

Germany seems to be on the losing side of the energy war.

EWALD NOWOTNY

Former Governor, Oesterreichische Nationalbank, and former Member of the Governing Council, European Central Bank

ecently, European gas prices fell below the €50 per megawatt-hour level, but prices remain elevated compared with historical levels. In addition, there remains a high degree of uncertainty concerning gas deliveries from Russia, which still account for about 25 percent of gas imports in the European Union, with substantial differences across the member countries. Contrary to pessimistic predictions, no gas shortages have occurred in Europe, due to strong growth in the supply of non-Russian natural gas, lower energy consumption in Europe, and lower energy demand in China as a result of the Covid-19 pandemic. Ironically, global warming—the reason behind the unusually mild winter—has also been helpful. While the euro area economy is not expected to enter a recession, growth will be very weak at 0.9 percent in 2023 and 1.5 percent in 2024.

Inflation has been going down, but is still expected to be at 5.6 percent in 2023 and—optimistically—2.5 percent in 2024 according to EU Commission forecasts. Cost inflation, especially via energy prices, plays a stronger role in the euro area than in the United States. So for the European Central Bank, a restrictive monetary policy stance is warranted, with a higher intensity and over a longer period of time than for the Fed.

All in all, Russia's President Vladimir Putin will be on the losing side of the energy war, while U.S., Norwegian, Arab, and North African suppliers may be expected to be on the winning side. Europe will remain an energy importer for the foreseeable future and will therefore be negatively affected. Some countries are expected to be hit especially hard, among them Germany, Europe's largest economy. Beginning in 2020, Germany—probably prematurely—opted for a fast exit from nuclear power and coal for electricity production. In fact, a key aspect of the now-defunct Nord Stream 2 pipeline would have been to transport gas needed to substitute these "problematic" sources of energy. While green energy and energy savings are growing in importance, they cannot by far provide enough reliable energy for a highly industrialized country like Germany.

So now the traditional and highly successful export-driven German business model, based on high-quality engineering but also on cheap energy from Russia, will need to undergo substantial changes. Export dynamics are threatened by the slowing down of globalization and rising uncertainty about China. With no reliable long-term energy supply available for strategic energy-intensive industries and with rising (relative) energy prices, substantial parts of Germany's industry may dramatically increase investment abroad. The potential effects of the U.S. Inflation Reduction Act may add to this development. The danger of deindustrialization is a concern for many European countries, but most pronounced for Germany. So Germany seems to be on the losing side of the energy war.



Europe needs to prepare to withstand an energy market "bomb" explosion in its natural gas market.

JOHN M. DEUTCH

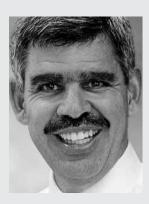
Emeritus Institute Professor, Massachusetts Institute of Technology, and former Director, Central Intelligence Agency, former Deputy Secretary of Defense, and former Undersecretary of the U.S. Department of Energy

mild winter, aggressive efforts to stockpile natural gas, and a 60 percent increase in LNG imports compared to 2021 have allowed Europe to dodge an "energy bullet." But the Russia-Ukraine war, the destruction of the Nord Stream 1 pipeline, and Europe's—especially Germany's—determination not to import Russian natural gas in the future leave Europe extremely vulnerable in the international natural gas marketplace, which will be undergoing massive restructuring during the next five years.

There are many uncertainties, but some trends are clear. Russia will pivot its natural gas exports to the Asia-Pacific region which is expected to be the dominant driver of global demand. Russian natural gas exports to China by the Siberian natural gas pipeline, already on the rise, will likely be accompanied by an even greater unwelcome strengthening of their political relationship.

Europe will be short of natural gas for the foreseeable future, and inevitably Europe will be in competition with Asia for global natural gas supply. The increase in global demand will be accompanied by higher natural gas prices, presenting Europe with unpleasant possibilities: A shift back to coal and nuclear to provide electricity and heat? The relocation of large international industrial firms that settled in Europe to take advantage of low-cost Russian gas to other parts of the world where natural gas is more plentiful and supply more reliable? A concern that the United States will not be a reliable supplier of liquefied natural gas to Europe at favorable prices going forward? This disquiet is heightened by the highly protectionist \$369 billion 2022 U.S. Inflation Reduction Act, which infuriated Europe. It demonstrates that the United States, with strong bipartisan domestic encouragement, is prepared to put American jobs and welfare first at the expense of its trading partners.

Europe needs to prepare not for dodging an energy market "bullet" but to withstand an energy market "bomb" explosion in its natural gas market that will require much adjustment and a significant increase in the cost of home heating, electricity, and industry operations, and an unfavorable trade balance. Absent an unlikely return of Russian gas to Europe, the situation will not improve until Europe formulates and implements a new long-term energy plan bringing in some new natural gas supply by tanker or transmission pipe.



Repeating this
European
accomplishment
will be much
more difficult.

MOHAMED A. EL-ERIAN

President, Queens' College, Cambridge University, and Professor, Wharton School, University of Pennsylvania

Through a combination of skill and good luck, Europe has managed its energy crisis in a manner that reduced the probability and severity of a recession in 2023. That is very good news indeed. But it is not the whole story.

Less good is the need to repeat the accomplishment this year. Even more consequential for longer-term

economic and social well-being, the region needs to evolve its economic management both to re-anchor financial stability and to generate higher, more inclusive, and more sustainable growth.

Smart inventory management and favorable weather were key to Europe's ability to reduce the immediate damage from disruptions to energy supplies. Delivering again this achievement in the context of prospects for even lower energy supply from Russia requires continued efforts to diversify sources and reduce energy intensity.

This needs to be part of a comprehensive revamp of the region's growth model centered on the green transition, as well as continued efforts to reduce inflation and limit financial volatility. There is also more room to use behavioral-based measures, including several nudge techniques, to have more efficient demand management do some of the heavy policy lifting.

This is an important and urgent policy challenge. Failing to meet it in a timely and decisive manner risks undermining growth potential, fueling persistent inflation, increasing financial fragmentation pressures, and accentuating socio-economic pressures.

Rather than just continue in a crisis management mindset, Europe should also use the 2022 energy shock as a catalyst to come closer together to deepen pro-productivity measures, improve green infrastructure, expand public-private partnerships, strengthen safety nets, and better align fiscal policy. This would only be possible in the context of greater policy integration.



The reality is that, even if Putin loses the current energy war, there's another one coming.

DEBORAH GORDON

Senior Fellow, Watson Institute for International and Public Affairs, Brown University, Senior Principal, Climate Intelligence Program, RMI, and author, No Standard Oil: Managing Abundant Petroleum in a Warming World (Oxford University Press, 2022)

he North Sea cannot supply the European continent with clean, ample energy. This has been a fact for generations. But instead of leading the world in

a wholesale energy transition, the European Union has remained largely dependent on imported crude oil, natural gas, and petroleum products. This move has enriched Russia's war machine and positioned the European Union to take the energy bullet. Now the European Union is facing high energy prices and staring down the barrel of a recession.

However, the real price of fossil fuel energy is a lot higher than what Europeans are shelling out to heat their homes and fuel their cars. The indirect energy costs for national security, migration influx, public health, and climate disasters are taking a big toll. Tipping the EU economy into a recession just adds one more hazard. Whether the damage is permanent-or not-should be less concerning than if the European Union's energy situation remains volatile. Constantly changing fortunes can be even more politically and socially disruptive.

Weaning itself off Russian oil and gas may be a necessary EU play, but it's not nearly enough. The European Union can dodge repeated energy bullets if its citizens are willing to pay more upfront for clean, secure supplies. The real question is whether EU politicians can convince the public that, while a durable energy transition will be challenging, it is worth the cost.

The recently passed U.S. Inflation Reduction Act is a good place to start. It is stocked with financial incentives that can transform America into a renewable electricity supplier at home despite its abundance of oil and gas riches. Add to that a fee on methane leakage, which is aimed at preventing wasted gas throughout the energy supply chain.

Weaning a highly integrated fossil fuel economy off historic fossil fuel energy sources will not be easy or cheap. It must be tackled with painstaking precision that no country has yet mastered. There will always be a regional or global supplier willing to lower the price to keep oil and gas flowing to bolster demand. The European Union needs the smartest economists, entrepreneurial engineers, and honest politicians to permanently resolve its energy problem. Because the reality is that, even if Russian President Vladimir Putin loses the current energy war, there's another one coming if the European Union doesn't durably back down from its dependence on imported oil and gas.



There might be longterm pain to come.

SEBASTIAN DULLIEN Research Director, Macroeconomic Policy Institute

he European economies have weathered the end of Russian energy deliveries much better than feared. According to latest data, the European Union as a whole is likely to avert a recession in early 2023, and growth is set to accelerate somewhat later this year. This contrasts with forecasts from last fall which had seen a pinching, even if not severe recession, over the winter.

Unfortunately, this does not yet mean Russian President Vladimir Putin has "lost the energy war," as some have claimed. First, we have not yet seen the end of the energy crisis. Europe has weathered the stop of Russian energy deliveries relatively well because of a combination of good policies and good luck. Europeans benefited from the fact that Putin allowed natural gas to flow over the summer so that storages could be filled to the brim by fall. They also got lucky that the winter was extremely mild by historical comparison, helping to save energy. Their governments managed to procure liquefied natural gas quickly, and passed huge relief packages.

While this has helped to cushion the short-term blow and to prevent outright natural gas rationing, there still might be long-term pain to come. Energy, which has already been more expensive on the European continent than in the United States over the past decade or so, is set to become yet more costly. Energy-intensive manufacturing will increasingly be induced to relocate to the United States. As part of this sector is crucial for supply chains and well-paid jobs, this will be painful for Europe.

Second, for determining a "winner" in a war, you need to compare gains and losses on both sides. And Russia has also been hurt much less by the energy war than some had hoped. Different from forecasts around the middle of last year, Russia's economy only contracted slightly, and it is unclear how much of the contraction is actually due to the fall in energy exports and how much is due to other sanctions such as being cut off from the international payment system SWIFT or not being able to procure key industrial components anymore. The continuing surplus in Russia's current account balance hints that revenue might not be

the binding constraint for Russia's economy despite the halt of energy deliveries to Europe.

So even if the battle on the energy front so far has gone better for Europe than feared, it is not clear how much it will contribute to finally winning the conflict with Russia.



The European
Union was fortunate
and brave.

THOMAS MAYERFounding Director, Flossbach von Storch Research Institute, and former Chief Economist, Deutsche Bank Group

ortune favors the brave" is an old Latin saying. In avoiding a recession caused by an energy crunch, the European Union has been both fortunate and brave. Fortune brought a mild winter that helped to reduce the costs of heating. But fortune was complemented by the prowess of consumers, enterprises, and politicians. In response to skyrocketing energy prices last fall, consumers reduced energy consumption. Home thermostats were lowered and driving on the famous German "Autobahnen" suddenly felt as if everyone had switched to U.S.-style slow motion. Entrepreneurs kicked into action, making the construction of LNG terminals on Germany's coast possible at lightning speed compared to normal circumstances. And politicians of the Green Party swallowed (some of) their ideology, securing LNG deliveries from the United States and the Middle East as well as firing up coal-fueled energy production. As a result, their pigheaded rejection of nuclear power, which leads to the shutdown of Germany's last remaining nuclear power plants at the end of March, almost faded into the background.

Does this mean that Europe's energy problems are solved? By no means. Cheap and plentiful gas from Russia was a cornerstone of Germany's "Green Transformation" policy. Without it, either green transformation Germanystyle has to end, or Germany will face massive deindustrialization, making the entire European Union poorer.

To foreign observers, the solution may seem obvious: Back-up the transformation to renewable energy with the expansion of nuclear power to secure reliable, affordable, and environment-friendly electricity production. But to the Green ideologues in Germany, nuclear power is anathema. They would rather risk energy rationing and deindustrialization than a return to nuclear power generation. Their willingness to increase coal-fueled energy production while shutting down nuclear power plants proves that the German green movement has its roots not in the environmental movement but in the anti-nuclear campaign of the late 1960s.

Consequently, for the European Union to dodge the energy bullet, German voters would have to see off Green ideology. Since this ideology has penetrated also the larger political parties, a further reality shock is probably needed to engineer another bitterly needed *Zeitenwende* in this area.



We still see no serious effort to align the eurozone with a better coordinated, if not fully integrated, member-state fiscal policy. That's the real political problem overlaying and defining the economic one.

ADAM GARFINKLE

Member of the editorial boards of American Purpose and
Cosmopolitan Globalist

'd like to make two brief observations.

First, whether or to what extent the European Union can avoid an energy-price-driven recession or not, the effort we've seen during the past year is indicative of a changed geopolitical calculus and sense of verve in Europe. This is perhaps the best evidence that, however slow and wobbly it sometimes seems in the moment, the *Zeitenwende* is real. Can anyone imagine EU leaders, German ones in particular, doing anything like this in the absence of massive Russian strategic stupidity and despite continuing U.S. strategic leadership activism?

Second, whatever we see occur in narrow economic terms in the European Union over the next six to nine months, we still see no serious effort to align the eurozone with a better coordinated, if not fully integrated, member-state fiscal policy. That's the real political problem overlaying and defining the economic one, and the one that will once again cause a splaying out of what economic trouble there may be between member-states like Germany and the Netherlands on the one hand, and member-states like Greece and Italy on the other.



European energy dependency on Russia is bound to remain very low or close to nil even in case of a peaceful resolution of the conflict.

LORENZO BINI SMAGHI

Chairman of the Board, Société Générale, and former Member of the Executive Board, European Central Bank

he European Union has substantially reduced its dependency on Russian energy, but has not yet become completely independent, especially concerning gas. This has been achieved in 2022–2023 through a combination of reduced consumption thanks to a relatively mild winter, a diversification of supply from other gas exporters (such as Algeria) and the construction of GNL terminals to import liquified gas, and the continued development of renewables. It is still unclear whether this trend can be continued in 2023–2024 at the same pace. This will depend on the weather conditions, the availability of other supply sources, and the continuation of substitution with other energies. The economic conditions in other parts of the world economy, such as China, could play an important role, by putting additional pressure on its energy demand and making the transition more costly for the European economy.

Over the medium term, however, European energy dependency on Russia is bound to fall drastically and to remain very low or close to nil even in case of a peaceful resolution of the conflict. The lesson from the war and the sanctions is that energy security and diversification of supply is an important component of a sustainable European energy policy.

The EU economy was able to absorb the energy shock, possibly avoiding a sharp recession, due to several factors. The first is the resort to the savings accumulated by households during the pandemic, which have been used to compensate for the lower purchasing power. Wages have not increased in line with inflation, maintaining the competitiveness of European exports, in particular in the manufacturing sector. The depreciation of the euro also favored the exports of services, in particular tourism. Finally, most European countries adopted fiscal measures to compensate households and companies for the higher energy prices, which translated into higher budget deficits. Finally, the hoarding of labor during the pandemic maintained a tight labor market with improving employment that contributed toward supporting aggregate demand.



It appears as if Russian President Vladimir Putin is losing the energy war.

ANDERS ÅSLUND

Senior Fellow, Stockholm Free World Forum, and author, Russia's Crony Capitalism: The Path from Market Economy to Kleptocracy (2019)

he European Union appears to have won the energy war with Russia. Paradoxically, the worst situation occurred in August 2022, when natural gas prices were several times higher than they had ever been. The main cause was an extreme hoarding of natural gas to fill all storages before the winter, while Russia minimized its piped gas supplies. Because of high oil and gas prices, Russia's exports of goods and services reached a new height of \$620 billion in 2022 to compare with a low of \$382 billion in 2020 (Bank of Finland data).

By the end of 2022, the European market price of natural gas had plummeted by more than 80 percent, which was still high but tolerable. The causes of the decline were many. Various European countries, notably Germany, had concluded new supply orders of LNG from the United States and Qatar. Norway has increased its deliveries of piped gas, especially through a new pipeline to Poland through the Baltic Sea. Italy has secured more gas from Algeria and Azerbaijan. Energy savings have been impressive, since Europe has high energy prices because of high taxes. In particular, energy-intensive industries, such as aluminum and fertilizer production, reduced their production. Furthermore, global warming provided Europe with another uncommonly warm winter.

Nor should we worry about the next winter. Europe's LNG supplies will be ever greater, and interconnections in Europe will further improve as the Iberian Peninsula gets larger pipelines to France. In recent years, the development of solar and wind energy has slowed down in Europe because of popular resistance against new installations, which is now likely to wane. The proliferation of carbon taxes will further stimulate energy saving. Ukraine possesses vast undeveloped gas fields that can be developed under a new European energy policy. Ukraine can also provide green hydrogen.

At the end of 2022, almost all Western countries stopped buying oil and gas from Russia, and Russia has no alternative customer for most of the gas. The Western front is almost united. The single exception is Hungary, whose Prime Minister Viktor Orbán has insisted on being excluded. In December, the collective West imposed a price cap for Russian oil. So far, it seems to work as planned. Russia can only charge about \$50 per barrel, while the Brent oil price is more than \$80 per barrel, and Russia continues its sales of oil to China, India, and Turkey at these reduced prices, so there is no shortage of oil. As a result, Russia's export revenues may fall by as much as one-quarter in comparison with last year's record revenues.

The Western sanctions regime is not watertight, but it appears as if Russian President Vladimir Putin is losing the energy war.



The European Union has turned out to be significantly tougher than many had feared—or hoped, depending on their point of view.

NICOLAS VÉRON Senior Fellow, Bruegel, and Senior Fellow, Peterson Institute for International Economics

he European Union appears to have severed its addiction to Russian oil and gas for good, even though that took about a year during which Russia still made a lot of money from it. As estimated by Ben McWilliams at Bruegel, in a baseline scenario the European Union will import only €30 billion of hydrocarbons from Russia in the twelve months following the first anniversary of Russia's invasion, as opposed to about €140 billion during the war's twelve first months. This is a remarkable EU success, and a striking failure for Russian President Vladimir Putin who thought he had critical leverage on it from his weaponization of energy dependency. Furthermore, it is only one of several instances in which the European Union has turned out to be significantly tougher than many had feared—or hoped, depending on their point of view.

The European Union has been widely viewed as a peacetime construct. Indeed, its very purpose, in the vision of its founders, has been to make war in Europe impossible—on which it has been entirely successful, namely none of its member states have ever fought each other after joining the bloc, but for non-violent negotiations in nondescript

conference rooms. It should not be forgotten, however, that the European Union was created by war veterans, starting with Jean Monnet who made much of his career from rationalizing war logistics in both World War I and World War II. The European Union is not, of course, at war with Russia. But it is actively helping Ukraine to defend itself. The European Peace Facility, established in 2021 ahead of the invasion, has contributed significantly to the provision of weapons to Ukraine's fighters. Frictions between the European Union and NATO, sometimes portrayed in the past as rival projects, have all but evaporated in the new wartime context. Even though one EU member state, Hungary, has embraced Russia's propaganda on a number of issues, it has not prevented the European Union from reaching unanimous positions when that mattered, not least on sanctions.

Many developments since February 24, 2022, have run counter to predictions that Russia would be able to divide and rule. The German "traffic light" coalition has survived the differences generated by massively divergent legacies in terms of its constituent parties' relationship to Russia. In Italy, a newly elected far-right—led government has been, if anything, more steadfast in its rejection of Russian influence than its predecessors. After more than a year, there is no clear indication of "war fatigue" in European public opinion's support to the Ukrainian cause, even after the hardships of the energy crisis in 2022.

The European Union should certainly not be complacent. On energy, it was helped by the last season's mild weather. More broadly, its resilience will be further tested, including by the likely challenges of its own enlargement to include Ukraine and Moldova. Even so, it has revealed itself to be remarkably strong.



Europe's decoupling from Russian energy is unlikely to reverse, but Russia maintains leverage over Europe's gas and food supply and poses a persistent risk.

FILIPA JORGE
Principal, The Scowcroft Group

he European Union's energy and economic outlook is deeply connected to the conflict in Ukraine and global geopolitical dynamics. Despite Russia's weaponization of energy and the added pressure the

energy crisis is placing on EU post-covid recovery, the bloc has defied expectations in its support for Kyiv and its ability to withstand economic pain. It has imposed harsh sanctions against Russia and supplied Ukraine with vital humanitarian, financial, and military assistance. Importantly, it has linked its energy security to weaning itself off Russian oil and gas, a trajectory that is most likely irreversible even if Russian President Vladimir Putin steps down.

Counter to fears of a severe recession and energy rationing, the European Commission recently increased the bloc's 2023 projected growth rate from 0.3 percent in November to 0.8 percent, and inflation is set to decline to 6.4 percent from 9.2 percent last year. In the eurozone, growth is forecast to be 0.9 percent (up from 0.3 percent) and inflation to drop from a record 10.6 percent last October to 5.6 percent in 2023 and 2.5 percent the following year, closer to the European Central Bank's 2 percent annual target. Key factors contributing to the more positive forecast include a mild winter, diversification of oil and gas suppliers (the European Union managed to fill its gas storage capacity to 95 percent last year), continuation of some Russian gas exports (roughly 15 percent of Europe's natural gas still comes from Russia, down from 40–50 percent prior to the war), faster than anticipated expansion of renewable energy, coordinated power savings, and lower gas prices. If a contraction occurs, analysts expect it to be less severe than anticipated.

The economic outlook is, however, fragile and masks conditions in individual member states that may yet experience a downturn and/or persistently high inflation. Growth could, for instance, be shattered by Moscow's policies, notably if it completely cuts off Europe from energy exports (there is no easy replacement for the critical share of gas it still delivers to Europe) and walks away from the grain deal with Ukraine. These two actions would exacerbate food and energy price inflation, with far-reaching effects on how societies, businesses, and governments respond to the cost-of-living crisis. Other factors such as central bank interest rate hikes, higher borrowing costs, and slow growth also cloud the horizon.

On the energy front, colder weather this spring may deplete gas storage stocks for the 2023–2024 winter that will be more challenging to replace as China's reopening drives global growth and increases demand for energy worldwide. Investments in renewables will take time to materialize, while the continued use of coal and nuclear energy as a stop-gap to oil and gas is unsustainable due to environmental and technical constraints. And while the latest version of the European Union's Green New Deal reinforces the desire to accelerate the energy transition, the European Union seems to have traded dependence on Russia with vulnerability to China's supply chains, namely electric vehicle battery materials and solar. Though Beijing wants a "full reset" of ties with the European Union, its close relationship with Russia and deepening tension with the United States places the European Union in a risky position.

Consequently, one should view the European Union's economic outlook with cautious optimism. Europe's decoupling from Russian energy is unlikely to reverse, but Russia maintains leverage over Europe's gas and food supply and poses a persistent risk to the bloc.



Gas is now even cheaper than before the Russian aggression one year ago. Its use across the European Union has been reduced by almost 20 percent.

KLAUS F. ZIMMERMANN

Professor Emeritus, Bonn University, President, Global Labor Organization, and former President, German Institute for Economic Research

fter one year of the Russian war of aggression on Ukraine, Europe was expected to face a significant recession caused by the massive economic sanctions the Western world, in particular the European Union, has undertaken. Recession fears were fueled by a perceived energy shortage, sticky high prices, and rising interest rates. Dependence of the European countries on Russian energy has been a major instrument in Putin's aggressive strategy against the West.

However, the damage both in Europe and in Russia seems to be much smaller than expected, and even more moderate than predicted for the latter. Sanctions work only partially due to a lack of global cooperation and market adjustments. Policy measures to support consumers and companies are moderating impacts. And Europe substantially reduced energy dependency from Russia (if not fully as in Germany since January 2023) and hence dodged the energy bullet.

Energy transformation had been already before the war a major objective of European, in particular German, politics. The immense pressure is therefore welcome to entertain the requested substantial societal and economic changes with much more force than would have been possible otherwise. Studies suggest that the potential for renewable energies in Europe is high enough to achieve electricity self-sufficiency on the continental level in the mid-term future.

Therefore, it is a critical transition period that has to be managed. The conditions are not so bad: Rationing energy was not necessary and remains very unlikely. After a mild winter, gas is now even cheaper than before the Russian aggression one year ago. Its use across the European Union has been reduced by almost 20 percent since last August. Europe's largest gas supplier is now Norway. LNG terminals are increasingly in place.

Consequently, business cycle expectations of firms and consumers are optimistic, the latter encouraged by a robust labor market and very low unemployment rates. Internationally supplied preliminary products are again sufficiently available to companies. Households are still sitting on high pandemic savings, although mostly held in illiquid assets.

The challenge, in particular in Germany, is labor shortages across all skill levels, despite the highest employment Europe has ever seen. Climate measures, energy transition, direct support of Ukraine with military weapons and equipment, and the support for and the economic integration of large numbers of Ukrainian refugees create demand for European goods and services and provide innovation incentives. The planned higher military public budgets across countries will contribute to this.

European governments are able and willing to support change with more efficient policies. The need to integrate the emerging economies of the world into global energy transition and climate change solutions provides further perspectives. These are all good chances for recovery and growth.



The European economy did not tank because of this combination of income support from governments and the relatively smooth working of the price mechanism.

DANIEL GROS *Director, Centre for European Policy Studies*

hen in the summer of 2022 Gazprom essentially stopped deliveries of natural gas to Europe, it seemed that soon the lights would go out and

that, come winter, freezing consumers would force their governments to beg Russia for more gas. At the end of the winter, the situation is completely different. Prices have come down to less than a fifth from their panic levels of the previous summer, the European economy is resisting, and storage levels are at record highs for this period of the year.

Russia's energy war against Europe has followed the pattern of Russia's invasion of Ukraine: a rapid advance at the beginning, followed by retreats when the invading forces were over-stretched, resulting in a stalemate and a war of attrition.

Putin (and many European policymakers) underestimated the power of market forces. As gas prices rose to dizzying heights (the price on the major European exchange peaked at thirty times the level of 2020), users rushed to cut back on consumption and find alternatives.

Industry reacted first because industrial consumers have to face increases in wholesale prices immediately. Retail consumers are usually protected from rapid price increases through longer-term contracts. But the unlikely few whose contracts ended were in for a price shock, with energy bills multiplying and threatening to require a large part of their salaries. However, governments stepped in to provide households with income support. This support was often not well-targeted, but it was instrumental in keeping social peace.

Skyrocketing prices fueled demand for price caps and the blanket protection of households and industry. The European Commission officially supported these demands for price "mitigation" to protect consumers. However, a coalition of good sense, composed mainly of the technical expert staff of the Commission and more market-minded (mainly northern) countries, mounted a successful defense so that the EU "price cap" agreed in December was set so high that it is now meaningless.

The result of the political bargaining was that the price mechanism was allowed to work in most countries. The EU targets of reducing gas consumption by 15 percent were met not because of measures by the European Union or national governments, but because both retail and industrial consumers found new ways of saving on gas as they faced much higher prices. A mild winter helped, but many studies show that because of behavioral changes, European gas demand would have fallen even with the average of past temperatures.

The European economy did not tank because of this combination of income support from governments and the relatively smooth working of the price mechanism.

The energy war is not yet totally won because prices for natural gas, while lower than shortly before the war, still remain high by historical levels, saddling European consumers with higher energy bills and European industry with higher costs. But the present level of prices is high enough to induce further savings by households and force European industry to switch to more high value-added, less energy-intensive products. If this process is allowed to continue to operate, and the green transition towards renewables accelerates, Europe will emerge as a winner in the long run as well.



Putin lost the gas war.

MAREK DABROWSKI Non-Resident Fellow, Bruegel, and Fellow, CASE - Center for Social and Economic Research

ndeed, most European economies experience stagflation. The inflation in the European Union exceeded 10 percent in the second half of 2022, while the quarterly GDP growth rate went down to zero in the fourth quarter. Macroeconomic forecasts for the first half of 2023 do not look rosy either.

European economies are paying now for past policy mistakes—slow structural and institutional reforms and expansionary monetary and fiscal policies. During the global (2007-2009) and European (2010-2013) financial crises and the Covid-19 crisis (2020-2021), various forms of fiscal stimulus were applied, which led to an increase in the euro area's gross public debt-to-GDP ratio of 30 percentage points of GDP between 2007 and 2021 (from 66 percent to 96 percent of GDP). Only a few countries (Ireland, Germany, and Malta) managed to decrease their relative debt burdens in the inter-crisis period of 2014-2019.

Monetary policy also was extremely lax with the subsequent rounds of asset purchasing programs that led to an almost seven-fold increase in the European Central Bank's total assets, a substantial part of which consists of government bonds (similar to the U.S. Federal Reserve). In the beginning, the increase in the monetary base was counterbalanced by a decreasing money multiplier and money velocity due to tighter financial regulations. When the Covid-19-related restrictions were relaxed in 2021, economic recovery combined with substantial monetary and debt overhangs led to the inflationary

explosion. Unfortunately, policymakers in Europe and elsewhere downplayed the inflation risk for too long. It was too late for a soft landing when they woke up in the first half of 2022.

The energy price shock generated by the postcovid global recovery, Gazprom's manipulation of the European natural gas market in 2021, the Russian invasion of Ukraine, and the Western sanctions and Russian counter-sanctions only added to the inflationary pressures, which were present well before. Remember that the previous periods of high energy prices (2007-2008 and 2014–2015) did not cause inflationary consequences in advanced economies due to their more robust macroeconomic fundamentals.

Fortunately, at the beginning of 2023, the energy shock in Europe is essentially over. Energy prices are decreasing, and the economy has not experienced natural gas shortages. Putin lost the gas war against Europe and the European gas market for good. However, overcoming stagflation remains an urgent task for policymakers in Europe and other advanced economies. They should avoid measures that only add to inflationary pressures, such as energy subsidies, but do not help to decrease energy intensity and fossil fuel dependence.



The European Union acted brilliantly.

PHILIP K. VERLEGER, JR. President, PKVerleger LLC

ultinational oil companies and oil-exporting countries have held the global economy hostage for fifty years. In 2022, the European Union exposed this economic treachery. The EU countries have avoided recession despite a record rise in natural gas prices. Furthermore, moving more rapidly to renewables now than planned a year ago will make the European Union's economy stronger and greener.

Energy market disruptions are an annoyance for those attempting to manage the global economy, promote fiscal growth, and address income disparity. In the past, OPEC ministers and the CEOs of multinational oil

companies have won political and economic concessions from the world's richest nations by threatening recession or worse if their demands were not met. The European Union's uncharacteristic response to Russia's cutoff of natural gas supplies shows that such threats can be nullified.

Russian President Vladimir Putin allegedly wrote a Ph.D. thesis in 1997 for the St. Petersburg Mining Institute. In it, he explained that Russia's return to economic power would be based on the nation's oil, gas, and critical minerals resources. Rather than caving to the Russian leader, the European Union counterattacked by introducing its "Fit for 55" program on Bastille Day in 2021.

When Russia limited its natural gas exports to the European Union, leaving the region's inventories low for the coming winter, prices rose to record levels, as Moscow no doubt expected. It did not anticipate the Europe's response, though.

The reaction was brilliant. For decades, those of us who have spent our lives writing on the energy market have understood that fossil fuel producers wielded massive leverage with economic policymakers. Key political and policy decisionmakers would genuflect to oil firm executives and oil ministers from exporting countries because they feared the economic consequences of price increases. This time, however, there was no groveling.

Instead of bowing to the energy sector, EU officials applied the lessons learned from the Covid-19 crisis, where governments appropriated large sums to offset the economic damage suffered by consumers and firms. Germany's relief expenditures totaled more than 2 percent of its GDP. Governments also implemented buffers to moderate the impact of high prices on the most vulnerable.

Other extraordinary efforts were made to compensate for the loss of Russian gas. Facilities to receive and process LNG, which normally take years to construct, were brought online in twelve months. As a temporary measure, some mothballed coal-fired power plants were restarted.

While all this was going on, the European Union and member governments accelerated their energy transition efforts. As *The Economist* editors noted, "The fuel squeeze has turbocharged clean-energy policy in the world's biggest economies." The change may bring forward fossil fuel's demise by ten years.

The European Union's green transformation will boost economic growth there over the next decade as environmentally related investment activity intensifies. In addition, the European Union's Carbon Border Adjustment Mechanism will partially insulate EU industries from having to compete with high-polluting offshore rivals and incent other nations to also speed their move off fossil fuels. Ultimately, the European Union won the energy war that Putin began.



Independence from Russian energy sources still comes at tangible financial and democratic cost.

GARY KLEIMAN Senior Partner, Kleiman International Consultants

he European Bank for Reconstruction and Development in its latest forecast underscored that frontline Eastern Europe and Baltic states will be in recession this year with still-steep energy costs from partial Russia replacement, and outright stagflation as 15–25 percent inflation rates from 2022 only gradually improve.

The influx of four million Ukrainian refugees into these emerging market regions has contributed to previous wage pressure from labor shortages, while their arrival also spikes property and household good costs. Poland has taken in 1.5 million refugees, and spent billions of euros from its budget on accommodation and social allowances that it will phase out over the coming months as refugees themselves absorb the bill, and it continues to divert money to polluting coal as its main power source.

The Czech Republic is second with 500,000 refugees and was first to register output contraction, while Hungary has kept its full Russia supply in a special arrangement flouting EU sanctions. Lithuania and Baltic neighbors have diversified into nuclear in recent years, but reactor integrity doubts and political clashes over its place on the green renewables spectrum stymie lasting backstop resort.

Western Europe is on track for 1–2 percent growth which will keep the European Central Bank in hiking mode according to its meeting signals. But lead countries have turned to questionable, unsavory geopolitical suppliers which raise the same questions as Moscow did originally. Italy and Algeria have struck deals through their respective energy giants to expand pipeline delivery, with the windfall providing the ossified state economy with a fat \$50 billion foreign reserves cushion.

Algerian President Abdelmadjid Tebboune has seized on the sudden status to promote membership in the advanced emerging markets BRICS group, and expanded social spending to buy off popular discontent through a monthly jobless benefit. France's President Emmanuel Macron has turned to Algiers and away from Morocco in a diplomatic shift driven by natural resource prospects,

with the trade-off the growing militarization threat from rupture along the border over Western Sahara control.

Azerbaijan under President Ilham Aliyev's authoritarian rule inked a pact directly with Brussels, and at the same time it ramped up hostility in the Karabakh enclave against next-door Armenia. Infrastructure and banking were cut off under a blockade, with all schools and most hospitals closed as the European Union refrained from direct intervention with its parallel agenda.

Germany's top officials for their part visited Senegal to hail a new hydrocarbon partnership coming on line this year, which could also set the stage for President Macky Sall to ram through a constitution overhaul for a thirdterm bid. Opposition parties eroded the government majority in recent elections, and a prominent leader has been accused of sexual assault and detained, setting off protests of a possible spurious charge as dirty campaign tactics presage next year's presidential contest.

These complications highlight that independence from Russian energy sources still comes at tangible financial and democratic cost despite notable strides, essentially unthinkable pre-war in such a short timeframe.



It looks as if Russian President Vladimir Putin is losing the energy war.

MARINA V. N. WHITMAN

Professor of Business Administration and Public Policy Emerita, University of Michigan, former member of the President's Council of Economic Advisors, and former Chief Economist and Group Vice President, General Motors

or the moment, it looks as if the European Union has dodged the energy bullet. It will avoid recession due to higher energy prices as gas prices continue to fall—the European Union has considerably overshot its planned reduction of gas prices—and global oil prices appear to be holding steady. Russian supplies of gas to Europe have fallen substantially, and a recent ban on Russian oil coming in by sea doesn't seem to have created disruption. There is good reason to believe that these conditions will prevail for the foreseeable future, since there are no signs at the moment of warming relations between

Russia and the European Union. Also, Europe has taken a number of steps to reduce its total demand for gas, at least some of which are likely to become permanent.

It doesn't appear that increased Russian gas exports, mainly to China as well as to India and Turkey, will fully compensate. In that sense, it looks as if Russian President Vladimir Putin is losing the energy war, that he cannot increase his global position by holding other countries hostage to his decisions about how much natural gas to export and to whom. Assuming that is the case, one more effort can be added to the strategies by which Putin has tried, and generally failed, to enhance his global standing.

Whether this situation will continue to prevail depends, of course, on a number of unknowables. Will global temperatures be colder next winter? Will China, having freed itself of covid restrictions, become more energy-hungry? Will Europe emulate the United States in providing significant incentives for investments in clean energy? And these are just the "known unknowns." What unknown ones lie in store?



One thing is clear: after the end of Putin's war of aggression, an international aid program will be indispensable.

JOSEF BRAML European Director, Trilateral Commission

nergy weapons are double-edged swords—and could undercut transatlantic unity and the reconstruction of Ukraine.

Above all, with the sanctions against Russian oil and gas supplies, the West is trying to weaken the Russian war economy. The sanctions will hurt Russia in the medium and long run, to be sure. But without really changing Vladimir Putin's war behavior today, Europe's economies have been harming themselves and undermining the economic resources needed to finance Ukraine's reconstruction.

The costs of the Ukraine war are rising, while the Covid-19 pandemic and the energy crisis have been limiting the fiscal space of many supporting countries. The result is likely to be a transatlantic conflict. The escalating U.S. government deficit and the imminent increase in the debt ceiling have a high price—which the Europeans will have to pay in the reconstruction of Ukraine.

Currently, the United States is once again experiencing a bitter dispute over raising the debt ceiling. The hard core of Republican fiscal conservatives will use the looming "fiscal abyss" to massively cut spending planned by Democratic President Joe Biden and the Democratic-controlled Senate—not least for Ukraine aid. Already during the election campaign, the Republican leader in the House of Representatives, Kevin McCarthy (R-CA), had threatened to issue Kyiv "no more blank checks." But this increases the financial pressure on Europe.

With a view to Ukraine's support against Russia's invasion, the U.S. demand for "fair burden-sharing" is likely to become louder and louder. Now that the Americans have provided most of the military aid to Kyiv, it is becoming clear that the Europeans will have to finance the lion's share of economic and reconstruction aid for Ukraine. The rebuilding of the devastated country is likely to cost more than the \$350 billion previously estimated by the European Commission—and, contrary to what parts of the EU bureaucracy believe, these costs cannot be paid for by confiscated assets of Russian oligarchs.

So what to expect? In addition to the current €750 billion Covid-19 aid package, the European Union could be forced to take on joint debt on a larger scale for Ukraine's economic and investment program. Such an approach, however, would be highly controversial within the European Union. The U.S. demand for "fair burden-sharing" is therefore likely to bring the divisive fungus into the European Union and put a heavy strain on the transatlantic relationship.

In addition, there is another aspect: statements by Chinese leaders indicate that the People's Republic, one of Ukraine's largest economic partners, also wants to support the reconstruction of the country with massive loan aid. This would suit the European Union, if only to conserve its own financial resources. Beijing's strategy of simultaneously improving Sino-European relations by providing aid to Ukraine therefore has a chance of success.

Such a development would be a thorn in Washington's side. In the rivalry with Beijing, the United States sees the decisive geopolitical conflict of the twenty-first century. Easing tensions in Sino-European relations thus amounts to growing tensions in transatlantic relations, another breaking point in the Western alliance.

The European Union would be well advised to endure these tensions and take on more security and economic responsibility for itself and its neighbors. One thing is clear: after the end of Putin's war of aggression, an international aid program will be indispensable, if only to give the millions of Ukrainians who have fled the prospect of returning to their tormented country.



The most salutary
effect of Europe's oil
shock could be a new
focus on innovation, a
DARPA-e for the
European Union.

LYRIC HUGHES HALE Editor-in-Chief, EconVue, Host, The Hale Report podcast, and Director of Research, Hale Strategic

year ago, oil prices were predicted to rise and perhaps double as Europe was cut off from Russian energy supplies due to the war in Ukraine. In fact, global oil prices were soft in 2022, most likely because there was a concerted effort by NATO allies to keep energy flowing while ensuring that Russia was not enriched by a spike in oil prices. This cushioned the effect on Europe, as did a mild winter, and so the price hikes and shortages that had been widely feared did not materialize and recession was avoided.

How were these goldilocks sanctions engineered? In addition to European conservation measures, there were multiple channels. The United States mobilized its Strategic Petroleum Reserve (which helped with domestic politics), and Israel became an oil exporter for the first time, sending crude oil material to Europe from its offshore Karish gas field. China offered inadvertent assistance by maintaining zero-covid past its due date until the end of last year. Lowered Chinese demand filtered through to its numerous trading partners as well.

The shift away from Russian energy by its first-world customers was triggered by a geopolitical event, not persistent macroeconomic forces. It is just over twelve months since the beginning of the Ukraine war. Will Europe maintain a permanent aversion to Russian suppliers, or will demand snap back as soon as peace is declared?

Transition from carbon to solar, wind, or nuclear energy, if that is the goal, cannot be accomplished quickly. It will require decades of planning and huge long-term investments. High oil prices fuel investment in alternatives and energy-efficient carbon fuel; low oil prices do not. So ironically, the current lid on energy prices could slow down this process while providing temporary relief for a wartime economy.

There are risks to the current strategy. If the war continues or spreads throughout the region, Europe's luck could run out. Prices for gasoline, electricity, and natural gas are already higher there than elsewhere in the world.

Should they trend higher still, it will have a negative impact on European competitiveness.

Eventually, through defeat, exhaustion, or escalation, the conflict will end, and the energy-intensive process of rebuilding will begin. The question is, will Europe, NATO, or perhaps China in its new role as peacemaker lead a Marshall Plan for Ukraine? The answer could shift the balance of power in Europe. In an increasingly debt-laden world, where will the money come from? Current estimates for the reconstruction of Ukraine are as high as \$1.1 trillion.

The modern world is built on energy; we even have a new currency that runs on it. The most salutary effect of Europe's oil shock could be a new focus on innovation, a DARPA-e for the European Union. Longer term, the price of energy is headed for permanent decline due to slipping demand and technological advances. Although essential, energy is not the only factor in Europe's economic future. If growth in the region continues to slow, blame leadership and demographics, not the price at the pump.



It is hard to imagine Europeans yielding to Russian energy blackmail.

DALIBOR ROHAC Senior Fellow, American Enterprise Institute

wo propositions might be simultaneously true. First, the European Union's macroeconomic outlook remains fragile, whether or not the continent avoids a recession this year. Second, it is difficult to see most EU countries returning to any form of business as usual with Russia, especially in the field of energy. At least for now, Russian President Vladimir Putin is indeed losing his energy war.

No one should be under any illusions about Europe's economic vulnerabilities. The projected growth rate of 0.8 percent this year, and 1.6 percent in 2024, hinges on the expectation of no further adverse shocks. With chronically slow productivity growth and large debt burdens across much of the eurozone, it would not take much to trigger a financial calamity that the European Central Bank might not be in a position to address adequately. As the ECB faces the imperative of maintaining its credibility by bringing inflation down, it is in a different position from the early 2010s when it was able to expand its balance sheets and provide a helping hand to struggling economies on the periphery.

Yet many of these structural challenges were present already at the time of the initial energy shock engendered by Russia's aggression. Still, Europeans have managed extraordinarily rapid and, in some instances, irreversible changes (such as Nord Stream's destruction) to their energy supply infrastructure. Since October, for example, Germany has stopped importing Russian natural gas altogether.

Both the building of new LNG terminals on hitherto unseen timescales and the European Union's commitment to decarbonization are helping to move the continent away from Russian sources. Thanks to a mild winter, Europe's available gas reserves remain at comfortably high levels and energy prices are slowly coming back to pre-war levels. Even if the winter of 2023 is harsher, it is hard to imagine Europeans yielding to Russian energy blackmail, especially after they've borne most of the adjustment costs.

If Europeans have made meaningful strides to wean themselves off Russian energy sources, the pro-Ukrainian coalition has been less successful in stopping Russian energy exports to other parts of the world, albeit at steep discounts. As a result, Moscow has not been fully deprived of one important component of its war-making machine: a stream of foreign exchange revenue.

For Europeans themselves, Russia's war against Ukraine, the fraying of the global trading system, and looming concerns over China raise the question about the long-term sustainability of its economic model particularly in Germany, where manufacturing has relied on cheap energy and a benign global trading environment.

The European Union's ambitious climate agenda, furthermore, can serve as a double-edged sword. On the one hand, the move away from Russian hydrocarbons has been oftentimes framed as being an integral part of European Union's decarbonization, even though in the short term cutting Russian natural gas has meant increased coal consumption in, say, Germany. On the other hand, for a sustainable move away from Russian energy and toward clean, non-carbon sources, it is important that the latter be abundant, cheap, and secure.

In contrast, forcing immature, expensive technologies on Europeans under an artificially accelerated timetable simply to meet a specific emissions-reduction goal remains a risky proposition, almost begging for a populist backlash—perhaps the only imaginable avenue for Russia to return to the game as a supplier of energy for Europe. Europe's climate-conscious policymakers ought to tread carefully.



Europe has proved all the doomsayers wrong.

HOLGER SCHMIEDING Chief Economist, Berenberg

nce again, Europe is proving all doomsayers wrong. Russian President Vladimir Putin's attempt to blackmail Europe into submission has failed. Instead, the continent has weaned itself off its dependence on Russian energy at an amazing speed. As a result, gas prices have corrected to around €50 per MWh and the risk of energy shortages has evaporated. With record employment and fiscal shortfalls miles below the U.S. level, the eurozone is on course for a solid economic rebound after a winter stagnation.

In the face of massive negative supply shocks, Europe has once again demonstrated its flexibility and resilience. For example, eurozone GDP continued to expand above its roughly 1.4 percent trend pace until mid-2022 despite the start of the war in February and the Shanghai harbor lockdowns in spring 2022. Only when Putin started to close the Nord Stream 1 gas pipeline from June onwards did the economy start to wobble. Gas prices surged to around €340 per MWh in late August as Europe tried to replenish its gas reserves at any price ahead of the approaching cold season. Coupled with a fear of gas shortages, this set the stage for a sharp economic correction.

However, the European response to Putin has worked. Although Russia's share in EU gas imports has fallen from 45 percent to a mere 9 percent, the European Union looks set to end the current heating season with gas storage at more than 55 percent of capacity. That would be 30 percentage points higher than a year ago. From such a comfortable starting position, and with ongoing investments into energy efficiency, it would take a highly unlikely combination of Arctic weather, reduced energy savings, and much lower gas imports from non-Russian sources to raise a serious gas shortage risk for the next winter.

Heavily exposed Germany is paying the price for its past policy mistakes with a modest winter recession. But Berlin has reacted. While mild weather has helped, it has not played the major role. Even adjusted for temperature effects, Germany is using roughly 18 percent less gas than

usual this winter. Some of the savings have been achieved the hard way, namely by shutting down gas-intensive lines of production. German chemicals output fell 29 percent year-over-year in December. However, other sectors managed to churn out more at the same time, limiting the decline in overall German output (including chemicals) to a mere 2.8 percent.

We see this accelerated structural change as a harbinger of the future. The eurozone will likely lose some 1–2 percent of its industrial capacity to the United States and North Africa/the Middle East for good. But at the same time, less energy-intensive sectors are taking up the baton. The undervalued euro provides a near-term buffer. More importantly, still-elevated fossil fuel prices are triggering a wave of innovations and—in some cases—a removal of legal obstacles to investment. Helped by the ingenuity of its engineers, Europe looks set to become a world leader in energy efficiency. In the age of climate change, it will be able to sell its energy innovations and solutions profitably around the world for decades to come.



It's too soon to tell—we are only in rounds one and maybe two of a long boxing match.

DAN MAHAFFEE

Senior Vice President and Director of Policy, Center for the Study of the Presidency & Congress

he question asking whether the European Union has dodged the energy bullet presumes that this is something like a Wild West gunfight, when in fact it is like a long boxing match—and we are only through rounds one or maybe two. While the European Union has done much to avoid the immediate energy shock, there are questions about the sustainability of the approach, the next-order effects in not only energy and economic matters, but also security and geopolitics, the effect on Europe's competitiveness, and the future of the U.S. transatlantic relationship.

Europe has avoided the worst through a range of measures from energy conservation to support for consumers. The worst-case scenarios have been avoided through rapid responses, identification of alternative sources, mild weather (next winter, Mother Nature may not be so cooperative),

and a largely graduated approach to the worst of the energy cut-offs. How long the Europeans can continue these policies tests both political will and fiscal prudence.

If Europe is now shifting its energy sources from Russia to the Middle East and North Africa, new geopolitical vulnerabilities are introduced. As the United States increasingly focuses on the Indo-Pacific, will Europe shoulder more of the military burden for securing energy production and transport from these regions?

At the same time, the effort to support an old energy economy will increasingly conflict with economic and political efforts to decarbonize. Already this is bringing Brussels and Washington into a war of words over the Inflation Reduction Act's green energy credits and subsidies. Both the United States and China are moving ahead with a range of green energy policies, aiming for greater efficiency with existing industries and support for green technologies' commercial adoption.

This will have carry-on effects for competitiveness as well. Take, for example, the decision by the chemical giant BASF to reduce production in Germany in favor of China, citing the former's high energy costs and the economic prospects of the latter. If European industry decamps abroad, the perceived energy savings will mask the loss of vital industries—and the new vulnerabilities that result.

For U.S. policymakers, it is important that the energy and economic aspects of the transatlantic relationship receive as much attention as the military and security ones. For U.S. policymakers, this means better coordination with Europe on a range of energy matters—starting with near-term efforts to get more North American energy to Europe, while also looking to cooperate on the green transition.

Therefore, this is probably an unsatisfying answer of "too soon to tell." Still, starting to answer some of the questions identified above and planning for those challenges improves the prospect. Many are already looking to next winter. While the worst has been avoided in the early rounds, the match is far from over.

