

Digitalisation of the energy sector

Digitalisation will be a vital tool and a prerequisite for safeguarding security of supply and ensuring flexibility and cost-effective solutions for the future energy system. The report from the Energi21 and Digital21 boards describes the roles of artificial intelligence, Big Data management, autonomous systems and the Internet of Things in the digitalisation of the energy system.

In addition, the report identifies needs for research and innovation activities. The report was a collaborative effort between the Digital21 and Energi21 strategy bodies. Representatives from the ICT and energy sectors were heavily involved.

Modern society is dependent on a reliable supply of energy and power. The energy sector's importance for society is growing, and an interruption of the energy supply can paralyse vital functions and processes. The energy system as a whole is a key infrastructure for value creation in society.

Digitalisation opens up opportunities for the energy sector. New digital solutions will help to raise efficiency in the operation and maintenance of the energy system, provide a more reliable supply of energy and improve preparedness. Digitalisation and higher data quality also provide a more accurate basis for decision-making regarding investments and make it possible to automate a number of decision-making processes.

There is a need for research and innovation activities to address challenges and take advantage of the digital scope of opportunity.

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