Evolving Energy Security in the Baltic States: From Security of Supply to Resilience

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AGENDA

The presentation will also provide concrete national examples of physical protection and resilience building for critical energy infrastructure. Evolution of Energy Security

Initial Focus: Security of Supply

Shift to Protecting Critical Energy Infrastructure

Future Focus: System Resilience

Key EU Regulations Guiding the Shift

Conclusion and Key Takeaways



INITIAL FOCUS: SECURITY OF SUPPLY

Regulation (EU) 2017/1938 measures to safeguard the security of gas supply

Regulation (EU) 2019/941 - on riskpreparedness in the electricity sector

- Risk assessment
- Preventives action plan (gas)
- Emergency plan (gas)
- Risk-preparedness plans (electricity)

Energy security was traditionally about ensuring reliable and uninterrupted energy supply.

Primary risks: Dependency on external suppliers, particularly Russia, for gas and oil.

Efforts focused on diversification of supply routes (e.g., Klaipėda LNG terminal).



THE SHIFT TO PROTECTING CRITICAL ENERGY INFRASTRUCTURE

Solutions are based on:

- Initial lesson lerned from the war in Ukraine (masive attacks on CEI)
- Stress tests
- Regional exercise (Coherent Resilience and other)
- National Task Force's reccomendation

With growing risks of cyberattacks and sabotage, the focus shifted to securing critical energy infrastructure

Key vulnerabilities: Power grids, pipelines, LNG terminals

NATO and EU initiatives to enhance physical and cyber protection of energy systems



HYBRID THREATS: A GROWING CONCERN

The Ministry of Energy has developed a programme to strengthen infrastructure protection. The programme is not a law, but a very practical tool for making changes and monitoring progress

A wide range of potential hybrid attacks led to a change:

- too many potential scenarios to be able to prepare properly
- the price is often too high
- it is difficult to keep pace with changing technologies

Hybrid warfare blends cyber, physical, and political threats

Recent examples: Sabotage of subsea pipelines in the Baltic Sea

Hybrid threats target energy infrastructure to weaken national resilience



FUTURE OF ENERGY SECURITY: BUILDING RESILIENCE

In line with the spirit of the CER Directive, we have begun to implement the following objectives:

- a requirement has been introduced for companies to maintain an emergency reserve of equipment and materials
- TSO and DSO have been asked to develop an "electricity island" concept instead of relying only on a "black start" plan
- it was decided to restrict access to inverter management systems and cloud services for countries that pose a threat to national security by the law

Focus on resilience: Ability to withstand, recover, and adapt to disruptions

Resilience goes beyond protection: Energy systems must continue to operate during crises

Emphasizes cybersecurity, redundancy, and flexibility of energy systems.



KEY EU REGULATIONS GUIDING THE SHIFT

Critical Entities Resilience (CER) Directive: Focuses on resilience of critical infrastructure.

EU regulations set a minimum standard for EU member states

NIS2 and the CER Directive require a comprehensive risk assessment, covering not only traditional risks, but also risks related to supply chains, climate change risks, etc. NIS2 Directive: Strengthens cybersecurity measures for critical sectors, including energy.

Network Code on Cybersecurity: Provides specific cybersecurity standards for the electricity sector



CRITICAL ENTITIES RESILIENCE DIRECTIVE (CER)

Shifts from protection to resilience of critical infrastructure.

Once the transposition of the CER and NIS2 Directives is completed, it will be possible to assess whether the Baltic States should consider higher standards for energy sector entities

NIS2 Directive: Strengthens cybersecurity measures for critical sectors, including energy.

Network Code on Cybersecurity: Provides specific cybersecurity standards for the electricity sector



CONCLUSION AND KEY TAKEAWAYS

But most importantly, we need to understand that all countries in the region need to act in synchrony, because only together can we build a resilient energy system.



Lithuania has evolved from focusing on energy supply security to protecting critical infrastructure and now emphasizing resilience

The future of energy security will be defined by the ability to withstand, adapt, and recover from threats

EU regulations like the CER Directive and NIS2 are critical for building a resilient energy system



Thank you!



