exchange and cooperation for the sake of economic development and higher security levels in Europe.

¹⁰ https://ec.europa.eu/energy/en/topics/international-cooperation/EU-cooperation-other-countries/russia/eu-russia-energy-dia-logue

The risk of climate non-cooperation

Since **the EU** has embarked on a journey that could end the traditional well-established fossil fuel energy relations with Russia, it **should pro-actively approach Russia** on developing bi- and multilateral dialogue and cooperation formats. For this, early-on coordination with interested EU member states could be essential. The European Parliament has already made the first step. In its July 2018 Resolution on Climate Diplomacy, it instructed the European Commission, the European External Action Service (EEAS) and the Member States "to focus their strategic dialogues on energy with fossil fuel exporting countries in the EU's wider neighbourhood on decarbonised energy cooperation".¹¹ Although, in order to make this possible, the still weak climate and green energy diplomacy capacities of the EEAS, the European Commission and several of the bigger EU Member States need to be further strengthened.

Important players in the EU might soon begin to interpret the decarbonisation goal as a necessity or even an opportunity to further reduce ties with Russia. They could feel that priority should be given to nourishing sustainable energy imports from countries like Iceland, Greenland, Norway and Morocco, which are often perceived as being easier partners than Russia and at the same time more interested in renewable energy. If this perspective prevails, however, the EU and Russia will drift further apart as business and science ties continue to deteriorate. Less interdependence and less mutual understanding could add to the likelihood of conflict. On the other side, without a serious dialogue offer by the EU about the future of energy and economic relations, some Russian opinion leaders could consider the EU's decarbonisation agenda a hostile move and further proof that Western policy basically aims at weakening Russia.

Ultimately, without a real effort of both sides to set up a comprehensive dialogue, the EU's decarbonisation agenda could lead into an even more fundamental structural conflict than the one that Russia and the EU are already experiencing. In this non-cooperation scenario, Russia may turn further towards Asia, inter alia when it comes to choosing its own green economy development model.

¹¹ European Parliament resolution of 3 July 2018 on Climate Diplomacy, http://www.europarl.europa.eu/doceo/document/TA-8-2018-0280_EN.html.

The European Parliament in the same resolution "(r)ecommends that the EU deepen its strategic cooperation at state- and nonstate level through zero-carbon development dialogues and partnerships with emerging economies and other countries which have a major impact on global warming, but which are also decisive in terms of global climate action; notes against this backdrop that climate can be an entry point for diplomatic engagement with partners with whom other agenda items are highly contested, thereby offering an opportunity to enhance stability and peace".

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