

The Enlightenment and Thinking of the Energy Crisis in European and American Countries

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Abstract: At present, the international situation is changing rapidly, and NATO (North Atlantic Treaty Organization) and the old Warsaw Pact have had disputes over their ownership relations. NATO, led by European and American countries, has reacted strongly and imposed all-round sanctions on Russia, including energy, finance and economy. As an important oil and gas producer in the world, the duration of the conflict between Russia and Ukraine, the relationship between Russia and Europe and the United States, and whether the sanctions are upgraded, will all have a profound impact on the oil and gas market, not only the subsequent impact of the sanctions on the Russian economy, but also the huge negative impact on international oil prices, natural gas prices and inflation in Europe and the United States. In the context of ongoing conflicts and mutual sanctions between Europe and America and Russia, this paper tries to analyze the impact of all countries in the world from the energy aspects, and puts forward suggestions and countermeasures to optimize and improve the energy supply of all countries. We look forward to the cooperation of all countries to strengthen dialogue and the early peaceful development of the world.

Keywords: Energy crisis, Energy transition, Energy supply, Suggested countermeasures.

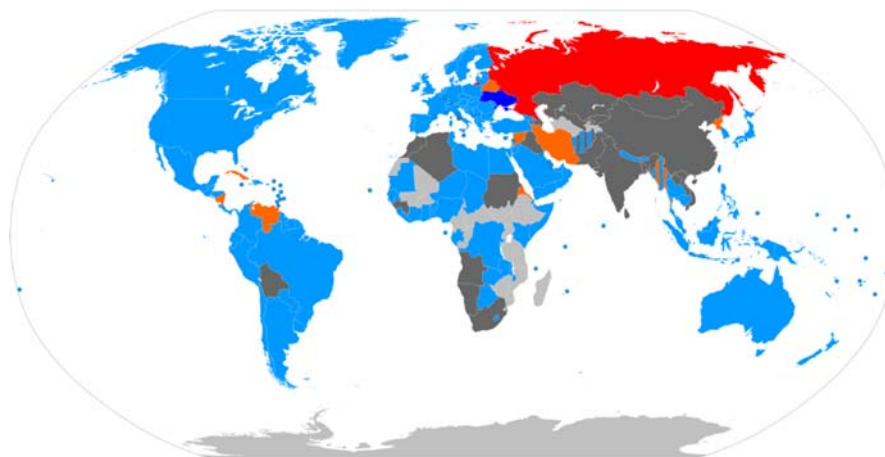
1. Introduction

Since the collapse of the Soviet Union in 1991, Ukraine has become an independent and sovereign country, the collapse of the bipolar pattern, the super world super situation, the West controlled the main discourse power of the world thought. Ukraine presents both pro-Russian and pro-European factions. The Russia-Ukraine conflict is an upgraded version of the Crimean conflict in 2014, and its internal conflict has not changed substantially. Russia, as a European geopolitical power, wants to return to a Soviet-style world power, trying to build a buffer zone around its homeland. After that, the Ukrainian government turned to a pro-European faction, constantly seeking assistance from countries such as NATO to bring military power to Ukraine. The new President Alexander Zelensky has also exacerbated the deteriorating situation, partly to use NATO and other forces to contain Russia, and partly to stimulate national

sentiment and to increase its support ratings. The conflict between Russia and Ukraine is not only the contradiction between Russia and Ukraine, but also the product of the game between great powers. In the work, as a part of the global hegemony route of the United States, this conflict is accidental, but it is more of a historical development inevitability.

2. The Impact on World Energy Supply

Recently, Europe, America and Russia have launched a "war without smoke of gunpowder" around energy. First, the West imposed economic sanctions on Russia, freezing Russian assets in the West [1]; Russia later announced that it would use a rouble when supplying gas to "unfriendly" countries and regions. These "unfriendly" countries, including EU member states, the United States, Australia, Canada, etc.



Governments' Responses to Russia's Invasion of Ukraine: ■ condemn the Russian invasion or NATO provocation ■ Neutral or vague attitude ■ Blame the invasion on Ukraine ■ Russia ■ Ukraine

Figure 1. Response and attitudes of various countries or regions to the Russian invasion of Ukraine

The energy-based economic war has made Europe, heavily dependent on Russian oil and gas, a further enemy in the conflict between Russia and Ukraine. The United Nations Conference on Trade and Development recently predicted that the conflict between Russia and Ukraine, which has severely disrupted previously tight food, energy and financial markets and severely hit the global economy, could almost halve world trade growth this year, and world economic GDP growth will be one percentage point lower than expected. Continued turmoil in global supply chains and energy markets has created more complex current trends. This paper selects several major economies in the world to conduct a detailed analysis of the favorable and adverse impact of the Russia-Ukraine conflict on its energy supply.

2.1. The party who eats the consequences

In the economic and energy sector, the EU has become the biggest loss of all the non-parties involved in the Russia-Ukraine conflict, with the European energy supply chain disorder. After the outbreak of the Russia-Ukraine conflict, the EU has followed the United States in imposing more than 5,300 sanctions on Russia. Although the EU did not know what measures Russia would take to deal with the sanctions, when Russia imposed the energy sanctions, European and American countries did not anticipate a large proportion of Russian energy imports, which had a considerable impact on domestic energy.

Since the conflict between Russia and Ukraine, the EU has rapidly suffered its worst inflation in 40 years. If energy supplies from Russia are suddenly interrupted, Germany's five leading economic research institutes predicted on Wednesday,[2]The German economy will grow by just 1.9% this year, and inflation will rise to 7.3%.[3]Europe's energy, food and markets have all taken direct and devastating hits, with the euro's global market share being hit hard.

2.2. One of the biggest winners

Ironically, Europe imposed energy sanctions on Russia, while the US is rapidly increasing its energy imports from Russia while gaining its original market share, perhaps the biggest winner in the fight with Russia.

In this Russo-Ukraine war, the United States has deeply affected and controlled the energy pattern in Europe, and took the opportunity to absorb the domestic inflation crisis in the United States. The United States could replace Russia as the continent's main "energy exporter". The Biden administration has urged U. S. oil and gas-related companies to seize the Russian European market as quickly, allowing the Biden administration to gain the support of the U. S. oil and gas energy consortium.

The United States has robbed the private assets of the Russian rich, "private property is inviolable", "rule of law", once boasted of the American dream, it can be said that the current United States has no credibility, legal order, but from its own interests, but it is beyond reproach.

2.3. The party moving steadily forward

The conflict between Russia and Ukraine will undoubtedly have minimal impact on China. In 2018, China and Russia signed hundreds of billions of large oil and gas contracts. The contract stipulates that starting from 2018, Russia began to

supply gas to China through the eastern route of the China-Russia natural gas pipeline, with the gas transmission increasing year by year, eventually reaching 38 billion cubic meters per year, and steadily supplying oil and gas to China for 30 years. In fact, this large order is very strategic vision and long-term foresight. It is a strategic insurance that can guarantee China and Russia to maintain the circular development of internal economy and livelihood during the large-scale western sanctions.

From the current situation, the strategic value of this oil and gas big deal has been highlighted. The influence of soaring energy supply prices, China's gasoline prices rose from 6 yuan to 8 yuan (Russia's oil and gas can not 100% to meet China's energy consumption demand), the current oil growth, for the underlying people is unaffordable spending, but in contrast, the United States and Europe, in the face of Russian sanctions on its energy, natural gas growth far more than oil, by May 22 years, rose more than 600%, more than the growth of oil.

Four years ago, the large long-term oil and gas supply orders between China and Russia played the role of the ballast stone. In fact, the long-term supply negotiations of the large oil and gas supply orders between China and Russia began in 2014. Since then, China has been stepping up its response work for nearly eight years.

3. Countermeasures and Suggestions for Countries to Improve Energy Supply

In the face of the crisis, European governments have taken medium-and short-term measures to ease rising energy prices. In the short term, mainly through financial means such as government appropriations and taxation.[4]Italy, for example, added an additional 4.4 billion euros and cut consumption taxes on gasoline and diesel; the Greek government also announced a financial support package of about 1.1 billion euros to increase corporate electricity and gas subsidies. In the short term, these policies have partly dragged down energy prices and increased energy supply. In the medium term, the EU is actively seeking the new energy transformation, optimizing the energy structure and reducing its energy dependence on Russia. In response, the EU will develop the photovoltaic industry "at all costs", aiming to replace 170 billion cubic meters of Russian gas with 480 gigawatt hours of wind power and 420 gigawatt hours of solar power by 2030.

3.1. No over-dependence on the energy supply of any country

Due to the natural resource endowment, economic policies and social development stage, the vast majority of countries in the world, especially the major economic powers, are unable to achieve energy independence, total energy self-sufficiency and energy imports, such as oil and natural gas[5]. However, while energy import dependence on the international energy market is inevitable, the great diversity and dispersion of import sources, without excessive reliance on a single country, should be the result of policies that energy importers must follow.

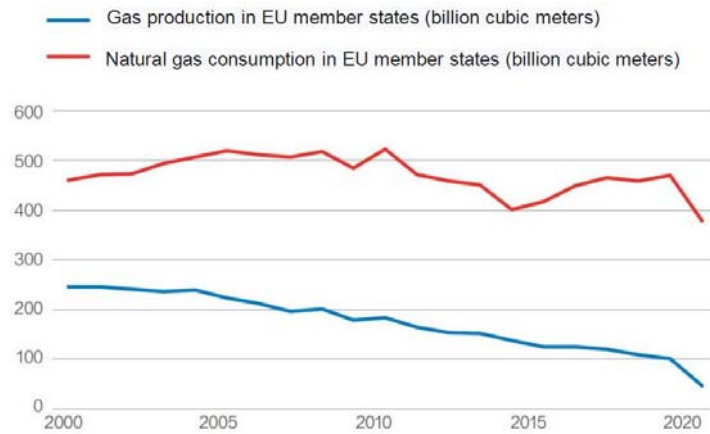


Figure 2. Comparing natural gas production and consumption in EU member states

Based on the observation of the Russo-Ukraine war, we believe that the energy import dependence of a single country or region as an energy importer should be controlled within 10%. Should be controlled within 15% [6]. It is also important to stress that, in order to ensure their own energy security, no importer should be labeled as "friendly" or "hostile", because each country has its own interests, and the changes in the relations between countries are eternal. There is no invariable relationship between the countries in the world.

3.2. Increase the flexibility of energy supply and improve the energy consumption structure

From the perspective of the primary energy consumption structure of the world or a single country, it is composed of renewable energy sources such as oil, coal, natural gas, hydropower, nuclear power, wind power and solar energy. Different types of energy sources give full play to their respective advantages to complement each other and benefit human society. This is the reality of energy consumption in today's human society, but also the ideal energy industry after years of development status quo.

The European energy crisis also shows that China should adhere to the strategy of energy supply security and avoid relying on a single energy source. We should strengthen overall planning, and constantly consolidate and deepen energy cooperation with "Belt and Road" countries to achieve mutual benefit and win-win. Data source: BP Petroleum Company

results. We should continue to increase the natural gas capacity of cross-border

pipelines, further deepen the natural gas cooperation with Central Asia, Russia and other neighboring countries, and continue to consolidate the oil and gas cooperation with Middle Eastern countries, and strengthen the energy cooperation with Argentina and other major oil and gas resources in Latin America, so as to promote the establishment of a diversified global energy cooperation pattern.

This is why the phenomenon observed in this Russo-Ukraine war shows us that for the energy-importing countries or regions, the flexibility and alternative varieties of their energy supplies must be ensured despite the long-term energy strategies or policies. Having renewable energy sources, such as wind and solar power, guarantees energy independence and, in short, in emergency and emergency situations. At a certain

scale, oil, coal, and natural gas can replace each other, thus ensuring a minimum energy supply and avoiding major economic and social unrest.

3.3. Accelerate energy transformation and increase energy reserves

With the outbreak of the European energy crisis, once again sounded the alarm to the national energy security issue. On the premise of realizing energy security, a reasonable energy consumption structure should be established. In the future, under the influence of multiple factors of science and technology and economic development, the world energy consumption structure will gradually become a clean, low-carbon and diversified level, and this transformation is already on the way.

The establishment of a certain scale of oil reserves, derived from the painful lessons of the first oil crisis [7], is one of the main tools of the International Energy Agency (IEA) in response to the crisis. Since its inception, the International Energy Agency (IEA) has released five oil reserves in 1991, 2005, 2011, and March 1 April 2022 to cope with instability in the international oil market. Oil caused by war or natural disasters, thus better playing the "ballast" role of the oil market. Currently, international energy members hold 2.075 billion barrels of emergency reserves and industry inventories, which can meet 156 days of net import demand.

4. Conclusion

As global inflationary pressures have intensified. From countries dependent heavily on Russian energy, ordinary people are already suffering from rising oil and gas prices.

In the long run, Russia's oil cannot be completely limited and is still likely to supply to the world, but in the short term there is great uncertainty, or the current change in oil prices is likely the result of the disturbance of war uncertainty, rather than a real lack of supply.

Experts call for that in responding to the current crisis, the world needs to strengthen energy security and reduce market volatility, while focusing on the global transformation of clean energy, and optimize the energy supply chain.

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