European Physical Society:

Need for new priorities in European energy policy

The Energy Group of the European Physical Society has prepared a new position paper. Building on the 2024 Draghi report on the negative economic and industrial impacts of current energy transition policies, it outlines a diversified energy strategy for Europe.

Key considerations:

- The stability of the electricity grid is challenged by growing amounts of Variable Renewable Energy Sources (VRES). This may limit the penetration of VRES.
- Carbon Capture and Storage (CCS) technology makes energy production less efficient. After more than 15 years of research and development a lack of progress makes it a less suitable technology for its planned goal.
- Due to high losses in the conversion of electricity to hydrogen and back, the suitability of full-scale hydrogen projects in electricity generation is questionable.
- Critical raw materials and rare earths are becoming essential elements in our current energy strategy.

Recommendations (overview, see full text here):

- Diversification of Energy Strategies. Leveraging a diverse set of energy sources can help enhance security of supply, manage costs, and optimize national resources.
- Advancement of Nuclear Energy. Extending the operational life of existing nuclear reactors and investing in advanced technologies, will contribute to a stable and sovereign energy mix.
- Support for Energy Research. R&D of energy storage, smart grids, and energy efficiency technologies are key for long-term competitiveness.
- Thermal Energy Considerations. Natural gas remains an important transitional fuel. As a predominantly imported commodity, its use should be minimized
- Public Awareness and Education. Educational programs focused on energy systems can contribute to a well-informed society capable of engaging in constructive discussions on energy policy.

The Danish energy mix:
The recommendations apply to the EU as a whole. Which recommendations the individual countries choose to follow must depend on national assessments. The preponderance of wind and solar energy in Denmark means that Denmark is heavily dependent on other EU countries ensuring the necessary diversity by going in other directions.