

Following the beginning of Russia's war with Ukraine on 24 February and Moscow's use of the weapon of natural gas supplies against European countries in response to the Western sanctions, many European states have begun looking for alternatives to Russian gas that constitutes around 40% of Europe's natural gas imports. This is so especially after Moscow cut gas supplies from a number of European countries like the Netherlands and Denmark, in addition to one of the companies that transport gas to Germany, in response to its nonpayment to Russia in roubles.

It seems clear that the Russian war on Ukraine will be protracted, and another war in the realm of energy will proceed in parallel with it, because Europe, which has used the weapon of sanctions, wants to break the link with Russian gas in order to isolate Vladimir Putin's regime.

Will Europe succeed in breaking free of is energy dependence on Russia? Can African gas, especially Algerian and Nigerian gas alongside Qatari gas, compensate for Russian gas? Who will eventually win the contest to complete the Nigerian gas transportation lines to Europe: Morocco or Algeria?

These are relevant questions that come to the mind of those interested in the fate of global energy security amid rapid changes on the geostrategic scene.

The Nigeria-Morocco gas pipeline project

The sights of strategy experts are turning towards Africa, and in particular to the Rabat-Abuja and Algeria-Abuja axes, as the project of the gas pipelines that will extend from Nigeria to Morocco in order to cross the sea to Europe is one of the biggest projects of interest from the standpoint of the Europeans, but the realisation of this ambitious project requires international efforts to come together and for the infrastructure to be provided. For Nigeria has the largest gas reserves in Africa, and ranks as seventh largest holder of reserves in the world. The realisation of this project would indeed constitute a true resource and alternative to Russian gas, but this project faces a number of problems and constraints.

The announcement of the launching of the Nigeria-Morocco gas pipeline project was made in Abuja by the Moroccan monarch King Muhammad VI and Nigeria's president Muhammad



Buhari in May 2017. The signing of an agreement between the two countries on that matter took place on 10 June 2018 in Rabat, and it was followed by a number of technical meetings between the officials of the two countries. Discussions with financial intermediaries nominated to invest in the project took place, and the Islamic Development Bank got involved with a sum of \$15.5 million to finance technical studies. At the end of last April, Morocco and the OPEC Fund for International Development contracted an agreement to finance a part of the second half of the detailed preliminary studies for the Nigeria-Morocco gas pipeline project.

According to a statement by Morocco's Economics and Finance Ministry, the Economics and Finance Minister Nadiya Fettah Alaoui signed a legal document pertaining to financing at a value of \$14.3 million, granted by the OPEC Fund for International Development to Morocco's office for Hydrocarbons and Minerals, in the framework of its participation in the financing of the second half of the detailed preliminary studies for the gas pipeline project that will connect Nigeria and Morocco. She did this through the exchange of correspondences with the general director of the OPEC Fund for International Development Abd al-Hameed al-Khalifa and the general director for Morocco's Office for Hydrocarbons and Minerals (a public institution that conducts investigations in the power sector realm) Aminah Bankhadara.

The study (for which the Islamic Development Bank in Morocco contributed funding), concerns the creation of documents to carry out the project of the Nigeria-Morocco gas pipelines and complete the relevant technical, financial and legal analyses. The importance of this project is apparent in the fact that it will entail an economic leap forward for the African countries through which it will pass and which suffer from weakness of energy supplies, as it will be possible for them to benefit from economic and financial revenues of this project.

However, the studies indicate that that does not mean there are no constraints facing the project, and among the most prominent constraints is the length of the distance that the pipeline will traverse, for it will extend over 5660 km, and pass through 13 countries, (including Nigeria and Morocco), and these countries are: Benin, Togo, Ghana, Cote d'Ivoire, Liberia, Sierra Leone, Guinea, Guinea-Bissau, Gambia, Senegal and Mauritania. With the exception of Mauritania, all the other countries belong, along with Nigeria, to the economic group of West African countries (CEDAO). Political stability in all these countries constitutes a



fundamental factor for the success of the project, and it is among the biggest constraints facing it. For comparison, the length of one line of the 'Nordstream 2' project that connects between the Russian port of Ustluga and the city of Greifswald in Germany is 1234 km.

The second constraint is connected with financing as the cost of the project is around \$25 billion, according to preliminary estimates. Recently, the Moroccan project has scored points at the expense of the Algerian project, as Nigeria's oil minister Timipre Sylva stated that his country and Morocco are still striving to obtain the money to finance the huge pipelines project to transmit Nigerian gas to North Africa and Europe.

Sylva said that the pipelines will be an extension of pipelines that have been transmitting gas from south Nigeria to Benin, Ghana and Togo since 2010. He added that his country wishes to continue these same pipelines to Morocco across the Sahel, and that the project is still under consideration. The Nigerian minister said: "We are in the stage of securing financing and many are expressing interest." He pointed out that the Russians were in his office recently, and they were very interested in investing in this project.

It seems that Russian interest in the matter comes in the framework of Moscow's attempt to get around the West's strategy that aims to compensate for Russian gas with African gas.

Until now no agreement has been reached on financing, according to Sylva. He said: "There is great international interest but we have not yet determined the investors we want to work with." It is expected that the project will attract Europe's interest to participate in is financing and accelerating it as it is considered one of the most prominent alternatives to Russian gas, but the implementation of the project will require a number of years to bring it online, and it is not an actual solution for the energy crisis that has currently come upon the world. It seems that he difference is that Nigeria does not look at the Moroccan and Algerian projects from the standpoint of competition, in so far as it sees in them two complementary means to bring its gas to European markets.

The Moroccan expert Muhammad Shaikar said in previous statements to the Emirati 'al-Ru'iya' newspaper that the current international circumstances may push European countries to accelerate the implementation of the project, via quicker provision of financing, instead of seeking it from the World Bank. He pointed out that the great powers may pressure the



African countries that do not wish for the pipeline to go through them, or impose as a condition the obtaining of a free share of natural gas, but Shaikar conversely highlighted that the implementation of the project requires going through specific stages, among them, conducting studies that can reduce its time or overrun, so that problems do not occur in the project.

In contrast, the Tunisian political analyst Basil Turjuman stated to the same newspaper his belief that the Nigerian natural gas line will not alter the equation even after its implementation, and will not end Europe's dependence on Russia with regards to gas supply-a dependence that preoccupied all the economic institutions and ordinary life in Europe. He pointed out that the expected line will only alleviate the dependence, in view of the high cost of the project, and its requirement for very large investments and reorganisation of the European networks for transmitting gas, which rely fundamentally on transmitting gas through Ukraine towards neighbouring states in Europe, and not the contrary.

The Nigeria-Algeria gas pipeline project

The transmitting of Nigeria's gas to North Africa and then Europe arouses great interest not only on the part of Morocco, but also on the part of Algeria, Rabat's arch-rival, which also initiated discussions with Abuja beginning in 2002 regarding a similar pipeline project through the Sahel region. This means there is intense competition regarding this project.

The Algerian-Nigerian gas pipeline project is considered the older one as an idea but it was not implemented because of multiple constraints, and indeed the studies for it did not go far, in comparison with the Morocco-Nigeria pipeline.

Theoretically, the project would extend over 4000 km: that is, less than the distance of the Morocco-Nigeria pipeline, as it would extend from Nigeria all the way to Algeria via one country only: Niger. On account of this it would transmit quantities of Nigerian gas to Europe. There is ongoing discussion about carrying out preliminary studies for it and its cost has been estimated at around \$25 billion. The agreement between the two countries for the project took place in 2009, but serious steps were not taken to implement it, and perhaps Algeria's recent stances that stopped work on the Maghreb-Europe gas pipeline that provides Europe with gas through Moroccan soil will not encourage the Europeans to bet on this project, which



would reportedly transmit 30 billion cubic metres annually after its completion, according to the Global Energy Monitor. But the problem lies in the fact that this project is not new, because for a long time the issue of security stability in the vast region between Algeria and Niger has not helped to realise it. In 2021, Algeria and Niger reopened their borders after a closure that lasted years because of the security situation, and the gas pipelines project was revived.

The Tunisian political analyst Turjuman says that the project is faced with a number of challenges, foremost of which is the security and political challenge that Nigeria is going through, amid the lack of political stability that the country has been experience for more than 20 years, in addition to the fact that the pipelines will pass through vast desert areas, which will generate, in his view, a threat from terrorist groups present in those areas (including in north Mali). Moreover, for the gas pipeline to reach the Mediterranean coastline requires very large financial investments, as well as earnest and real securing of a guarantee that the project will not be vulnerable to terrorist and security threats that Nigeria and other countries are going through.

Nigeria currently exports its gas in liquified form i.e. via ship to Europe and among its most prominent customers are France, Spain and Portugal, and they are countries that have stations for liquified natural gas, but Germany, which is considered the largest European state threatened by the cutting of Russian gas, does not have a liquified gas station, and it is considering to build two stations, per the statements of the expert on the power sector in the German African Business Association- Khadi Camara- to "Deutsche Welle" channel. She says: "In 2019, Europe imported around 108 billion cubic metres of liquified natural gas, among them more than 12 billion from Nigeria." Camara says that Nigeria is among the ten countries that have the largest reserves of gas in the world, because: "It has more supplies than required for its particular market, and therefore it is capable of exporting."

Does that mean that the planned for gas pipeline project to transmit Nigeria's gas is the solution for German imports? Conversely, according to Camara, this matter means that in order for Germany and Nigeria to be able to work together in a closer way in the field of gas, there is a need for long-term investments and a strategic partnership, because Nigeria may not be able to provide a quick solution for gas supplies, but Germany must expend greater



effort in order to diversify energy sources in the future.

In addition to all that, quantities of natural gas coming from North Africa through the pipelines have begun to go on a downward trend. That is due to the increase in local demand for exporting states and the decline in their security and political stability, in addition to the lack of investment in new facilities or production wells that require on their part huge sums. Despite the availability of huge reserves of gas in this region, there are nonetheless big doubts about the continuation of the flowing of quantities of exports coming from North Africa, especially from Algeria, during the coming years.

It should be noted that Europe is importing liquified gas from Africa, predominantly from Nigeria and Algeria, in addition to smaller quantities from Egypt, Angola, Equatorial Guinea, and The Congo.

Hopes for Algerian gas?

South European countries have pinned hopes on increasing their supplies of gas from Algeria and Libya, which are two primary producers of gas and have pipelines with Europe, but the political problems have hindered betting on this solution.

Before the Russian attack on Ukraine, Spain was conducting negotiations with Algeria to increase gas supplies passing over Moroccan soil through the Maghreb-Europe pipeline.

For this pipeline, on which work began in 1996 (and it is also known by the name of Pedro-Duran-Farell pipeline), is a natural gas pipeline, extending between the Hassi R'Mel field in Algeria via Morocco and Cordoba in Spain, where it connects with the Portuguese and Spanish gas networks, and supplies Spain with 13 billion cubic metres of gas annually.

In 2011, Algeria launched another pipeline ("Medgaz") connecting it directly with southern Spain. In October 2021, Algeria surprised Spain through rejecting the renewal of an agreement to transmit gas that passes through Moroccan soil, and banned supplies, and threatened to stop sale of gas to Spain because of its recognition of Morocco's sovereignty over Western Sahara. Algeria also expressed its anger about the possibility of Morocco's supplying of Spain with gas after the cutting off of Algerian gas from Rabat because of longstanding disagreements between the two countries.



Things did not just stop there, as Algeria's presidency announced on 8 June 2022 the suspension of the friendship pact that was contracted in 2002 with Spain after the latter changed its position on the issue of Western Sahara, while Madrid expressed its "regret" for Algeria's decision to suspend the pact. The head of the Spanish government- Pedro Sanchezhad sent a message to the Moroccan monarch Muhammad VI in which he informed him that "Spain considers the Moroccan initiative for autonomy as the most serious, realistic and credible basis for settling the dispute" connected with Western Sahara.

The Algerian position came after a series of stances in opposition to the unity of Moroccan land, on the grounds that Morocco is pursuing a hostile policy towards Algeria, as the latter closed its air space to Moroccan aircraft, cut its diplomatic relations with Rabat, and threatened recourse to war.

The Maghreb-European pipeline extends over a distance of 1300 km, of which 540 km are inside Moroccan soil, and this is what made it possible for Morocco to obtain transit rights: i.e. what equates to 700 million cubic metres as a yearly average, while Morocco's needs are around 1 billion cubic metres.

Algeria was pumping since 1996 around 13 billion cubic metres of natural gas annually to Spain and Portugal via the Moroccan-European pipeline, but this pipeline is currently suspended, because of Algerian political grievances. Algeria has not merely been content with rejecting renewal of work via the Maghreb-Europe pipeline, but has also worked because of the political crisis on reducing the gas supplies to Spain by 25% via the Medgaz pipeline that connects it with Almeria in Spain.

Amid this, Spain has resorted to importing higher-cost American liquefied natural gas to compensate for this deficiency, while Italy has agreed with Algeria to increase gas supplies to around 9 billion cubic metres annually by 2024, via the Trans-Mediterranean pipeline that extends from Algeria to southern Italy, and whose capacity does not exceed 8 billion cubic metres annually. It is considered one of the most important gas pipelines in Africa, as its length reaches 2475 km, and the pipeline transmits gas from Algeria to Italy via Tunisia and Sicily. Work on building it began in 1978, and it went online in 1983, and it is one of the longest pipelines in the world, with its daily capacity reaching 110 million cubic metres, but it



transmits only 60 million cubic metres per day.

## Qatari gas?

The European countries have pinned great hopes on Qatari gas as an alternative to Russian gas, especially as Qatar has come to be one of the biggest producers of liquefied natural gas in the world. During two recent visits to Germany and the UK, Qatar's amir Sheikh Tamim Bin Hamad Al Thani signed agreements to increase cooperation including in the energy sector, but Qatar's amir admitted that his country cannot be a replacement for Russian gas, because it is tied through long-term contracts with other countries, among them Asian states. Qatar's amir requested from his counterpart European leaders to sign extended contracts, but the Europeans do not want this, according to the report of Reuters news agency.

That comes at a time in which Europe wishes to contract short-term contracts to resolve its current crisis, while it is working to reduce its reliance on Russian gas that provided it more than a third of supplies before the invasion of Ukraine. As for Germany by itself, Russia supplied around 55% of the country's gas imports in 2021.

According to a Reuters report, among the problems facing the Qatari-European agreement is that there is the problem of the length of the contracts, because the UK and Germany desire to contract agreements of around five years, in order to be able to realise the aim of transitioning away from fossil fuels. Germany aspires to reduce its carbon emissions by 65% by 2030 compared to 1990 levels, while the UK is planning to reduce emissions by 78% by 2035 compared to 1990 levels. The increase in consumption of natural gas may lead to impeding their ability to realise these goals. Among the other main problems according to Reuters is the price of Qatari liquefied natural gas, which must be transported long distances and is more expensive than Russian gas, which is transmitted via pipelines.

## Future Outlook

It appears from the available choices that Europe, which is betting on the provision of necessary urgent alternatives amid the Russian gas crisis, realises the extent of the difficulties that this effort faces. On the one hand, there are energy alternatives in Africa, especially in Algeria, Nigeria and other countries, but turmoil and political conflicts and weakness of infrastructure constitute an obstacle for provision of an actual alternative amid



the gas crisis.

In particular, it seems unlikely that Nigeria itself can constitute a real alternative to Russia for meeting Europe's gas needs. Jacob Zenn, a scholar on Nigeria and terrorism in the country and the wider West Africa region, told Castlereagh Associates that while greater energy cooperation between Nigeria and Europe in the realm of natural gas could give the Nigeria a chance to "reassert itself as a global energy player in a way unseen for decades," he was nonetheless sceptical about Nigeria's capacity to transport additional natural gas to Europe via new pipelines running through West Africa and/or the Sahel and then onwards to North Africa and Europe. He highlighted the difficulty of securing cooperation between West Africa's regional players and that the threat of disruption to any project in the Sahel by terrorism and insurgency is too high. He also noted Russia's ties with Sahel countries like Mali as a potential spoiler.

Qatari natural gas also cannot completely fill the gap for numerous reasons, such as the country's commitments to supplying other Asian countries, the higher cost of Qatari natural gas as opposed to Russian gas, and perhaps most importantly the country's desire for long-term supply of natural gas in contrast with European desires to transition away from fossil fuels and achieve net-zero emissions by 2050.

**Energy Editor**