



**China-CEE Institute**  
**中国—中东欧研究院**

ISSN 2786-2860

Vol. 2 No. 38

October 2022

# CHINA WATCH

## **Energy Crisis and Its Impact on the European Economy**

**CHEN Xin**

# Energy Crisis and Its Impact on the European Economy

CHEN Xin<sup>1</sup>

Professor and Deputy Director of the Institute of European Studies, Chinese Academy of Social Sciences; Executive Director of the China-CEE Institute

The situation of the Russia-Ukraine conflict is still unclear, while Europe's energy dilemma is repeatedly intensifying.

On September 26 and 27, local time, the Nord Stream 1 and 2 natural gas pipelines experienced three major leaks in a row. The destruction of these pipelines, which are like the "aorta" for Europe's energy supply, may mean that the main Russian gas pipelines to Europe will not be able to resume operations for at least this winter. Even though there had been widespread expectation that the Nord Stream pipelines would stop gas transmission for a long time, the leaks have exacerbated European concerns about natural gas shortages and an energy crisis.

The exchange rate of the euro against the US dollar was affected by this incident and reached a new 20-year low; European stocks generally fell, and European natural gas futures soared by 13%, reaching a high of more than 230 euros/MWh again. In response to these energy woes and the power crisis, the European Commission has been discussing new emergency measures, but the details are still being negotiated and member states are still at odds.

In the absence of Nord Stream 1, can Europe's current gas reserves support it through this winter? What are the prospects for the energy supply, the economy, and inflation trends in the Eurozone? Can the EU really decouple completely from Russian energy supply? Will the euro system decline? What spillover effects must China pay attention to during the current round of energy crisis and potential economic recession in Europe?

---

<sup>1</sup>This interview was published in Beijing by the Research Department of the China Finance 40 Forum (CF40) on September 28, 2022.

Recently, the CF40 Research Department invited Chen Xin, the Deputy Director of the Institute of European Studies, Chinese Academy of Social Sciences, to share his views on the above issues.

Chen Xin believes that if we consider the energy structure, reserves, and potential exploration of energy sources in European countries, it is theoretically possible for Europe to deal with this crisis. However, at present, each member state is acting in its own way—there is a lack of coordination, resulting in an uncoordinated overall response. *How the EU gets through this winter will be crucial for the future direction of EU-Russian gas relations.* The weakening of the euro may continue, but there is no sign of the Eurozone’s disintegration in the short term. On the contrary, historical experience shows that Europe’s integration process has moved forward in times of crisis, and *the possibility the EU will continue in the next stage to make small steps forward in terms of common finance and common debt cannot be ruled out.*

As for the spillover effects of the European energy crisis and economic recession, Chen Xin proposes that China should pay attention to three areas: First, the EU economic recession may be manifested as a decline in demand, which will adversely affect the export environment for China’s foreign trade. Second, as China’s economic situation improves, its energy demand will pick up, so it will be necessary to pay attention to how to ensure China’s energy security when the international energy balance is very tight. Third, an economic slowdown or even negative growth next year in Europe will inevitably have a negative impact on China’s investment confidence.

**The text of the interview follows:**

**Q: While gas transmission to Europe through Nord Stream 1 was completely halted, EU data also showed that its overall natural gas storage capacity had already reached 84%, which reflects a degree of progress in gas storage that exceeds expectations. What do you think of the energy supply situation in Europe this winter? Can the existing measures help the EU survive the heating season without Nord Stream 1?**

Chen Xin: As for the data on the progress of gas reserves, I think there may be a few elements of psychological warfare in it. We need to leave a question mark on the

extent to which the EU data reflects the actual situation. In theory, if the EU's progress in gas storage is such that it has already exceeded 80% or 85%, or even 95% in some countries, then the average level should meet the minimal requirements, but in the end the situation is still unknown.

Now everyone is more concerned about how Europe is going to get through this winter. *Generally, I personally think that Europe has not been "forced" into a corner. If it were really "forced" to that extent, the Europeans would have a solution. Europe itself has natural gas and potential energy sources, but they have not been fully tapped.*

At present, all the EU has done is to take emergency measures for the heating season. This process also presents a typical "European situation" or "European response model." This has been reflected in several crises that Europe has encountered in the past decade, such as the European debt crisis, the refugee crisis, the pandemic, and this energy crisis: in the beginning, there is always a lot of hustle and bustle when member states act in their own ways, thinking first of their own interests instead of European approaches. Of course, countries now are reaching consensus faster than before, and the EU's response to the energy crisis is also clearer. That is, it is determined to decouple from Russian energy. However, as far as the member states are concerned, ensuring energy supplies will, in the end, needs to be implemented by each country. In this case, *every country inevitably has different considerations, resulting in an uncoordinated overall response.*

Considering European countries' energy structure, reserves, and potential for exploring energy resources, they can theoretically cope with this crisis. For example, the Netherlands has the Groningen gas field, one of the largest natural gas fields in Europe. But two years ago, the Netherlands decided to close its natural gas fields, saying that over-exploitation was affecting geological structure and risked triggering earthquakes. The Groningen gas field was slated to be completely closed this year, but then the energy crisis occurred. Ordinary logic would make it inappropriate to close the gas field at this time, but the Netherlands still maintains the original closure plan. Another example is nuclear energy. Germany decided to shut down nuclear power completely after Japan's Fukushima nuclear power plant leak in 2011, and it was

planning to shut it down completely by this year. Such a plan could have been postponed due to the power shortage, but the German government has still insisted on closing the nuclear power plant on schedule. Of course, there may be technical reasons for these things, but in general, it also shows that when the various countries are dealing with a crisis, they basically go their separate ways and fail to achieve overall coordination. Recently, the European Commission has intensively convened meetings of energy ministers, attempting to find a common response, but this process will take time.

**Q: How will the current energy supply and inflation situation affect the European economic structure? So far, we have seen the relocation of a number of European industrial companies. What do you think of this trend?**

Chen Xin: It should be said that *the sharp rise in energy prices has a more profound impact on industry than on consumption*. Industrial production is not the same as household consumption. Households can reduce consumption for a time and then resume it later, but once energy prices are so high that factories cannot maintain operation and close down, it is very difficult to reverse the situation quickly—because once a business closes, the cost of restarting it is quite high, and some businesses may shut down completely.

Some businesses in heavy industry that consume a lot of electricity, such as aluminum, steel, or chemical plants, are now facing these problems. Especially for countries with relatively small economies, the influence of individual companies may be great.

For example, Slovalco, a large aluminum smelter in Slovakia, is already preparing to close. Aluminum plants are important to Slovakia, since they attract a lot of foreign investment from Germany, South Korea, Japan, and so on, all of which have invested in automobile production in Slovakia—and aluminum is an important part of automobile production. Whether there will be a series of follow-up effects if the aluminum plant closes is a big question. In addition, the chemical industry has a rather large demand for natural gas, so the German chemical giant BASF, for example, has been affected by the natural gas crisis and has reduced production or even moved

production capacity overseas. Can that production capacity be moved back to Germany in the future? This will bring a series of deep problems. Of course, it remains to be seen how things will develop in the future, because what the business world has done in recent months is also an emergency response.

This goes back to our topic at the beginning—that is, the EU countries go their own separate ways and lack coordination. The EU claims to strengthen strategic autonomy and reduce external dependence, but *if the energy crisis continues and results in the loss of production capacity, the EU's dependence on the outside world will increase instead.*

From this perspective, one can say that *Europe's biggest problem now is the loss of its strategic direction.* The EU's so-called “strategic autonomy” has lost the “autonomy” part after the Russia-Ukraine conflict.

**Q: How do you view Europe's energy supply situation in the medium term, for example, after the heating season, by the end of next year?**

Chen Xin: Different periods will need different response methods. If the current situation develops into next year, and if Europe continues to regard as unchangeable the strategy of decoupling from Russia for energy, regardless of how the Russia-Ukraine conflict goes, this will have medium- and long-term impacts. Europe may at least need to change from its current state of emergency to finding a way out in the medium term. The first will be to find a relatively stable natural gas supply, the second will be to adjust the EU's overall energy structure, and the third will be to determine a direction for its energy transition, as well as the extent to which technology can provide support. But uncertainties still remain in all of these.

After the European energy crisis broke out, Germany and other countries have been looking for natural gas supplies and negotiating with major producing areas like Qatar and Azerbaijan. These negotiations have achieved some preliminary results, but some gas suppliers are still hesitant—for two reasons.

*First, the global supply of natural gas is already tightly balanced.* Judging from the existing production capacity, it is generally difficult for suppliers to fully meet Europe's sudden natural gas demand. Natural gas-supplying countries may need to

expand production capacity, which involves investment, and investment and design planning generally require the support of a stable demand for that production capacity lasting ten, fifteen, or more years. Europe's demand for natural gas suddenly increased, but how long will it last? Because of this question, natural gas suppliers have difficulty making their minds up to invest.

*Second, one reason for Europe's large demand for natural gas imports, besides meeting the need for heating and power supply, is its development of hydrogen energy.* The reason Nord Stream 2 existed, on top of Nord Stream 1, which already supplied a large amount of natural gas, was that not all of that natural gas was being used for power generation or heating—the conversion to new energy was also involved. Hydrogen energy converted from natural gas and then put on the market is called “blue hydrogen.” It is emission-free and does not involve the wasting of other resources. Blue hydrogen is written into Europe's overall energy transition roadmap, but as a transitional path rather than a final path, so it may be phased out over time. This also means that Europe's demand for natural gas may be a transitional one. How long this transition period might be is also difficult for gas suppliers to determine.

Meanwhile, Europe is currently in a state of emergency, and in a state of emergency, no expense is spared. For example, although the gas storage rate is in excess of 80%, at how high a price was it purchased? In theory, its purchase price for natural gas is far higher than in a normal year. *As it moves from a state of emergency into the medium- to long-term situation, however, price may become a major consideration, because natural gas prices not only determine the final price of electricity but also affects the inflation situation.*

*If inflation continues while energy and food prices have been on a cyclical upswing, it will drive up labor costs, and then form a spiral between inflation and labor costs, having a negative economic impact that can't be ignored.* This is not a good sign.

*Another factor to consider is the changing patterns of global energy demand.* With the economy facing downward pressure this year, China's demand for international energy has slowed. Next year, if China's economy gradually returns to normal and energy demand follows, then the global energy market patterns may show

a completely different situation. This is why the current practice of European countries to get natural gas at whatever cost may not be sustainable by next year. If global natural gas prices continue to be high, it will be necessary to rethink the market orientation.

At present, the EU is also conducting various discussions on the development of the overall situation, and some opinion polls have shown change. These factors will have a certain impact, so it may be too early to judge what the European energy situation will be by the end of next year.

**Q: The intervention plan recently issued by the European Commission did not include the previously proposed price limit on gaz. What do you think of this outcome? How do you analyze the possibility of, and the impact of, the EU's reintroduction and realization of price caps on gas and even all imported natural gas in the future?**

Chen Xin: There is no consensus within Europe on the natural gas price cap, especially as there are a few very clear objections to it, so on the EU level no consensus has been reached on this issue. As for whether the EU can implement the price limit in the end, I have my doubts, unless they bypass the EU's principle of "collective agreement" and instead use an international treaty among governments, as was done with the "Fiscal Compact" during the European debt crisis.

But even if the relevant price limit measures are finally passed, not every member state has to implement them, because this is not a mandatory obligation but a recommended measure. On the whole, things in Europe are more complicated. Some competences belong exclusively to member states, some exclusively to the European Commission, some are mixed, and some aren't very clear and need to be constantly clarified in practice—and energy falls into this last category. For example, the competence on trade belongs to the European Commission, because trade policy is decided by Brussels (the seat of the main administrative bodies of the EU, so it's a byword for the EU), and what the member states say doesn't count, but energy policy is decided by member states through negotiation. At present, the differences among member states are too great.



Previously, the sixth round of EU sanctions against Russia failed to pass due to opposition from Hungary. On the one hand, Hungary is rather dependent on Russian natural gas; on the other hand, the latest data shows that Hungary's natural gas reserves have just reached 60%, meaning that it may be one of the countries with the lowest reserves in Europe. For countries with insufficient reserves, like Hungary, the forced price limit may lead to an interruption of gas supply, and who would make up for their gas shortage?

Besides, subsidizing consumers through price caps can backfire and bring additional upsets—what Spain tried has demonstrated this point.

**Q: According to estimates by HSBC, natural gas supplies from countries such as Norway, Algeria, and Azerbaijan are likely to increase by only 15 billion cubic meters in the next two to three years, while Gazprom supplies have fallen by 125 billion cubic meters compared to 2020. Looked at this way, the gap is still rather large. Can the EU really break away from Russia's gas supply entirely?**

Chen Xin: I personally think that Europe is still in an “emotionalized” state. When it slowly regains its “rational state,” the market mechanism may be able to reflect the real signals. When that time comes, it may have some more medium-term considerations for energy policy and energy demand, instead of emergency considerations.

The key that decides whether it will be able to return to this “rational state” and reconsider easing its relationship with Russian energy *still depends on how Europe gets through this winter. There are three possible situations to focus on.* The first is the direction of the Russia-Ukraine conflict. If the direction of the conflict becomes clear and many uncertainties are gradually eliminated, then some of the Europeans' “emotionalized” actions may also be eliminated. The second is a change of public sentiment. European countries have electoral systems. If the wave of public protests continues to increase, the governments will also consider relevant demands. The third is the reaction of the business community. If it reacts too loudly, the governments should also face up to the problem.

I think the three factors above are the most important ones. Other than those, *the funding problem is not at all too big*. On the one hand, although some member states have high debt ratios, it is not impossible to increase spending again in emergencies; on the other hand, there may be some alternative financing methods at the EU level to that will allay part of the burden of member states.

**Q: With the skyrocketing price of natural gas, the price of electricity in Europe has risen sharply, and the linkage between the two is mainly because the European electricity pricing adopts a marginal pricing system. That being the case, why did Europe not reform the electricity pricing mechanism and replace it with a series of administrative interventions? For example, the recent “Emergency Intervention Plan for Responding to High Energy Prices” sets a ceiling on the electricity prices from non-natural gas power generation companies and proposes measures such as a windfall profits tax.**

Chen Xin: In fact, long before the energy crisis, southern European countries said that the current pricing mechanism for electricity, which is linked to the price of gas, was not reasonable enough, and called for reform. At the time, their voices were not very strong. But with the outbreak of this energy crisis, such voices have become more conspicuous—the price of natural gas has risen too sharply, causing the overall price of electricity to spike. However, those companies that do not generate electricity with natural gas—companies that generate it with nuclear power, hydropower, and other means—their production costs have not changed, so the sharp rise in electricity prices have brought them super-high profits. One of the calls emerging in Europe now is to impose an additional windfall tax and the profits of these non-gas power generation companies, in order to show fairness.

Theoretically, the high price of electricity is due to the high price of natural gas, while other costs have not changed. If a new electricity pricing mechanism is introduced very quickly, electricity prices will drop immediately. But Europe is not in a hurry to solve this problem—it’s preparing to do so after March next year. I personally think that the consideration behind this arrangement is that *if electricity fees are reduced by adjusting the pricing mechanism, it will very likely stimulate a new round of demand*

*for energy and electricity.* In particular, the existing compressed consumption demand from some households would be suddenly released, which in turn would further push up the demand for natural gas. The existing natural gas reserves will be able to support just the minimum winter demand in Europe. If the gas demand were to increase beyond that, then it becomes a question of whether Europe can survive this winter.

Of course, if they were to set an upper limit on the income of non-natural gas power generation companies, levy a windfall profits tax, and use the revenue to subsidize disadvantaged groups, that might also stimulate people's demand for electricity. Looked at this way, this practice is also controversial.

**Q: What is your outlook for the Eurozone economy and the inflation situation? Will raising the interest rates solve Europe's inflation problem?**

Chen Xin: For the European Central Bank (ECB), the current level of inflation in the Eurozone was not expected a year ago, and the current inflation is not under the control of the ECB itself, but depends on the price of natural gas, which is affected by a series of factors such as the conflict between Russia and Ukraine.

According to traditional normative analysis, the best way to fight inflation is to raise interest rates, but this traditional approach will not necessarily work in the Eurozone. The two recent rate hikes by the ECB have not curbed inflation. The crux of the problem is that *the Eurozone is not a "complete" entity*, and it is not a single nation-state, but a monetary system made up of more than a dozen countries with different fiscal systems. *In other words, the Eurozone is simply using the same currency, but each country has its own fiscal policies.* In such a situation, the transmission effect of interest rate hikes will vary among member states. The larger the rate hike, the larger the subsequent bond interest rate gap between member states, and the greater the increase in financing costs for businesses. These will have negative effects, and the stability of the Eurozone monetary system will also be impacted.

Especially now that the EU is facing an "atypical" situation, it's still unclear how the Russia-Ukraine conflict will end, or whether the emergency measures will become the front end of the mid-term situation—all that will need further observation and discussion. With so many uncertainties, the ECB's decision to raise interest rates was

indeed difficult. According to its original plan, the ECB not only had to raise interest rates, but also needed to shrink the balance sheet, but not it seems that shrinking the balance sheet won't be easy.

The Transmission Protection Instrument (TPI), a tool launched by the ECB for preventing financial fragmentation, is intended to prevent widening interest rate differentials among member states due to interest rate hikes from causing a serious blow to the most indebted countries. Once the national bond interest rate spread among member states becomes too large, which affects the stability of the financial system, the ECB can use this tool to buy government bonds to narrow the national bond interest rate spread. However, it should be noted that *this approach goes beyond the scope of monetary policy*. The issue of national debt is more or less the responsibility of the member states. This practice interferes with their fiscal policy constraints, especially after raising interest rates, which will bring a series of transmission effects.

Since the beginning of this year, the ECB has lowered its forecast for the EU's economic growth next year twice. Its latest judgment is that the year-on-year GDP growth this year may reach 3%, and next year may be less than 1%. In fact, negative growth is also possible, especially in Germany, Europe's largest economy. The Bundesbank has said the German economy may shrink in the fourth quarter of this year and the first quarter of next year.

**Q: Considering the gap in monetary policy between the US and the EU, as well as the current economic and social performance of the Eurozone, people are more concerned about whether the euro is facing a long-term weakening trend, and even whether the euro system is at risk of collapse. What is your opinion on these and related issues?**

Chen Xin: *No short-term risk of Eurozone disintegration has been observed. In fact, the EU still has many tools that it can dig out.* For example, during the European debt crisis, the financial community believed that the euro system might not survive or even collapse, because there was no lender of last resort for the euro at that time. In the end, Mario Draghi made a statement that in fact, the ECB assume the role of last resort. The situation was reversed in an instant, and "Super Mario" successfully saved the euro.

In my opinion, the weakening of the euro may continue, but there is no sign of disintegration of the Eurozone in the short term.

Considering the ECB's large-scale expansion of its balance sheet since the European debt crisis, plus the current complex external environment and severe inflation situation, the ECB may indeed not be as handy in using new tools as it was during the European debt crisis.

However, in terms of the fiscal situation, *the EU itself overall debt ratio as a debtor is still very low, and the possibility that it will continue to make small steps in the area of common finance and common debt in the next phase cannot be ruled out.* In my opinion, there is still room to explore the promotion of common debt and having the European Commission or other EU institutions guarantee the issuance of bonds, as long as they don't interfere with the fiscal sovereignty of member states. If bonds are issued based on the overall creditworthiness of the EU, an important global economy, then the returns should be guaranteed to some extent.

After the COVID-19 pandemic, the EU introduced a series of programs, such as the "Recovery Plan for Europe," which is actually a small step towards EU common finance and debt, because the funds used for it are 800 billion euro in bonds, issued with the EU as guarantor. Now that the current energy crisis has led to rising consumer prices, which especially affects people's lives, *the EU may take another step forward in terms of common finance, for example, by launching a similar energy independent plan by issuing bonds guaranteed by its name to phase out this energy crisis.*

The integration process in Europe has always been moving forward in crises. Without a crisis, there is no pressure or motivation to go further, as has been proven in its decades-long history of integration.

In addition, *the EU is now considering some medium- and long-term arrangements to promote more progress in various fields, especially in the field of green transformation.* This can also be seen in the "REPowerEU" plan.

*For example, in the area of clean energy, the current plan announced in Europe focuses on hydrogen energy.* On the one hand Europe has fallen behind in the area of lithium batteries. Traditional vehicles powered by fossil fuels—gasoline and diesel—

have high requirements for mechanical technology (engines, transmissions, chassis, etc.), which are Europe's strengths. However, battery-powered vehicles are not mechanically driven. Batteries, electric motors, and software have become the three major new components, so Europe no longer shows obvious advantages in electric vehicles. On the other hand, hydrogen energy is a new energy source with close to zero emissions, while lithium batteries will still bring emission pressure through lithium mining, processing, use, and recycle. Therefore, Europeans are now looking forward to regaining an advantage in new energy vehicles in the future by taking the technological pathway of hydrogen energy, while they reduce emissions significantly.

Previously, the Netherlands, Germany, and Denmark jointly invested in the construction of a 12GW offshore wind power "energy island" in the North Sea, in order to solve the problem of hydrogen energy production. At the same time, Europe has begun preparing to deploy a series of hydrogen energy storage and transportation facilities, such as hydrogen refueling stations and hydrogen energy trucks, to form a new industrial chain. This has become a key future breakthrough direction for Europe.

**Q: For China, what spillover effects must it pay attention to in this round of energy crisis and potential economic recession in Europe?**

Chen Xin: First, China is now the second largest economy in the world, and its trade volume with the United States and the European Union is very large, so economic fluctuations in any one of the three will have a corresponding impact on the other two. *Economic recession in the EU may manifest itself as a decline in demand, which will adversely affect China's export environment.* China is a major exporter, and many of its exports to Europe are intermediate products, which are also embedded in European industrial chains.

Second, in the previous stage, China's economy was facing greater downward pressure, and now it is entering a critical turning point. It's expected that overall economic work will usher in a new round of growth next year, so China's energy demand will increase again, which in turn bring new variables to the currently tight international energy balance. In such circumstances, how can China's energy security be assured, how can its energy demand be met? This, too, is an issue needing attention.

Third, the area of investment. Both China and Europe have been affected by the pandemic in the past few years, but mutual investment between them is still on the rise, and each has a certain confidence in the other's market. However, *if there is an economic slowdown or even negative growth in Europe next year, it will inevitably have a negative effect on China's investment confidence.*

Translated by Thomas E. Smith