

“European Energy Independence, Cooperation in East Mediterranean and the Role of Greece”

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A.CAN EUROPE ACHIEVE ENERGY INDEPENDENCE? NEW STRATEGIES FOR OLD PROBLEMS

Energy security and independence in Europe until very recently was not given enough priority or attention, although its role has been recognized in all EU documents. So, diversification of alternative import sources and routes, remains key to decreasing the region's import dependency on any single supplier.

EU has worked during the last 20 years, mainly on the issue of Green Transition. But, the triangle of **Sustainable Energy**, requires three major parameters of equal importance:

1. Green Transition,
2. Energy Affordability/Poverty, and
3. Energy Security.

In short, **the Energy Green Transition alone is not enough as an energy strategy.**

As a result, after the Russian invasion in Ukraine, we are experiencing the worst energy crisis of the last decades. A crisis, which has caused, so far, a wealth export of 800 billion euros outside EU.

The lesson from this crisis is twofold: 1. at least for the next 30 years, we will need plenty of natural gas as a transition fuel and 2. at the same time, we must develop the European, domestic natural sources of supply as much as possible.

So, E.U. must formulate a complete Strategic Plan of both alternative supplies, as well as avoidance of over-dependence from third countries. The above-mentioned events highlight the need for the EU to formulate a **new, modern Energy Strategy Doctrine** for today's world, which is very different from the world of the 2000s.

To use a slogan; let's forget the wrong policy "EITHER Renewable Sources OR Natural Gas" and implement the sober and effective policy "BOTH Renewable Sources AND Natural Gas".

This strategy becomes even more important if we take into account that the transport of green hydrogen in the future will rely on upgraded natural gas pipelines, networks and infrastructure.

Referring to the main energy parameters of the European system, one could mention the following 6 parameters:

1. Over the past 40 years, global natural gas production has increased from 1,400 bcm (1980) to about 4,000 bcm in 2021. According to IEA, an increase in global energy consumption is expected in gas from the approximately 4.0 trillion cubic meters/year today, at 4.5 trillion cubic meters/year in 2050.
2. 58% of global oil and natural gas production comes from state-owned oil companies (NOCs), 28% from small and medium independent companies and the remaining 14% from the very large companies (Majors). Every gap in global hydrocarbon production, due to environmental restrictions, will obviously be filled by the NOCs, whatever this means for geopolitical balances and security of supply for the EU.
3. From the 150 bcm/year of domestic European natural gas production in 2015, this production is expected to decrease to only 30 bcm/year in 2030.
4. During the last year of the crisis, European consumers are getting natural gas at prices seven, or more times higher than their US counterparts and competitors.
5. Within a year (from August 2021 to August 2022) European dependence on Russian natural gas decreased from 39% to less than 10% and correspondingly increased imports of LNG from 15% to 38%.
6. Green energy creates new geopolitical challenges. Minerals demand such as lithium, graphite, cobalt, nickel and rare earths, will increase by up to 20 times (!). China is the dominant country in the Critical Raw Materials market, with the 45% of the market share, while the second USA has only 7% of the international market.

Concluding:

1. EU energy policies, impact all the Mediterranean countries.
2. We must learn from our mistakes.
3. Europe cannot be indifferent (uninterested) to East Mediterranean, a region which can provide enough natural gas to EU, as a new, reliable source.
4. We cannot allow our future energy system to rely on 100% imported equipment.
5. We must ensure that key technologies are also produced in Europe.

6. We must ensure that we develop all our available energy natural resources. Otherwise, we're just paving the path for repeated and possibly even more acute price surges in the future.

B. REGIONAL COOPERATION IN EAST MEDITERRANEAN

East Mediterranean represents a key area for the diversification and stability of markets in the medium term, guaranteeing EU's direct and continuous access to one of the world's largest reservoirs of natural gas, renewable sources and new energy sources such as hydrogen.

East Mediterranean, mainly the Israeli fields Tamar and Leviathan, the Cypriot Aphrodite and the Egyptian Zohr, have total proven reserves that exceed 1.800bcm and their total annual output capacity is more than 70bcm/a. This output from the three countries can reach to 50% of Russian exports to Europe which were about 130bcm/a before the invasion in Ukraine. The changes in energy balances and European security issues, are obvious. Besides the above, the Greek National Hydrocarbon Agency estimates that the offshore identified geological structures in the Ionian Sea and South and West of Crete, could host extractable reserves of natural gas, reaching 2.000bcm.

The enhancement planned for the Israeli fields already in production would be sufficient to guarantee exportable volumes via EastMed pipeline, complementary to the two existing Egyptian LNG Liquefaction Plants in Idku and Damietta, whose combined full capacity is 15bcm/a.

The direct connection to the fields already operational in Israel and to those in Cyprus will favor the formation of new price signals, making it possible to balance exposure to the LNG market, which by its nature is flexible, but which guarantees volumes only at the marginal price of a global market.

Having in mind the 2050 deadline for decarbonization agreed by EU member states, there is little time for solving the various economic and technical problems, as well as the geopolitical disputes. Energy can become a strong link of regional cooperation, instead of a barrier

It is evident that the necessity for extremely higher amount investments on "green" actions for Mitigation, Adaptation and Resilience, requires new and very generous financing globally, in developed and developing countries.

The solution can only be provided by forming a modern, international, **Climate Bretton Woods**, similarly with the respective Bretton Woods agreement 77 years ago, after the end of the World War II. At that

conference in 1944, 44 countries decided on the fixed exchange rate of currency, so that post-war international growth could progress without fiscal issues.

Now, a **Global Climate Bretton Woods** must be launched and coordinated by strong economies, expand the goals of major financial organizations, such as IMF, World Bank, ECB, FED, etc. in order to allow them to fund major projects of Circular Economy and Decarbonization all around the world, especially in developing countries

All the above may be further supported by working with our neighbours who respect International law and Law of the sea, to increase regional cooperation in energy, environment, coastal protection, Research and Technology and also to promote bilateral trade. The problem is that the current situation in east Mediterranean is unprecedentedly tense ; we should go back to the wars of 1967, 1973 and the Turkish invasion to Cyprus to find such a condition.

The reasons are multiple, but it may be the first time that we face, a convergence of different, highly negative factors, of various kind and scale:

- various military conflicts in many regions like Syria , Libya , unstable Iraq etc
- continuing Turkish occupation in Cyprus ,
- Middle East problem
- negative impact from destabilization in further areas , like Afghanistan , the horn of Africa, Sahel, etc.
- the global geo - energy strategic problem of energy commodities security and sufficiency
 - migration, a strategic problem of grave magnitude , which is neither occasional nor of geographically regional character; I am sorry to say that its seriousness has not been understood by our European continent ;
- the climate change ; only to mention the desertification of arable lands in Sahel, droughts and famine in combination with rapid demographic increase in those areas and of course
- the war in Ukraine; a dangerously bleeding wound in the heart of Europe.

What to do, ourselves? **To cooperate!**

The 3+1 initiative, with the participation of USA and EU as observers, in the strategic cooperation of Greece, Israel and Cyprus, formulates a stable basis of regional cooperation.

The operation of East Med Gas Forum, where Egypt, Greece, Israel, Palestinian Authority, Cyprus, France, Italy, Jordan participate, is a very useful platform of regional cooperation on energy issues.

East Mediterranean area may grow into a new, hopeful source of energy supply for the whole E.U.

This truth must be clear to all European capitals.

C. THE ROLE OF GREECE

Referring to Greece, let me mention the existence of TAP, EastMed pipeline, IGB pipeline and its extension Vertical Corridor, the Alexandroupolis FSRU infrastructure, the Revythousa LNG station, the natural gas pipeline with Northern Macedonia, the planned seabed electrical connections Euro-Asia Interconnector between Israel, Cyprus and Greece, the Euro-Africa Interconnector between Egypt and Greece, are all top projects for the entire Europe.

The EastMed pipeline, the only new route, from a new source (East Mediterranean) for providing natural gas to the European economies and societies, since 2013 has been included in the list of European Projects of Common Interest -PCIs for funding, is a 2,000 km long pipeline, starting from offshore Israel, passing through Cyprus and Greece and finishing at Italy. When both its lines will be in operation, it will carry a total of 21 bcm/year. Its construction is expected to be completed within 36 months, with a total investment of €5.2billion, and a life cycle that will exceed 50 years. It will allow the transportation of hydrogen, and the synergy with RES will be available along its route.

Furthermore, the two electric cables under construction, with 2,000 and 3,000MW respectively of renewable electricity each, connecting Asia – Europe (EuroAsia Interconnector) and Africa – Europe (EuroAfrica Interconnector) will also contribute deeply in boosting the energy role of the region.

Thus, along with the **Diplomacy of pipelines**, a new, internationally and regionally useful energy aspect, is the shaping of the **Diplomacy of Green electric cables**.

Greece has already made agreements with neighboring countries, on the delimitation of the EEZ with Italy and Egypt, by applying International Law, while it has agreed with Albania to refer the issue to the International Court of Justice of The Hague.

Greece has declared, that all existing partnerships are not against any third country, directly or indirectly; peace, stability, upgraded cooperation in our region are the sole clear objectives of these partnerships, which are open to any third neighbor who would wish to join, but on the prerequisite of parity, absolute respect of international Law, and Law of the Sea (UNCLOS).