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José Pardo de Santayana

2021, year of uncertainty in energy geopolitics

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Abstract:

The COVID-19 crisis has hit the energy sector very hard, altered its future prospects and forced an impasse until the direction of the global economic recovery is seen. The timing is particularly sensitive, as the climate objectives of the energy transition collide with a geopolitical landscape of growing rivalry between the three global powers, the USA, China and Russia, which also coincide in being the megapower of the moment. This paper presents an analysis of the geopolitical energy outlook for the year 2021 that is likely to act as a pivot of a changing energy dynamic.

Keywords:

Energy, geopolitics, rivalry, energy transition, pandemic, strategic capitalism, U.S. China, Russia.

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2021, año de incertidumbre en la geopolítica de la energía

Resumen:

La crisis del COVID-19 ha golpeado muy fuerte al sector energético, alterado sus perspectivas de futuro y obligado a un impás hasta que se vislumbre la dirección que vaya a tomar la recuperación económica global. El momento es especialmente sensible, los objetivos climáticos de la transición energética entran en colisión con un panorama geopolítico de creciente rivalidad entre las tres potencias globales, EE. UU., China y Rusia, que coinciden en ser además las megapotencias energéticas del momento. Este documento presenta un análisis del panorama geopolítico de la energía para el año 2021 que probablemente actuará como pivote de una dinámica energética en transformación.

Palabras clave:

Energía, geopolítica, rivalidad, transición energética, pandemia, capitalismo estratégico, EE. UU., China, Rusia.

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Introduction

The crisis caused by coronavirus is removing the foundations of our societies and the international order we know, deepening a trend that the Strategic Survey 2016 already recognised when it stated that "the foundations of the global order are weakening at an alarming rate"[1]. The global economy is gradually shifting towards "strategic capitalism" in contrast to the free market capitalism that prevailed in recent decades. By using geo-economic measures, governments are imposing conditions on transactions in goods, services and technologies depending on whether or not the economic partners are trustworthy. Companies are trying to preserve their businesses as much as possible, but recognise that they have limited control over the geo-economic changes that are taking place[2].

The world is therefore not moving in the direction of the liberal-democratic-multilateralist model, and energy policies cannot be formulated on the basis of common interests that no longer exist. The economic confrontation has emerged as a corollary of the geopolitical rivalry[3]. Thus, unlike other global health crises, this one is being used to deepen the confrontation between the main actors on the international scene. These growing tensions between the US, on the one hand, and China and Russia, on the other –which also coincide in being the energy mega-powers of the moment– project a long shadow of added uncertainty over the future of the energy markets, which are subject to a cocktail of future scenarios resulting from three major unresolved questions: How will the global economy, and therefore energy demand, behave once the COVID-19 bump is over? What efforts will States, mainly emerging ones, be willing to make to decarbonise their energy sectors? How will social behaviour, and hence energy use, change as a result of the pandemic, but above all as a result of the fourth industrial revolution under way?

[1] Strategic Survey 2016. International Institute for Strategic Studies, October 2016.

[2] CHOER MORAES, Henrique, WIGELL, Mikael. *The Emergence of Strategic Capitalism. Geoeconomics, Corporate Statecraft and the Repurposing of the Global Economy.* FIIA working paper 117, September 2020.

[3] LADISLAW, Sarah, TSAFOS, Nikos. *Race to the Top. The case for a new U.S. International Energy Policy*. CSIS Report, July 2020, pg. vii. https://www.csis.org/analysis/race-top-case-new-us-international-energy-policy

Furthermore, we must consider that the effects of the current pandemic on the economy, social life and international relations are so great and so profound that we must discard any idea that, once the crisis in V, W or L is over, the world will continue on the path it was on before the beginning of 2020. Thus, the International Monetary Fund (IMF) predicts that the pandemic will reverse the progress made since the 1990s in reducing global poverty and increase inequality, bringing 90 million people below the poverty line[4].

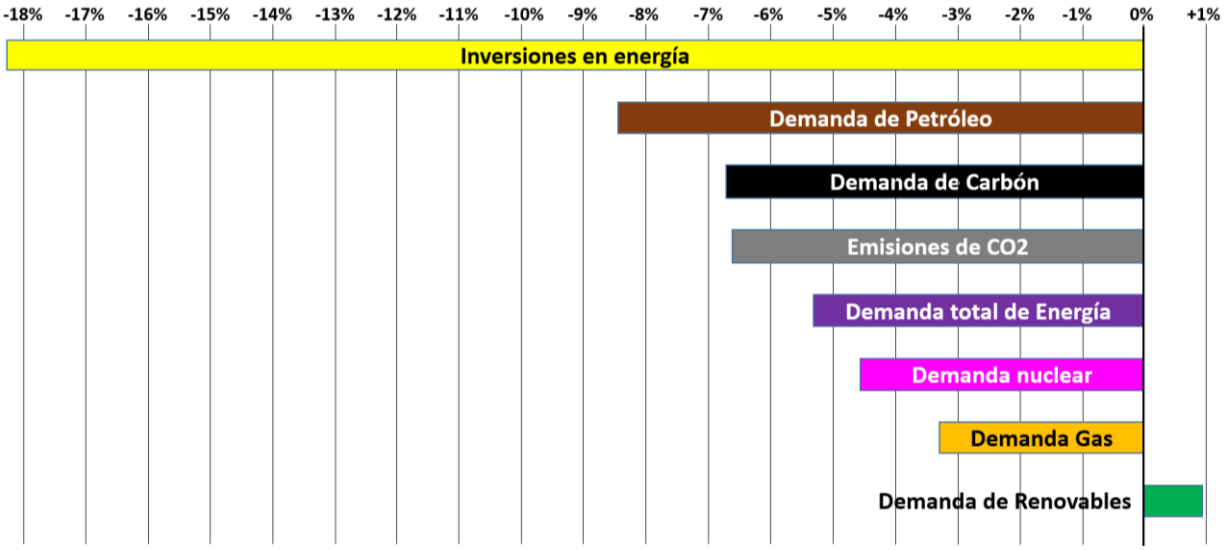

Figure 1: projected variation in energy data from 2019 to 2020.
Source: Prepared internally based on WEO 2020 data

As far as the energy sector is concerned, coronavirus has caused a greater disruption than any other event in recent history (Figure 1), leaving an impact that will be felt for a long time to come. According to the *World Energy Outlook 2020* (WEO 2020), this year the world's energy demand will be reduced by 5%, energy-related CO_2 emissions by 7% –bringing them back to where they were a decade ago– and energy investment by 18%. The estimated 8% drop in oil demand and 7% drop in coal use contrast sharply with a slight increase in the contribution of renewable energies. The reduction in demand for natural gas will be around 3%, while global electricity demand will be reduced by a relatively modest 2%[5].

[4] World Economic Outlook, October 2020: A Long and Difficult Ascent. IMF. https://www.imf.org/en/Publications/WEO/Issues/2020/09/30/world-economic-outlook-october-2020

[5] WEO 2020. IEA, Paris, October 2020. file:///C:/Users/JOS~1/AppData/Local/Temp/ExecSum-1.pdf

The result is that global energy demand will not recover to pre-crisis levels until early 2023, or even 2025 if the pandemic continues. Before the crisis, it was projected to grow by 12% between 2019 and 2030. It is now expected to be between 9 and 4%, depending on the scenario. However, it is too early to say whether today's crisis represents a setback to efforts to achieve a safer and more sustainable energy system, or a catalyst to accelerate the pace of change. The pandemic is far from over, many uncertainties remain and crucial energy policy decisions have yet to be made[6].

This document presents an analysis of the geopolitical energy scenario for a year that will probably act as a pivot in the dynamics of the energy markets, accepting the hypothesis that the current pandemic will not be overcome until well into 2021, that the economic recovery to pre-crisis levels could take more than a year and that, therefore, we are talking about a global economic hiatus of between two and three years. Recovery will also be very uneven across regions, with a boiling global geopolitical context that will leave very serious social scars not known in recent history during periods of peace.

Only in 2022, when the COVID-19 pandemic has been overcome and an initial damage assessment has been carried out, will the pace of economic recovery and the prospects for the future development of the energy horizon become apparent.

For this analysis we have relied on the recent publication of both the International Energy Agency's WEO 2020 (13 October) which focuses on the impact of the coronavirus crisis for the next 10 years and the *BP Energy Outlook 2020* (11 September) which presents its analysis with a 2050 horizon.

A reasonable concern

The 2008-2009 financial crisis provides an example of the psychological importance that deep economic crises can have. We have seen how it has impacted on Western societies, radicalising the political spectrum and sowing doubt in the institutions and in the democratic-liberal model itself. We have also seen how China, seeing how the Western nations were suffering its effects and overcoming them much more easily,

[6] Ibīdem.

reaffirmed its conviction that the time had come to abandon the low profile to claim a new role in the international order.

The economic effects of COVID-19, being so unequal in some sectors of society and having affected Western and Asian societies so differently, are going to produce real landslides of a domestic political and global geopolitical nature in the world as we know it, accelerating the shift of the world's centre of gravity towards Asia. According to the IMF, by 2020 the advanced economies will contract by 5.8% (USA, Canada, Japan, Mexico, and the US -4.3%, Euro zone -8.3%) and in 2021 they will grow by 3.9% (the US +3.1%, Euro zone +5.2%) and emerging countries and developing economies will contract by 3.3% in 2020 (Asia -1.7%, ASEAN-5 -3.4%, China +1.9%), and grow by 6% in 2021 (Asia +8%, ASEAN-5 +6.2%, China +8.2%)[7].

In addition, the devastating impacts of this crisis have further diminished the prospects of achieving the Sustainable Development Goals (SDAs), with the most adverse effects falling on the countries and people most vulnerable and at greatest risk of being left behind[8]. There is a danger of unravelling the web of principles and institutions that has contributed so positively to the development of the human community since the middle of the last century. Francis Fukuyama has even gone so far as to say that the legitimacy of governments will depend not so much on whether they are democratic or authoritarian, but on their effectiveness in combating the pandemic[9]. Greater understanding among the dominant powers could help to ease the inevitable frictions of a boiling world. At the moment, it doesn't look like it will.

On the other hand, many of the states in the Middle East, the world's powder keg, are suffering deep economic and social crises as a result of the fall in oil prices, which are key to sustaining their state budgets. This year the region's oil producers have seen state budget revenues from the export of this fossil fuel reduced by half[10]. If the situation of low prices continues for a long time, which seems quite probable, the coronavirus

[7] World Economic Outlook, October 2020: A Long and Difficult Ascent. IMF.

[8] Zhenmin, Liu. Preface to the Report of the United Nations Economists Network for the 75th Anniversary of the United Nations *Shaping the Trends of Our Time*, September 2020 https://www.un.org/development/desa/publications/wp-content/uploads/sites/10/2020/10/20-124-UNEN-75Report-Full-EN-REVISED.pdf

[9] FUKUYAMA, Francis. The Pandemic and Political Order. Foreign Affairs July/August 2020.

[10] BIROL, Fatih. Presentation of WEO 2020. 13 October 2020. https://www.iea.org/events/world-energy-outlook-2020

crisis could seriously aggravate the regional balances of a geopolitical space whose toxicity has not ceased to disturb the international order since the end of the Second World War.

Africa, too, requires our attention. Reversing a decade of progress, WEO 2020 shows that this year will increase the number of people without access to electricity in sub-Saharan Africa. By 2019, some 580 million people –three quarters of the world total– still lacked access to electricity there. Governments cannot address all of the problems that are occurring at once[11]. The consequences for regional development and stability will be very negative, weakening the governance of many of the states, facilitating the penetration of Islamic radicalism and increasing migratory pressure[12]. Angel Losada, special representative of the European Union for the Sahel –the most sensitive region for Spain– speaks of a "perfect storm"[13].

It is estimated that, by 2020, rising poverty levels worldwide may make basic electricity services unaffordable for the more than 100 million people who already have them, pushing such households to rely on more polluting and inefficient energy sources[14].

What can we be sure of?

Spencer Dale, BP's chief economist, when presenting the *BP Energy Outlook*, stated that in the face of a horizon with so many uncertainties, we need to start by recognising those parameters that are present in all future scenarios and that therefore offer us a reasonable degree of certainty[15].

All of these predict a decline in absolute demand for both oil and coal as a primary energy source between now and 2050. This is the first time this has happened in modern history. The different energy sources have been increasing and reducing their

[11] WEO 2020.

[12] SANCHEZ HERRAEZ, Pedro. *The Sahel in times of pandemic: Even worse? Pedro Sánchez Herráez*. IEEE Analysis Paper IEEE 24/2020.
http://www.ieee.es/contenido/noticias/2020/07/DIEEEA24_2020PEDSAN_pandemiaSahel.html

[13] *Non-stop terrorism and violence*. Foreign Policy Weekly Report 1200, 26 October 2020.

[14] Ibīdem.

[15] DALE, Spencer. Presentation of the BP Energy Outlook 2020 at the CSIS, 21 September 2020

percentage in the global energy mix, but in absolute terms they have not stopped growing.

Natural gas is much more resilient and in all scenarios improves its share of the other two fossil fuels, outpacing both. In some it even increases in absolute quantity by 2050. Its special role lies in the fact that due to reasons related to technology, price and reduced pollution, it is necessary as a support to renewable energies and to replace coal, especially in emerging societies, and as a source of clean energy when combined with CO_2 capture and storage. In India, it could even be the case that higher decarbonisation rates require the simultaneous use of more natural gas, without which the consequent reduction in the use of coal would not be possible.

The three hydrocarbons together currently represent about 85% of the overall energy mix and projections place it at between 65% and 20% in 2050, the former being more realistic than the latter.

With energy demand in advanced economies on a downward trend, the whole increase is coming from emerging market and developing economies, led by India. The slower pace of energy demand growth puts downward pressure on oil and gas prices compared to pre-crisis trajectories, although large falls in investment in 2020 also increase the possibility of future market volatility.

We can also say that the use of renewables is growing faster than any other energy source in the past and that by 2050 it will have risen from 5% today to between 20% and 60%, the latter only in the case of major collective efforts still to be made.

The global energy scene is clearly moving towards greater electrification, with energy markets therefore more localised and hydrogen playing an increasingly important role. By 2050, the share of electricity in total final consumption increases from just over 20% in 2018 to between 34% and 50%. The success of the energy transition will depend largely on both the degree of decarbonisation of the electricity sector and the increased electrification of energy uses.

More developed societies will decarbonise their energy sector faster than emerging ones. Thus, by 2050 in the most unfavourable scenario, *"Business as usual"*, the USA will have decarbonised by a third compared to today. However, in the same scenario the overall decrease of CO_2 emissions by energy use will be only 10%. The key to further achieving the Paris objectives in the fight against climate change will therefore depend primarily on what happens in the least developed countries, mainly India and China, not forgetting Africa.

There is also the certainty that the energy mix will be increasingly diversified, the customer, as opposed to the traditional availability of resources, will gain prominence, with increasing competition between markets and energies. Likewise, the digitalisation of the electricity sector is a huge advance and a vulnerability at the same time[16].

Geopolitical considerations

In a context of sustained technological innovation, the geopolitics of energy today is driven by three forces that point in different directions: climate concern, business interest and "strategic capitalism". The latter can align itself with the interests of energy companies and in many cases acts through them –as is the case with Russia– with those of the more powerful states being favoured. However, strategic capitalism is generally insensitive to climate objectives, even if, by reducing economic growth, it contributes to it indirectly. On the contrary, climate policies and business interests are called upon to understand each other because, without a healthy economy, the economic efforts required by climate policies cannot be supported. Likewise, without the contribution of businesses, the research effort needed to develop the technologies, which are still in limbo today, will be impossible, without which the energy transition will be just the expression of a desire.

If the global consensus that led to the Paris Agreement in 2015 has exploded into a thousand pieces, at the same time, the world has witnessed an explosion of growing "*bottom-up*" activism by states, municipalities and environmental groups around the

[16] All data in this chapter is from the *BP Energy Outlook*. https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/energy-outlook/bp-energy-outlook-2020.pdf

planet. The financial sector has made sustainability a central factor in any investment decision[17].

However, in order to achieve the climate goals, it will be what happens in the emerging countries, especially their stability and governance that will be crucial, as well as technological advances that offer solutions that are both economic and clean. Special mention should be made of the replacement of polluting energy infrastructures with years of useful life ahead, with others with a more decarbonised profile. According to Fatih Birol, if this is not done, it will be impossible to achieve the goal of zero net emissions in 2050[18]. For countries committed to energy transition, policies aimed at helping emerging countries will in many cases be more cost-effective than progress within their own borders.

Similarly, as is the case in Africa, if security and stability are essential for the implementation of clean and sustainable energy policies, without adequate use of the enormous potential for renewables that the continent possesses, it will not be possible to consolidate a horizon of peace and development either. It should also not be ruled out that gas is an important fuel that would help solve significant sustainability challenges such as desertification and excessive diesel consumption[19].

In opposition to the global efforts to advance the Paris objectives while meeting the needs of the most disadvantaged countries, there are growing tensions between the great powers that are giving life to strategic capitalism, not to mention the rebellion of the middle powers, such as Turkey and Iran, which pose serious regional challenges. Energy interests stir up geopolitical rivalries that feed back into a process whereby energy dominance is used as an instrument of geopolitical pressure. With the US neither able nor willing to perform the traditional task of guaranteeing the energy order, the outlook is somewhat gloomy.

[17] PASCUAL, Carlos. Interview published in Energy and Geostrategy 2020, IEEE, May 2020. pgs. 26-27. http://www.ieee.es/Galerias/fichero/cuadernos/Energia_y_Geoestrategia_2020.pdf

[18] Birol, Fatih. Presentation of the *Energy Technology Perspectives 2020* report. 10 September 2020. https://www.iea.org/events/energy-technology-perspectives-2020-2

[19] PASCUAL, Carlos. Op. cit. pg. 37.

If Beijing's grand strategy has always been very much conditioned by the fear of being cut off from access to energy resources, as it was during the Korean War when the Americans cut off its oil supply. Later, the USSR would do the same. Both the current New Silk Road project and the disputes over the South China Sea have their origins in the need to secure oil and gas supply routes[20]. Beijing and Moscow have formed close energy ties through the construction of gas and oil pipelines and collaboration on the development of the Yamal liquefied natural gas plant. The strategic partnership between the two neighbours has succeeded in overcoming the deep-seated rivalries and mistrust. This entente would not have been possible without the progressive deterioration of US relations with both powers[21].

Russia, the world's largest hydrocarbon exporter, has traditionally used such trade for geopolitical purposes. Moreover, since his return to the Middle East during the Syrian war, it has skilfully managed energy diplomacy to establish links with the main actors in the region and, along with military and diplomatic successes, to assert its role as a global power. Its most notable achievement has come from the relationship with Saudi Arabia within OPEC+, jointly constituting a G2 of the energy markets and sometimes with Moscow acting as chief mediator[22]. However, the Russian oil complex began to perceive the US and its unconventional production as a serious threat, complaining about the production cuts imposed on it by the oil cartel, which delayed its investment plans for new projects. Igor Sechin, Rosneft's CEO, became the leading advocate of a strong state energy sector that should oppose Russian energy dominance to that proposed by the Trump Administration[23]. The issue has become a real obsession for Putin and the battle has only just begun.

Since coming to power, President Trump has strengthened the role of energy on his international agenda, deregulated the coal, oil, gas, electricity and automobile sectors and announced his intention to withdraw from the Agreement. The fracking revolution that led to the spectacular boom in oil and gas production allowed the application of the

[20] YERGIN, Daniel. *The New Map, Energy, Climate and the Clash of Nations*. Penguin Press, New York, 2020.

[21] PARDO DE SANTAYANA, José. *Energy in the geostrategy of the Russian Federation*. Energy and Geostrategy 2018, IEEE, May 2018.
http://www.ieee.es/Galerias/fichero/cuadernos/Energia_y_geoestrategia_2018_.pdf

[22] LADISLAW, Sarah, TSAFOS, Nikos. *Op. Cit.*, pg. 19.

[23] ESCRIBANO, Gonzalo, LÁZARO TOUZA, Lara. *Energy, climate and coronavirus*, 27 March 2020.

ambiguous principle of “energy mastery”, a combination of “energy independence” and the ability to influence the international community through energy instruments. The White House sought to achieve several goals: reduce trade imbalances, compete with China, and force allies and adversaries to recalibrate their relations with the US In addition, Trump extended the legacy sanctions regime against several oil and gas producers, including Iran, Russia and Venezuela[24].

According to Daniel Yergin, the world will still extract large amounts of fossil fuels over the next few decades and may go to war over them[25]. In the short and medium term, it is foreseeable that OPEC+, driven by Moscow and Riyadh, will seek to recover maximum production with prices below $50, hoping that the shortage of investment in the new production sector caused by the COVID-19 crisis will end up forcing up prices, but then with significant market capture, and many competitors already out of the picture. The American unconventional sector will not die, it will contract somewhat and will concentrate on the most powerful companies, resurfacing with the price increases and improving their yields[26]. With demand for oil declining slightly from sometime in the 2030s, geopolitical pressure seems fairly assured.

Natural gas with expanding demand and production and falling prices will make competition increasingly tight. Strategic rivalries and economic interests are merging into a great dynamic that goes beyond the regionalisation that characterised this market. Northstream II and the Eastern Mediterranean[27] are two cases that directly affect the EU.

China, the biggest importer of both hydrocarbons, looks on with satisfaction at the bulls from the fence and, if the intense rivalry with the US continues, it will continue to deepen its energy relations with Russia. The Asian giant also has the advantage of its dominance over the renewables industry and the strategic minerals linked to it (it currently supplies 70% of the world’s rare earths), as well as the growing power of the

[24] LADISLAW, Sarah, TSAFOS, Nikos. *Op. Cit.*

[25] YERGIN, Daniel. *Op. Cit*.

[26] O’SULLIVAN, Megan. *The Other Crisis: Oil Markets During Coronavirus*. Interview at Harvard Kennedy School, 22 May 2020. https://www.hks.harvard.edu/centers/mrcbg/programs/growthpolicy/other-crisis-oil-markets-during-coronavirus-meghan-osullivan

[27] See SÁNCHEZ TAPIA, Felipe. *Geopolitics in the Eastern Mediterranean: more than gas*. Energy and Geostrategy 2020, IEEE, May 2020.

demand side. China has achieved a key position in regions such as West Africa and Central and South America; in the Middle East, Beijing is replacing the role traditionally played by Washington as Chinese growth combined with US withdrawal from the region. The US government has achieved self-sufficiency in petroleum products[28].

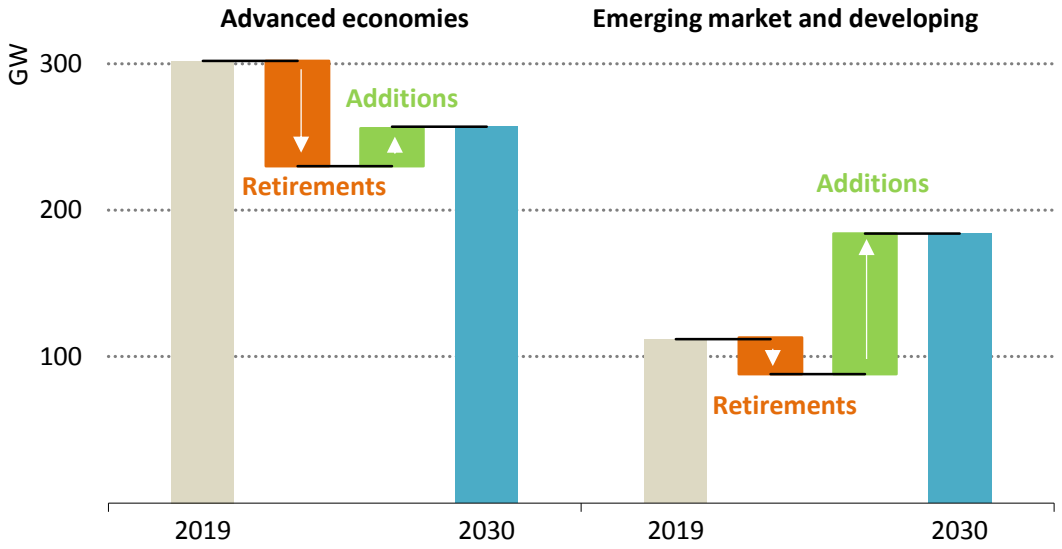

Figure 2: Installed nuclear capacity and variations 2019-2030. WEO 2020, IEA, Paris

In the field of nuclear energy, while from 2019 to 2030 European Union production will fall by 20% and in the US by 10%, in emerging market and developing economies production will increase by more than 60% (Figure 2). Russia and China are growing and participating in new plants being built in emerging countries, mainly in India and the Middle East, with Russia being the world's leading exporter of nuclear technology for civil use. With 49 nuclear reactors in operation and 11 under construction, China will have the largest nuclear reactor fleet in the world[29]. This may have important geostrategic implications because progressively China and Russia will take a greater lead in controlling non-proliferation.

In the longer term, greater diversification of primary energy sources and the move towards electrification can be expected to reduce the ability to use energy resources as a means of sustaining geopolitical rivalries. Nor should the hope be lost that the lessons learned from this pandemic and the multiple challenges of our time, such as sustainable

[28] TAPIA RAMIREZ, Isidoro. *The strategic rivalry between China and the US is a major player in the energy field*. Energy and Geostrategy 2020, IEEE, May 2020, pg. 39.

[29] WEO 2020. pg. 199.

development, climate change, the reordering of the nuclear order, the growing strategic importance of outer space, the necessary governance of cyberspace, migratory pressure, etc., which require cooperative solutions, will end up convincing the main world leaders of the need to mitigate tensions and seek a model of coexistence beyond the deep differences that may exist. Depending on whether this happens or not, the necessary political coordination to promote a responsible energy transition and make the many adjustments to increasingly diverse, complex and competitive energy markets will be facilitated or hindered.

Conclusion

It will probably not be until 2022 –after the pandemic is over in 2021– that a damage assessment will be made and with the global economy in full recovery, that we will be able to know the paths that the global energy sector will be able to follow. Until this happens, it will be difficult to make decisions for the future. For the moment, it is clear that coronavirus will have a very serious impact on energy markets.

In this context of uncertainty, interests of very different kinds are competing: climate concerns, business interests and strategic capitalism, the latter being a consequence of the growing rivalries between the great powers of the moment, the US, China and Russia.

The effects of the coronavirus on the economy and society can be very worrying and will undoubtedly contribute to widening differences of all kinds, producing fractures and tensions both within States and in global power relations.

The combination of uncertainty, surplus production and growing geopolitical rivalry will cast its shadow over energy relations and markets. Those most affected will again be the most vulnerable, whether they are States or certain sectors of society. History shows how the misfortune of the forgotten often has a “boomerang effect”. The security of our environment may be greatly affected.

There is still much to be said for oil and, in the short and medium term, OPEC+ is likely to seek maximum recovery in production while waiting for the lack of new investment to drive up prices. Natural gas is a booming commodity and geopolitical disputes will be around for a while. The nuclear energy market is shifting from Western leadership to China and Russia, which should give us pause for thought. Renewable energies are coming in strongly, but their great prospects are not sufficient for the achievement of zero net emission targets in 2050. In the longer term, greater diversification of primary energy sources and progress towards electrification will most likely reduce the ability to use energy resources as a means of sustaining geopolitical rivalries.

For both a successful transition to clean energy and to ensure that the boiling of the global geopolitical landscape does not end in explosion, it is essential that major agreements are reached for the management of energy resources both at the global level and at the level of states themselves; otherwise there will be a danger of a feedback loop in which the inability to resolve energy issues will provide arguments for further political rivalry and vice versa.

José Pardo de Santayana

DEM Artillery Colonel

IEEE Research Coordinator