

The Ukrainian Conflict and the Energy Crisis: Sustaining the Energy Transition

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E S S A Y P R I Z E

Russia's full-scale invasion of Ukraine, launched on 24 February 2022, had dramatic consequences on the latter while triggering a crisis whose economic, political, social and security consequences rapidly spilt over to all neighbouring and non-neighbouring states. The conflict resulted in a disruption of the already strained relations between Europe and Russia, and the European Union's concern shifted from finding ways to enhance cooperation with Moscow to dealing with the implications of a sudden cut-off in relations with it.

EU and its energy supply in the face of war

The effects of Putin's war, however, did not impact EU member states to

the same extent. Countries that had a privileged partnership with Russia have evidently been the most affected. However, the EU has rapidly put in place a "burden-sharing" strategy, so as to allow the most fragile members to cope with the harsh repercussions of the conflict.¹

The EU promptly condemned Moscow's breach of international law and introduced, as of November 2022, eight packages of sanctions against Russia, with the aim of isolating it from global markets and weakening its economic

¹ Nils Redeker, "Same Shock, Different Effects: EU Member States' Exposure to the Economic Consequences of Putin's War", in *Jacques Delors Centre Policy Briefs*, 7 March 2022, <https://www.delorscentre.eu/en/publications/economic-consequences-ukraine>.

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power. In parallel, it implemented measures to support Ukraine by defending its territorial integrity, sovereignty and independence, and to provide humanitarian aid to Ukrainians fleeing the country as well as to internally displaced people.

When launching the war, Putin based his strategy on the expectation that NATO's and Europe's responses would be somehow in line with those undertaken in the recent past and thus weaker than they turned out to be. Previous acts of aggression – such as the war waged against Georgia in 2008, the annexation of Crimea and the conflict in Eastern Ukraine in 2014, alongside military exercises along the Ukrainian and Polish borders and in the Pacific Ocean – may have convinced Putin that NATO would not respond militarily to a new offensive and that the West's military support to Ukraine would be more limited than it has proved to be.

Likewise, Putin could have expected that the EU would impose sanctions, although he probably did not predict it would forge such a rapid, cohesive and unprecedentedly harsh response. He may have hoped that a *blitzkrieg* invasion would create tensions among EU countries. Given their high dependence on Russia for critical raw materials, they would have been discouraged from implementing strict measures against Moscow that would damage their own economy too. Evidently, norms of cohesion have trumped interests, as was suddenly made clear by Germany's decision to suspend the Nord Stream 2 pipeline project right after Russia's recognition of the independence of

the two eastern Ukrainian regions of Donetsk and Luhansk on 21 February 2022.² Eventually, sanctions turned out to be much more comprehensive than those introduced in 2014 in response to the annexation of Crimea.³

As far as gas is concerned, Putin was probably aware that if the EU reduced its reliance on Russia, his country would face economic repercussions, given that 70 per cent of Russian pipeline gas exports went to the EU in 2021.⁴ However, he believed the Russian economy could sustain such repercussions by turning towards other commercial partners such as India and China. Indeed, over the last few months, Russia has become China's biggest crude oil supplier. As of August 2022, the percentage of Russia's oil exports to China has grown by approximately seven per cent compared to the previous year.⁵

It is evident that EU's sanctions and Putin's countersanctions have also negatively affected the European energy sector and threatened its energy

² Philip Oltermann, "Germany Halts Nord Stream 2 Approval over Russian Recognition of Ukraine 'Republics'", in *The Guardian*, 22 February 2022, <https://www.theguardian.com/p/knj6x>.

³ Council of the European Union, *Timeline – EU Restrictive Measures against Russia over Ukraine*, last reviewed on 28 November 2022, <http://europa.eu/!vG96nY>.

⁴ Daniel Gros, "Smart Sanctions and How to Diminish Europe's Dependency on Russian Gas", in *EU Ideas*, 10 March 2022, <https://euideas.eu.eu/?p=1594>.

⁵ Chen Aizhu, "Russia Is China's Top Oil Supplier for 3rd mth in July- Customs Data", in *Reuters*, 22 August 2022, <https://www.reuters.com/markets/commodities/russia-is-chinas-top-oil-supplier-3rd-mth-july-customs-data-2022-08-20>.

security, as President Putin hoped they would. Before the outbreak of war, Russia was the main supplier of crude oil, natural gas and solid fossil fuels for many EU countries, notably Germany and Italy.

In December 2021, 40 per cent of Italy's overall gas imports came from Russia.⁶ Therefore, the decision to cut off reliance on Russian gas supplies led to shortages, causing a dramatic increase in energy prices, aggravated by speculation on energy markets. In Italy, the effects of the radical reduction in Russian supply have been particularly pronounced due to the high percentage of gas in Italy's energy supply (41 per cent), combined with the country's dependence on imports in the energy sector (75 per cent in 2021), as it fails to take advantage of domestic resources.⁷ There are several reasons for this, such as Italy's scarcity of gas fields,⁸ not to mention the environmental concerns and legal constraints that have hindered gas extraction in the past.⁹ In 2021, gas production totalled 3.3 billion cubic metres, a small figure when compared to the 8.6 billion produced in 2012, a

⁶ Italian Ministry of Ecological Transition, *La situazione energetica nazionale nel 2021* [The national energy situation in 2021], July 2022, p. 138-139, https://dgsaie.mise.gov.it/pub/sen/relazioni/relazione_annuale_situazione_energetica_nazionale_dati_2021.pdf.

⁷ *Ibid.*, p. 10.

⁸ Ufficio nazionale minerario per gli idrocarburi e le georisorse (UNMIG), *Riserve nazionali di idrocarburi, anno 2021* [National hydrocarbon reserves, year 2021], <https://unmig.mise.gov.it/index.php/en/dati/ricerca-e-coltivazione-di-idrocarburi/riserve-nazionali-di-idrocarburi>.

⁹ Pier Paolo Raimondi, *Natural Gas in Italy: Features and Perspectives in Light of Russia's War in Ukraine*, Rome, IAI, September 2022, p. 12-15, <https://www.iai.it/en/node/15987>.

quantity that has not been matched since.¹⁰

To cope with the urge to diversify its supply sources, Italy has turned towards other strategic partners. Eni and the Algerian state-owned company Sonatrach have reached an agreement that will increase Italy's gas imports from Algeria through the Trans-Mediterranean pipeline by up to 9 billion cubic meters per year by 2024.¹¹ Moreover, there will be a notable increase in gas supplies from Egypt, Mozambique, Angola and Congo.¹²

What room for energy transition?

Against this backdrop, Italy has also decided to pursue a parallel strategy to boost its domestic energy production, which consists in maximising the production of six coal-fired power stations and one fuel-oil power station on its territory.¹³ Regardless of the

¹⁰ CEIC website: *Italy Natural Gas Production: OPEC: Marketed Production [1960-2021]*, <https://www.ceicdata.com/en/indicator/italy/natural-gas-production-opec-marketed-production>.

¹¹ Eni, *Eni and Sonatrach Agree to Increase Gas Supplies from Algeria through Transmed*, 11 April 2022, <https://www.eni.com/en-IT/media/press-release/2022/04/eni-and-sonatrach-agree-to-increase-gas-supplies-from-algeria-through-transmed.html>.

¹² Eni, *Eni and EGAS Agree to Increase Egypt's Gas Production and Supply*, 13 April 2022, <https://www.eni.com/en-IT/media/press-release/2022/04/eni-and-egas-agree-increase-egypt-s-gas-production-and-supply.html>; Rafiq Raji, "Europe's 'Gas Rush' in Africa: Risks and Opportunities (for Both)", in *ISPI Commentaries*, 19 May 2022, <https://www.ispionline.it/en/node/35094>.

¹³ "Riapertura centrali a carbone: ecco i siti che torneranno a pieno regime" [Reopening coal-fired power plants: the sites that will return fully operational], in *Il Sole 24 Ore*, 7 September 2022, <https://www.ilsole24ore.com/art/da-brindisi->

short-term objective of topping up the country's gas reserves as quickly as possible in view of the winter season, the long-term consequences of such choices must also be taken into consideration, given that the coal combustion process produces 40–50 per cent more carbon dioxide (CO₂) emissions than natural gas.¹⁴

Indeed, the climate emergency deserves the utmost attention, and Italy should also take into account and assess the impact of its rushed measures on this dossier. Such solutions may jeopardise the 2030 goal of reducing carbon emissions by at least 55 per cent compared to 1990 levels, as set by the European Commission, not to mention that of attaining net zero carbon emissions by 2050, in accordance with the European Green Deal.¹⁵

Rather than falling back on past practices, Italy and other EU members should grasp the opportunity offered by the severe energy crisis to reduce their dependence on fossil fuels and adopt far-sighted policies aimed at alleviating the stress on the ecological system, which must be deemed necessary for the survival of the human species on Earth.

Rapid energy transition requires cooperation among EU countries. The

monfalcone-ecco-centrali-carbone-che-saranno-riaccese-massimo-AEz8xAyB.

¹⁴ Hannah Ritchie and Max Roser, "CO₂ and GHG Emissions", in *Our World in Data*, 2020, <https://ourworldindata.org/emissions-by-fuel>.

¹⁵ European Commission, 'Fit for 55': *Delivering the EU's 2030 Climate Target on the Way to Climate Neutrality* (COM/2021/550), 14 July 2021, <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:52021DC0550>.

Baltic Sea Energy Security Summit, attended by eight EU members in Denmark on 30 August 2022 and the signing of the Marienborg Declaration are important steps in such a direction. Signatory countries have committed themselves to reducing their dependence on Russian energy supply and investing in renewable sources of energy, notably offshore wind power, for which the Baltic region promises enormous potential.¹⁶

A further effort to accelerate energy transition can include cooperation between Italy, as a member of the EU, and the African Union (AU). Italy's reliance on gas supplies from Algeria, Egypt, Angola, Congo or Mozambique might benefit African countries by counterbalancing the immediate impacts of the conflict in Ukraine on their economies, as seen with the dramatic increase in the cost of commodities.¹⁷ However, Italy's enhanced partnership with the AU should also feature sustainable collaboration through investments in renewable infrastructures on the African continent.

Italy has already taken steps in this direction. In August 2022, Italy's Cassa di Risparmio di Roma (CR) loaned 100 million euro to the Africa Finance Corporation to be invested in renewable energy infrastructures

¹⁶ Baltic Sea Energy Security Summit, *The Marienborg Declaration*, 30 August 2022, <https://www.regeringen.dk/aktuelt/publikationer-og-aftaletekster/the-marienborg-declaration>.

¹⁷ Lucia Ragazzi, "Ukraine and Africa: Food Crisis, Energy Ambiguity and an Uncertain Political Outcome", in *ISPI Commentaries*, 6 May 2022, <https://www.ispionline.it/en/node/34926>.

on the African continent.¹⁸ In line with its decarbonisation goals, Eni is collaborating with some African countries, especially the Republic of Congo and Kenya, on the development of agri-feedstock and agri-hubs for biorefining. This project aims to promote sustainable development on the African continent and foster local growth by engaging local communities and creating new job opportunities.¹⁹ In Egypt, Eni is also involved in projects for the development of wind and solar energy, the production of hydrogen, as well as carbon capture and storage (CCS) projects.²⁰ Such projects seem to be particularly effective in that they encourage Italy's engagement in tackling both the energy emergency and the climate crisis by contributing to the diversification of energy sources whilst at the same time focusing on decarbonisation.

Nonetheless, it has to be acknowledged that only two per cent of global investment in renewables has been made in Africa over the last two decades, in spite of the fact that the continent offers enormous untapped potential in terms of wind, solar, hydro and geothermal energy.²¹ Its hydroelectric

potential is due to its major river basins: the Nile, Congo, Niger and the Zambesi. In terms of onshore wind potential, studies have shown that its exploitation – notably in Algeria, but also in Mauritania, Mali, Egypt, Namibia, South Africa, Ethiopia and Kenya – would satisfy Africa's electricity demand 250 times over.²² The African continent also offers enormous geothermal potential, mainly in the Great Rift Valley region of East Africa. Thanks to its progress in this area, Kenya now ranks among the world's top ten geothermal power producers.²³ Moreover, with its 9,000,000 square km in extent, the installation of solar panels in the Sahara region could not only satisfy Africa's demand for energy, but Europe's as well. In such a partnership, meeting Africa's energy demand should be set as a priority, while the exploitation of Africa's energy resources for the sole benefit of European countries should be deemed unacceptable.

Thus, a fruitful collaboration between Italy, working closely with the EU, and the AU would have highly beneficial outcomes for all those involved. Undoubtedly, it would allow Africa to fulfil its potential for economic growth,

¹⁸ CDP, *100 Million from CDP to Accelerate the Ecological Transition in Africa with AFC*, 31 August 2022, https://www.cdp.it/sitointernet/page/en/100_million_from_cdp_to_accelerate_the_ecological_transition_in_africa_with_afc?contentId=CSA40087.

¹⁹ Eni website: *Seeds for Energy*, <https://www.eni.com/en-IT/circular-economy/seeds-for-energy.html>.

²⁰ Eni website: *Our Work in Egypt*, <https://www.eni.com/en-IT/eni-worldwide/africa/egypt.html>.

²¹ International Renewable Energy Agency (IRENA) and African Development Bank (AfDB), *Renewable Energy Market Analysis: Africa and*

Its Regions, Abu Dhabi and Abidjan, IRENA and AfDB, January 2022, <https://www.irena.org/publications/2022/Jan/Renewable-Energy-Market-Analysis-Africa>.

²² International Finance Corporation (IFC), *New Analysis Shows Onshore Wind Potential Across Africa Enough to Power the Entire Continent Many Times Over*, 30 September 2020, <https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=24607>.

²³ Susan Schneegans, Jake Lewis and Tiffany Straza (eds), "The Race Against Time for Smarter Development", in *UNESCO Science Reports*, 2021, p. 499, <https://unesdoc.unesco.org/ark:/48223/pf0000377433>.

thus favouring the development of the African economy. At the same time, it would also lead to a dramatic reduction of global carbon emissions, as Africa and Europe would head towards achieving the net zero goal, an objective which can be reached by 2050 only if annual investment in renewable energy in developing economies grows to over seven times the current level.²⁴

Only the creation of a united front among EU members, while cooperating also with other regional organisations, can tackle major issues such as climate change. Since the Russian invasion of Ukraine, the EU has demonstrated enormous cohesion in its ability to respond to external threats. To date, the compactness of its member states and their alignment with decisions issued by Brussels have allowed Europe to cope with Putin's attempts to splinter the Union so as to undermine its power, through the weaponisation of refugees, energy and food supplies.

Italy's compliance with the EU response was favoured by the firm Europeanist and Atlanticist stance adopted by Prime Minister Mario Draghi and his government.²⁵ Italy has put aside interests that derived from its ties

²⁴ Mili Fomicov and Olivia Zeydler, "Averting an Energy Crisis Requires Bold Investment in Renewable Energy – Particularly in Developing Economies", in *Sustainable Development Impact Meetings*, 14 September 2022, <https://www.weforum.org/agenda/2022/09/energy-crisis-investment-renewable-energy-developing-economies>.

²⁵ Italian Government, *PM Draghi's Parliamentary Address on the Government Programme*, 17 February 2021, <https://www.sitiarcheologici.palazzochigi.it/www.governo.it/ottobre2022/www.governo.it/en/node/16789.html>.

with Russia and has acted in line with values that underpin European identity – such as human dignity, freedom, democracy, human rights – as well as with international law principles of territorial integrity and sovereignty.²⁶

If we take it as given that foreign policy outcomes are highly influenced by individuals and ideas,²⁷ Mario Draghi's resignation as Prime Minister and the formation of a government which relies on a right-wing coalition might lead to variations in Italy's European policy, and any change in Italy's Europeanist stance will influence the way the climate emergency is managed.

Only cooperation within the EU, an enhanced partnership with the AU and a turn to clean energy sources might allow Europe to attain energy security. The environmental crisis whose global effects are manifestly evident on a daily basis should not be treated with less urgency than a conflict that threatens the world's security, and should be put at the forefront of the Italian and European political agenda.

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²⁶ Helene Sjursen and Guri Rosén, "Arguing Sanctions: On the EU's Response to the Crisis in Ukraine", in *Journal of Common Market Studies*, Vol. 55, No. 1 (January 2017), p. 20-36, DOI 10.1111/jcms.12443.

²⁷ Michael McFaul, "Putin, Putinism, and the Domestic Determinants of Russian Foreign Policy", in *International Security*, Vol. 45, No. 2 (Fall 2020), p. 95-139, DOI 10.1162/isec_a_00390.

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