



NUCLEAR ENERGY DEVELOPMENT AS AN INCENTIVE FOR SOCIETAL AND ECONOMIC GROWTH

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19/10/2023

THE BASIC THESIS

- The renaissance of nuclear energy is becoming a reality in the face of the current turbulent changes in energy. It is also a fact that nuclear power plants are an emission-free source and best meet the requirements for self-sufficiency and security in electricity supply. There is no other solution for the Czechia how to meet the environmental goals till the 2050 year. It is a political reality. We, in the Czech Republic, respect it.

CONTENT

- 1. Introduction: The Energy Landscape**
- 2. The Renaissance of Nuclear Energy: A Global Perspective**
- 3. Nuclear Alliance in the European Parliament**
- 4. Czechia's Expertise in Nuclear Energy: Education, Service, Repairs, and Technology Support**
- 5. The Role of Nuclear Energy in a Sustainable Future**
- 6. The Challenges and Opportunities of Nuclear Energy**
- 7. The Future of Nuclear Energy**
- 8. The Legislation and Communication within the European Commission**
- 9. The Macroeconomic Effects of the Completion of the New Nuclear Power Plant Units**
- 10. Conclusion**

INTRODUCTION: THE ENERGY LANDSCAPE

- The global energy landscape is undergoing a significant transformation.
- The need for sustainable, reliable, and clean energy sources is more pressing than ever.
- Amidst this backdrop, nuclear energy is experiencing a renaissance.

THE RENAISSANCE OF NUCLEAR ENERGY: A GLOBAL PERSPECTIVE

- The global shift towards nuclear energy has to be driven by the need to combat climate change and ensure energy security.
- Countries around the world should recognize the potential of nuclear energy in achieving these goals.
- Even in Germany, some polls show more than 1/2 support of the population.

NUCLEAR ALLIANCE IN THE EUROPEAN PARLIAMENT

- The formation of a nuclear alliance in the European Parliament (11 countries) signifies a shift in energy policies.
- This alliance aims to promote the benefits of nuclear energy and influence legislative decisions (green investment within taxonomy).
- It's a testament to the growing recognition of nuclear energy's potential in addressing climate change.

CZECHIA'S EXPERTISE IN NUCLEAR ENERGY: EDUCATION, SERVICE, REPAIRS, AND TECHNOLOGY SUPPORT

- Czechia has a rich history and expertise in nuclear energy, providing education, service, repairs, and technology support.
- The country's nuclear industry plays a crucial role in its economy and energy security.
- Czechia's expertise in nuclear energy can serve as a model for other countries.

THE ROLE OF NUCLEAR ENERGY IN A SUSTAINABLE FUTURE

- Nuclear energy is a key player in the transition to a sustainable future.
- It provides a reliable and large-scale source of low-carbon electricity.
- It provides a stable and reliable source of power, unlike some renewable energy sources that depend on weather conditions.
- The development of advanced nuclear technologies, such as small modular reactors (SMRs), could further enhance the role of nuclear energy in climate change mitigation.

THE CHALLENGES AND OPPORTUNITIES OF NUCLEAR ENERGY

- While nuclear energy holds great promise, it also comes with its own set of challenges.
- Issues such as production cost, waste management, safety, and public perception need to be addressed.
- However, these challenges also present opportunities for innovation and improvement.
- The development of the nuclear program is linked to further investments and infrastructure development in the entire region (Třebíčsko).

THE FUTURE OF NUCLEAR ENERGY

- The future of nuclear energy is bright, with advancements in technology and policy support.
- New reactor designs and fuel cycles are making nuclear energy safer and more efficient.
- It is another impulse for the knowledge-based economy, the development of research and development of education.

THE LEGISLATION AND COMMUNICATION WITHIN THE EUROPEAN COMMISSION

- The fundamental simplification of legislation is the key.
- The permitting procedure for large infrastructure constructions must be transparent, have clearly defined rules and allow the investor to go through all stages of the procedure without obstruction.
- An expropriation process is necessary for transport, energy or telecommunications assets.
- Setting clear deadlines and removing administrative burdens is necessary.

THE MACROECONOMIC EFFECTS OF THE COMPLETION OF THE NEW NUCLEAR POWER PLANT UNITS

- Fossil fuel consumption to fall by 74% by 2050, energy consumption to rise by 49%.
- New nuclear unit - 1,000 new jobs for normal plant operations.
- Macroeconomic impacts - investment and job creation, multiplier effect on public finances, improved energy independence, reduced greenhouse gas emissions, impact on energy prices. At the same time, economic and political risks.
- Construction of one unit (CZK 250 billion) means a contribution to Czech GDP of CZK 532 billion (based on input output analysis of data from the Czech Statistical Office).

CONCLUSION

- The renaissance of nuclear energy is a testament to its potential in addressing our energy needs.
- While challenges exist, the opportunities for innovation and improvement are immense.
- The future of nuclear energy is not just a possibility, but a reality.