

DIGITALISATION



DIGITALISATION

Regulations

CODES/STANDARDS/ MANDATES

OBLIGATION SCHEMES

OTHER REGULATIONS

Measures:

- Regulation on **ecodesign** requirements **for servers and data storage** products (2019/424)
 - The Communication from the Commission on **ICT Standardization** Priorities for the Digital Single Market
 - The Communication from the Commission on **Digitising European Industry** Reaping the full benefits of a Digital Single Market
 - Gold standard of **blockchain**
- IoT can solve many common problems such as traffic, climate change (electricity consumption), healthcare. They can be fused in the case of improving energy efficiency and reducing energy consumption, solutions in smart cities and transport. Policies can make it more energy efficient and greener. Blockchain tools, which can help you calculate, track and report electricity generation and consumption, carbon footprint and carbon emissions, will be instrumental in the development of an array of innovative services in the energy sector

DIGITALISATION

Regulations

CODES/STANDARDS/
MANDATES

Measures:

- Communication from The Commission 2030 Digital Compass: the European way for the **Digital Decade**
- Strategic targets will stimulate the development of digital services, leading, on the one hand, to higher energy use because of larger overall volume of online traffic, and on the other, to less energy consumption in sectors where conventional service provision will move online.

OBLIGATION SCHEMES

Measures:

OTHER REGULATIONS

- The **'Europe Fit for Digital Age'** package
- This package of policies will stimulate the development and expansion of digital services and their role in the economy and, depending on the final legislative solutions, may include rules that will affect the energy efficiency of the digital services sector.



DIGITALISATION

Economic and financial instruments

DIRECT INVESTMENT

Measures:

- Green Public Procurement

- GPP can influence energy demand by promoting the purchase of more energy efficient devices for digital public services

FISCAL/FINANCIAL INCENTIVES

Measures:

- Digital Europe programme
- ERDF and Cohesion Found
- EIB lending

MARKET-BASED INSTRUMENTS

- Activities supported under funding programmes may lead to the development of technologies and innovations that, on the one hand, improve the efficiency of energy generation and use, and on the other stimulate the development of novel digital services, expansion of existing ones, and enable moving more conventional services online.

DIGITALISATION

Economic and financial instruments

DIRECT INVESTMENT

FISCAL/FINANCIAL
INCENTIVES

MARKET-BASED
INSTRUMENTS

Measures:

- Review of the EU Emissions Trading Scheme – **ETS Directive**
- The EU ETS not only induces shifts on the energy supply side, but also (via electricity price) affects demand-side measures in the ICT sector, e.g. investing in energy efficiency aspects of digital services, optimisation of energy consumption by the digital infrastructure, shifting its energy-intensive elements to locations where sufficiently large volumes of cheap, low-carbon energy is available.



DIGITALISATION

Soft instruments

VOLUNTARY APPROACHES

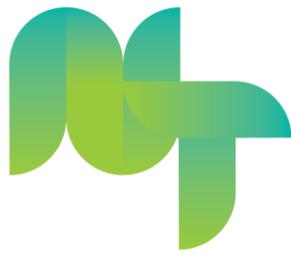
Measures:

- Big Data Value Public-Private Partnership
 - European Innovation Partnership of Smart Cities and Communities
 - Code of Conduct for ICT
 - European Blockchain Partnership
 - Code of Conduct for Energy Efficiency in Data Centres
 - Green and Digital Coalition
- Voluntary initiatives may affect energy efficiency of public services by using smart solutions for energy use optimisation (e.g. focused on transport, water supply, waste disposal facilities, street lights, energy use in buildings)

QUESTIONS

- In which sectors and applications do you think the digitalisation will lead to reduced energy demand (e.g. increased efficiency, virtual services), and where will it lead to higher demand (e.g. induced higher activity, ICT-specific demand)?
- Which digital policies do you expect to affect energy demand the most? E.g., on blockchain, 2030 digital targets, GDPR, new policies on data redundancy parameters and “data availability security”.
- What parameters / variables resulting from energy demand models do you think would be the most useful for policy making process?

Examples of parameter: electricity use by ICT equipment across the sectors (incl. by type of equipment), ICT sectoral energy use



Aleksander Śniegocki

aleksander.sniegocki@wise-europa.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 893311.