

WINTER LOOMING EUROPE'S ENERGY STRATEGIC READINESS

Executive Summary

The ongoing European energy crisis represent a challenge in terms of political, social, and economic stability. Russian reduction in gas supply, summer drought, and short-sighted energy policies have put a strain on the European Union members. However, a storm is on the horizon, peak in energy demand is expected alongside the coming winter. In this Strategic Viewpoint, social crisis, industrial disruption, and spread of Pro-Russian sentiment risks will be analysed and assessed.

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Executive Summary

- The European energy crisis opens a critical perspective on the coming months, especially with the arrival of winter.
- The energy crisis is the result of a conjunction of factors like the Russo-Ukrainian war, summer drought and wrong energy policies.
- Social turmoil, industrial disruption, and the spread of pro-Russian sentiment represent the main risks emerging from the current energy situation.
- Different national energy approaches show a different degree of risk at the country level for each.
- The EU does not want to be caught unprepared by further reductions in Russian gas supplies and the arrival of winter.
- In Aug, EU gas storage levels surpassed 80% of capacity, a positive signal in a stormy climate.

Introduction

The ongoing increase in global energy prices has come at a time when Europe is facing a severe energy crisis. Precisely, a 10-fold increase than average prices over the last decade has now fuelled inflation and strain on industries as well as the civil society. With winter season about to arrive, the demand for natural gas is another storm in the horizon. Many suggest the European energy crisis is mainly due to the ongoing war in Ukraine and the EU's imposition of sanctions against Russia which has led to Moscow's decrease in natural gas exports to the EU. But we at WoRisGo suggest that the real reason behind the shortage is not exclusively the war. Alternative sources such as LNG are expensive, summer drought in Europe have already reduced hydroelectricity production levels and river water availability for cooling down nuclear power plants with the ongoing energy decarbonization and denuclearization policies worsening the situation. The range of political risks emerging from the current situation embraces social crisis, industrial disruption, and the spread of pro-Russian sentiment. This Strategic Viewpoint analyses the political risks and the way they could turn into a crisis for business resilience with a broader attention to Europe as a region.

Contours of the War In Ukraine

What led to the Russian invasion of Ukraine?

In 2013, Ukraine experienced a wave of protests known as Euromaidan. The uprising was triggered by the Yanukovych government's pro-Russian positions. The protesters requested for government resignation, democracy, and opening up to the European Union. In 2014, Euromaidan turned into to the so-called Maidan Revolution in which protesters took control of the capital and President Yanukovych was dismissed by the Parliament.

In Eastern and Southern Ukraine, pro-Russian riots erupted escalating into the Donbas war: separatist militias arose, Luhansk and Donetsk oblasts declared themselves independent Republics, and Russian troops crossed the border annexing Crimea. From there began a long-lasting conflict in Ukraine culminating with the Russian invasion of the country in February 2022.

A hybrid conflict

- The Russo-Ukrainian War (2014 ongoing), after the full-scale invasion of Ukraine by Russian forces has shown mainly its conventional dimension.
- Conventional warfare is a large-scale utilization of conventional weapons and battlefield tactics between 2 or more states in military confrontation transcending regular troops on the battlefield.
- In the Russo-Ukrainian conflict, the main non-conventional elements are cyberattacks, disinformation, deployment of mercenaries, and weaponization of the economy (in particular, energy).
- The overlap of conventional and non-conventional weapons and tactics is the pivot of the so-called hybrid warfare.
- In the present report, dealing with the European energy crisis, we will observe the non-conventional factors related to energy and their potential disruptive outcome.

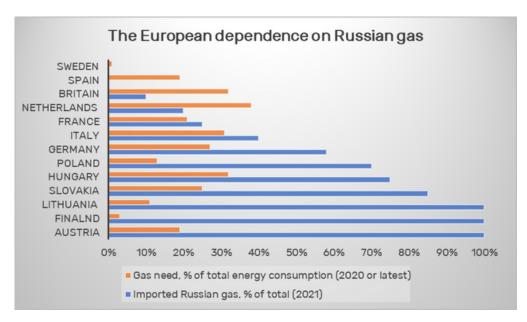
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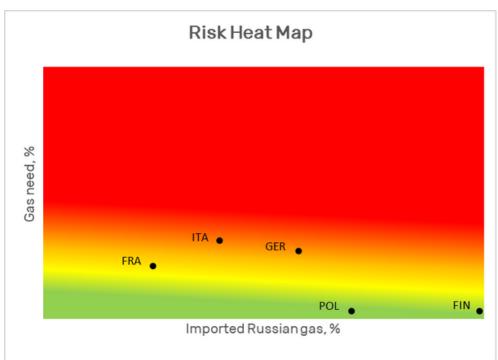


The weaponization of energy

- In 2021, Russia supplied to the EU around 45% of its total gas imports, 27% of oil imports and 46% of coal imports. Russia was the main gas exporter to the EU.
- The EU is heavily dependent on Russian energy imports. In particular, Russian gas is cheap, making its imports a pillar of different European economies.
- As the main supplier, Moscow has strong leverage on the EU.
- After the invasion of Ukraine, Russian gas flows have plummeted to half compared to 2021.
- In May 2022, Russian state-owned energy colossus Gazprom shut down a gas pipeline running across Belarus and Poland that delivered gas to different European countries.
- In Jun 2022, gas delivery through Nord Stream 1 (from Russia to Germany through the Baltic Sea) was reduced by 75%.
- In Jul 2022, the energy company closed Nord Stream 1 for ten days because of maintenance needs.
- Shortly after reopening it at a very low level of gas supply, in Aug, Gazprom halted gas supplies to Europe through Nord Stream 1 again.
- In Sep 2022, the indefinite shutdown of the pipeline was announced.
- The Kremlin claims that the reason for the indefinite reduction of gas supplies to Europe are punitive sanctions imposed on Russia by the West.
- Russian narrative represents a clear indication that Moscow is seeking to pressure the EU to rethink sanctions

Europe Energy Reliance- An Analysis







Finland



- Finland is directly involved in security issues as regards the Eastern Russian frontier.
- The two countries share a 1,340-kilometre-long border and a long fluctuating history of wars and diplomatic relations.
- After the Russian invasion of Ukraine, Finland applied for NATO membership and rejected Putin's request to pay for gas in roubles.
- Russian reaction was halting gas supply to Finland in May.
- Russian gas covered approximately 68% of the total Finnish gas needs. But natural gas accounts for just 6% of Finland's total energy consumption.
- Thus, the country is shielded enough from Russian energy supply volatility.

France



- France has a solid energy system that provides the county with an elevated degree of energy security.
- The country relies on nuclear power for 70% of its electricity needs, meaning it is far less dependent on Russian gas supply than different neighbouring nations.
- Even in that situation, with about 17% of its gas imports proceeding from Russia, France cannot ignore the Russian gas export policy.
- The French government has been working on contingency plans in case of total Russian gas cutoff.
- Total halt in Russian gas supply would be critical now: French nuclear production would struggle to handle the load as different reactors are currently off for maintenance.

Germany



- Natural gas covers 27% of Germany's total energy consumption. Before the invasion of Ukraine,
 55% of gas consumed in Germany was supplied by Russia.
- Since Feb, Berlin has been struggling to diversify its gas sources. For instance, buying gas from the Netherlands or Norway or importing LNG from Qatar and the US.
- In Summer 2022, Germany was reliant on Russian gas for about a quarter of its needs.
- However, the remaining quarter is crucial in critical areas: private heating as well as industry. In both fields, gas is the largest energy source (37% of the overall need).
- Being European largest economy, Germany cannot afford an energy shortage.
- In addition, Germany is about to shut down its last three nuclear power plants.
- To meet decarbonization goals, Germany is also planning to abandon coal power.
- Such a trajectory is difficult to invert on the short run because of technical issues. That energy policy and the outbreak of the war created a perfect storm for Germany.
- The German government has decided to nationalize Uniper, a gas giant, holding a stake of 98.5% in the firm. The aim is to save Uniper's assets from the volatility marked by the energy crisis.



Italy



- In 2021, Italian dependence on Russian imported gas amounted to 40% of Italy's needs.
- In the months following the Russian invasion of Ukraine, the country decreased that dependence to 25%.
- The Italian government announced measures to boost gas storage to buffer shortfalls of energy imports from Russia.
- Italy planned to further purchase coal to maximise coal power generation if needed to save gas and bring gas reserves to at least 90% of capacity by Nov.
- In addition, Italian multinational oil and gas company Eni signed new agreements with Algeria, Egypt, Qatar, Angola, Congo, and Mozambique.
- Italy is pushing for a European price cap on gas imports from Russia to mitigate the burden of rising prices on businesses and consumers.
- The gas trade is grounded on pipeline networks. Thus, Russia has no alternatives to the European market on the short run.
- If the EU adopts a price cap on gas, Russia will be forced to accept that price to trade gas with EU countries.

• In April, Poland rejected Putin's demand to pay for gas in roubles. In turn, Russia cut off its gas supply through the Yamal pipeline to Poland.

- The Polish leadership stated that the country was prepared for Russian "gas blackmail".
- Polish gas reserves proved that Poland anticipated Russia's energy leverage.
- As the summer season approached, other EU countries' gas reservoirs were only filled at around 30%, while Poland's level was 76%.
- Several emergency measures implemented by the Polish government showed that Poland had smelled Russian assertiveness.
- Poland has long been pursuing energy diversification to avoid critical dependence on Russia.
- According to the government, various alternatives are possible to substitute Russian gas, from domestic production to imports from Norway.
- Apart from gas, Poland imports 15% of its coal and 73% of its crude oil in addition to an important quantity of diesel from Russia.
- Coal supply seems to be difficult to substitute, due to reduced domestic production capabilities. As regards oil, import diversification appears more feasible.
- Additionally, Poland planned to start the construction of its first nuclear power plant in 2026.

Poland





Europe drought-Impact on Energy

While it is true that the Russian energy assertiveness towards the EU can be labelled as the primary reason for the European energy crisis, even other factors contributed to the worsening of the European energy situation. In the first place, summer drought and short-sighted energy policies were the underlying reasons.

As global climate change intensifies, the frequency of extreme weather events increases. A clear example of that is the exacerbation of the European energy crisis caused by drought (long-lasting and extensive occurrence of below average availability of water).

Finland



- In 2021, hydropower covered 22% and nuclear accounted for 33% of the total share of Finland's electricity generation.
- As one of the coldest European countries, Finland did not record severe drought in summer 2022.

France



- In nuclear power production water plays a crucial role. Nuclear reactors' cooling process relies on water that usually comes from rivers.
- If a river's temperatures go below a certain threshold, nuclear production must be reduced.

 Excessively hot cooling water would harm the environment when pumped back into the river.
- The drought happened in the meantime as French nuclear production capacity was already reduced because some nuclear power plants under maintenance.
- Recorded data shows that the decrease in production started in May, in correspondence with the increase in temperatures in Europe.

Germany



- Summer 2022 was labelled as the sunniest and the sixth driest on record in Germany.
- The main effect of the drought in Germany was the Rhine water lowering, resulting in deep reduction in coal transport.
- Coal cargo ships were forced to reduce by two thirds their capacity.

France meets 70% of its electricity consumption with nuclear energy.

- In Germany, coal represents a crucial energy source to face Russian gas supply reduction.
- In the first six months of 2022, 31.4% of German electricity was produced out of coal.



Italy



- In the summer of 2022, Northern Italy experienced the worst drought of the last 70 years.

 State of emergency was declared in five northern regions.
- The Po, the longest Italian river, reached record low water levels because of extremely high temperatures, lack of rainfall, and little snow on the mountains.
- The Po is a critical source of water for different Northern Italian regions in sectors such as house consumption or agriculture.
- In that framework, Italian hydropower production has been heavily impacted by the water crisis.
- Northern Italy hosts more than 85% of Italy's hydropower infrastructure. Hydro covers 15% of the Italian energy demand.
- At the commencement of 2022, Italy's stored energy level was 22% below the average level of the previous seven years.
- Italian hydropower storage levels have gone down during the summer period, a drop of 40% below the average.

Poland

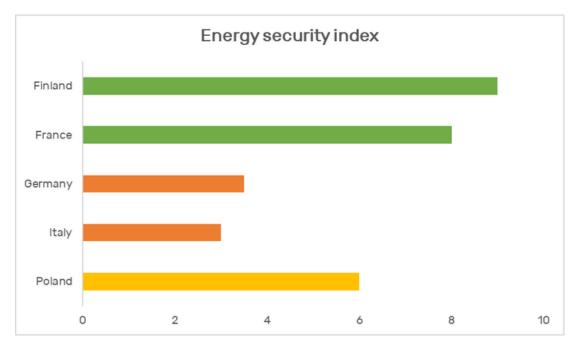


- In summer 2022, the Vistula, the longest river in Poland, approached its lowest historical level.

 Some areas recorded new local record highs.
- Hydropower plays a minor role in energy production and consumption in Poland.

Policy trajectories contributing to present crisis

Energy security (the uninterrupted and continuous availability of energy in sufficient amounts at a sustainable price to a country) is a crucial dimension of national security. Energy security rests on three main elements: consumption needs, import dependence, and domestic production. Reduction in the first two and increase in the latter mean strengthening energy security. In the case of short-sighted energy policies, vulnerability to foreign leverage and international volatility increases.





Finland



- Finland can rely on a decentralised, diversified, and efficient energy system.
- The country is expected to reach self-sufficiency in electrical energy in 2023.
- Finland is a global leader in smart grid technology, reaching an elevated level of energy efficiency.
- In Jun 2022, the Finnish government presented its national climate and energy strategy.
- The strategy focuses on the green transition and the phasing-out of Russian fossil energy, the import of which has already ceased almost completely.
- The Finnish government has set as a goal to make the country carbon-neutral by 2035.

France



- France meets 70% of its electricity consumption with nuclear energy. It is the world's highest share in national energy mix.
- Historically, France has focused considerably on energy security.
- In April 2022, Emmanuel Macron declared the will to lead France towards rapid decarbonisation and energy independence.
- Six new EPRs (European pressurised reactor or Evolutionary power reactor) will be operational by 2035. Eight additional new-generation reactors are in planning stage.
- The government have allotted one billion euro in research on new small modular reactors.
- Considering the volatile energy market, Macron may consider enhancing options pertaining to renewable energy production.
- Natural gas covers 27% of German total energy consumption. In 2021, 55% of gas consumed in Germany was supplied by Russia.
- The Bundestag devoted attention to energy prices only, ignoring the geopolitical implications of energy trade.

Germany



- As a result, cheap Russian gas has been seen as a great opportunity. Now, Germany is paying a
 heavy price in both geopolitical and economic terms.
- In 2005, German Chancellor Schröder approved the Nord Stream 1 pipeline (majority-owned by Gazprom) from Russia to Germany crossing Baltic waters.
- Nord Stream 1 is the biggest pipeline bringing Russian natural gas to Europe.
- In 2014, Schröder and other German notables endorsed Nord Stream 2, it was completed in 2021 but never entered service.
- Nord Stream 2 would have made Germany a major transit country, at the price of becoming almost 100% dependent on Russian gas.
- In 2011, after the Fukushima accident, Chancellor Angela Merkel decided to close all German nuclear power stations, greatly reducing domestic production capacity.



Italy



- In 2021, Italian dependence on Russian imported gas amounted to 40% of Italy's needs, up from 27% ten years ago.
- Instead of improving, Italian energy security has been deteriorating over the years.
- Italy abandoned nuclear energy in 1987 (after the Chernobyl tragedy) and interrupted its resumption in 2011 (after the Fukushima accident) via referendum.
- In 2011, Italy has proved incapable to manage or at least influence Libyan affairs.
- Libya was Italy's first supplier of oil (27% of total consumption) and the third supplier of natural gas (12.5%). Eni was the main foreign energy operator in the country.
- The Arab Spring and the subsequent war marked the deterioration of Italy's influence on the country and, as a result, a weakening of Italian energy security.
- In 2018, the first Conte government blocked some 80 gas exploration platforms in Italian territorial waters.

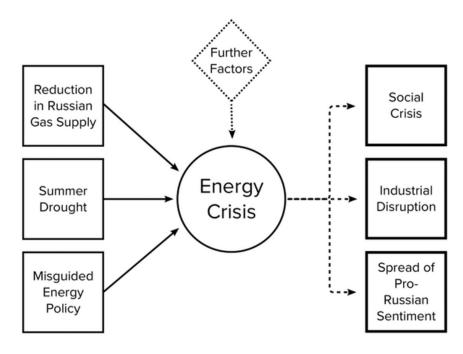
Poland



- Poland devotes keen attention to energy security and a balanced transition that maintains affordable access to energy.
- Gazprom's decision to cut gas supplies to Poland did not worry the Polish government.
- In 2008, the Polish state-owned pipeline operator Gaz-System entered in the Polish-Danish project of construction of the Baltic Pipe, a gas pipeline directed to Poland.
- After some delays, the current project was initiated in 2016.
- The Baltic Pipe is expected to be partially operational from October 2022. From January 2023, the pipeline is planned to be operational at full capacity.
- In February 2021, the government approved Poland's energy policy until 2040 (PEP2040), the first strategic document on energy approved in 12 years.
- PEP2040 traces a path to meet EU climate and energy objectives. It includes the commissioning
 of the first Polish nuclear power plant planned to be active for 2033.



Framework for Political Risk arising from Energy Crisis

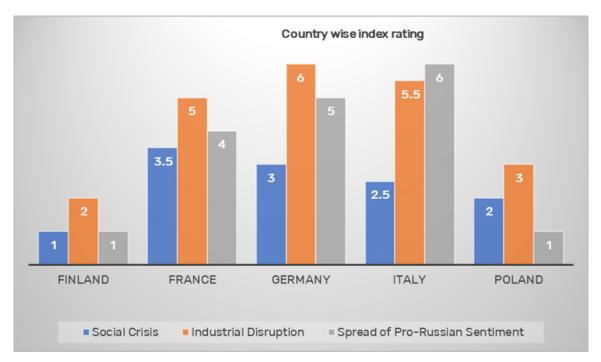


Macro Risks	Micro Risks	Consequences for BR
Social Crisis	Civil tensions, isolation and alienation of workforce, vulnerability to information warfare, supply-chain interruptions, separatism, extortion, espionage, political instability, rise of populist/extremist/terrorist forces	Protests, strikes, rallies, terrorism ,emergency state, political and institutional instability
Industrial Disruption	Export collapse, balance of payments deficit, decumulation of foreign exchange reserves by the central bank, supply chain, interruptions, foreign speculation, rise in unemployment, spread of social grievances	Market instability and volatility, supply loss, state insolvency, drop in foreign direct investment, deterioration in the exchange rate, prices increase, inflation, social fabric fragmentation
Spread of Anti- Establishment Sentiment	Social and political polarization, political violence, rise of sovranism/nationalism/anti-multilateralism/authoritarianism, disruptive policy choices	Contraction in rule of law, erosion of constitutional checks and balances, protests, strikes, rallies, terrorism, institutional instability, aggressive foreign policy, economic nationalization, market instability and volatility, supply loss, state insolvency, drop in foreign direct investment

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Impact Analysis



	Social Crisis - Country-based Risk Measurement		
Finland	Social discipline, no record of major protests for energy prices, robust energy security, and diffused common perception of		
	Russian aggressivity make social unrest a low risk in Finland		
■ France	Proneness to dissent, recorded protests against the EU policies and inflation, high-level energy security, and solid presence of a		
	populist sentiment make social unrest a high risk in France		
Germany	Strong regionalism and regional-interest-based feelings, recorded protests, weak energy security, huge energy-based industrial		
	sector, diffused economicistic perspective, and pro-Russian sentiment among some segments of the society make social unrest		
	a high risk in Germany		
■ Italy	Minority but radical protest attitude, recorded protests, low energy security, deep economic ties with Russia, and diffused pro-		
	Russian sentiment among some segments of the society make social unrest a high risk in Italy		
■ Poland	Recorded protests, elevated energy security, and strong anti-Russian sentiment among the population make social unrest a		
	medium risk in Poland		
	Industrial Disruption - Country-based Risk Measurement		
■ Finland	Robust energy security and limited industrial capacity make industrial disruption a low risk in Finland		
■ France	Robust energy security and massive industrial sector (11% of the EU sold industrial production) make industrial disruption a medium		
	risk in France		
■ Germany	Reduced energy security and massive industrial sector (27% of the EU sold industrial production) make industrial disruption a high risk		
	in Germany		
■ Italy	Reduced energy security and massive industrial sector (16% of the EU sold industrial production) make industrial disruption a high risk		
	in Italy		
■ Poland	Robust energy security and important industrial sector (6% of the EU sold industrial production) make industrial disruption a medium		
	risk in Poland		

Pro-Russian Sentiment Diffusion - Country-based Risk Measurement		
■ Finland	Diffused anti-Russian feelings among society make pro-Russian sentiment diffusion a low risk in Finland	
■ France	Strong populist forces (Rassemblement National scored 41.5% in the 2022 presidential runoff) make pro-Russian sentiment diffusion	
	a high risk in France	
Germany	Strong populist forces (Alternative für Deutschland occupies 10% of Bundestag) and diffused pro-Russian sentiment among some	
	segments of the population and establishment (German navy chief Schönbach declared publicly that Putin "deserves respect" in	
	January 2022) make pro-Russian sentiment diffusion a high risk in Germany	
■ Italy	Strong populist forces (Italy experienced a populist government, the Lega-Movimento 5 Stelle executive led by Giuseppe Conte in	
	2018-2019, he declared "I am a populist") and diffused pro-Russian sentiment among some segments of population and	
	establishment (right-wing Lega leader Salvini and left-wing Movimento 5 Stelle leader Conte declared publicly scepticism about	
	sanctions against-Russia) make pro-Russian sentiment diffusion a high risk in Italy	
■ Poland	Diffused anti-Russian feelings among society make pro-Russian sentiment diffusion a low risk in Poland	

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Business resiliency forecast

Climate Conditions

- Low Possibility of further drought in Europe.
- Low Possibility of a frosty winter in Europe.
- High Possibility of further Russian reduction in gas supply to Europe.
- Medium Possibility of EU intervention to introduce mandatory cuts in gas consumption.

Geo-Economic Trajectory

- High Possibility of state intervention in the energy sector.
- High Possibility of public and private investments in the energy sector.
- High Possibility of energy rationing by states.
- Medium Possibility of targeted nationalizations by states.

Social and Political Stability

- Medium Possibility of social turmoil.
- Medium Possibility of growth of populist political forces and spread of pro-Russian sentiments.
- Low Possibility of political, social, and institutional collapse.

Industrial fallouts

- High Possibility of production recession.
- High Possibility of supply chain interruptions or delays.
- High Possibility of reduction in foreign investment.



About the Author

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