

# New Gas Pipelines as an Element of the Geopolitical Competition of Algeria and Morocco in Africa

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**ABSTRACT:** The African continent is rich in oil and natural gas resources, much of which is still not fully explored. The reasons for this are climatic and geological conditions, the colonial past, which overlaps with the uneven economic development of the countries in the region, political, economic, and security problems. This article looks at the prospects for expanding gas infrastructure from Nigeria through the Maghrebi-Saharan region towards the EU. Two gas pipelines will be analyzed – the Trans-Saharan gas pipeline (Nigeria-Algeria) and the Atlantic gas pipeline (Nigeria-Morocco). Due to the fact that two projects are competitive, the question arises which of them has the greater chance of implementation? The main purpose of this article is to investigate whether the construction of new gas pipelines from Africa to the EU is justified, taking into account the processes of transformation of European energy markets and whether the projects of the above-mentioned gas pipelines are economic or political nature. To what extent can these two gas pipelines constitute a strategic interest in terms of natural gas supplies for the European Union and how important will they be in the diversification process compared to other suppliers? Moreover, it is very important to assess whether natural gas resources and capacity will be sufficient to transport gas to the EU, taking into account the demand for this natural gas also in transit countries. The article will analyze the potential and energy infrastructure of Algeria and Nigeria as key exporters of natural gas to the EU from the African region. It will be no less important to find an answer to which role and importance of Morocco, which is a net importer of energy resources but occupies a strategic geographic location, which makes it an important transit country. During an in-depth analysis of all the factors influencing the implementation of two projects, their strengths and weaknesses will also be indicated, and how their implementation may affect the geopolitical situation in the Maghrebi-Saharan region and relations between countries.

**KEYWORDS:** Nigeria-Morocco (Atlantic) gas pipeline, Algeria, Trans-Saharan gas pipeline

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## Introduction

■ **The energy transition policy, which is gaining turnover in the European Union, requires reflection on the question of how significant can the construction of new gas pipelines from Africa towards the European Union be? The gradual increase in the share of renewable energy sources in the energy balances of European countries is to reduce the use of crude oil and coal. Natural gas will play a very important role in the transition from conventional to unconventional sources of energy, as it is a so-called transition resource and will replace oil and coal and, in some cases, nuclear energy in the first stage of the energy transition strategy implementation. On the African continent, intensive work is currently underway to study the surface and continental shelf of countries (which have access to the ocean) in terms of oil and gas resources. It can be said that another “race for Africa” has started in this region. If at the end of the 18th century and the 19th century it consisted of conquest and the acquisition of new lands, now international energy companies are engaged in the race of energy resources and competition for the rights to concessions to explore and develop new deposits.**

According to the statistics of British Petroleum from 2020, the reserves of crude oil on the African continent accounted for 125.7 billion barrels of oil (7.2% of the world's resources), and natural gas – 14.9 trillion m<sup>3</sup>, which constitutes oil 7.5% of the world's resources. The greatest potential for natural gas in Africa is in Nigeria (5.4 trillion m<sup>3</sup>), Algeria (4.3 trillion m<sup>3</sup>), Egypt (2.1 trillion m<sup>3</sup>), and Libya (1.4 trillion m<sup>3</sup>). These countries account for 88.5% of Africa's total gas reserves (British Petroleum Statistical Review of World Energy, 2021). The vast majority of these resources are located in North Africa, which makes this region a very important source of energy supplies to the European Union due to its geographical proximity. For the purposes of this article, I will analyze the energy potential of the largest natural gas producers in Africa – Nigeria and Algeria. It is necessary to show what place natural gas occupies in the energy balances of these countries, how large is its internal demand and whether there are enough resources to be able to export them. With the help of in-depth analysis, I will try to confirm or correct the rightness of building new gas pipelines to the EU. It will also be important to analyze the role

of Morocco in this process. Due to its proximity to the EU, the country may become an important link between the European and African energy markets. Particular attention will be paid to the geopolitical and security situation in the Maghreb-Sahel region, as this will determine whether or not a new energy infrastructure will be built in the region.

## Analytical background

The main research methods used for the article are various analyses: strategic, infrastructure, and transmission capacity, analysis and assessment of supply sources, and prospects for international cooperation, taking into account the geopolitical situation in the region. Moreover, for the article, the collected literature was analyzed and synthesized, two projects were compared, strengths and weaknesses were identified, and challenges and threats were identified (SWOT analysis).

Scientific studies concerning the development of the energy sector in Algeria and Nigeria were important at the time of writing the article. Data from the British Statistical Review of World Energy 2020 and the Energy Information Administration reports were used to assess the energy potential of Algeria, Nigeria, and Morocco. Deserve attention reports about the political, economic, and security situation in the Maghreb-Sahel-Saharan region. In this context, there were very useful reports of the United State Institute of Peace “Border security challenges in Grand Maghreb” (Hanlon & Herbert, 2015). The report analyses the level of border security in Grand Maghreb after Arab spring and determines main problems such as – smuggling, terrorist activity, the rise of religious extremism, and at the same time underlines the importance of cooperation and necessity to improve the security situation in the region. The same problems were examined in the Sahel-Saharan region, all of them were depicted in the report, made by Friedrich-Ebert-Stiftung, Peace and Security Centre of Competence Sub-Saharan Africa, titled “Security Challenges and Issues in Sahelo-Saharan region” (Iratni, 2017). Both reports allowed us to make a complete analysis of the problems in the Maghreb-Sahel-Saharan region and indicate the main threats which can have an influence on the eventual building of new energy infrastructure. As was indicated in the report that these threats transcend state borders in the Maghreb, they also spread on the Sahel-Saharan region and

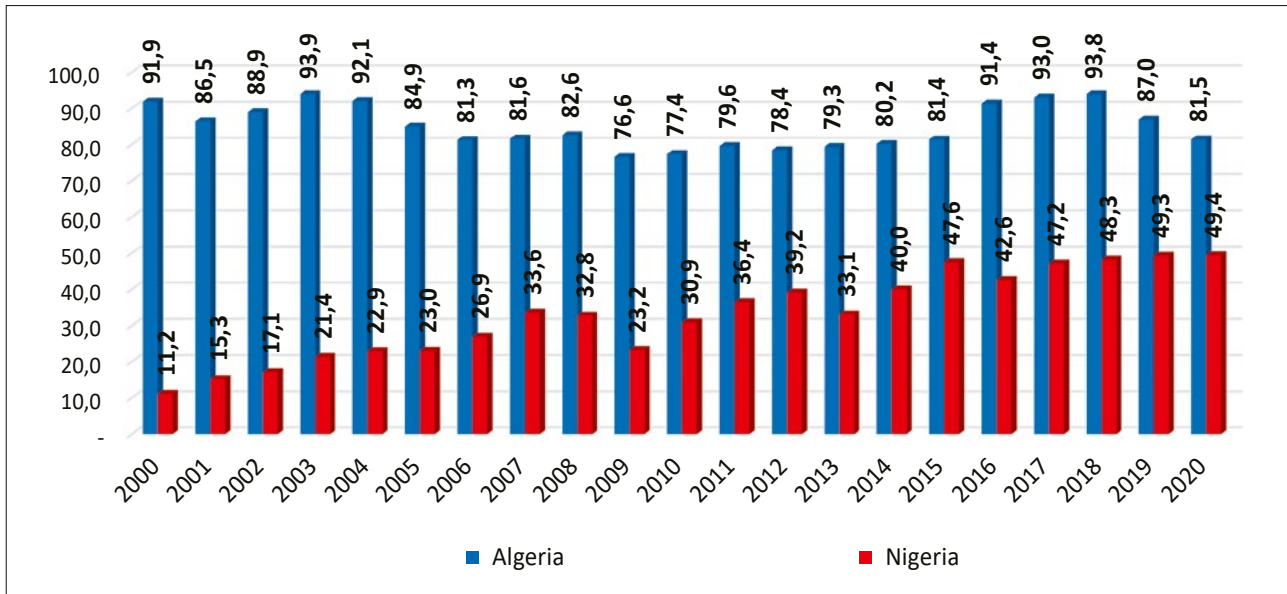
require, not an individual response from each State, but increased and constant dialogue and coordination of all of the States. In the report of the International Crisis Group titled “Algeria and its Neighbours” (Algeria and Its Neighbours, 2015), the role of Algeria as an “indispensable broker of stability in North Africa and Sahel” is analysed. The main attention is paid to the challenges with those Algeria met: the domestic and foreign policy in the shadow of the political crisis inside the country, strained relations with Morocco (main political rival in the region), relations with France (former colonial power), Algeria’s attitude to the situation in Mali and the intentions of Algeria to save control over the region. In the report “Conflict Analysis of Algeria” the main sources of potential conflicts inside Algeria are analysed, among them are: the activity of Islamists groups, trafficking, and kidnapping, a growing number of protests, rentier economy and high unemployment, political crisis, POLISARIO camp in Tindouf, the problem of Tuaregs (Strachan, 2014).

In reports of the German Institute for International and Security Affairs, “Maghrebi Rivalries Over Sub-Saharan Africa” (Werenfels, 2020) and “The Pandemic and Governance in the Maghreb: A Moment of Truth” (Fakir & Werenfels, 2021) was analysed how pandemic influenced the geopolitical situation in the Maghreb-Sahel-Saharan region. The article “Algeria-Morocco Relations and their impact on the Maghrebi Regional System” analyses the dynamics of relations between two main regional powers in North Africa – Algeria and Morocco, and the main antagonisms among them, especially the problem of Western Sahara (Lounnas & Messari, 2018). For the needs of the article, there were also examined reports concerning the political, economic, and security situation in Nigeria. In this context, the main attention was paid mainly to terroristic movements like the Movement for Emancipation of the Niger Delta (MEND). Important matter while writing the article had the books and articles concerning Boko Haram, among them “Boko Haram. Security Considerations and the Rise of an Insurgency” (Ekhomu, 2020), and “Boko Haram’s Terrorism and the Nigerian State. Federalism, Politics, and Policies” (Olumuyiwa, Sultan & Adeoye, 2019), where authors explain the phenomenon of Boko Haram, analyse the political, economic and religious situation in Nigeria and its influence on the hydrocarbon sector. During work on paper, there were used also numerous articles, published in scientific journals, reports and analytical issues.

## Natural gas potential of Nigeria and Algeria

According to BP statistics, the potential of Nigerian natural gas resources in 2020 was 5.5 trillion m<sup>3</sup>, which makes Nigeria a leader in Africa. In 2000–2020, the production of natural gas in the country increased almost three times, from 11.2 bcm to 49.4 bcm (chart 1). Nigeria ranks 17th in the world in terms of natural gas production. Currently, most of the produced gas in Nigeria is associated gas, which occurs during oil extraction (Biose, 2019). Nigeria has hardly taken any steps to develop independent natural gas fields, as its energy policy has so far been mainly focused on the extraction and sale of crude oil. The domestic demand for natural gas is not high, in 2020 consumption amounted to 25.5 bcm. The internal natural gas supplies Nigeria covers from its own resources, and the surplus the country is exporting in LNG form. In 2020, LNG exports accounted for 28.4 bcm. Nigerian natural gas is gradually gaining importance in the European gas market. Over the past few years, Nigeria has been exporting more natural gas than Algeria, which for many years has remained the unchanged leader in terms of gas supplies from the African continent to the EU. The main reasons for this are a) gradual increase in gas production; b) significant reduction of natural gas flaring, c) continuous increase in demand for natural gas in foreign markets, d) low consumption in the country in relation to the population (206,139,589 people (2020)) (Nigeria Population 2020).

Algeria is the most important exporter of natural gas to the European Union. The country has the second-largest natural gas reserves in Africa (2.3 trillion m<sup>3</sup> in 2020). Over the past year, the country’s natural gas reserves have double-reduced. In 2000–2020, the production of natural gas fluctuated between 76–93 bcm with a tendency to decrease (chart 1). A clear decrease in gas production, by as much as 4.8%, was recorded in 2020, which is mainly explained by: a) the maturity of the gas fields, b) the lack of investments, c) the high level of flaring natural gas due to the poorly developed infrastructure in individual remote regions of the country d) a political crisis, e) a decrease in demand for natural gas due to the Covid-19 pandemic, and f) a low price. In addition, the situation is complicated by a high degree of corruption, monopolization of the internal hydrocarbon market, and a rapid increase in domestic gas consumption caused by an increase in the population (43,851,044 people (2020)) (Energy Resource Guide – Algeria –

**Chart 1.** Dynamics of natural gas production in Algeria and Nigeria (2000–2020), bcm

**Source:** own study based on British Petroleum Statistical Review of World Energy, 2021.

Oil and Gas, 2021). All this together severely limits Algeria's export potential and negatively influences its economy.

In the terms of energy resource exploration and production, Nigeria and Algeria share several features, including:

- high attachment of economies to oil prices;
- significant dependence on International Oil Companies (IOC) in the terms of investments and modern technologies;
- high rate of flaring natural gas;
- insufficiently or poorly developed energy infrastructure;
- presence of politically unstable regions.

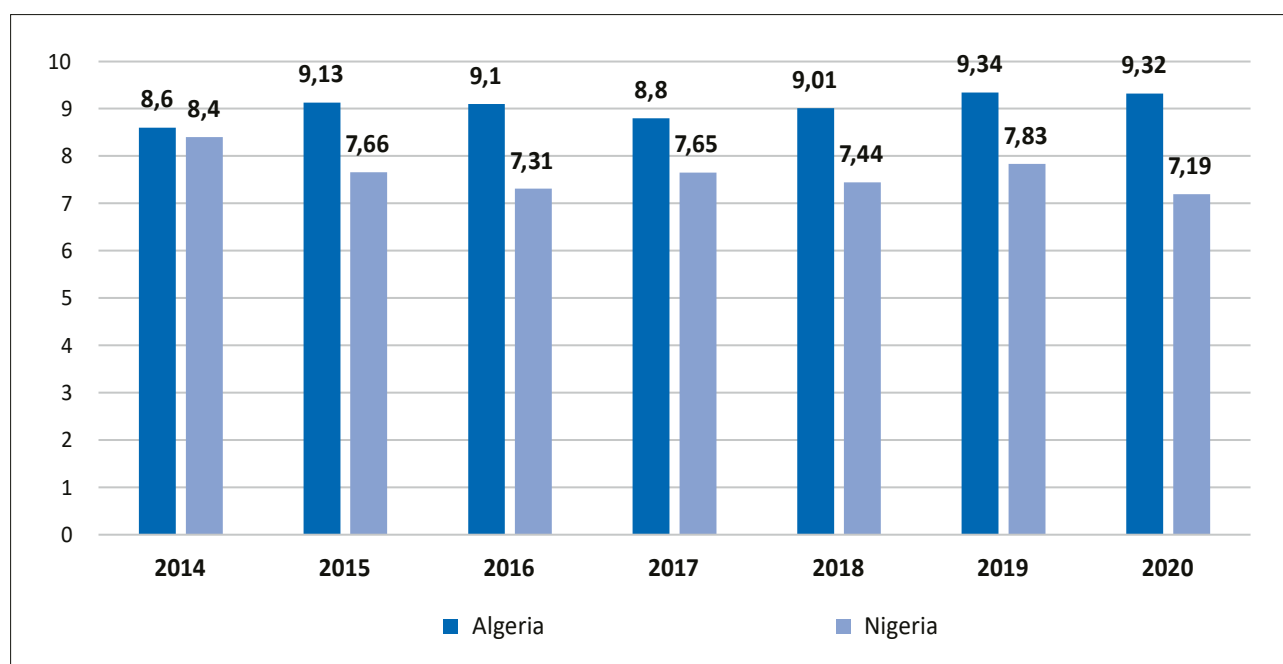
Algeria's budget is heavily dependent on oil prices on the world market. The Algerian Sahara Blend was \$ 20 a barrel during the pandemic, while the 2020 austerity budget was based on \$50 a barrel (Reliant on oil exports, Algeria watches price crash with concern, 2020). Algeria faced serious challenges due to structural problems such as the alleged ineffective management of the finances obtained from the sale of crude oil, a hostile business environment – especially insecurity and an underdeveloped banking system, and the strong dependence of the state budget on the sale of crude oil and natural gas. The Algerian economy is overly dependent on hydrocarbons, which account for 40% of GDP and 95.6% of its exports (Abouzzohour & Mimoune, 2020). Falling prices and weak demand for crude oil and natural gas from the main importers of Algerian raw materials have further depleted Algerian foreign exchange reserves. The country needs

in-depth economic reforms to remedy the situation, attract investors and increase the production of natural gas from fields that are located in remote regions.

The Nigerian budget, like the Algerian one, also depends on the fluctuations in oil prices on the world markets. Due to the unstable situation in the oil market, the Nigerian Department of Petroleum Resources (DPR) developed a strategic and policy actions plan to survive the Covid-19 crisis in the energy sector. Despite low oil prices in 2020, Nigeria continued to implement its energy reforms. Nigeria has enacted legislation to promote and encourage significant investment in border areas (Atitebi & Ajenifuja, 2020).

There are numerous IOCs operating in the Nigerian and Algerian markets. In Nigeria among them are Shell, ExxonMobil, Chevron, Total, Eni, Addax Petroleum, Statoil (US Energy Information Administration. Country Analysis Brief: Nigeria, 2016), and in Algeria, they are – Cepsa, BP, Eni, Repsol, Total, Statoil, and Anadarko (US Energy Information Administration. Country Analysis Brief: Algeria, 2016). The fall in oil prices due to the Covid-19 pandemic put pressure on both countries' budgets and national economies because many companies as a result of the pandemic and the related restrictions closed or significantly limited their exploration and production activities (Ajenifuja & Atitebi, 2020). Then, when Nigeria introduces reforms regardless of the pandemic, Algeria suspended both reforms and the implementation of economic and social projects, and limited government spending,



**Chart 2.** Flaring of natural gas in Algeria and Nigeria in (2014–2020), bcm

**Source:** own study based on Global Gas Flaring Data, 2022.

which has a negative impact on the economic situation in the country and is not conducive to the inflow of investments (Ajenifuja & Atitebi, 2020). In turn, Nigeria's main goal is to solve the problems reported by investors regarding the Petroleum Industry Bill (PIB) and to balance the requirements and expectations of investors and the state. Moreover, Nigeria is trying to settle numerous internal disputes between IOCs and the government, as this leads to increased distrust on the part of investors and halts the inflow of investments, which means that plans to discover new deposits and increase oil and gas production are delayed or impossible to implement (Ajenifuja & Atitebi, 2020).

A serious problem faced by both countries is natural gas flaring, which is extracted to the surface during the production of crude oil. Both countries belong to the top ten in terms of natural gas flaring give way to Russia (which is the leader), Iraq, the USA, Iran, and Venezuela (Global Gas Flaring Data, 2021). In 2000, Nigeria burned about 27.18 bcm of gas annually (Ejiogu, 2013), and in 2019 – 7.82 bcm, and the intensity of gas combustion was 11.02m<sup>3</sup> per barrel (Upstream Gas Flaring, 2019). In the period 2004–2020, Nigeria significantly reduced the burning of natural gas from 22.0 bcm to 7 bcm. Chart 2 shows that over the last six years, Nigeria has managed to minimize gas

burning from 8.4 bcm to 7.19 bcm, while in Algeria, natural gas flaring slightly increased from 8.6 bcm to 9.34 bcm.

The main reason for the natural gas flaring in both countries is the lack of adequate infrastructure to separate gas from crude oil and the ability to transport it to consumers over long distances, and the poor quality of gas, which makes its transport and cleaning unprofitable. The development of the necessary gas infrastructure will significantly reduce the flaring of natural gas and increase its supply to local consumers, given that domestic demand in both countries is increasing. Moreover, the reduction of the volumes of natural gas flaring will significantly improve the ecological situation in both countries. The countries will be able to export the surplus of produced gas. Nigeria and Algeria, due to the significant dependence of their economies on a single source of income, can certainly be classified as typical rentier states, which has a negative impact on their economic situation, especially during the global economic crisis (Alvarez, 2010)<sup>1</sup>.

According to EIA statistics, Morocco is a net importer of natural gas. As of 2018, the country's own gas resources amounted to 0.087 bcm. The consumption of natural gas in the country is not high in relation to the growing population (36,910,560

<sup>1</sup> "Rentierism usually refers to the situation of countries receiving persistent revenues from hydrocarbon exploitation, where these revenues represent the principal source for sustaining economic, social, and political life".

people in 2020) (Morocco population, 2020) and in 2020 it amounted to 0.75 bcm (British Petroleum Statistical Review of World Energy, 2021). Until October 2021, most of the imports were Algerian gas, and Morocco played a significant role as a transit country as the Maghreb–Europe gas pipeline (MEG) run through its territory.

## Existing energy infrastructure

Discussing the existing energy infrastructure in Nigeria and Algeria is essential to understand whether there is a need for new pipelines, the cost of which is significant, and the safety of infrastructure along certain sections of their route requires increased attention due to the existing threats in some regions. Due to the lack of interest in the production and export of natural gas in Nigeria so far, the gas infrastructure in the country was poorly developed, figure 1. Most of the pipelines are located in the south of the country at the sites of extraction of energy resources and are used mainly for domestic needs. BP statistics show that Nigeria exports most of its gas in liquefied form (28.8 bcm). The major part of Nigerian gas is associated gas, which is extracted with crude oil (so-called, associated natural gas). Previously, a significant amount of natural gas was flared or vented.

However, according to the reports of the Nigerian newspaper *Punch*, some elements of the internal energy gas infrastructure are being built on the territory of Nigeria, and in the future, it will constitute a component part of the Trans-Saharan gas pipeline (Nnodim, 2019). It concerns the construction of the Nigerian section Ajaokuta–Kaduna–Kano with a length of 614 km, the purpose of which is to deliver natural gas from the south to the central part of the country (Asu, 2020). The proposed pipeline will deliver high-quality gas obtained from various gas collection projects in the southern part of Nigeria. The gas pipeline project, which is estimated to cost \$2.8 billion, forms the first phase of the Trans-Nigerian Gas Pipeline (TNGP) project (AKK Natural Gas Pipeline Project, 2021). Construction of the pipeline is carried out under Nigeria's Gas Master Plan. The main objective of this Plan is to use the surplus production of natural gas for electricity production and internal consumption. It is anticipated that the construction of the gas pipeline will also strengthen the industrial sector in the eastern and northern regions of the country, reduce unemployment and significantly reduce gas flaring in the Niger Delta and increase the generation of revenues from the export

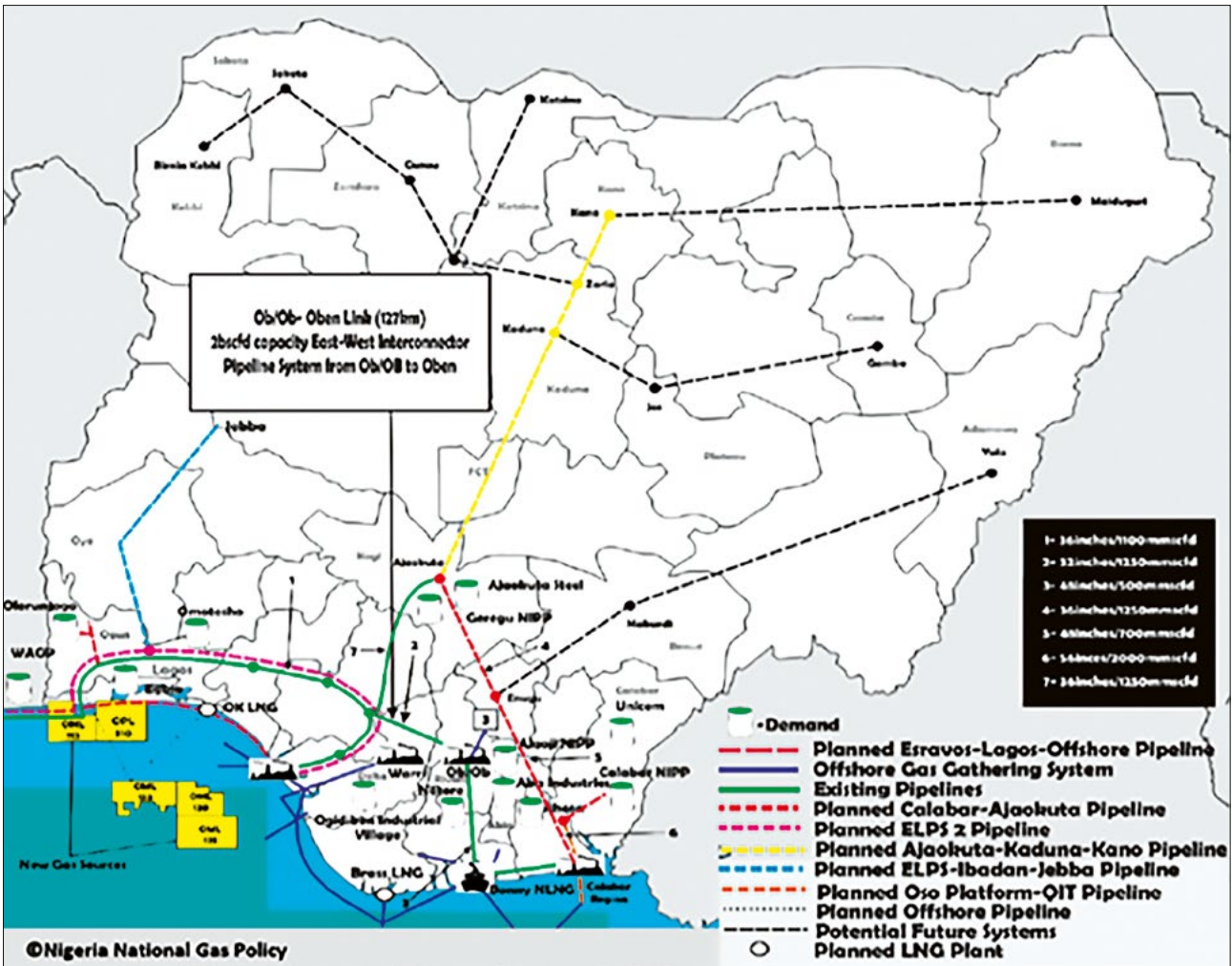
of natural gas (AKK Natural Gas Pipeline Project, 2021). Hydrocarbon liquids will be processed at Ajaokuta into LPG, and the remainder of the gas will be transported to feed new power plants and petrochemical plants in Abuja, Kaduna, Kano, and Katsina (Ajaokuta–Kaduna–Kano (AKK) Gas Pipeline, 2021). Construction of the Ajaokuta–Kaduna–Kano gas pipeline began in July 2020, and commissioning is scheduled for 2022.

The 1,300 km-long Trans-Nigeria gas pipeline will be the largest single project to be implemented in Nigeria's history. After its completion, Nigeria will be able to develop its own gas potential and obtain on this account the revenues. Expanding Nigeria's gas infrastructure will not only eliminate or reduce natural gas flaring, and will help the country meet global climate policy requirements for greenhouse gases/climate change in the long run (Habib & Congjiao, 2020).

Nigeria's energy infrastructure with neighboring countries is poorly developed. Currently, the country has only one international gas pipeline, the Western Africa Gas Pipeline (WAGP), 678 km long and with a capacity of 5 bcm of gas per year. The gas pipeline supplies gas to neighboring countries – Benin, Togo, and Ghana. The West African Gas Pipeline (WAGP), owned by a consortium of Chevron, NNPC, and Shell, was launched in 2011, but contracted volumes were never reached and the pipeline never reached full capacity (Biliyok, 2018). The main reasons for this are a) frequent attacks on the energy infrastructure (both on oil rigs and the gas pipeline itself) in the Niger Delta, b) low quality of gas, which causes downtime and frequent shortages in its supplies to neighboring countries and hinders the operation of the pipeline. In 2019, gas exports through this WAGP gas pipeline amounted to only 1.73 bcm (British Petroleum Statistical Review, 2021).

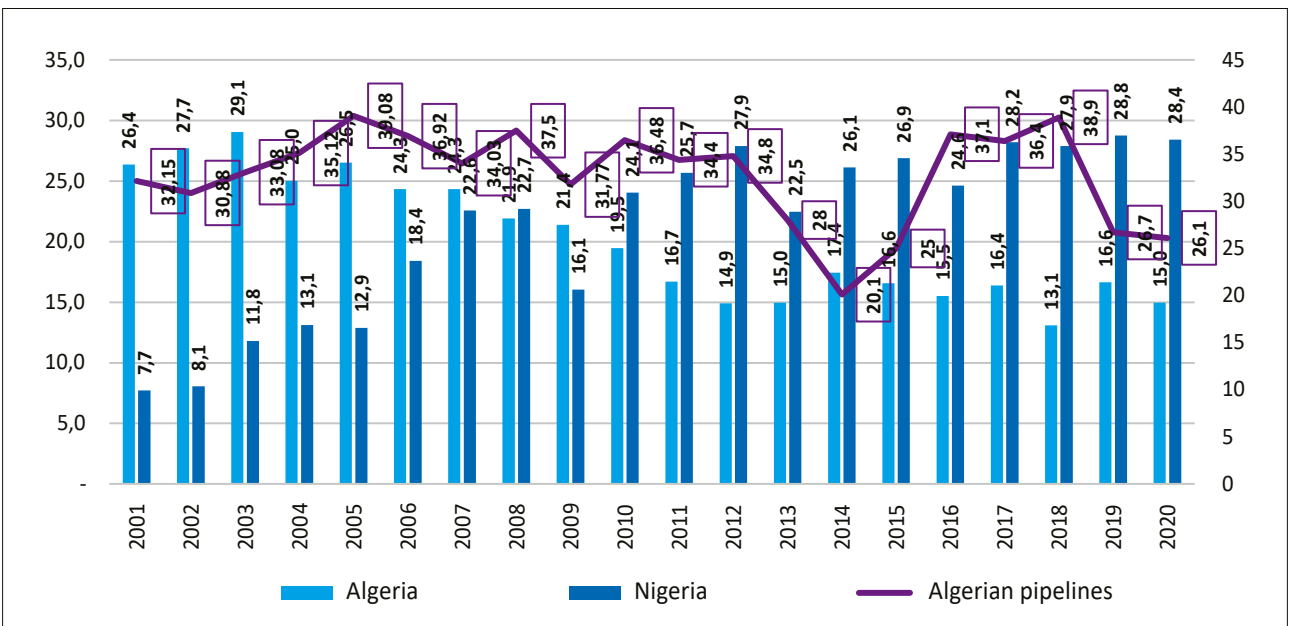
Although Nigeria has started exporting natural gas relatively recently, the geography of Nigerian LNG supplies is more diversified than Algerian one. As in the case of Algeria, EU countries are the main consumers of Nigerian gas – 15.8 bcm, followed by Asian countries – 10.5 bcm, Mexico and the US import 1.3 bcm and 0.1 bcm respectively. In addition, 0.4 bcm of Nigerian gas is supplied to the Central and South American markets. Between 2001 and 2019, LNG exports from Nigeria gradually increased. There was a slight slump in 2009, which was mainly caused by the global economic crisis and lower demand for natural gas. However, since 2010, LNG exports are at the level of 22–28 bcm with a tendency to increase (chart 3). Nigeria has

Figure 1. Gas infrastructure in Nigeria



Source: Biliyok, 2018.

Chart 3. Export of natural gas from Nigeria and Algeria in 2001–2020, bcm



Source: own study based on BP Statistical Review of World Energy, 2000–2020.



been slightly ahead of Algeria in LNG exports to the EU over the past two years.

The main consumers of Algerian LNG are France (3.6 bcm), Italy (2.9 bcm), Spain (1.1 bcm) and the United Kingdom (0.1 bcm) (BP 2020). Moreover, Algeria exports 1.2 bcm of gas to Asian countries – Turkey – 5.8 bcm, Pakistan (0.4 bcm), India (0.3 bcm), China (0.1 bcm), Japan (0.1 bcm) and Middle East – to Kuwait – 0.1 bcm and to Turkey – 5.8 bcm (British Petroleum Statistical Review, 2021).

According to statistical data (chart 3), a dominant role in Algerian gas exports play gas pipelines. Since 2014, the Algerian energy sector has experienced a serious crisis. The drop in crude oil prices in 2014 resulted in a significant reduction in Algerian gas exports from 34.8 bcm in 2012 to 20.1 bcm in 2014. The situation slightly improved in the following years, but anti-government protests and the Covid-19 pandemic once again caused a decline in exports using pipelines. Algerian LNG export has also been gradually declining since 2003 but without any drastic jumps. Algeria exported the largest amounts of gas in 2006 when the total exports amounted to 63.76 bcm of gas per year. For comparison, in 2020 total exports amounted to 41,1 bcm of gas per year.

The Algerian pipeline system is much better developed than the Nigerian one. The main strategic

pipelines start with the largest oil and natural gas fields, Hassi Messaoud and, Hassi R'Mel which are connected by pipelines to export terminals in the Mediterranean Sea. The main gas and oil-producing regions of the country are interconnected by the national pipeline network (figure 2). In the ranking of gas-exporting countries, Algeria is 7th in the world and fourth in terms of gas supplies to the EU, and in terms of LNG – 8th in the world and fifth among the natural gas exporters to the EU (BP Statistical Review of World Energy, 2020).

The country has three strategic pipelines – the Enrico Mattei Pipeline (GEM) through Tunisia to Italy, the Pedro Duran Farrell pipeline (Maghreb-Europe) through Morocco to Spain, and Medgaz, which connects Algeria with Spain. The EU is the main market for Algerian gas. Since 2007, there has been a clear decline in overall exports, as a result of which only about 50% of the transmission infrastructure was used (Grigorjeva, 2016).

Morocco's gas infrastructure is hardly developed, which is explained mainly by the low potential of hydrocarbons. On October 31, 2021, MEG's 25-year operating contract for the transit of Algerian gas to Spain via Morocco expired. The 1,400 km long Maghreb-Europe gas pipeline (MEG), inaugurated in 1996, was one of several main pipelines from North Africa to Europe, 540 km of which passed through Morocco (Why

Figure 2. Energy infrastructure in Algeria



Source: World Energy Outlook. Middle East North Africa Insights, International Energy Agency 2005.

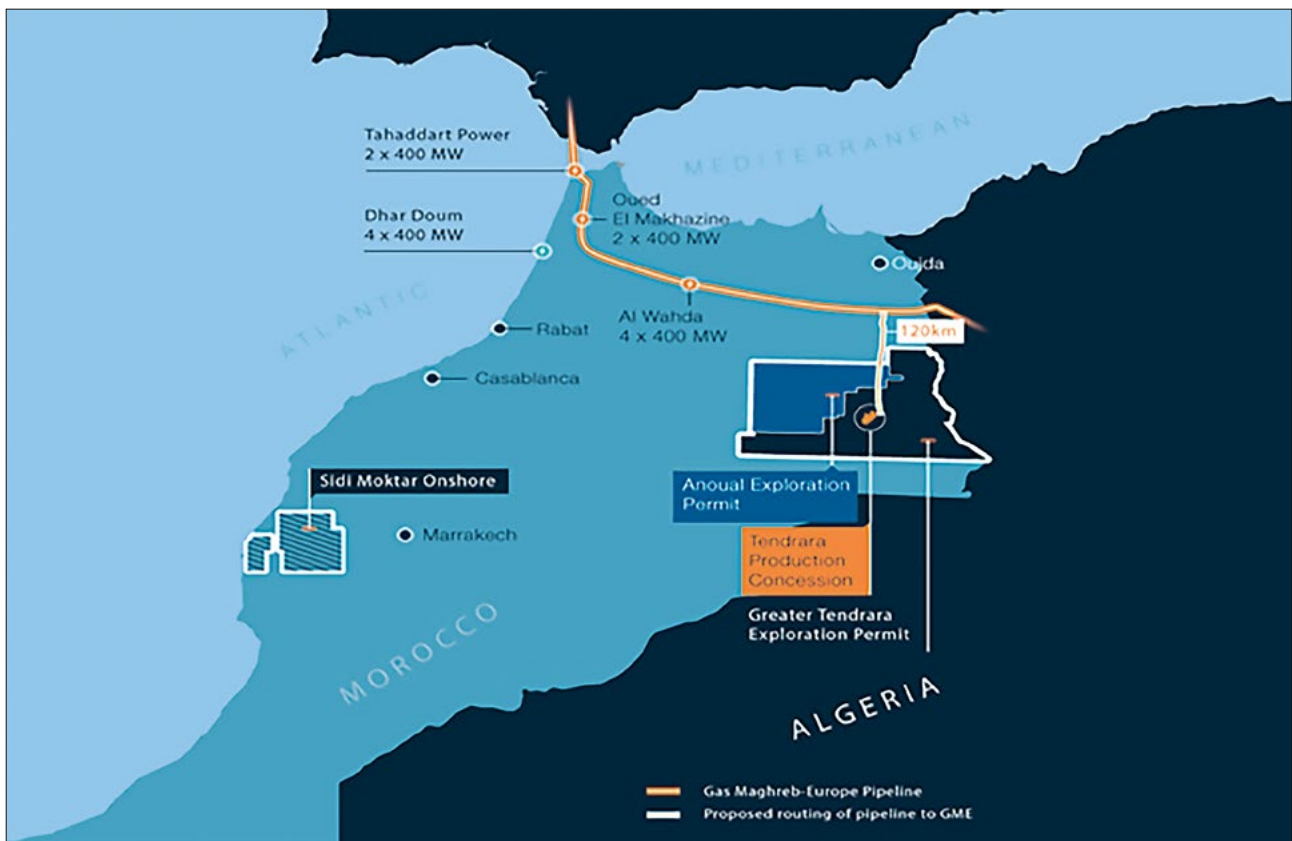


the closure of an Algerian gas pipeline is bad news for Spain, 2021). The deterioration of Moroccan-Algerian relations meant that Algeria did not extend the contract for the transit of natural gas to Spain via Moroccan territory via the MEG gas pipeline. Currently, Spain receives natural gas from the second Algerian pipeline, MedGaz, but there are concerns that the pipeline will not be able to make up for the gas shortage. Algeria assured the Spanish side that it would increase gas supplies via the MedGaz pipeline from 8 bcm to 10 bcm per year, and the rest of the gas would be sent to Spain in liquefied form (Why the closure of an Algerian gas pipeline is bad news for Spain, 2021). For Morocco, the MEG pipeline was a significant source of income, as Rabat could earn between \$ 50 and \$ 200 million on transit depending on the volume of gas flowing through it. However, instead of transit fees, Rabat was taking about 5 bcm of gas for its own needs (Voytyuk, 2012). The problems in Moroccan-Algerian relations and the failure to extend the agreement on the transit of natural gas through Morocco may cause an energy crisis in that country. By halting gas exports through the MEG

pipeline, Algeria used the pipeline as an energy weapon. On August 24, 2021, Algiers severed diplomatic ties with Morocco, accusing Rabat of “hostile actions” for, among other things, supporting Berber separatists in northern Algeria, contributing to fires in Kabylia and the northern regions of Algeria, and for normalizing Morocco’s relations with Israel in return for Washington’s recognition of Rabat’s sovereignty over disputed Western Sahara (Algeria to halt gas exports to Spain via Morocco, 2021). The cooling of Algerian-Moroccan relations has a direct impact on the prospects of building gas pipelines from Nigeria. Tense relations with Algeria may push Morocco to push through the construction of the Atlantic gas pipeline, which may further increase rivalry between countries. In view of the recent events, the commencement of work on the construction of the Trans-Saharan gas pipeline may accelerate.

In 2018, the British company Sound Energy, which has several permits for gas exploration in the Kingdom, confirmed that the discovered gas resources amount to an average of approx. 20 bcm (Lachka, 2018)<sup>2</sup>. The section concerned covers

**Figure 3.** Gas Infrastructure of Morocco



**Source:** A Prospective Resource With Multiple Tcf Potential, 2021.

<sup>2</sup> It is a cross-border natural gas field, part of which is located in Algeria.

an area of 250 km<sup>2</sup>, which is only 1% of the total area of the surveyed region in eastern Morocco (figure 3). If there is no warming of relations between the parties in the near future, there is a chance that in the future the Moroccan section of the Maghreb-Europa pipeline could be used as part of the transmission infrastructure, provided that the potential of natural gas resources in the Tendirara-Lakbir region in the eastern provinces on the border with Algeria will be confirmed. The potential of the entire area is estimated at at least 252 bcm. If this potential is confirmed, the discovered gas reserves could cover the needs of the Moroccan economy for the next 50 years. The exploitation of the Tendirara field should start in 2022 (Benkhadra, 2018).

The new gas-bearing region is located 120 km from the route of the Maghreb-Europe transit gas pipeline, the development of new deposits, the development of new infrastructure, and its connection to the MEG pipeline will allow some of the gas to be exported to the EU and the rest to be used for their own needs (figure 4) (Morocco: Sound Energy announces partial divestment update & LNG strategy, 2020). The MEG pipeline has a chance to get a “new life” and Morocco to strengthen its position in the international arena (Elliott, 2021). Having its own natural gas resources will give the Kingdom greater independence and economic certainty, and at the same time reduce its dependence on imports.

### **Trans-Saharan gas pipeline pros and cons**

The idea of a gas pipeline connecting Nigeria with Algeria, called “Trans-Saharan”, sprouted in the 1980s. A pipeline with a length of over 4,000 km and a capacity of 30 bcm of gas per year would deliver natural gas from oil fields in the Warri region (Niger Delta) to Hasi R'Mel in Algeria, where it was to connect to the already existing infrastructure running towards the Algerian export terminal Beni Saf in the Mediterranean Sea and from there to Europe. The initial value of the project was to be \$7 billion and would last six years. In 2021, the project costs \$10 billion, and several continental and international institutions have contributed to its funding, such as the World Bank, the African Bank, and the Islamic Bank, due to the enormous benefits the project envisages for development in the region (Henache, 2021). Tenders for the feasibility study for the construction of the gas pipeline were launched for the first time

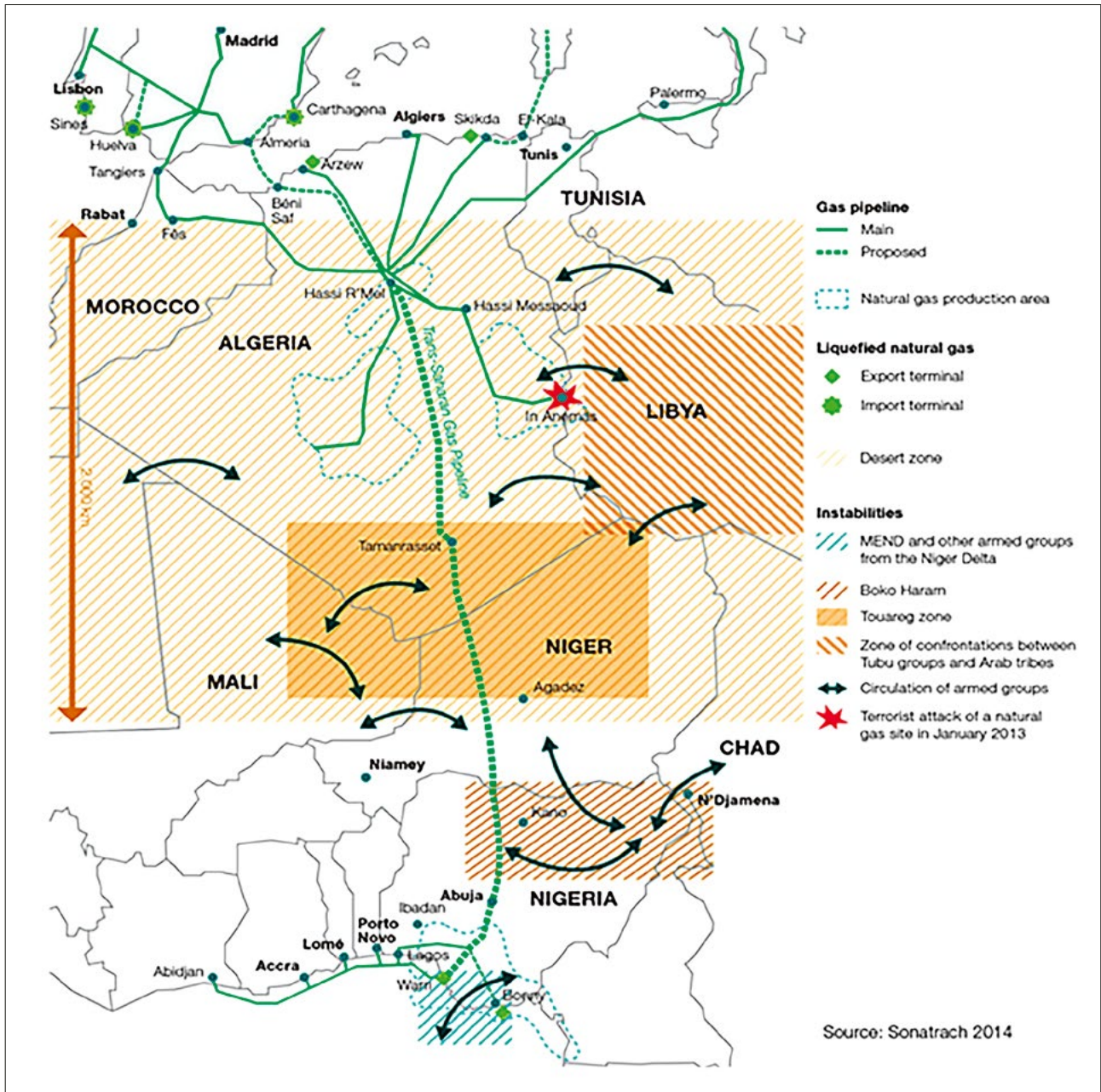
in September 2004, and the completion of the construction was scheduled for 2009 (US Energy Information Administration. Country Analysis Brief: Nigeria, 2020). In 2009, the governments of Niger, Nigeria, and Algeria signed an agreement specifying the implementation of the project, but the Nigerian government has not yet ratified it (Jaabouk, 2021). This agreement made it possible to start feasibility studies for the project once again in order to make it a reality. In October 2018, during the meeting of the foreign ministers of Nigeria and Algeria, plans to build the gas pipeline were mentioned once again, but again, the project did not start. However, the construction of the gas pipeline has not yet started (Benali, 2020).

Today, the implementation of this initiative is questionable, but this opportunity is not completely rejected (Nigeria: Trans-Saharan Gas Pipeline Project behind schedule, 2018). Currently, the project has not yet stepped over the first stage. The project's investors are a consortium of Nigerian and Chinese companies. Several domestic and international companies, including Total (Green, 2009) and Gazprom (Газпром ищет дорогу в Нигерию, 2008), became interested in the project. However, in 2013, Total and Gazprom began to distance themselves from the prospects of the realization of the project, justifying it with the lack of due safety along the pipeline route. However, Gazprom's position seems to have also other reasons behind it. Since American LNG began to enter the European market, the Russian Federation began to actively fight to maintain control over the European gas market, and it began to perceive Algeria and Nigeria as a threat to its own interests in Europe, that's why the construction of the Trans-Saharan gas pipeline poses a threat to Russia's interests.

The Trans-Saharan gas pipeline has a number of disadvantages that negatively affect the future of the project, among them, are:

- Security issues. Security conditions in northern Nigeria, Niger, and southern Algeria require significant improvement and the active involvement of all parties. The alleged route of the Trans-Saharan gas pipeline remains unstable due to the presence of terrorist groups exploiting leaky borders and attacking pipelines and gas installations, such as Boko Haram (Ekhomu, 2020). In the south of Nigeria, there are local separatists from the Movement for the Liberation of the Niger Delta (MEND) who fight for the autonomy of the Niger Delta and the fair distribution of petrodollars between

Figure 4. Trans-Saharan Gas Pipeline



Source: The Trans-Saharan gas pipeline, 2014.

the Ijaw people and the central government, periodically seizing oil platforms and workers of oil companies as a hostage (Marquardt, 2007).

- Infrastructural difficulties. Most of the pipeline route is expected to pass through desert areas and, in some places, through mountainous locations such as the Hoggar Mountains. From the point of view of topography, there may be difficulties here that may burden the cost of the project, but solving this problem will not be too difficult for specialized companies (Nigeria: Trans-Saharan Gas Pipeline Project behind schedule, 2018).

- Weak involvement of both parties in the project implementation so far. Increasing gas pipeline construction costs continued regulatory, political, and financial uncertainty in Nigeria and Algeria may pose serious problems. Initially, Algeria was reluctant to implement the Trans-Saharan project and showed indifference to the gas pipeline. The gas pipeline was, to some extent, in competition with the Algerian gas supplied to the EU. Algeria hoped to become the EU's main gas supplier in the south, as did Russia in the east of the EU. However, the authorities in Algiers did not take into account the fact that



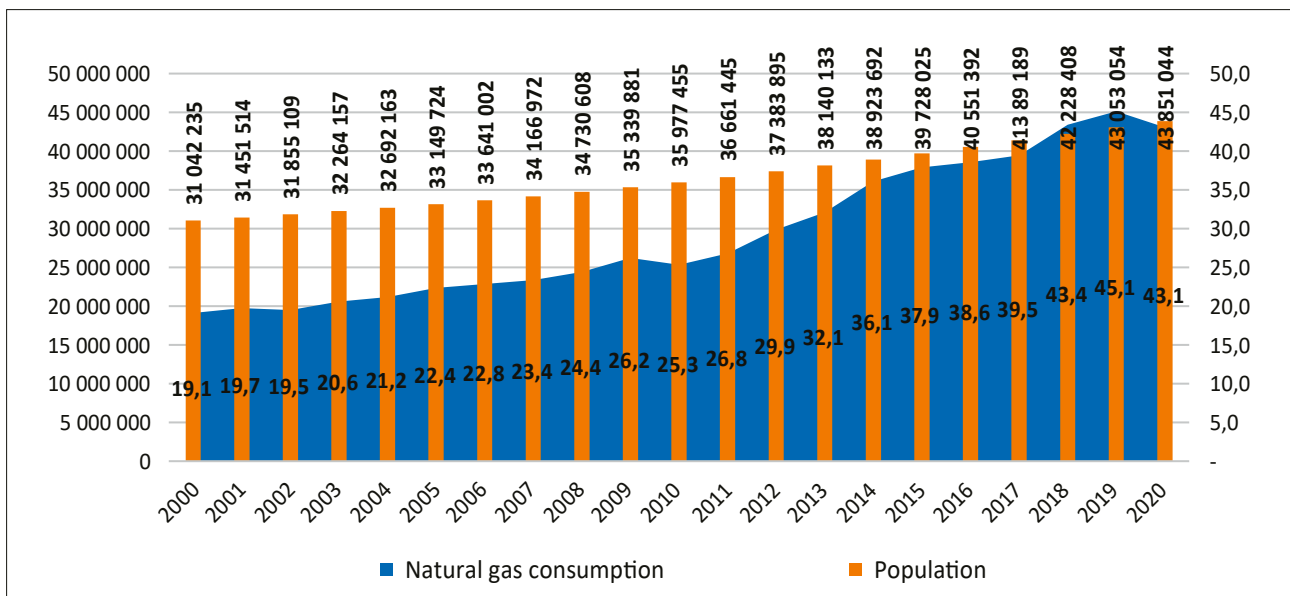
the geographical location of the countries of southern and western Europe is more favorable for the diversification of gas supplies than of the location of the countries of Eastern Europe.

- Turbulence in the world oil market. Gas production in Algeria is largely tied to the price of a barrel of oil, the lower the price, the lower the export revenue to the state budget. The fall in hydrocarbon prices after 2014 dealt a severe blow to the Algerian economy and reduced the profitability of the project.
- Increase in population and demand for natural gas in Algeria. The Algerian authorities did not take into account the internal situation in the country. The consumption of natural gas in the country increases with the growth of the population. As chart 3 shows, the population in Algeria has grown from 31 billion in the last 20 years to 43 billion people, and gas consumption more than doubled from 19.1 bcm to 45.2 bcm (BP Statistical Review of World Energy, 2020). Forecasts indicate that this tendency will continue (chart 4).
- The lack of investment in the energy sector causes a decline in Algeria's export capacity. In order to fill the gas pipeline, it is necessary to invest in the exploration and/or development of

new fields in the Algerian part of the Sahara and in the territory of Nigeria.

- Algeria's protectionist policy reduces the chances of diversifying supplies through expansion into African markets, due to the decline in foreign investment. Under the rules that were updated in 2014, private companies can only invest abroad for activities that complement their domestic operations, and capital transfers still require official authorization (Codes algériens, 2015)<sup>3</sup>.
- Competition for gas markets. Just as Russia sees Algeria as a serious competitor on the European gas market, Algeria also sees Nigeria as a competitor on the European gas market and does not want to offer Europe alternatives to a natural gas supply (How Nigeria set Algerian regime back on its heels on Sahara issue, 2020). Due to the deterioration of relations with Morocco since July 2021, Algeria may use the construction of the gas pipeline for political purposes to weaken the importance of its western neighbor as a transit country, and prevent the implementation of the Morocco-Nigeria gas pipeline project. Equally important in this situation will be the position of Nigeria, which is currently between two countries and choosing either side may be difficult.

**Chart 4.** Natural gas consumption (bcm) in Algeria in relation to population growth (2000–2020)



**Source:** BP Statistical Review of World Energy, 2021.

<sup>3</sup> N°14-04 du 29 septembre 2014 fixant les conditions de transfert de capitaux à l'étranger au titre de l'investissement à l'étranger par les opérateurs économiques de droit algérien. Art. 5–6.



All the above-mentioned reasons explain why the Trans-Saharan gas pipeline has not been built so far. In different time periods, the above-mentioned aspects had a greater or lesser impact on the project implementation. However, despite its weaknesses, the Trans-Saharan gas pipeline also has strengths. The Nigeria-Algeria-Europe gas pipeline is more economically, financially and technically justified compared to the route promoted by Morocco, for several reasons:

1. It runs through the territory of three countries (Algeria, Niger and Nigeria), which means that only one country will be entitled to transit – Niger.
2. The gas pipeline route through Algeria will bypass the sea (Atlantic Ocean), making it financially cheaper and easier technically.
3. The pipeline route through Algeria will ensure the exit of Nigerian gas directly to Europe, taking into account the Algerian pipeline transport network ready to go to the European continent.
4. Should the construction of the Trans-Saharan gas pipeline commence, the Galsi gas pipeline linking Algeria with Sardinia (Italy) will be reanimated, with a capacity of 30 bcm per year. The construction of the gas pipeline has been suspended due to insufficient transmission capacity, and Nigerian gas may replace the missing volumes. In addition, in the face of the suspension of gas transit through Morocco via the Maghreb-Europe gas pipeline, Galsi may gain importance and contribute to the diversification of gas supplies to the EU, and increase its energy security in the context of the energy transition policy, which European countries are gradually implementing, and natural gas in this process is a temporary raw material and the demand for this raw material will increase.
5. Algeria is unable to increase natural gas production in the short term. Obtaining additional gas volumes in Algeria is possible thanks to the extraction of shale gas, but this is a difficult issue to resolve for many reasons in the short term, so a gas pipeline from Nigeria could supplement transmission capacity.

The analysis of individual Algerian media shows that after completing the construction of the Nigerian section of Ajaokuta-Kaduna-Kano, the next step will be to connect the energy infrastructure of Algeria and Nigeria to the territory of Niger. According to the Algerian newspaper *El Chourouk*, the Algerian-Nigerian gas pipeline project is progressing very quickly and when it reaches the city of Kano, it will be connected across the border

with Niger, and from there it will move to Algeria. Most the Algerian pipelines have almost reached the border with Niger (Henache, 2021). The main advantages of the Trans-Saharan gas pipeline will be: accelerating the economic integration of African countries, fostering the economic development of individual African countries, such as – Niger, Burkina Faso and southern Mali, which are affected by high energy prices and desertification, expansion of markets, reduction of gas flaring volumes in Algeria, pushing Nigeria to meet its zero gas flaring goal by 2025.

Nigeria is currently facing the challenge of meeting its gas obligations towards neighboring African states due to insecurity in the Niger Delta. The state is unable to fully ensure the secure supply of natural gas to Ghana and Togo. And the main reason for this is the conflict between the federal government and MEND. Since late 2005, the oil-rich Niger Delta region has been engulfed in uprisings by MEND fighters. With the emergence of this organization in southern Nigeria, resistance to the state and international oil companies operating in the Niger Delta region took a sharp turn. Militants are increasingly attacking international oil companies, oil plants, and government security forces. The group aims to obtain the right of local oil-producing communities to participate in Nigeria's oil industry to obtain benefits – royalties, employment, infrastructure, and compensation for environmental degradation caused by oil production – from the federal government and oil companies. The activities of this and other groups operating in the region lead to the stoppage of about a quarter of the daily oil production in the country. The current crisis is the culmination of unresolved problems that have built up over the years, practically since the discovery of the oil fields and the start of oil production in the Niger Delta between 1956 and 1958. Simultaneously with the start of oil extraction, social marginalization and poverty, political repression, and environmental deterioration began. Residents could not directly enjoy the benefits of the oil industry, including employment, because they did not have the necessary skills and capital resources. The lack of opportunities for dialogue has worsened the situation (Courson, 2009). The Nigerian president's administration attempted dialogue with militants in the Niger Delta through oil companies and law enforcement to find a lasting solution to the region's problem, but the parties failed to reach an agreement and negotiations ended in a fiasco. The situation in the Niger Delta region continues to be tense (Nwakalor, 2016).

## Atlantic gas pipeline – pros and cons

A project of natural gas construction pipeline along the Atlantic seabed that will lead Nigerian gas through the territorial waters of several West African countries (Benin, Togo, Ghana, Côte d'Ivoire, Liberia, Sierra Leone, Guinea, Guinea-Bissau, Gambia, Senegal and Mauritania) to via Western Sahara to Morocco, and eventually to Europe, was announced in late 2016. If it is successfully implemented, it will be the largest infrastructure project in Africa. In addition, the Morocco-Nigeria gas pipeline project could become a benchmark for South-South relations, both economically and politically (Le projet de gazoduc Maroc-Nigéria au cœur d'une lutte informationnelle, 2020). The construction of the gas pipeline will favor the development of industry in the West African region (Nnodim, 2019).

In May 2017, the parties signed a Memorandum of Understanding in the presence of King Mohammed VI and Nigerian Foreign Minister Geoffrey Onyeam (Bozonnet, Tilouine, 2017). The Nigeria-Morocco gas pipeline is one of the key projects implemented by King Mohammed VI. King's vision of cooperation with Africa is based on shared development, knowledge exchange, and a win-win partnership, the ultimate goal of which is political and economic continent's integration (Bozonnet, Tilouine, 2017; Morocco and Nigeria to Execute the Atlantic Gas Pipeline, 2017). The total length of the pipeline, which will be an extension of the existing WAGP, will be approximately 6,000 km (Coalition Maroc-Nigéria: l'Algérie appelée à réagir, 2020)<sup>4</sup>.

It should be noted that initially the idea of the project was skeptical, but the discovery of natural gas resources in the east of Morocco (Oriental Marocain Province) near the border with Algeria increased the chances of its implementation. However, it is an energy project that raises important multidimensional issues in terms of economic benefits for West African countries. It is believed that the project could stimulate the development of industry in the region, support the creation of food processing and fertilizer production centers, which means an increase in agricultural production, which will contribute to the diversification

of the population's diet (Naji, 2021). In addition, the implementation of the project could increase competitiveness and will be conducive to the diversification of exports between the countries of the region, which will allow West Africa to become self-sufficient in individual sectors of the economy. ECOWAS is expected to play a leading role in negotiating agreements and overseeing the construction of the pipeline (Naji, 2021).

As mentioned above, stabilization of the security situation in the Niger Delta is essential for the implementation of this project. With the Nigerian-Moroccan gas pipeline, as with the Trans-Saharan gas pipeline, there are many issues that require further clarification. If, from the safety point of view, this gas pipeline outside Nigeria seems to be relatively safer, then in terms of its feasibility on a strictly technical level, it raises some concerns and doubts. The offshore pipeline will consist of a pipe only 20 inches long and therefore its capacity will be limited to 5 bcm per year. As a result, Nigeria can only allocate an additional 3 bcm of gas to these exports (Gerber, 2020).

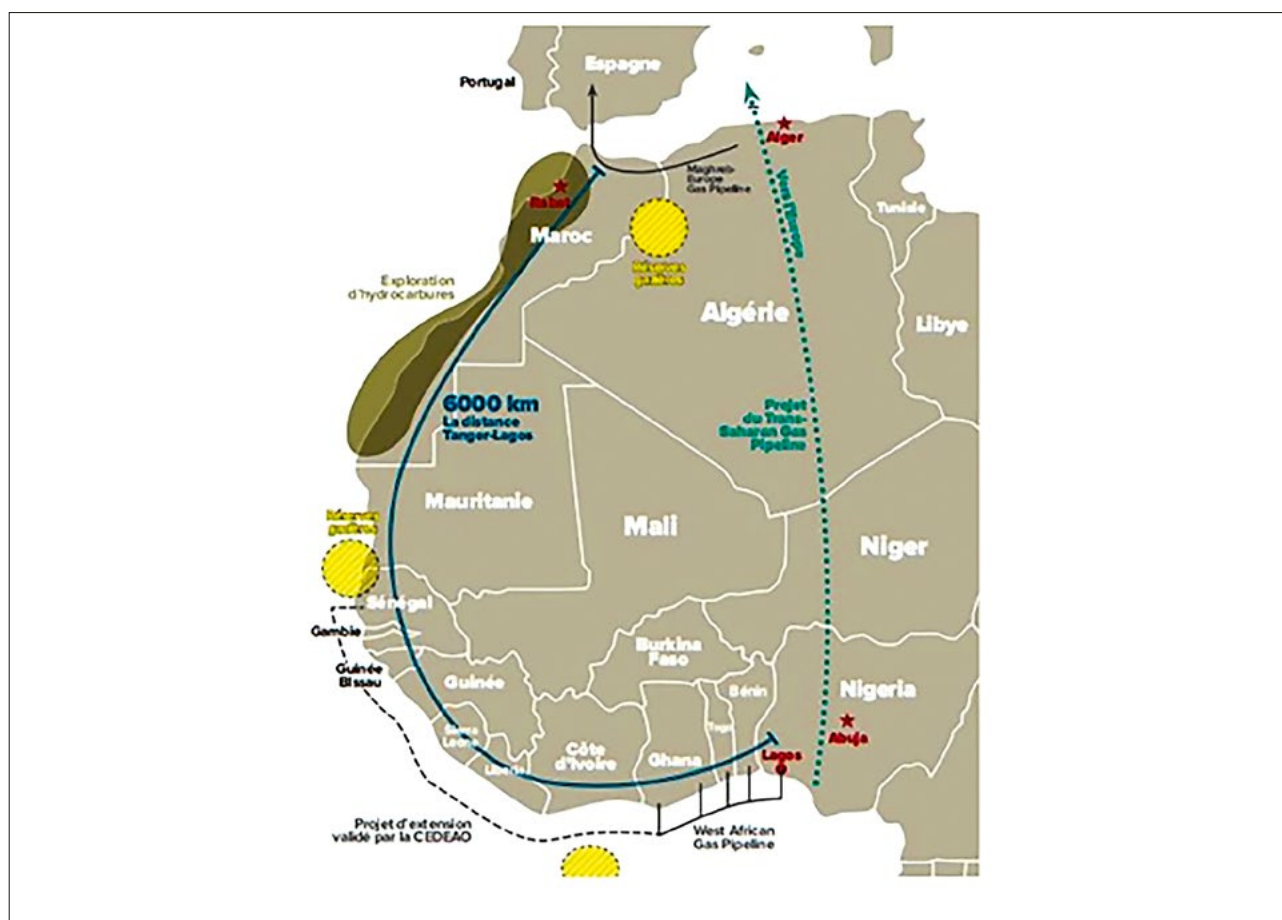
Out of 5 bcm, 2 bcm will be extracted by Ghana, Togo and Benin, slightly more than 1 bcm will be extracted by Morocco if the transit of Algerian gas through its territory is not resumed, so only 2 bcm will be delivered to the EU. These calculations do not take into account the coastal states through the territorial waters of which this gas pipeline will run, and their gas demand. For the EU, 2 bcm of gas per year does not significantly change the situation on its energy market. For comparison, Algeria's capacity to supply Spain and Italy in 2020 was 20.6 bcm per year, transported by pipelines (Gerber, 2020).

Another technical problem that the pipeline may encounter is that its route runs very close to the coastal states (up to 25 km). Such arrangement of the pipeline may cause a high risk of its damage by boat anchors, which will result in interruptions in supply and additional financial costs for its repair.

The third technical and at the same time economic problem may be time. The construction of the WAGP gas pipeline (678 km) took 28 years. In order for the pipeline to reach Morocco, it is necessary to lay more than 3,000 km of pipes and to build 10 compressor stations (Coalition

<sup>4</sup> WAGP is a West African gas pipeline that connects Nigeria with Cotonou in Benin, Lomé in Togo, and Tema and Takoradi in Ghana. The length of the gas pipeline is 678 km. The shares of West African Gas Pipeline are owned by Wapco, owned by a consortium of states and international concerns such as Chevron and Shell. Natural gas is supplied mainly to power plants in three countries at 2 bcm per year.

Figure 5. Morocco-Nigeria gas pipeline



Source: Moroccan-Nigerian Pipeline Puts Final Nail in Algeria's Trans-Saharan Gas Project, 2017.

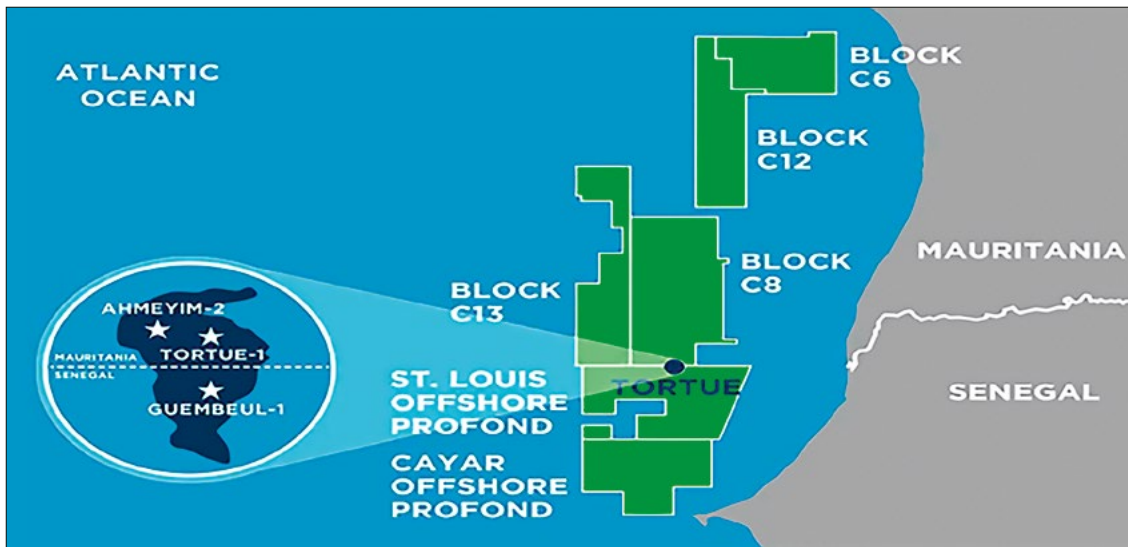
Maroc-Nigéria: l'Algérie appelée à réagir, 2020). Without foreign investors, West African countries will not be able to bear this investment, the estimated cost of which is around \$20–25 billion (Bonzonnet, Tilouine, 2017). It is expected that the gas pipeline will be built in parts, which will be gradually put into operation, and its construction will take about 25 years (Anyango, 2021).

Considering the EU's energy transition policy implementation plans, in 25 years the demand for natural gas in the EU may be significantly lower, as in 2045 most of these countries will be in the final straight transition from conventional energy sources to renewable energy sources. Thus, it seems that the role and importance of the Atlantic gas pipeline at the beginning of its construction and after its completion may have different political and economic importance. However, the role of this pipeline to African countries undoubtedly remains significant.

There are other countries on this pipeline route that have gas reserves. It is believed that Mauritania and Senegal may compete with the pipeline

in the future. In 2015, the US company Kosmos Energy made a groundbreaking gas discovery in the waters between Mauritania and Senegal. According to BP data, Mauritania's gas potential for 2020 is estimated at 1.78 trln. m<sup>3</sup> of gas, of which 212.37 bcm has already been estimated as recoverable reserves (Mauritania – Senegal: an emerging New African Gas Province – is it still possible? 2020). In turn, Senegal's potential is 1.1 trillion m<sup>3</sup> (figure 6). The recoverable gas resources in Senegal can be estimated at 651.28 bcm. Statistics show that the recent gas discoveries made in Mauritania and Senegal are colossal and located much closer to Morocco. Moreover, production of LNG from the Greater Tortue Ahmeyim (GTA) field is expected to start in 2023 (Kosmos scraps Mauritania, Senegal sale plans, 2020). The implementation of this investment will question the legitimacy of the construction of the Nigeria-Morocco gas pipeline, as the distance from Mauritania to Morocco is much shorter, and the technical export possibilities are much greater than that of the planned gas pipeline. However, it is also not worth dismissing

**Figure 6.** Greater Tortue/Ahmeyim gas filed location



Source: Beaubouef, 2019.

the option that both Mauritania and Senegal will also be able to export excess gas by placing it in an Atlantic gas pipeline and selling it to other African or European countries (Naji, 2021).

Environmental and social issues are no less important in the context of the construction of the Atlantic gas pipeline. In March 2018, 40 non-governmental organizations (NGOs) signed a joint declaration that addresses fundamental environmental, social and economic issues (Nigeria-Morocco gas pipeline: Not in Our Interest, 2018). The construction of the gas pipeline poses a serious threat to the environment due to environmental pollution (water) during gas and oil extraction, the risk of chemical waste and potential spills in fisheries. The increase in the extraction and consumption of fossil resources can contribute to an increase in carbon dioxide emissions and will have an impact on climate change, the use of methane can have a negative impact on marine fauna. The construction of the pipeline could destroy the livelihoods of fisheries-dependent communities in regional waters. NGOs cite the example of Nigeria and the situation in the Niger Delta as examples (Olukayode, 2012). The energy company Shell, operating in Nigeria since 1937, has been accused of causing massive environmental degradation that is affecting fishing and agriculture (Boele, Fabig & Wheeler, 2001). Moreover, in line with Morocco's National Energy Strategy, the country is moving towards the development of renewable energy sources. According to the plan, in 2030 RES in the country's energy mix will amount to over 50% (Energy Policies Beyond IEA Countries – Morocco, 2019). Thus,

the construction of the Atlantic Gas Pipeline seems to run counter to the goals of Morocco's sustainable development and reaffirms that the project is more political than economic, and is more oriented towards satisfying the economic needs of West African countries, and Morocco, in turn, counts on the loyalty of these countries to solve the problem of Western Sahara.

The unregulated status of Western Sahara through the territorial waters of which the gas pipeline would run is the greatest threat to the implementation of the Nigeria-Morocco project. Without regulating its status, the construction of a gas pipeline in Sahrawi waters may have legal consequences. The problem of recognizing Western Sahara for many years has caused not only tensions in the region, but also does not favor its economic and political integration.

### Regional rivalry and new gas pipelines

In the context of the construction of the above-mentioned gas pipelines, the Algerian-Moroccan relations are very important, as they have a direct impact on the prospects for the implementation of these initiatives. Algeria and Morocco have a lot in common in terms of language, religion, ethnic history and identities, but unfortunately now more divide them than connect them. The tensions between the two neighbors date back to French colonialism. The French colonial policy has done a lot of damage in the Maghreb region, which the countries in the region have been grappling with so far.



The main causes of difficult relations are: belonging to different camps in the Cold War and today<sup>5</sup>, ideological differences and the struggle for leadership in the Maghreb region, fueled by the ambitions of local ruling elites that came to the fore after European colonialists. There are also territorial claims (Lounnas & Messari 2018; Wild, 1966)<sup>6</sup>, divergent approaches to foreign policy, in the fight against terrorism and other threats, and the issue of Western Sahara, which underlies contemporary tensions between Morocco and Algeria (Teevan, 2018)<sup>7</sup>.

Both Algeria and Morocco have geopolitical ambitions for Africa, and the greatest rivalry is between them for influence in the Sahel region. Algeria's ties with the sub-Saharan region are long-lasting and multi-faceted. The Sahel is a natural extension of the Sahrawi border of Algeria, which shares a very long border with two countries in this region: Mali (1,300 km) and Niger (1,200 km)<sup>8</sup>. Algeria is linked to this region in terms of ethnicity and culture. Tuaregs living in the southern part of Algeria maintain ties with the Tuaregs living in the northern regions of Mali and Niger. After independence in 1962, Algeria supported the political, cultural and economic liberation of the Sahel states, strictly adhering to the principle of the inviolability of borders inherited from colonialism, which was approved by the Organization of African Unity (OAU) in 1963. As a result, separatist temptations occasionally expressed by Tuareg groups in Niger and Mali are perceived by the Algerian government not only as a violation of the principle of inviolability of borders, but also as a risk of national fragmentation that could destabilize the entire Sahel region and the south of the Sahara.

The Sahel is considered to be the "soft underbelly of Algeria" and, at the same time, a "corridor of all danger" (Ghanem-Yazbeck et al., 2018). The greatest threats that occur in this region are: a) the in-

stability of the political systems of the countries in the region, b) the presence of armed terrorist groups and the related terrorist threats, c) illegal migration, d) organized crime, including arms trafficking and human smuggling, e) Malian crisis, f) food problems (Eljarh, 2016).

Due to the divergence of individual countries in their approaches to solving the Sahelian crisis, it was not possible to develop a uniform concept of stability and security. However, Algeria's position is based on the following elements:

- 1) Non-interference in the internal affairs of the states of the region. According to the Algerian authorities, external interventions only exacerbate the crises, as in the case of the Iraqi and Libyan crises.
- 2) Respecting sovereignty.
- 3) Open dialogue between all opposing parties through regional primacy over international ones. In this situation, Algeria could act as a mediator in order to reach a political agreement and end the conflict. Algeria uses mediation as an important element in foreign policy.
- 4) Political solutions over military interventions (Lounnas, 2021).

After several years of decline in international activity caused by the political turmoil that marked the last years of Abdelaziz Bouteflika's rule, and economic problems caused by the 2014 Ukrainian crisis, the 2019 Hirak anti-government protests and the covid-19 pandemic, Algeria is coming back to the regional game. Abdel Majid Tebounn's victory in the presidential election in December 2019 did not bring about significant changes in foreign policy. The new President continues his predecessor's foreign policy. However, it seems to be in a much weaker position than it was in times of Bouteflika. Attempts to restore the construction the Trans-Saharan gas pipeline are now much more difficult, and Algeria must work hard to convince

<sup>5</sup> Morocco favors cooperation with the EU, the United States and, more recently, with Israel, and Algeria keeps to long-term relations with Russia.

<sup>6</sup> In 1961, King Hassan II of Morocco signed an agreement with the Algerian Provisional Government-in-Exile in which both sides recognized the existence of a border dispute, but agreed to delay its resolution until Algeria gains independence (Lounnas & Messari, 2018). Shortly after Algeria gained independence, King Hassan II of Morocco asked the newly created Algerian authorities to resolve the issue of the border cities of Bechar and Tindouf over which Rabat was claiming sovereignty. Citing the OAU *uti possidetis* principle, Algeria refused to transfer these cities to Morocco. Borders became the first of many issues on which independent Algeria and Morocco disagreed (Wild, 1966).

<sup>7</sup> "Moroccan foreign policy on the continent may seem to align more closely with European priorities in light of the "advanced status" of EU-Moroccan relations under the ENP, Morocco's willingness to actively engage with the EU on the G5 Sahel, and close cooperation on migration and counter-terrorism. Morocco is also in the process of negotiating a Deep and Comprehensive Free Trade Area (DCFTA) with the EU. This contrasts with the somewhat slower pace of the EU's relationship with Algeria".

<sup>8</sup> Algeria also shares a border with Mauritania (460 km), which territory is located both in Maghreb and Sahel region.

Nigeria and investors that its project is more legitimate and safer than the Moroccan initiative of Atlantic gas pipeline proposal. In connection with the assassination of President Chadu Idris Debby, the geopolitical importance of Niger has changed significantly, which the Algerian government has tried to use to its advantage (G5 Sahel: le Tchad retire 600 soldats de la zone dite «des trois frontières», 2021). Taking into account the plans to expand the energy infrastructure, where Niger acts as a link between Nigeria and Algeria, the change of priorities in Algeria's foreign policy towards Niger may be to the benefit of all parties. In July 2021, Algeria signed several agreements with Niamey and decided to reopen the borders closed in 2020 due to the Covid-19 pandemic, given that Algeria kept all other land borders closed. The agreement allows for the movement of goods and the solution to the problem of migrants from Niger in Algeria. In addition, Niamey and Algiers decided to strengthen security cooperation in the Sahel region. Consequently, Niger expects Algeria to provide it with equipment and training for its troops, given Algeria's vast experience in countering terrorism. If the signed agreements are implemented, then Algeria will not only solve a number of coexisting problems in the region, but above all will increase the chance for the safe construction of the Trans-Saharan gas pipeline and other infrastructure projects (Lounnas, 2021).

Terrorism poses a serious threat in the Maghreb-Sahel region. Due to the complicated relations between Algeria and Morocco, it was not possible to establish collective security mechanisms at the Maghreb level. Both countries are pursuing individual strategies in the fight against terrorism in the Maghreb-Sahel region. In the Sahel, Algeria is fully committed to joint counter-terrorism mechanisms in cooperation with other Sahel countries, under the CEMOC (Roussellier, 2017). While Morocco has attempted to revive the Community of Sahel and Sahara (CEN-SAD) (Nickels, 2013), however, without success.

Based on its own experience in the fight against terrorism, Algeria has developed the principle of not negotiating with terrorist groups in hostage kidnapping situations where a ransom or exchange of prisoners is required for their release. According to the Algerian authorities, the fight against terrorism in the Sahel should be carried out primarily directly by the affected countries themselves, without interference from foreign countries. Algeria worked with its partners in the Sahel region to implement a joint, bilateral strategy based on consensus and

cooperation between various armies and security corps, and acted as a mediator in conflicts in the region. In line with its constitution, Algeria has not engaged in military operations against terrorism outside its borders and remains firmly opposed to any foreign intervention, in particular in Libya or in Mali. Western countries and the EU seem to have endorsed the view that Algeria is a key country in the fight against transnational terrorism and that it is essential to efforts to maintain stability in the Sahel (Iratni, 2017).

One of the basic principles of establishing the position of a regional power is achieving internal stability. Unfortunately, over the past 7 years, Algeria has been plunged into permanent crises and has no stable foundations. Algeria's poor involvement in external affairs was skillfully used by Morocco. Unlike Algeria, which has been following the old foreign policy paths over the years, Morocco has cardinally changed its approach and appears to be gradually successful. Morocco's main goal is to achieve a geopolitical South-South balance (Chtatou, 2017). The once deceased King Hassan II said in one of his speeches that Morocco is a large tree with roots deeply buried in Africa, its trunk in the Arab-Muslim world and branches in Europe. This metaphor shows how important the geopolitical balance between Africa and Europe is for Morocco. In its foreign policy, Morocco places the main emphasis on a strategic partnership with African countries. Three elements distinguish Morocco's current African foreign policy from the previous one: political integration and strengthening economic cooperation, strategic partnership and human development, as well as the restoration of membership in individual African organizations.

The first hallmark of Morocco's new African foreign policy is political integration. Morocco has worked with the international community on security initiatives, providing support to combat violent extremism in the Sahel and block transnational migratory flows. In addition, Morocco participated in the UN peacekeeping missions in Africa MONUSCO in the Democratic Republic of the Congo and MINUSCA in the Central African Republic and in military operations (Cherkaoui, Tobi, 2021).

The second element of foreign policy is the emphasis on strengthening economic ties with African countries (Berahab, 2017). In this context, the dominant role of King Mohammed VI is very important. To regain political influence in Africa and to warm relations with African countries, the king has made 51 visits to 26 African countries since 2000 and signed some 952 bilateral

agreements and partnerships, in sectors as diverse as education, agricultural development, the economy and religion (Messari, 2018; Sounni, 2020)<sup>9</sup>. Almost half of the visits took place in West Africa. During his overseas visits, the King inaugurated many development projects with Moroccan financing in a wide variety of sectors, from banking to mining, and from construction to telecommunications (Berahab, 2017). Despite the fact that Morocco can in no way compete with major investors on the African continent (such as China, the United States, India and France), the important and targeted nature of its investments has had a significant impact on the economies of mainly West African countries. Morocco is recognized as an important investor in these economies (Cherkaoui & Tobi, 2021).

The third characteristic of Morocco's new African foreign policy goal is the combination of politics and the economy to achieve strategic goals. It is about using strong economic and political ties to achieve your ultimate geopolitical goals. The far-reaching Moroccan offensive on the continent is part of Morocco's African strategy and is aimed at warming relations with African countries, making their economies dependent on Moroccan investments, the ultimate goal of which is to use all possible political, economic, diplomatic and other instruments, including blackmail, for achieving the most important goal that Morocco has been pursuing for years – recognizing Western Sahara as an integral part of its territory. It is about gaining benevolent neutrality towards the Sahrawi question by other African countries. Achieving benevolent neutrality on the part of African states in recognition of Morocco's sovereignty over the Western Sahara will help the Kingdom, on the one hand, to secure its position as a regional power, and on the other, it will ensure wider integration and development of cooperation with the countries of the region.

The fourth, last but not least element of Morocco's foreign policy is the restoration of membership in international organizations. Since Morocco left the African Union in 1984, the European Union has become the main strategic partner. The EU's neighborhood policy, launched in 2008, gave great opportunities for the development of bilateral relations, but it did not bring any spectacular results

(Tobi, 2019). The free trade agreement may have put Morocco on a path of economic convergence, but unfortunately Morocco has not benefited from this policy. Today, the EU, caught in a multidimensional and prolonged crisis, places more importance on the security aspects of its partnership with Morocco than on trade and economic relations. Without giving up hope to improve relations with the EU by intensifying economic ties, the Kingdom of Morocco has returned to its roots in Africa with the aim of implementing a South-South strategy. Improving relations with African countries is essential for the successful implementation of this initiative.

In January 2017, Morocco returned to the African Union after 33 years of absence. Morocco's immediate goal is to push the AU towards neutrality and then to gradually win support for a win-win political settlement to the Western Sahara dispute (Roussellier, 2017). Morocco's re-accession to the African Union (AU) raises some concerns as it may disrupt the organization's operation due to opposing positions that will inevitably be expressed on Western Sahara and thus undermine the solidarity of African states. Morocco is likely to continue its policy of delegitimizing all claims of the Polisario in its pursuit of an independent state. He will also try to weaken the political influence of the Polisario leaders and the countries supporting the movement – Algeria and South Africa, Libya, and many south African countries. Despite Morocco's intense African policy agenda and colossal economic projects, there are countries that continue to defend the Polisario leadership. Among them, Nigeria, which has benefited from Morocco's investment, but continues to hold a position of support for the Polisario in their struggle for independence. According to Professor Khalid Chegraoui, "Many still believe that the African Union works the same way as it did in the 1970s and 1980s. Africa has changed, especially the English-speaking African countries. This is an important transition that Moroccan officials and businessmen must take into account" (Hasnaoui, 2017).

In January 2017, the Kingdom applied to join the Economic Community of West African States (ECOWAS) (AL Qays, Jebri, 2020). But Morocco's membership was postponed. According to the ECOWAS constitution, nothing prevents Morocco from becoming a member of the organization,

<sup>9</sup> There is also intensive work on the non-governmental level. Moroccan universities have been hosting students from other African states, which has created solid personal and social links between Moroccans and people from those other states. On the religious level, Morocco has had an important – and essentially spiritual – influence on Western African Islam (Messari, 2018; Sounni, 2020).

not even its geographic location. There are, however, a number of political, legal and socio-economic reasons that prompted the Member States to postpone the Moroccan request (Munshi, 2019; AL Qays & Jebril, 2020). Nigeria is the largest country in West Africa and has a strong position in ECOWAS. Morocco's attempts to gain support for membership in this organization have so far been unsuccessful. Nigeria is not interested in Morocco's accession to ECOWAS, as Morocco's strong economic and political position will weaken its place in this organization and may disrupt the decision-making process (Bozonnet & Tilouine, 2017). Currently, ECOWAS recognizes Western Sahara as an autonomous state (Hilse, 2017).

## Conclusion

As the above analysis shows, the announcement to build the Nigeria-Morocco gas pipeline is more political than economic. The implementation of this project, on the one hand, could foster regional integration and the establishment of cooperation and closer relations with Nigeria and other African countries. On the other hand, Morocco can use the new gas pipeline as a political instrument to pursue its own political interests and influence other countries with a lower political and socio-economic position in Africa. In addition, Morocco, seeking the favor of Nigeria, counts on sympathetic neutrality on its part in the vote on the Western Sahara. Nigeria has so far supported the independence of Western Sahara, just as most African countries consider Morocco as the invader. If successful, this project could make Morocco and Nigeria leaders of South-South cooperation. The thaw in Morocco's relations with many other African states is more the result of the king's initiatives and his personal commitment and from reorganization of Moroccan diplomacy. Morocco's new African foreign policy is not limited to the issue of Western Sahara and aims more broadly to make Morocco a key and influential player in African politics (Messari, 2018).

The geopolitical impact largely depends on whether the Nigeria-Morocco gas pipeline will be completed in full or not. For West Africa, even a partial project will be considered a success. The increase in the production of electricity and fertilizers will contribute to economic development and thus a certain political and social stabilization. However, the geopolitical success for Morocco will be the implementation of the project as a whole, i.e. from Nigeria to Morocco and further to

Europe, the more widely the project is implemented, the greater will be its significance and geopolitical impact (Naji, 2021).

For economic reasons, the construction of the Trans-Saharan gas pipeline seems to be more justified, as it runs through a smaller number of countries and its capacity is much greater and may actually be of interest to potential gas recipients in the EU. In addition, part of the infrastructure along the route of this gas pipeline is already developed on the Algerian side. In turn, the Atlantic gas pipeline, which crosses the territory of more than 10 African countries, requires their consent to lay pipes in their territorial waters and its capacity is 25 bcm lower. In addition, in the event of a possible reduction in gas production in Nigeria, Algeria can maintain and provide blockbuster supplies from its own reserves. In the case of the Atlantic gas pipeline, filling the pipeline with gas other than Nigerian may be more problematic unless Mauritania and Senegal enter the project with their gas. However, given the potential of these two countries, the question arises as to what legitimacy is to build a gas pipeline from Nigeria if there is the possibility of larger supplies over a shorter distance. Taking into account the information available at the moment, in order to implement the Atlantic gas pipeline construction project, it is necessary to re-analyze the needs of all transit countries and to assess the legitimacy of building the project after deducting the natural gas demand of the transit countries. In addition, it is essential to explore the potential of Nigerian oil fields, Mauritania and Senegal's resources, and possible replenishment of the gas pipeline from half of them, and to study the risks that could disrupt supply.

Once implemented, this strategically important project would consolidate the economic, political and diplomatic presence and influence of Algeria in the Sahel. Algiers would then be an important and main link between Africa and Europe, allowing the latter access to additional sources of natural gas while reducing its dependence on imports from Russia. However, given regional uncertainty and instability, the prospect of such a project remains difficult at this point (Lounnas, 2021).

The competition for gas pipelines in Africa is political. Nigeria is very unlikely to complete both projects. Starting the construction of one of them will simultaneously increase the role and geopolitical importance in the region of one of the countries, and thus weaken the position of the other. So the competition is not for gas, but for an international image between Morocco and Algeria.



Competition to establish a sphere of influence in the North African region will increase. The EU can benefit from the increased number of gas suppliers it is currently very dependent on. The party with the stronger conviction will win. However, in the case of African countries, the winner will be the country that will finalize the project and puts gas pipeline into operation (Hatim, 2021). Morocco and Algeria may strengthen their geopolitical position, and Nigeria may expand their sales market.

From the point of view of the interests of the European Union, diversification of supply sources is welcome, especially if the raw material comes from a new source, Nigeria is a young player on the European gas market. Nigerian gas will be an alternative to Russian and Algerian gas (How Nigeria set Algerian regime back on its heels on Sahara issue, 2020). On the other hand, the Russian Federation and the US, which are currently actively competing for the European gas market, may try to block both gas pipelines, as they may weaken their position on the European market.

At the moment, both projects are at the same stage of progress (in terms of feasibility studies), the ambitious plans of the Moroccan and Nigerian governments to finalize the project by the end of 2025 seem unlikely, so Algeria still has full freedom to negotiate with Nigeria on the possible resumption of the Trans-Saharan gas (Louadj, 2020).

If the project is successfully implemented, the Morocco-Nigeria gas pipeline will ensure Abuja the position of the leading African energy center, supplying natural gas to many countries of the continent and the EU (Morocco In The Process Of Setting Up Firm For Nigeria Gas Pipeline Project, 2021). On the other hand, if the Trans-Saharan gas pipeline is completed, Nigeria's role will be reduced, as Algeria will seek to be recognized as an energy hub. Economically, Nigeria has more to gain from partnership with Morocco than with Algeria. The lack of economic transparency on the part of Algerian state institutions discourages international partners from launching joint projects in Algiers. The Kingdom, on the other hand, is fully transparent about its economic situation, regularly updating the official macroeconomic indicators (Morocco In The Process Of Setting Up Firm For Nigeria Gas Pipeline Project, 2021). The Nigeria-Morocco pipeline has received international support because it would benefit not only the countries launching the project, but all West African countries off the Atlantic coast. While the Trans-Saharan pipeline would only benefit Nigeria, Algeria and, to a lesser extent, Niger. Another argument in

favor of the Nigeria-Morocco gas pipeline is that, unlike Algeria, Morocco enjoys unparalleled political and economic stability in the region, which increases the Kingdom's chances of launching and maintaining visionary, long-term projects (Morocco In The Process Of Setting Up Firm For Nigeria Gas Pipeline Project, 2021).

Provided that the situation in Niger, southern Algeria, and Mali stabilizes, the Morocco-Nigeria gas pipeline project and the Algeria-Nigeria gas pipeline project "can successfully complement each other, as is currently the case with the Maghreb-Europe gas pipelines via Morocco and MedGaz, connecting direct from Algeria with Europe (Gazoduc Maroc-Nigeria: les études sont toujours en cours, 2018).

The main problem currently blocking the project towards Morocco is the pending status of Western Sahara. On the other hand, in the case of the gas pipeline towards Algeria, the biggest problem is terrorism and the unstable situation in the Sahel region. At present, it is difficult to say which of these problems is easier to resolve. The final decision as to which of the projects will be implemented first, and which will be rejected or postponed indefinitely, rests with Nigeria. The difficult situation in the Niger Delta raises many questions in the context of the prospect of building new gas pipelines from Nigeria to Morocco or Algeria, as this region is the main starting point for both gas pipelines and the stabilization of the situation in this part of Nigeria is a key element (Nigeria: Trans-Saharan Gas Pipeline Project behind schedule, 2018). Nigeria should take full control of the situation in the region and take care of its security, because without this, none of the gas pipelines has a chance to be built (Moroccan-Nigerian Pipeline Puts Final Nail in Algeria's Trans-Saharan Gas Project, 2017).

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