THE NECESSITY AND OPPORTUNITY OF ESTABLISHMENT THE STRATEGIC STUDIES OF ENERGY SECURITY RESEARCH CENTER FROM THE UNIVERSITY OF PETROSANI

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Abstract: The "Strategic Studies of Energy Security " Research Center was established following Decision no. 136 of October 4, 2021 of the Senate of the University of Petrosani, based on the provisions of the National Education Law no. 1/2011, the Charter of the University of Petrosani and the Regulation on the organization and functioning of the Senate of the University of Petrosani. The academic community within the "Strategic Studies of Energy Security " Research Center is a national and international elite group composed of professionals with extensive academic experience in the field of energy, industrial, economic and national security, accumulated during years of study and experience professional and who are always ready to fulfill their obligations at the highest level of quality and professionalism, patriotic, honest, proactive and who are always ready to be in the service of the country.

Keywords: research center, strategic studies, energy security.

1. WHO WE ARE

The “Strategic Studies of Energy Security” Research Center was established following the Decision no. 136 of October 04, 2021 of the Senate of the University of Petrosani, based on the provisions of the National Education Law no. 1/2011 (with subsequent amendments and completions), The Charter of the University of Petrosani and the Rules of Organization and operation of the Senate of the University of Petrosani [7], [9], [11].

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Purpose is to become the most important pillar of national civil scientific knowledge and expertise, by developing strategic energy security studies for the Romanian Presidency, Prime Minister, Ministry of Energy and other public structures with attributions to ensure energy, industrial and national security [5], [8], [10].

The "Strategic Studies of Energy Security" Research Center is a national and European elite group (thing Tank) composed of civil and military teachers, researchers, experts, evaluators, specialists, officers, etc., with extensive professional and academic experience in the following areas:

- *Security*: national, energy, industrial, critical infrastructure, etc.;
- *Engineering*: industrial, electrical and energy, systems, oil and natural gas, mining, nuclear, transport, etc. [6], [13], [15].

Context of establishment:

- the increasing occurrence of cases of *energy terrorism* – black/brown-out (total/partial exit of some energy subsystems or of the entire integrated National Energy System);
- using energy (in all its aspects and dimensions) as a possible *energy weapon* or *pressure instrument* around the world;
- certain critical energy infrastructure may be the *target of terrorist* or *cyber attacks* [1] [2] [14].

2. MISSION AND VALUES

The mission of the "Strategic Studies of Energy Security" Research Center is to stimulate scientific research activities, through research carried out in order to strengthen managerial capacity, covering various thematic sectors and providing the organizational and informational framework necessary for the elaboration, development and implementation of the project – development projects initiated by the members of the academic community of the Center.

The "Strategic Studies of Energy Security" Research Center will promote, in the field of scientific research, the following set of values:

- professionalism and proactive attitude in the field of engineering and security (national security, economic security, industrial security, energy security, cyber security, security, etc.) electrosecurity, security of critical systems and infrastructures, etc.);
- ethics;
- feasibility;
- performance in research;
- protection of intellectual property rights;
- extensive dissemination of scientific research results;
- professional development and improvement of human resources [3], [12], [17].

3. PURPOSE AND OBJECT OF ACTIVITY

The "Strategic Studies of Energy Security" Research Center aims to develop multidisciplinary and interdisciplinary scientific research, to train students, teachers and specialists in key strategic areas of the national energy industry, with reference to energy security:

- national security;
- economic security;
- industrial security;
- security of resources, reserves and strategic energy storage;
- security of extraction, transport and distribution of energy resources;
- security of electricity generation;
- security of electricity transmission and distribution;
- occupational health and safety;
- cyber security;
- security of critical energy systems and infrastructures;
- electrical safety.

They take place through a process of supporting the balance between continuity and innovation in the field of fundamental and applied research in the existing industrial context following integration in the European Union and NATO, aiming to improve communication between universities, institutions and economic agents, as well as non-governmental organizations in the research area [4], [16], [18].

The " Strategic Studies of Energy Security" Research Center has as object of activity:

- carrying out scientific research activities;
- developing strategic studies and providing scientific documentation on specific energy security issues for decision makers within the national economy and industry and other structures with attributions in the field of energy, industrial and national security;
- elaboration of scientific papers for the purpose of developing the theory and practice of energy security;
- to respond to the strategic challenges of the contemporary energy security environment in the context of dynamism and energy process, by developing, implementing and disseminating the results of scientific research;
- providing consultancy, expertise and services specific to state and private institutions and entities with attributions in the field of energy, industrial and national security;
- substantiating the theoretical basis of the place and functions of the energy component in the main strategic documents for national security planning;
- the introduction of energy security in the national security component;
- investigating changes in the evolution of the strategic energy environment with influence on national interests;
- exploring the energy role in the future operational environment of national security;
- study of phenomena within the energy environment with impact on national security;
- developing cooperation with civil and military research institutes, governmental and non-governmental structures, other universities in the country and abroad;
- promoting the strategic, energy, industrial and national security culture in the romanian society;

- involvement in the educational process by supporting professional training at strategic level within the University of Petrosani, at doctoral, master, bachelor and postgraduate level;
- initiation and development of research works in the field of energy industrial risk assessment;
- participation in research and development programs and grant programs of the Ministry of Education and Research, the Academy of Romanian Scientists, the Academy of Technical Sciences of Romania, or of international institutions;
- participation in the organization of various scientific events enrolled in the program of the University of Petrosani, as well as those initiated by the "Strategic Studies of Energy Security" Research Center;
- capitalizing on the results of research works by publishing and disseminating information bulletins and documentaries, good practice guides and other scientific publications.

The " Strategic Studies of Energy Security" Research Center organizational chart is as shown in fig. 1.

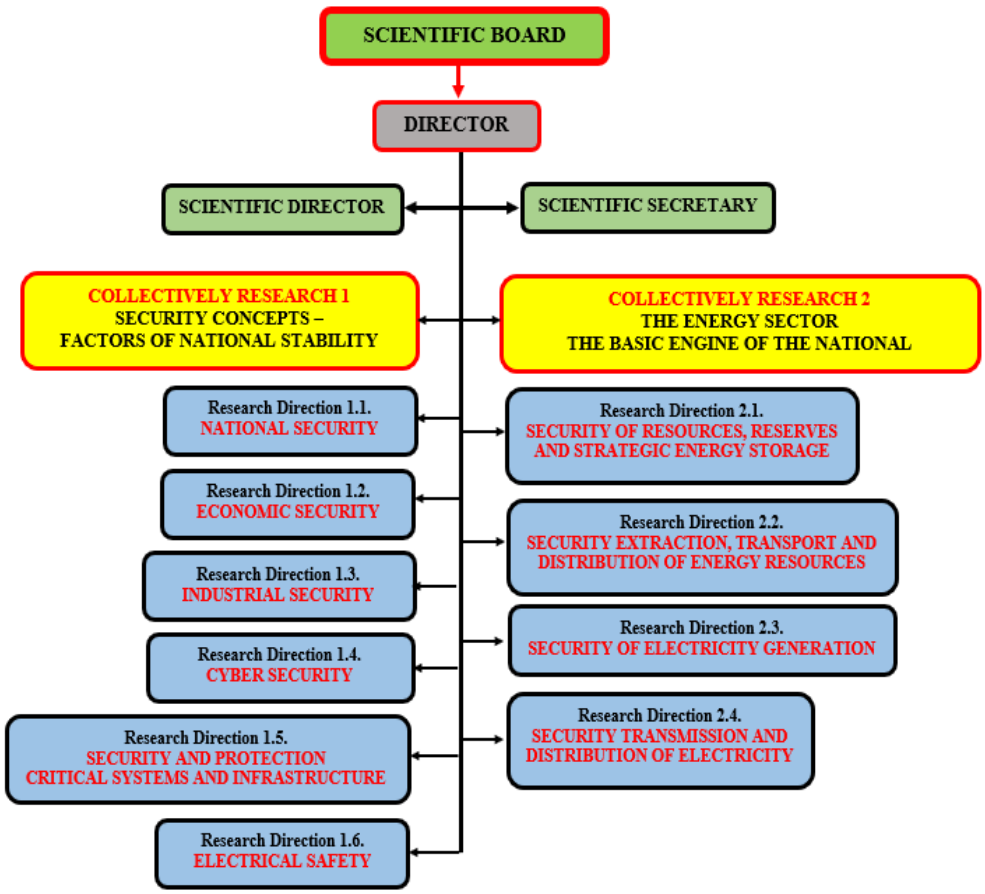

Fig. 1. Strategic Studies of Energy Security Research Center organizational chart

4. CONCLUSIONS

The importance and necessity of the "Strategic Studies of Energy Security" Research Center arises from the following considerations:

- the increasing occurrence of cases of energy terrorism – black/brown-out (total/partial exit of some energy subsystems or of the entire integrated National Energy System);
- using energy (in all its aspects and dimensions) as a possible energy weapon or pressure instrument around the world;
- certain critical on-shore or off-shore energy infrastructures on the territory of Romania or from the Romanian Black Sea platform, or certain appliances and equipment within these critical energy infrastructures (oil pumping stations, natural gas compression stations, power stations and power plants, offshore drilling platforms, extraction wells, refineries, marine terminals, strategic storage facilities, land or marine pipelines, land or sea pipelines, air power lines and certain nuclear facilities or equipment), may be remotely remote from a distance through cyber-attacks or may be the target of terrorist attacks;
- vulnerability of critical infrastructures leads to consumers' lack of energy and to a national crisis, by the fact that all sectors of the national economy depend on energy;
- the crisis triggered leads to a state of social imbalance and at the same time brings extreme damage to the safety of the citizen and national security;
- in this context, the integrated National Energy System, through the other related subsystems (resources, reserves and energy storage, oil, natural gas, mining, nuclear, electricity), becomes a strategic objective of national importance by being a generator of national and european critical infrastructures.

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