INTERNATIONAL STRATEGIC INTERESTS AT THE BLACK SEA – ENERGY SECURITY ANALYSIS

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Abstract: The birth, development and propagation of regional and world conflict, as well as its escalation towards military war, global economic interests that converge towards the monopolization of strategic hydrocarbon energy resources, it transforms the Black Sea into a geostrategic space of geopolitical and geo-economic importance, but also with huge potential for confrontation and war. Positioning Romania in an inflection point of interests, in an area of strategic importance, being the buffer between NATO and the Russian Federation (the most important regional actor), it gives us the status of a state provider of regional security and welfare. The Black Sea region is important in that it is rich in hydrocarbons (oil and natural gas), it is an energy transit center and becomes a hot spot for the extended world security because it delimits the border between NATO and the Russian Federation, but also the influences from China.

Keywords: Black Sea; strategic interest; energy security; analysis.

Introduction

The actions of the Russian Federation against the sovereignty and territorial integrity of Ukraine represent flagrant violations of international law and accepted standards of civilized behavior of states and represent a direct threat to security and stability european, with serious repercussions on world order and well-being. The consequences of war are felt in all parts of the globe disrupting supply chains, raising the cost of energy, and, by generating economic inflation and jeopardising energy security, especially in import-dependent countries in Africa and Asia, the post-pandemic economic resilience is jeopardised. (Fita, 2024) Thus, the Black Sea region becomes in these times of crisis, a bigger stake than ever, not just in terms of security, but especially from a geopolitical perspective, with implications on several levels: security, free movement, freedom of trade, energy, security of supply chains, infrastructure, interconnectivity and interdependence. Since the Black Sea is of paramount importance in protecting NATO's eastern and southern flank, it represents the space of confrontation between the Russian Federation and NATO and the defence of strategic interests. For this reason, the Russian Federation can disrupt navigation, create problems for Romania within the exclusive economic zones where strategic energy resources are located, or block access to Odessa. (Fita, 2021)

In this unfortunate context, the Black Sea region meets all the conditions to become a conflict area with the risk of military escalation and global expansion, especially against the backdrop of the global energy crisis and the resurgence of the global hegemony struggle, which includes, among other things, the struggle for (re)sharing areas of control and influence. (Bahnareanu, 2008)

I. Geopolitical, situation and interest analysis to Black Sea

1.1. Geopolitical analysis

Location: *South-East Europe;*

Riparian countries: Romania, Bulgaria, Turkey, Georgia, Russia. Ukraine (see Figure no. 1.1.);

Surface: over $420\ 000\ km^2$; **Volume of water:** $547\ 000\ km^3$;

Depth: 2212 m.;

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 Length:
 1149 km.;

 Width:
 630 km.;

 Bays:
 Odessa;

Straits: a) Kerch (Azov Sea – Black Sea);

b) Bosphorus – Darnanelles (Black Sea – Marmara Sea – Aegean Sea – Mediterranean Sea):

Peninsulas: *Crimea;* **Islands:** *Snake;*

Ports: Constanta (Romania); Odessa, Kherson, Mariupol (Ukraine); Rostov on

Don, Sevastopol, Ialta, Sochi, Feodosia, Kerch, Novorossiisk (Russia); Batumi, Sukhumi (Georgia); Rize, Trabzon, Ordu, Samsun, Zonguldak,

Istanbul (Turkey); Burgas, Varna (Bulgaria).

Strategic resources: The Black Sea is very rich in hydrocarbons (oil and natural gas) and it is

the only large natural pool in the world of hydrogen sulfide liquefied at

high pressure (400 meters).

1.2. Geopolitical analysis

Actors (players):

- a) Russia (state actor/player) the biggest actor/player in the Black Sea;
- b) NATO (non-state actor/player) the most current and important actor at the Black Sea, consisting of the following countries:
 - Romania (state actor/player);
 - Turkey (state actor/player)
 - Bulgaria (state actor/player)
- c) Ukraine (state actor/player) country at war with Russia and joining NATO and the European Union;
- d) Georgia (state actor/player).

Situation:

- In the regional security scheme are involved not only the Black Sea riparian states, but also certain directly involved states:
 - Republic of Moldova and Transhistria (directly involved in the regional security scheme through Ukraine and Romania);
 - Greece and Cyprus (directly involved in the security issue thanks to Turkey);
 - Israel, Iran, Hamas and Egypt (directly involved in the war in the Middle East, through Turkey, which is on the side of the Muslim Brotherhood, that is, Iran, Hamas, Egypt and newer Palestine, which is in the process of becoming a state within Israel);
 - China, which is buying many Black Sea port targets to implement and develop the Silk Road.
- The hydrocarbon basin is mostly under the control of the Russia, which involves a great imbalance of power;
- The evolution of the security environment of the Middle East can be a model of how the Black Sea Region would tend to evolve, if starting from a fairly balanced distribution of control and influence areas (in the Middle East) during the Cold War, it has come to take control by the US Israel binomial over the entire region, except Iran and Syria, and this trend extends to the Black Sea;
- Some of the Black Sea riparian states are part of the Balkan geopolitical equation (Turkey, Bulgaria, partly Romania) and this involves directly but

- also tangentially a number of other states that are located in the Extended Black Sea Region, without being riparian proper (Macedonia, Kosovo, Serbia, Hungary, etc.);
- Recalculating the position towards the European Union and withdrawing the borders of the regions of control and influence realized from the perspective of the Brexit event, including the possible design of similar events;
- Without any exception, all the Black Sea riparian states face serious internal problems being states where there are (sometimes they also manifest) inter-ethnic and inter-confessional conflicts of traditional nature, old in certain cases for hundreds of years;
- Between all the states riparian the Black Sea there are old and serious territorial disputes, which further complicates the regional security scheme;
- The Black Sea area is a transit area between the East and Europe, which makes the main illegal cross-border actions to be concentrated in this region;
- Through the Black Sea area pass the main energy supply routes (gas pipelines and oil pipelines) with fossil resources and electricity marine cables of Western Europe. (Horell, 2016)

1.3. Interest analysis

Interests:

- China's increasingly insistent attempt to meddle in the economic problems of the Black Sea region, as China has already seized important hydrocarbon exploitations in the Mediterranean basin, the Cyprus/Turkey Region and develop the Silk Road;
- The presence of immense natural resources (hydrocarbons), largely untapped, which arouse the attention and amplify the expansionist struggles in the field (re)drawing of areas of control and influence;
- The growing American military presence on Romanian territory only indicates the preparation of this state as a base for launching air and ground military operations and therefore, attracting Romania into a military confrontation with evolution and outcome that is difficult to specify, but which is very unlikely to be in favor of the US-Israel binomial.
- The security environment of the Black Sea is becoming very unstable and capable at any time to generate conflicts of greater proportions, including escalations of already existing conflicts and global expansions of regional conflicts:
 - the Hegemonic confrontation between the US and the Russia;
 - the emergence of Turkish and Chinese regional power (the latter, very discreet);
 - preparing armed confrontations with consequences and developments that are difficult to predict;
 - the existence of multiple sources of conflict involving other states in Europe;
 - the corrupt political regimes, which induce general discontent, the stupid gait of states, poverty, unemployment, ineffective administration, etc. (Baumann, 2008)



Figure no. 1.1. Black Sea and riparian countries

(Source: https://en.wikipedia.org/wiki/Black Sea)

II. SWOT analysis to riparian countries to Black Sea

SWOT analysis (Strengths/Weaknesses/Opportunities/Threats), is the most important technical and managerial analysis on understanding and knowing the strategic position of an organization, industry or national economy and has the following objectives¹: the detailed knowledge of threats, risks and vulnerabilities and the possibilities to counter them related to energy organizations, industry and the national economy; development opportunities of national energy organizations, industry and economy; the safety and security level of the national industry and economy; the real state of the national economy and economic security; the recommendation of strategies that ensure the best alignment between the internal and external environment and choosing the right strategy for adapting strengths to opportunities, minimizing risks and eliminating weaknesses. (SGG, 2024)

2.1. Russia

	Strenght		Weaknesses
-	global superpower capable of influencing certain	-	NATO borders in the proximity areas of the
	regional and global events and exercising power;		Russia: Romania, Bulgaria, Poland;
-	military, maritime, land, air and space superpower;	-	expansion of NATO and the European Union,
-	possess nuclear weapons and mass destruction;		through the desire to join Ukraine and the
-	access to the warm seas: Black Sea, Caspian		Republic of Moldova, at the proximity with the
	Sea, Japan Sea, Baltic Sea;		Russia;

¹ ISO 30000 – Risk Management

Strenght Weaknesses access to the Frozen Ocean; counter-candidates to the world superpower: all types of relief and environment; USA and China; economic superpower, by holding strategic possible conflicts with NATO through war with energy resources (oil and natural gas); Ukraine: world leader in hydrocarbon exports (oil and the economy is not very strong compared to the natural gas); US and China economy; it has the largest network of pipelines (oil and economic blockades followed by EU sanctions gas) in the world over very long distances, due to the war in Ukraine – financial losses; supplying almost all of the European Union, mistrust of the people in the president; China, India and other Asian states; distrust of European and world security states large reserves of gold, coal, wood, ores; and organisations by using the armed forces to very strong nuclear force: occupy Crimea, parts of Ukraine, Georgia and very strong Orthodox religion anchored in the Azerbaijan; non-compliance with international peace and total/partial political, military and energy arms treaties; dependence of the former states of the USSR; interference with the internal affairs of other he is a permanent and active member of the States with the role of interests and supremacy; following global security structures: United economic loss by decoupling certain European Nations – UN; Association of Southeast Asian energy buses from the Russia; few inhabitants compared to the country's area. Country Nations ASEAN: Cooperation Organization; G20; Council of most of them living in the western part of the country, about 77% of the population. Europe; Asia Economic Cooperation – Pacific - APEC; Pentry Organization Security and Cooperation in Europe – OSCE; World Trade Organization - WTO; Commonwealth of Independent States – CIS; Collective Security Treaty Organization - CSTO; Eurasian Economic Union. **Opportunities** Threats control the world and become the largest global NATO expansion in the proximity areas of the superpower – total hegemony; Russian Federation through the entry of become the greatest military, maritime, land, Ukraine into NATO; air and space power; loss of control over Ukraine and Moldova; possess the most nuclear weapons and mass the continued development of China and the destruction; expansion of territories and appropriation of financial losses through EU economic sanctions; natural and energy resources in the basement; exit from certain international become the greatest economic and energy organizations and treaties; power; possible war with NATO; serious opponent of NATO; reduced credibility through use of energy defeat the military, economic and political war (hydrocarbons, electricity) as an energy with the US and China. weapon or pressure instrument for profitability or blackmail purposes; economic loss by decoupling certain European

2.2. Turkey

	Strenght		Weaknesses
-	the settlement of the crossroads of Europe and	-	dependence on imports of strategic resources,
	Asia makes it a country of great regional and		in particular hydrocarbons (oil, natural gas)
	world geostrategic importance;		from Russia and Azerbaijan.
-	it is a member state of the UN, NATO, OSCE,		
	OECD, OIC and Council of Europe;		

energy buses from the Russian Federation; low demographic factor compared to the

country's area.

	Strenght	Weaknesses
-	in 2005 the European Union opened accession	
	negotiations with Ankara;	
_	great economic power;	
_	a strong Islamic state and has cooperative	
	relations with the Middle East and the Turkish	
	states of Central Asia, through membership in	
	organizations such as the Islamic Conference	
	and Economic Cooperation Organization;	
-	total control of the Black Sea: the Bosphorus	
	and Dardanelles straits separate the Black Sea	
	from the Mediterranean Sea (Marmara Sea and	
	Aegean Sea), having an important role in the	
	transit of goods, military resources and	
	techniques between the two seas;	
-	construction of the Istanbul canal to bypass the	
	Bosphorus and Dardanelles Straits and to	
	circumvent the Montreux Convention, 1936;	
-	integrated State in the Muslim Brotherhood;	
-	decision-making role at the Black Sea;	
-	high demographic factor;	
-	the growing presence throughout Europe.	
	Opportunities	Threats
-	control the Islamic world and become a great	- economic loss by decoupling certain energy
	superpower;	buses from the Russian Federation, or
-	become a great economic, military and	Azerbaijan;
	maritime power;	- a possible war with Israel, being on the side of
-	energy hub to Black Sea.	Hamas in the war between the two;
		- the character of fundamental Islamism can
		generate conflicts or wars;
		- the use of the two straits (Bosphorus and
		Dardanelles) as a political weapon or pressure
		instrument for the purpose of profitability or blackmail;
		- country of transit of migrants to Europe.

2.3. Bulgaria

	Strenght		Weaknesses
-	state belonging to the European Union and NATO,	-	almost total dependence on Russian gas;
	which gives security, stability, credibility and	-	almost dependence on coal for to produce
	economic, diplomatic and military relations with all		electricity;
	countries of the world;	-	high level of corruption;
-	NATO military bases on the territory of the	-	non-partnership in the Schengen area.
	country;		
-	exit to the Black Sea (warm sea) through the		
	two ports of Varna and Burgas;		
-	exit to the Danube through the two ports of		
	Vidin and Ruse;		
-	bridges over the Danube, Vidin – Calafat and		
	Ruse – Giurgiu;		
-	possible hydrocarbon resources (oil and natural		
	gas) in the Black Sea: perimeter 1-26 Han		
	Tervel, Han Asparuh block, Vinekh deposit and		
	Krum deposit;		
-	rich coal deposits (lignite and anthracite),		
	which gives energy security;		

connection to ENTSO-E – the main electricity system in the EU; connection to ENTSO-G – the main gas system in the EU. **Opportunities Threats** massive investments in exploration the use of gas by Russia as an energy weapon extraction of possible hydrocarbon resources (oil or a political pressure instrument in achieving and natural gas) in the Black Sea: perimeter 1-26 the objectives; Han Tervel, Han Asparuh block, Vinekh deposit possible attacks by Russia on NATO military and Krum deposit; bases; eliminating dependence on Russian gas; transit of the territory of refugees; membership of the Schengen area confers the EU policy against coal, which gives energy free passage of goods and people; insecurity and dependence from import.

2.4. Georgia

energy hub to Black Sea.

	Strenght		Weaknesses
-	member of: United Nations, Council of Europe,	-	it has few energy resources;
	World Trade Organization, Organization of the	-	dependence on natural gas brought from Russia
	Black Sea Economic Cooperation,		that can cause many conflict situations;
	Organization for Democracy and Economic	-	dependence on natural gas brought from
	Development.		Azerbaijan through the Baku-Tbilisi-Ceyhan
			pipeline (oil pipeline), as it connects Baku with
			Ceyhan.
	Opportunities		Threats
-	become a member of NATO;	-	the desire to join NATO and the EU, as well as
-	become a member EU;		energy dependence on Russia and Azebaidjan,
-	energy hub because is transit country for gas		can generate military conflicts on the part of
	from Caspian Sea – Azerbaidjan to Turkey and		Russia.
	South Europe.		

2.5. Ukraine

Strenght	Weaknesses
- military support from NATO and the EU;	- state of war with the military and economic
- strong solidarity with EU countries;	giant Russia;
- strong financial support from the US and EU;	- loss of life and military technique;
- energy and food support with some EU countries;	- significant infrastructure losses;
- humanitarian and political support with EU	- population decimation (refugees);
countries, especially Romania;	- dependent on Russian gas;
- country very rich in natural resources and	- dependent on Russian nuclear energy and
especially energy;	nuclear fuel;
- country with very strong energy infrastructure;	- dependent on romanian electricity;
- good relations with the US, NATO and the EU,	- involvement of Belarus on the side of Russia;
on the background of war;	- the involvement of Iranian drones in aggression;
- transit of gas and oil energy pipelines through	- bombardment of the port infrastructure on the
the national territory to Europe;	Black Sea and Danube;
- possibility of interconnection to ENTSO-E and	- bombardment of the energy critical infrastructures;
ENTSO-G (the main European electricity and	- non-transition of grain and resource vessels;
gas systems) especially through Romania – this	- many black-outs;
involves major investments in energy	- food insecurity;
infrastructure.	- energy insecuriy;
	- economic insecurity;
	- national insecuriy.

Opportunities	Threats
- accession to the European Union;	- lose the war with Russia and return to Russian
- accession to NATO;	domination;
- escape from Russian domination and become a	- naval and maritime insecurity in the Black Sea;
European country.	- inability to join the EU and NATO;
	- possible loss of territory in favor of Russia:
	Lugansk, Donetsk, Zaporozhie, Herson and
	Crimea;
	- loss of territories rich in strategic energy
	resources;
	 loss of life and military technique;
	- escalating war in the long run.

	2.6. Romania		
	Strenght		Weaknesses
	state belonging to the European Union and NATO, which gives us security, stability, credibility and economic, diplomatic and military relations with all countries of the world; NATO military bases on the territory of the country, which gives military security; declaration of the Black Sea as an area of strategic interest by NATO (Summit Madrid 2022); exit to the Black Sea (warm sea) through the port of Constanta; the Danube's navigability (commercial or strategic transport on the Danube with the EU and Serbia states); the Danube in the Black Sea (Danube Delta) through the three arms: Chilia, Sulina and St. Gheorghe; ports on the Danube: Sulina, Tulcea, Galati, Braila, Cernavoda, Calarasi, Oltenita, Giurgiu, Bechet, Calafat, Drobeta Turnu Severin, Orsova, Moldova Veche; bridges over the Danube: Calafat-Vidin and Giurgiu-Ruse; hydrocarbon resources (oil and natural gas) in the Black Sea; coal deposits (hard coal, lignite and anthracite), which gives energy security; connection to ENTSO-E – main EU electricity system; connection to ENTSO-G – main EU gas system; supply with electricity for Ukraine and Moldova.		partial dependence on Russian gas; unpredictability of the executive and legislative system; high level of corruption; legislative non-harmonisation; the departure of civil or military academics, specialists and experts, abroad due to low salaries, can generate national crises (military crises, energy crises, food, etc.); non-partnership in the Schengen area.
_	Opportunities		Threats
-	massive investments in exploring and extracting possible hydrocarbon resources (oil and natural gas) in the Black Sea; exit of the country from the NATO periphery and its transformation into a regional hub of	-	the use of gas by Russia as an energy weapon or a political pressure instrument in achieving the objectives; possible attacks by Russia on NATO military bases;
	energy and regional security:		transit through the territory of refugees from the

- energy and regional security; exit of the country from dependence on Russian gas and Russia's impossibility to use its energy
- transit through the territory of refugees from the Middle East or North Africa;

- as an energy weapon or a tool of political pressure to pursue its interests;
- membership of the Schengen Area confers the free passage of goods and population.
- possible refugees from the Global Islamist Network or the Muslim Brotherhood can harm Romania's national security.

III. Equation of power, sources of conflict, risk scenarios and balance of forces (militarization)

3.1. Equation of power

3.1.1. States actors/players directly involved

Next actors/players is directly involved to Black Sea: Ukraine, Rusia, Georgia, Turkey, Bulgaria and Romania. (SGG, 2024)

3.1.2. States actors/players indirectly involved

Next actors/players is indirectly involved to Black Sea: USA, China and Austria. (SGG, 2024)

3.1.3. No-state actors/players indirectly involved

Next no-states actors/players is indirectly involved to Black Sea: NATO, UE and Muslim Brotherhood. (SGG, 2024)

3.1.4. Diminant states/Dominated states

The next states are dominant in the Black Sea: Russia and Turkey. (SGG, 2024)

The next states are dominated in the Black Sea: Romania, Bulgaria, Ukraine and Georgia. (SGG, 2024)

3.2. Sources od conflict

Possible sources of conflict to Black Sea region: (SGG, 2024)

- Hegemonic rivalries between the US and the Russia;
- American or NATO military presence in the territories of Romania, Bulgaria or Turkey in proximity to the Russia;
- Moving the war between Israel and Hamas, Israel and Iran or Israel and the Muslim Brotherhood on the international arena with an emphasis on Muslim states at odds with Christian states;
 - Possible involvement of the Russia in the war between Israel and Hamas or Israel and Iran;
 - The influences and interests of the Russia on the Black Sea;
 - Unlawful cross-border actions;
 - Disputes on transit between Europe and the East through the Black Sea;
 - Territorial disputes;
 - Disputes of a traditional inter-ethnic and inter-confessional nature;
 - Disputes on hydrocarbon resources;
- The use or transport of energy resources as an energy weapon or instrument of political or energy pressure;
 - Disputes regarding the transit of Russian natural gas through the Black Sea to Turkey:
 - Russia-Turkey: Beregovaya-Samsun;
 - Russia-Turkey: Russkaya-Luleburgaz.

3.3. Risk scenarios

Risk scenarios with low probability: (SGG, 2024)

- Risk scenario 1 Military war Ukraine Russia → Nuclear war NATO Russia:
 - Probability: 1 Very low;
 - Gravity: 5 Very high;
 - Risk assessment: 5 Very low.

- Risk scenario 2 Military war Israel Hamas or Israel Iran → Entry Turkey to war (Hamas or Iran) → U. S. Entry into war (Israel) → U. S. war/NATO Middle East (muslim state):
 - Probability: 1 Very low;
 - Gravity: 5 Very high;
 - Risk assessment: 5 Very low.

Risk scenarios with high probability: (SGG, 2024)

- Risk scenario 3 Territorial dispute hydrocarbons Black Sea NATO (Romania/Bulgaria) Russia → Energy conflict → Economic conflict (interests) NATO – Russia:
 - Probability: 5 Very high;
 - Gravity: 4 High;
 - Risk assessment: 20 Very high.
- Risk scenario 4 Using (re)energy resources as a weapon /pressure tool by the Russia → Energy conflict → Economic conflict Russia NATO (Romania/Bulgaria):
 - Probability: 5 High;
 - Gravity: 4 High;
 - Risk assessment: 20 High.
- Risk scenario 5 Use of electricity as an energy weapon/pressure instrument of the Russia → Decoupling Ukraine and the Republic of Moldova from the Russian Energy System IPS (Integrated Power System system with transport voltages 330 kV and 750 kV atypical EU) → Possible black-out → Energy conflict with possible military escalation → coupling Ukraine and the Republic of Moldova to the Romanian Energy System (ENTSO-E European system):
 - Probability: 5 Very high;
 - Gravity: 5 Very high;
 - Risk assessment: 25 Very high.

3.4. Balance of forces (militarization)

- Romania:18 ships; 7150 soldiers.
- Ukraine: 14 ships; 6500 soldiers.
- Russia: 43 ships; 7 submarine; 25 000 soldiers.
- Georgia: 19 patrol ships; 700 coast guard.
- Turkey: 72 ships; 12 submarine; 45 000 soldiers.
- Bulgaria: 17 ships; 4500 soldiers. (SGG, 2024)

CONCLUSIONS

In the context of ensuring national and European energy security, the Romanian state must focus on the following essential pillars:

National pillars:

- Security of energy supply The European Union must become less dependent on imported energy by making more efficient use of energy produced in Europe and by diversifying energy and supply sources;
- Nuclear energy actions of the European Union must help to ensure the safety and security of nuclear reactors, the sound management of radioactive waste and the use of nuclear materials only for legitimate purposes;
- Single energy market The European Union must have fewer technical and regulatory barriers, so that energy can circulate across national borders and energy suppliers can compete across the whole territory of the Eeropene Union;

- Oil, gas and coal European Union rules must maintain a balance between fossil fuel
 markets and protect the environment, including when new technologies such as shale gas
 extraction are used;
- Energy efficiency The European Union must achieve certain energy efficiency targets so that it becomes a low-carbon society;
- Energy technologies and innovations The European Union must support the deployment of low-carbon technologies such as photovoltaic and wind energy sources, carbon capture and storage and energy storage technologies;
- Renewable energy The European Union must coordinate the actions taken to achieve national targets in accordance with the Directive on renewable energy;
- Critical energy infrastructure the strategy of trans-European networks TEN-E, it must focus on expanding and modernising European critical infrastructure and on creating networks covering several countries and even other continents.

National pillars:

- Romania, regional energy security provider;
- Continuation of electricity generation from non-renewable energy sources (coal, natural gas, uranium) with very high share in ensuring, stability and increasing national energy security;
- Promoting electricity generation from renewable energy sources (E-SRE) and energy
 efficiency promoting the production of electricity from renewable energy sources (global
 potential, photovoltaic parks, wind farms, biomass, biomass, energy efficiency, etc.) must
 represent an imperative at the level of Romania and the European Union justified by the
 protection of the environment, the increase of energy independence from imports, by
 diversifying the sources of energy supply, and for economic and social cohesion reasons;
- Making investments in critical energy infrastructure building new national or cross-border energy critical infrastructure and/or refurbishing existing ones;
- Electricity storage through major investments in energy storage technologies to cover domestic consumption in peak hours and control of the energy market, it must become the top priority of decision makers on ensuring, stability and increasing energy security;
- Vulnerable consumer protection and reduction of energy poverty;
- Stability of energy markets;
- Increasing the quality of the education system through the continuous training of the human resources specialized in the energy field.

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