



NATURAL GAS & LNG STRATEGIES
SOUTH EASTERN EUROPE

covalor@outlook.com
cyrilleemery@hotmail.com

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Messieurs,

We are a pleased to offer you this free strategic newsletter about natural gas and LNG in the Balkans and South Eastern Europe.

We hope it will assist your decision making and we stand ready to assist you if you have projects in this region.

We look forward to reading from you.

Cyrille EMERY, LL.B, MBA
Managing director

OVERVIEW OF THE INFRASTRUCTURE

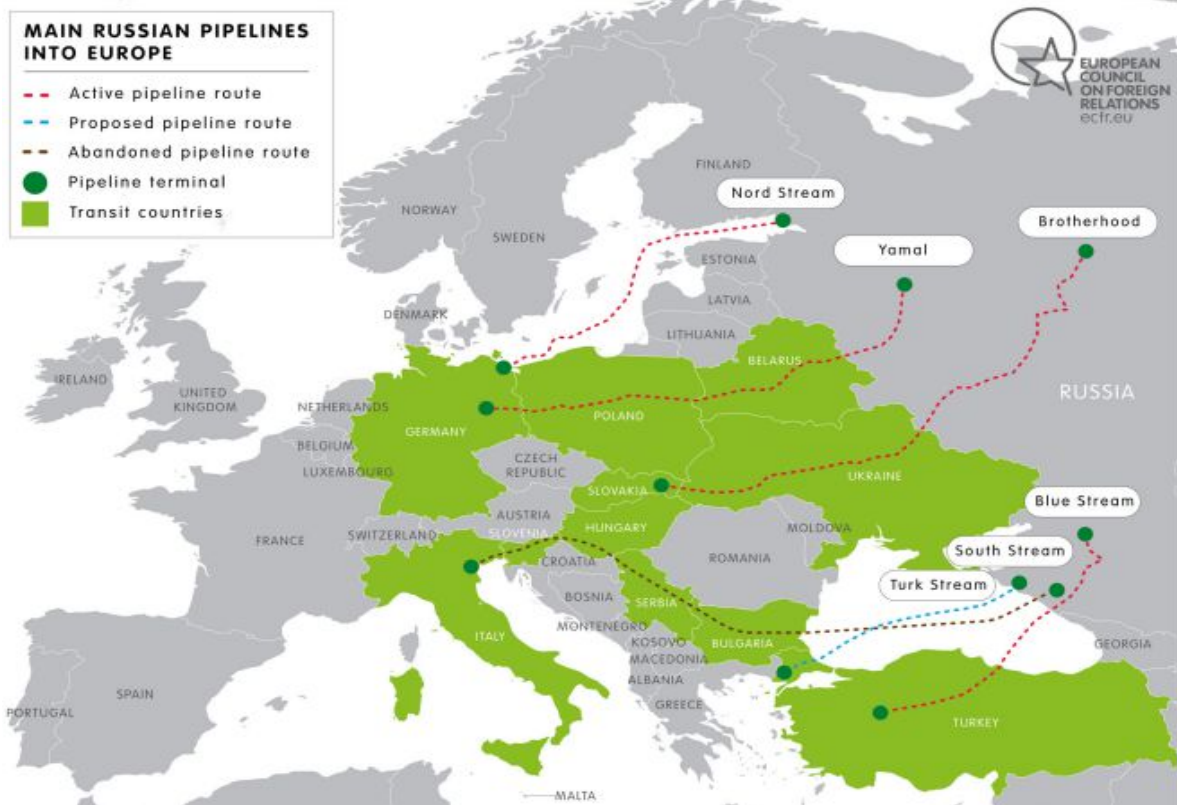
Gas and oil transport infrastructure in S.E.E.



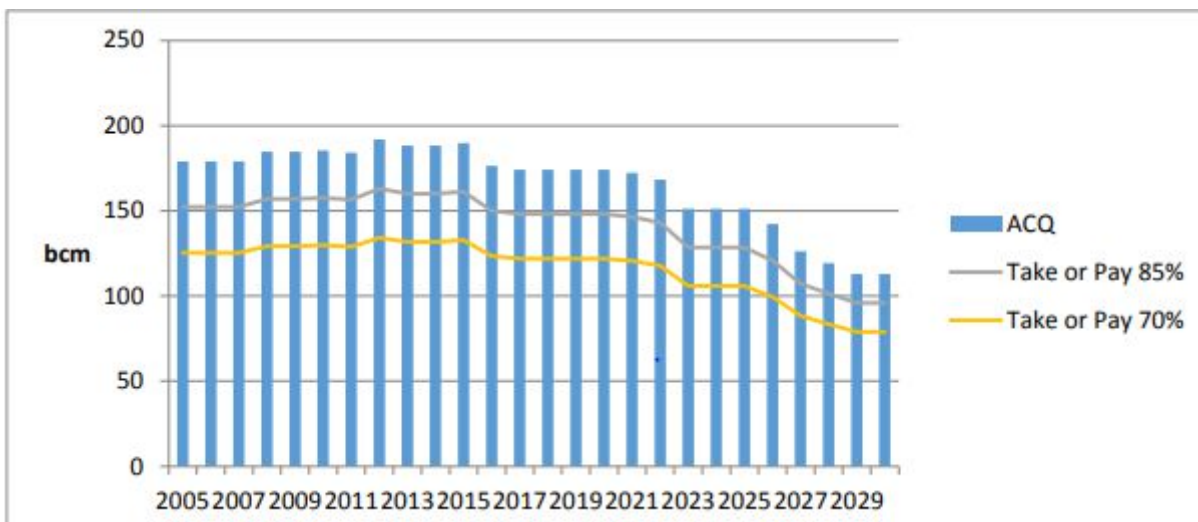
New gas pipelines options in SEE



Source: <http://aea-al.org/lng-in-europe-an-overview-of-european-import-terminals-in-2015/>



Russian long term export contracts with OECD (Oxford Institute of Energy Studies)





Forewords

Since the 1960 gas trade between Europe and Russia had been remarkably stable and survived the ups and downs of the Cold War and other political turmoils. Today Russia is considered an indispensable partner and accounts for almost 40 % of its natural gas imports. However this relationship has not come unnoticed by the other major European partner, the USA, wary of such dependence.

The enlargement of the European Union to Eastern countries, formerly Russian satellites, skeptical about maintaining strong ties with Russia, together with an aggressive foreign policy by Putin had changed the landscape of the European natural gas markets. The diversification of sources of supply has taken center stage in the European Energy Policy. However the supply of natural gas from Russia is still a highly controversial matter. The Nord Stream 2 pipeline is a case in view.. In a 2017 piece from Buck Thomas , the Financial Times explored the divisive issues that it creates amidst European countries and their partners. The USA, since the shale gas expansion that made it an exporter of LNG has been particularly vocal, threatening sanctions against participating companies to the project. European countries that derived an important budget contribution from transit fees are also critical of the project and cannot fathom to lose such sums. Germany, the main proponent of the project is under the limelight of critics and, some commentators are of the opinion that it will seriously dent the German credentials as the country leading the unification of the European Union. Yet, with Nord Stream 2 and interconnection with Central Europe countries, Germany is poised to become a major (natural) gas hub.

This is against this backdrop that we present our strategic letter about South East Europe and the Balkans natural gas markets. The region is contemplating becoming a natural gas hub and an important transit area of gas to European markets. There are of course some crucial reforms in governance and welfare to be made before it becomes a reality. South Eastern Europe is still one of Europe's region where lignite/coal are dominant commodities in the production of energy. Political cronyism and governance issues are also at stakes..

We look forward to reading your comments and hope that this letter will assist you in navigating these uncharted territories.

Yours faithfully

Cyrille EMERY
Managing director
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1) Introduction

Recent developments at the borders of Ukraine, where Russian troops are said to gather in force, renew the claims that the European Union should reduce its dependence from Russian gas. It has been reported that during the last round of negotiations in Geneva, US officials approached some of their EU counterparts to offer special delivery of LNG supplies in case Russia stops the pipeline flows (<https://www.reuters.com/business/energy/exclusive-us-talks-energy-firms-over-eu-gas-supply-case-russia-ukraine-conflict-2022-01-15/>) .

The increased tensions at the borders of Ukraine revive the talks of international sanctions threatened against Russia if it invades the country. In turns it might lead to retaliation measures from the latter. However through out tensions and conflicts between Russia and Ukraine/EU, the parties have always shown some extraordinary restraint in not escalating the conflict and, above all , not disrupting the trade in natural gas. The current talks in Geneva about the future of Ukraine will certainly end up in a “mexican standstill”.

Moreover the EU, through the different stages of territorial conflicts and political brinkmanship between Ukraine and Russia has recognised the needs to diversify not only the routes but also the sources of supplies.

Although the hands of the European Union are tied by markets dynamics it remains focused, as a political power, on diversifying sources and providing energy security. “Pipelines diplomacy” is seen as a way to achieve political integration of weakest EU members but also, on a broader sense, to allow for EU diplomacy to break the stalemate across Mediterranean countries and driving in roads into the Caucasus and Central Asia..

How does this will fit with South Eastern European countries as a future gas hub since those countries suffer from a lack of investments in new infrastructures and the existing ones are obsolete. The EU set up the High Level Group on Central and South Eastern Group Energy Connectivity (CESEC) which met officially for the first time in February 2015. As per the official statement the aim of this group is to *establish a regional priority infrastructure roadmap to develop missing infrastructure and improve security of gas supplies* (each country must have at least 3 different sources of gas supply).

In 2008, the EU set up the EU Neighbourhood South Initiative, led by the Union for the Mediterranean, to promote economic integration and cooperation amongst its 15 members whose aims are to create “*an integrated Mediterranean energy market and to promote renewables*”

This was diplomatically reinforced in 2021 when members declared that they intend to reinforce cooperation on ambitious targets for energy sustainability in the Mediterranean.

With the hindsight of the current energy crisis and rocketing prices it is very probable that some projects in the region will be revisited. Not only to fend off Russian and Chinese interests in the same regions but also to achieve affordable energy supplies objectives.



2) Geopolitical context

South Eastern European gas market is at the confluence of global security concerns which may hinder its development and the security of supply that the EU is actively promoting. The recent developments in Ukraine and Belarus should serve as reminders that some countries are not playing by the textbooks of post Cold War search of stability..

The consensus as enshrined in the following conventions Helsinki Final act (1975), Charter for Europe (Paris 1990) and the Budapest Memorandum (1994) have gone down the drain as Russia is trying to regain influence in the ex soviet Republics through various means. Western countries were made to understand that some rogue states could try to topple the world order by any means (cue current Belarus actions at the borders of the EU)

The 2014 invasion by Russian forces of Crimea had been the tipping point, followed by a protocol between Ukraine and Russia about the presence of Russia's naval forces in Sevastopol (Kharkiv Agreement supposed to last until 2042). It has made the Black Sea an unsecured place for energy investments. Russia has regained military influence over the region outreaching to Middle East.

Altogether with military intervention, Russia's diplomacy has been deploying efforts across the Black Sea's countries, to regain control over energy routes by either regional or bilateral agreements.

The Lisbon Treaty (2007) was the framework for a shift of authority to the EU institutions to implement a common energy policy. After the Crimean invasion in 2014 by Russian forces, the issue of the security of energy supply was raised by the then president, Mr Donald Tusk. The Commission took the lead role and implemented in 2016 the Energy Security Package. The Commission was in charge of the coordination of natural gas supply and implemented regulations and recommendations that favored importing countries over providers and fostered competition between the various actors. The aim is to create an integrated European market in energy and several initiatives have been shaped :

- North-South Interconnection (NSI West gas)
- North South Interconnection in Central Europe and Southern Europe (NSI east)
- Baltic Energy Market Interconnection (BEMIP Gas)
- Trans European Network for Energy (TEN-E)
- Southern Gas Corridor (SGC)

The latter is of significant importance for the EU as it is crucial for the import of natural gas from Azerbaijan and the Caspian region.. The aim is to create a route to divert gas away from Russian reach via Turkey and then connect to Italy through the Trans Adriatic Pipeline. Azerbaijan is the major country supporting the SGC together with Turkey which wants to become a regional gas hub and a major transit centre.

As a commercial venture the SGC has few merits but most commentators believe it to be a geopolitical project from Europe, compliant to its projection of soft power and to its security of energy supply...



a) Azerbaijan

At the collapse in 1991 of the Soviet Union, Russia was faced with a new geopolitical dynamic with the constitution of independent countries, some of them keen to align with Western economies. In the Caucasus, Azerbaijan, Georgia, Armenia adopted quite rapidly a pro western orientation. Azerbaijan under the presidency of Aliyev became a destination for foreign investments in the energy sector. The Azeri government having recognised quickly the crucial role its vast energy resources could play in the development of the country without Russia's hegemonic role.

In 1994, they signed the first Production Sharing Agreement (PSA), hailed as the "Contract of the Century", for the oil produced in the Chirag and Guneshi oil fields. This was the cornerstone of their new energy policy. In 1996, they signed a PSA with British Petroleum for the Shah Deniz gas fields... Since then they have signed over 30 such agreements with foreign companies and are expecting, by 2020 onward to provide additional gas to Europe from Caspian Offshore fields (Asharun, Umid, ACG Deep).

In a region afflicted by ethnic conflicts, Nagorno Karabagh conflict with Armenia, Ossetia uprising in Georgia, Azerbaijan tried to maintain a delicate balance of power with Russia in the region. The latter having favored the Ossetia independence, mistrust was high as there was no sign of the Russian influence waning (they sent troops into Georgia in 2008). Russia succeeded in 2000 to attract under its powers the independent Abkhazian Republic, not recognised by Georgia.

Russia used all tactics against Eurasian countries to remain influential in the area by delivering subsidies upon acquiescence of Russian demands, forcing indebted countries to hand over energy assets...

The role of Russia, intertwined with nationalist resurgence, in newly created countries did not meet a strong opposition from the international community. Russia has been often accused of steaming up conflicts in order to keep a significant role in the region. The EU took time to build up consensus within its members with regards intervention in the region and was not in a position to leverage its economical weight as it could not offer integration opportunities.

The recent peace deal signed by Azerbaijan, Russia and Armenia has not alleviated the concerns of the former which sees Armenia normalised its relation with Turkey. It shall be remembered that Azerbaijan is facing pressure at its border with Iran, which is an important provider of gas to Turkey and had supported Armenia throughout the conflict. Iran has been in open conflict with Azerbaijan since the independence (religious conflict).

Nevertheless Azerbaijan is yet the only country that can provide gas, albeit at a high price, to Europe and the major partner of the Southern Gas Corridor. It is also planning to be the transit country for Turkmenistan (avoiding the Iran and Russia routes) and Uzbekistan's gas to sell into Europe. This has been simplified since the international agreement on the Caspian Sea which now recognises it as a "sea" and defines Exclusive Economic Zones (EEZ) for riparian countries.



b) Turkey

Turkey was heavily dependent on Russian natural gas and relations with Russia have deteriorated since the former had gunned down a Russian plane...Turkey's relations with the EU also have been strained by the question of EU membership and the ambiguous role it plays in the East Mediterranean as well as in neighbouring countries (Syria, Iraq). However since 2020, the Russian share of natural gas in Turkey has dropped significantly and has been replaced by Azeri gas.

Russia and Turkey enjoy nevertheless pragmatic diplomatic relation that has seen the latter shying away from the Crimea's illegal annexion by Russia. Despite a large community of Turkish Tatar in Crimea. In the same line of pragmatism, commentators believe that Turkey will continue to use the Montreux convention to prevent any foreign naval forces from entering the Black Sea.

In the East Mediterranean, Turkey has recently signed an international agreement with the UN backed Libyan government over disputed Maritime Exclusive Economic Zone.. This bold move, in response to actions from Israel, The Greek Cypriot Government and Lebanon, places Turkey at the heart of any decision regarding the recent gas discoveries in the East Mediterranean region.

Turkey has the ambition to become a gas hub in its own right in the regions. First of all because it is one of the main consumers in the region and is an important transit country for Eurasian and Caucasian as well as Middle Eastern gas (Iran, Iraq, Syria..);

Since 2010, Turkey has aligned its internal market to the European standards as it sees its role as a hub for gas to Europe. These changes were supervised and assessed by the World Bank under the label " Structure 2010" . which envisioned a complete change in the whole gas market, in accordance with the Turkish law on Natural Gas 2001. The changes required the elimination of BOTAS monopoly on import of gas and ensuring a fair competition..

Being a transit cornerstone of the Southern Gas Corridor Turkey has managed to extract concessions from Russia on gas deliveries and price. However it has been argued that, through the replacement of the South Stream (non EU compliant) by the Turkish stream, Russia has strong-armed Turkey into a project which is not economically viable. It is also argued that Russia is freeing itself from the shackles of the EU's Third Energy Package (cause of the South Stream demise) by delivering its gas at the Turkey-Greece border.

By doing this, Russia is keeping a foot in the distribution network of gas to Europe and the opportunity to keep the flow of Russian gas going. Gazprom also acquired gas wholesalers in Turkey. This has not escaped the oversight of Turkish government with their Prime Minister, Mr Erdogan, declaring that the ambition of Turkey was not to be only a transit country but also a producer in its own right. This could happen with the discovery of large reserves in its EEZ in the Black Sea and with the disputed gas fields around Cyprus.



3) Southern Gas Corridor

The Southern Gas Corridor is an Azerbaijan – Turkey route comprising the following elements :

- The South Caucasus pipeline, parallel to the Baku-Tbilissi- Erzurum pipeline (BTE)
- The Trans Anatolian Pipeline (TANAP) which runs from the Georgian-Turkish border to Greece border
- Trans Adriatic Pipeline connecting to Italy. It is planned to connect with the Ionian Adriatic Pipeline to supply gas to Bosnia, Montenegro, Slovenia, Croatia and Herzegovina.

To complement this infrastructure, there are an existing network of other pipelines :

- The CAC pipeline (Turkmenistan)
- The Buchara – Ural pipelines
- Korpejke- Kort – Kuy (KKK) pipeline (Turkmen and Iranian gas)
- Tashkent – Bishekek- Almaty (TBA)
- Baku – Tbilissi- Ceyhan (BTC) pipeline (Azerbaijan-Georgia-Turkey)

This network of pipelines spans across Turkmenistan, Uzbekhistan and Kazakstan.

It must be noted that Russia and Turkmenistan signed in 2003 a Long Term Contract (LTC) for a duration of 25 years for the latter to provide gas to the former. The contract was highly favorable to Gazprom interests. It also prevents Turkmenistan to export gas to Europe.

This reduced the amount of gas that TANAP can provide into the Southern Gas Corridor and there are other countries trying to compete with it. China is investing in energy assets in Kazakhstan, although there's the vexed question of Ouighours and other Kazahks people living within its borders.

Iran is also not really interested in sending gas into the TANAP as it sees it as a project that will enforce Western influence within what is considered its backyard and sphere of influence. Moreover it is not quite sure that if production started there will be enough gas to export once Iranian domestic demand is satisfied.

Although the long vexed issue of the legal statute of the Caspian Sea has been solved recently through an agreement creating Exclusive Economic Zones (EEZ) for each riparian states, Russia and Iran are still calling for some specific measures and a veto right for each pipeline that could be laid in the sea.



The South Eastern Europe and the Balkans a fertile playground for natural gas and LNG.

The above reflects on a traditional geopolitical view of the energy supply, linking point A to B through transit countries and on an outdated vision of the definition of energy security. The gas market has evolved through the disruption caused by the affluence of LNG from various suppliers, changing the ways markets are being constructed. This in turned modified the definition of what is considered security of energy from “availability of energy at all times in various forms and sufficient quantities at an affordable price” into the “effective management of primary energy supply from domestic and external sources, reliability of energy infrastructure and ability of suppliers to meet current and future demands” (Dusciac-Robu “Economic Diplomacy in the Energy sector in the EU and Eastern Vicinity”).

The south Eastern Europe and the Balkans are to be considered under the view of new geopolitical definition of gas market where it forms out of the direct link between suppliers and buyers and adapt to new entrants whether upstream or downstream. Historically gas trade was a point to point trade from “dedicated resources to dedicated markets”, LNG has changed the way the market is being operated with spot cargoes, new contractual relations, shorter terms.

Moreover the Southern East European gas market is about to being fully interconnected with the EU network of pipelines. Under the 2016 European Energy Security Package, the EU coordinates the material supply of gas and have implemented following projects :

- North South Gas Interconnection (NSI West Gas)
- North South Gas Interconnection in CSEE (NSI East Gas)
- Baltic Energy Interconnection Plan (BEMIP-GAS)
- Trans European Network for Energy (TEN-E)

Technical progress has also made building LNG projects less expensive and it is a possible way for SEE to enter the fray at lesser cost rather than, as some commentators argued, extracting rents from the transit of gas.

Given the precarious and acrimonious relationq between the European Union and Turkey, South Eastern Europe should be seen as a “route for gas into the EU” on its own merits and provide for additional diversification of supply, chiefly from the Eastern Mediterranean discoveries

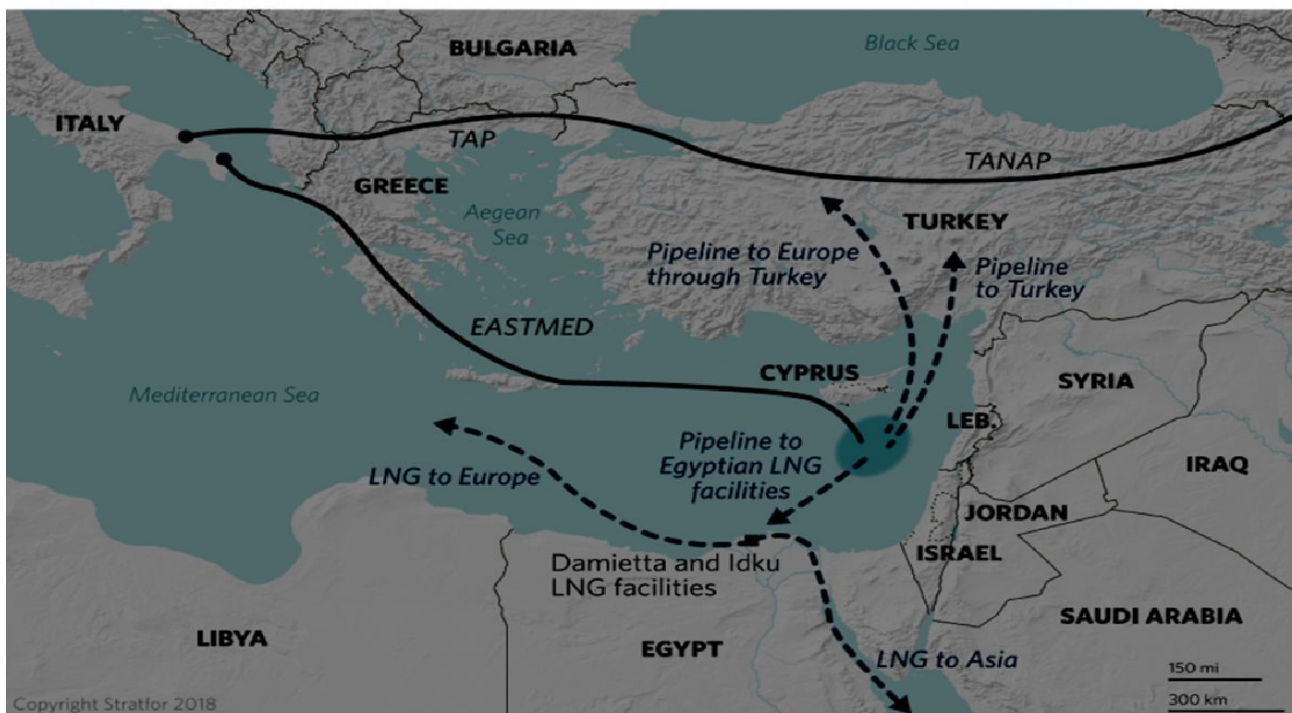
The Eastern Mediterranean reserves

The recently discovered reservoirs in the region are :

- Cyprus : Aphrodite gas Field, block 12 (discovered in 2011) : holds 3 to 6 Tcf
Calypso gas field (discovered in 2018), holds about 6 to 12 tcf
- Israel : Tamar Reserves (2010) : holds approx 10 tcf
- Egypt : Zhor Gas field (2015) : holds approx 30 tcf
- Lebanon : Levantine Deep Marine Basin : holds approx 2tcf

Through these discoveries the EU can contemplate being less reliant on Russian gas and to diversify the supply of gas. They can also foster the diplomatic will of the European Union to have a pacification of this part of Mediterranée and to export its model of regional cooperation through convergence of values and economic model.

Potential Export Routes for Eastern Mediterranean Gas



(source : Fondation for Strategic Research)

However the wider region is prone to instability due to the various wars fought in it and the competition between USA/EU and Russia for the control of the Middle East and Center West Balkans as well as an internal contest between the USA and France+Germany and France vs Germany vis à vis the controle of the Center West Balkans (*Fondation of Strategic Research*).



According to geopolitical expert, Michael Tanchum “Geopolitics of the East Mediterranean Crisis”, the 4 major players in the region’s strategic re-organisation are : Egypt, France, Italy, Turkey. France and Egypt having established long term partnerships to oppose the expansion of influence from Turkey

Turkey is also claiming the region as sphere of influence where it can deploy its “*neo ottoman*” regional policy. The discovery of vast marketable reserves of gas in the Cyprus region by ENI, the Italian NOC, which intended to market them using Egypt infrastructure and by-passing Turkey has ignited the ire of Ankara which started gunship diplomacy. During that time Cyprus sold gas to Egypt’s LNG plants for export and Israel, which initially thought of going along with Turkey, followed suit. Turkey escalated the tension by implementing the policy of “Mavu Mati”, challenging coastal waters of Greece, Cyprus and Egypt..

To avoid escalation in the area, the Eastern Mediterranean Gas Forum was created with Egypt, Greece, Italy, Cyprus, Palestinian Authority and Israel. France asked to join and the EU and USA are asking for observer status.

Facing isolation, Turkey then turned to Lybia’s GNA and signed in 2019 an agreement over maritime EEZ and a security agreement. This move caused a seismic shift in NATO’s allies clearly acting against Turkey expansion in the area. A front encompassing Egypt and France, with UAE, is the staunch opponent to such ambition. Italy is poised to join France despite a pragmatic relationship with Turkey; ENI (the Italian Oil Operator) has strong interests in the area. Turkey then tried to move beyond the Eastern Mediterranean region by forging alliance with Qatar and developing ties with Sudan.... However the move did not prove particularly successful and Turkey is now isolated.

Given the current tension at the Ukraine’s and Belarus borders, the East Med pipeline connecting Cyprus to Greece then Italy should gain traction. It was a Project of Common Interest for the EU back in 2015 but has been delayed.

In 2017, Gazprom reached agreements, but the practicability is yet to be assessed, for the following routes :

- The Greek Stream route via Turkey, Greece to Italy reviving the ITGI Poseidon project,
- A Northern route via Serbia and Hungary leading either to Trarico (Italy) or the Baumgarten hub in Austria.

Another sub-system of the region is what is termed the “Mashrek countries” (Iraq, Syria, Lebanon, Jordan, Israel and Palestinian Authority) which are complemented by Iran. They all have aspired to connect their power and gas grids to the European system.

Those countries have joined following EU projects :

- Euro- Arab Mashrek Gas Market Report (drawing of a masterplan);
- Euro- Mediterranean Energy Market Integrator (MED-EMIA)
- Mediterranean Working Group on Electricity & Gas Market (MED-REG)
- Mediterranean Electric Ring (MED-RING)

South Eastern Europe : the alternate route for gas into Europe

TURKSTREAM SET TO TRANSFORM SOUTHEAST EUROPEAN GAS MARKET



Source: S&P Global Platts



Under the theory of the “*Regional Security Complex*” (*Copenhagen School of Security Studies*), it has been argued that Turkey, being at the same time a buffer zone for Middle East, Europe and Russia and at the convergence of 3 other RSC could not play a rôle in the security of its neighbours. Despite an escalating military rethoric and gunship diplomacy in the Eastern Mediterranean Region, Turkey is now being isolated from its neighbours. Although they tried through military assistance in Libya and partnership with Qatar to break such impasse . Their recent moves beyond the Middle East region had not proved too successful. The continuation of their pragmatic diplomacy towards Russia, to promote Turkey as a broker in the Black Sea and Caucasius , may also hinder their efforts as Caucasian countries are eager to join NATO’s umbrella.

The EU is still trying to project its soft power for regional cooperation and have launched back in 2004 the EU Neighborhood South Partnership to reclaim part of its influence in the region through various programs :

- 2008 : Union for the Mediterranean which intends to create an integrated Mediterranean energy market and to promote renewable energies;
- 2008 MOU on strategic Energy Partnership with Egypt
- 2015 EU/Algeria Strategic Partnership on Energy which is integrated in the bilateral configuration of EU/Algeria

In 2020 the EU launched the South Eastern-Eastern Europe Gas (SEEGAS) platform under the Energy Community Secretariat to develop cross borders trade and transparent pricing. However the project is being scuppered by Slovakia refusal to participate.

South Eastern Europe and the Balkans at large are now at the forefront of the fight for influence of Russia, the EU, Turkey and China. International diplomacy to stop infighting between some of the Balkans countries have not yet seen a positive result ; lingering ethnic and religious dissents, kept alive by Russia, are making the region a risky investment proposition.

The EU should have been the most influential partner as it represents almost 70% of FDI in the region. Its efforts are thwarted though by the walking back from the promesse of the enlargement made in 2003, at the Thessaloniki Summit. The promise was repeated in 2021 at the Kranj Summit after an EU internal squabble between EU members as to what term should be used : enlargement or integration.

China is using such apathy to make in roads in the region by lending to infrastructure creation at a heavy cost for indebted governments.

Since Europe may not have access to the Black Sea to create LNG/ Gas imports terminals, it is important that South Eastern Europe is getting on board the EU bandwagon. There are some very important issues to solve : heavy reliance on governments and problems of governance as well as some pressing economic issues. The energy market in the region is very opaque and used to work on a “stick and carrot” system. It must also be said that the quasi monopolistic provider in the region is Gazprom.



Due to various historical factors, Bulgaria is becoming a de facto energy hub in the region. It imported in 2019 US LNG from the Greece Revithoussa terminal. It is expected that LNG will enter the Bulgarian energy mix as underlined by their Minister of Energy who sees it as a first step of the liberalization of the market as well as strengthening Bulgaria's position as Balkan gas Hub..

CONCLUSION

With regards to the current state of affairs at the borders of Ukraine and Belarus and rumours about Gazprom reducing gas deliveries to the EU, it seems wise that the EU use its influence across the Mediterranean region to diversify supplies as well as routes into its realm.

Following factors should be taken into consideration.

Russia is trying to cultivate diplomatic relations with Greece and Cyprus and is therefore unlikely to support the Turkish initiatives in the East Med as it could be detrimental to its relation with the aforementioned countries and set it into collision with EU. There might also be adverse effect in the near neighborhood of Russia in the Caucasus region with Azerbaijan supporting Turkey.

Russia is also not interested into supporting Turkey into its Middle East venture. They are embroiled in Syria where their role as peace broker has backfired badly. Supporting Turkey will be detrimental to their ties with Egypt, Saudi Arabia and the UAE. It will also opposed them to the EU which is favoring a negotiated solution.

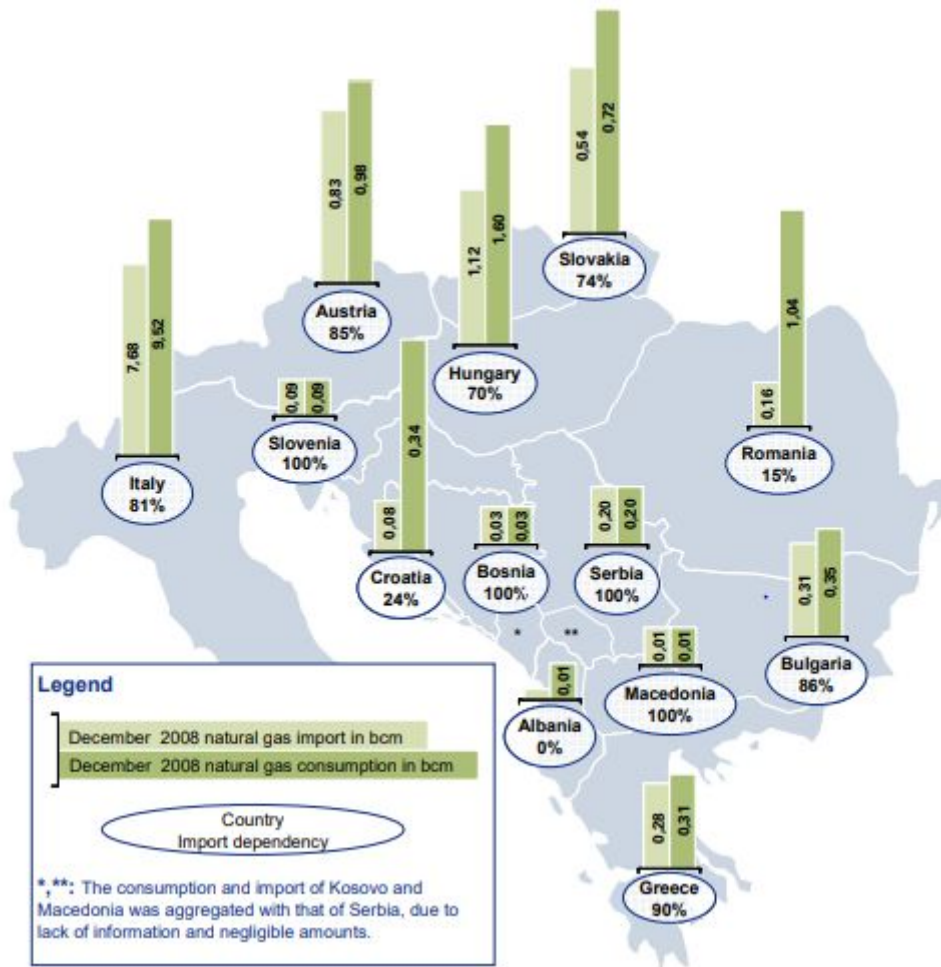
Russia is also trying to protect its European market shares by participating with EU companies in EastMed and Middle East discoveries . They have acquired 30% equity in the Zhor fields (Rosfnet), partenered with ENI and Total in Lebanon and trying to promote Israel gas (as LNG) to the East.

The EU could leverage the potential sanctions against Russia should the crisis escalate in Ukraine to increase its geopolitical clout in the Eastern Mediterranean and by doing so fulfilling its goal of diversification of supplies and routes.

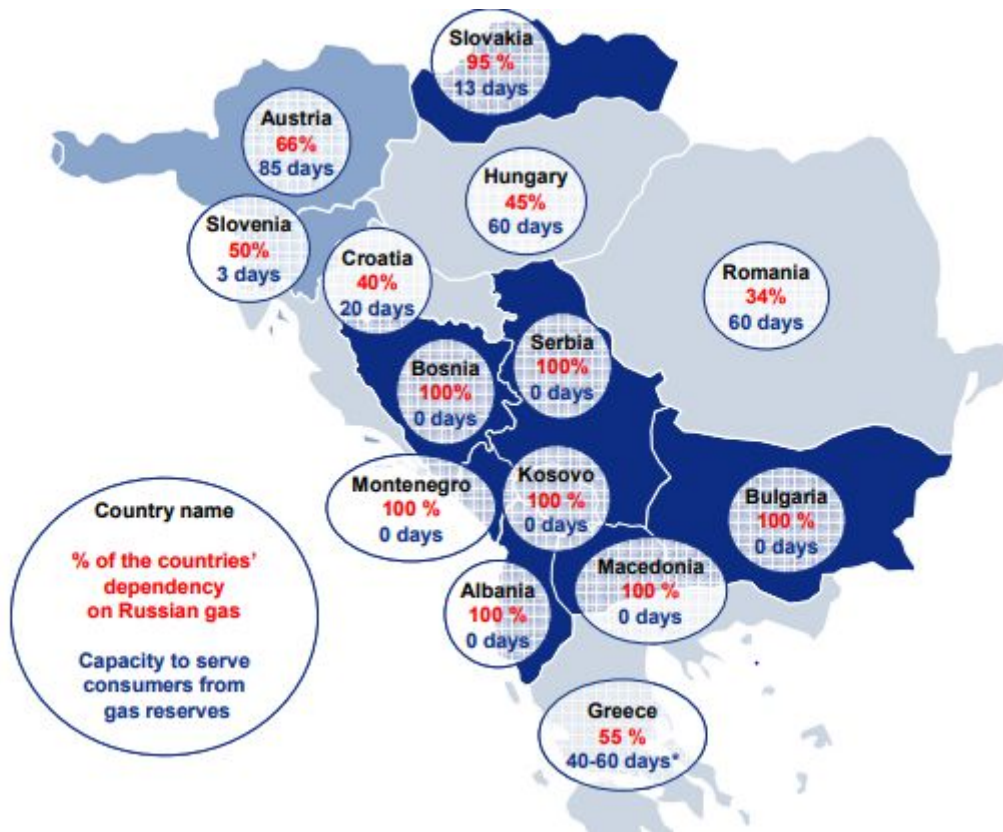
The Balkans should be reclaimed within the EU realm as future transit route and diversification of supplies.

ANNEXES

Natural gas consumption and imports in South East Europe (2008, KPMG)



Dependency on Russian gas in the SEE region.



Planned pipeline projects in the SEE region

- Trans Adriatic Pipeline (TAP) supplying Caspian and Russian gas in Albania and transiting to Italy, through Greek gas network;
- Interconnection Greece-Italy (IGI) will allow the flow of Caspian and Middle East reserves into Italy and Western Europe through Greece;
- Ionian Adriatic Pipeline project (IAP) is going to link the Albanian gas network with Montenegro, Bosnia Herzegovina and Croatia network;
- West Balkan Ring (WBR) is a proposed international gas network system connecting 7 countries in the region improving the supply security of these countries, with supply source from either the Trans Atlantic (TAP), Ionian Adriatic (IAP), Nabucco or the South Stream pipelines;
- LNG terminal at Fier in the Adriatic coast and an undersea pipeline to supply gas to Italy.



Coal in Europe 2020

lignite production, hard coal production & imports

EURACOAL

EU-27	million tonnes
lignite	244
hard coal	57
imports	89

