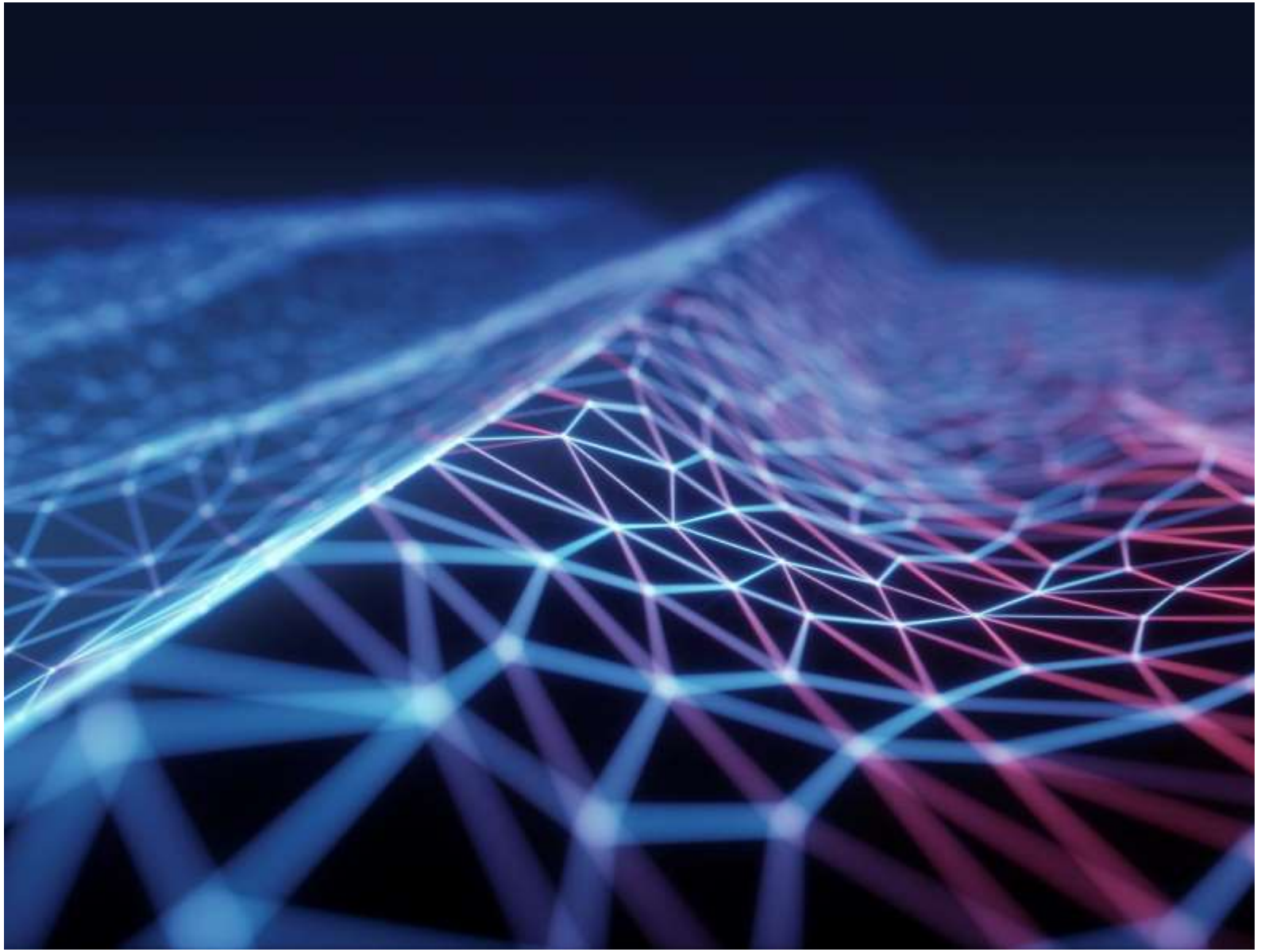

# GREEN AND SMART ECONOMIC RENOVATION: A PREREQUISITE FOR SUSTAINABLE DEVELOPMENT

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# GREEN AND SMART ECONOMY RENOVATION: A PREREQUISITE FOR STABILITY OF THE ECONOMY

A smart and green economic recovery and reboot after the COVID-19 pandemic focuses on the European Green Agreement and shaping the digital future of Europe [1]. Digital solutions are key to combating

Climate change and achieving a green transition for:

- overcoming climate change and environmental problems;
- limiting global warming to 1.5 0 C;
- achieving net zero greenhouse gas emissions
- sustainable use of resources and
- improving the health and quality of life of citizens.

***For reference***. According to research by the Carbon Tracker think tank, the world's fossil fuel reserves of energy and mining companies are 2,795 gigatonnes of CO2, which is incompatible with meeting the targets of keeping the global average temperature rise below 2 ° C until 2050.

[1] *Shaping Europes digital future. URL : https://ec.europa.eu/digital-single-market/en*

# THE EUROPEAN GREEN AGREEMENT ESTABLISHES:

- Achieving climate neutrality by 2050
- Biodiversity conservation
- Recycling of raw materials
- Elimination of pollution

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Such a recovery is seen as an opportunity to facilitate the transition to a new socio-economic model that is climate-neutral, resilient and comprehensive.

***For reference.*** In 2019, as a result of consistent policies of individual countries, global CO 2 emissions decreased by approximately 33 gigatonnes (Gt), primarily due to a sharp reduction in emissions in the energy sector due to the growing role of renewables, switching from coal to natural gas and increasing nuclear energy.

# TRENDS IN GREEN AND SMART RENOVATION

Formation of innovative plans for smart and green recovery - a prerequisite for the creation of innovative ecosystems, intensification of energy transitions and construction of the latest digital infrastructure based on:

- decarbonization,
- decentralization,
- deregulation,
- democratization and
- digitization.

The goal of the 2030 Target Climate Plan is to ensure a level playing field and stimulate innovation, competitiveness and jobs based on social, economic and environmental impact assessments. [2].

Creating economic opportunities for the formation of a modern sustainable economic and ecological and competitive economy and economic growth is realized by stimulating investment resources derived from global greenhouse gas emissions, use of natural resources, waste generation and risk management.

[2] *2030 Climate Target Plan. URL : https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12265-2030-Climate-Target-Plan*

# INSTRUMENTATION FOR MEASURING ENERGY TRANSITIONS

A new paradigm of energy transition values of sustainability, flexibility and affordability is provided by a new way of energy production, supply and consumption. The instruments of such an energy transition on a global, regional, national, sectoral and / or cross-sectoral basis are [3] :

- monitoring of world energy problems;
- measuring the efficiency of the national energy system (energy policy trilemma index);
- global energy scenarios;
- risk management (dynamic stability) and
- introduction of innovative data.

[3] *CREATING INSIGHT FOR SUCCESSFUL ENERGY TRANSITION. URL : https://www.worldenergy.org/transition-toolkit*

# INSTITUTIONAL BASIS FOR GREEN AND SMART RENOVATION

The European strategy for financing climate action and environmental sustainability calls for investment in sustainable energy projects and aims to combat global warming and finance innovation in clean energy, energy efficiency, digital infrastructure and renewable energy sources [4]. Within the framework of the G20, the following documents have been adopted to modernize infrastructure through technological innovations, increase resilience, comply with state policy requirements, and address environmental issues:

- Alliance Global Infrastructure Connection Initiative (2016),
- G20 African Partnership (2017),
- roadmap for infrastructure as an asset class (2018);
- G20 High Level Principles for Regional Sustainable Environment Planning (2018) and Global Reporting Initiative (GRI) standards.

[4] *Financing climate change and sustainability/ URL : https://www.ey.com/en_ro/news/2019/09/financing-climate-change-and-sustainability*

# DIGITAL INFRASTRUCTURE AS A CLASS OF INFRASTRUCTURE ASSETS

The model of dynamic stability of digital infrastructure, as the ability of the power system to return to a stable mode of operation without asynchronous mode after significant disturbances, excludes the concept of electricity tariff and is considered as a class of infrastructure assets.

***For reference***. As part of this initiative, the EDHEC Infrastructure Institute (EDHECinfra) has created a database on infrastructure investments, which over the past 20 years covers more than 500 infrastructure assets in 10 different countries, including private equity tracking (EDHECinfra Private Equity) and infrastructure debt (EDHECinfra Private) [5].

[5] *EDHEC Infrastructure Database URL : https://www.gihub.org/resources/data/edhec-infra-database/*


# MEASUREMENT METHODS:

Methods of dynamic stochastic modeling of general equilibrium (DSGE) - the basis of mathematical modeling and forecasting the stability of economic, environmental and social aspects.

The macroeconometric model used in this study is the Bayesian vector autoregression model (BVAR) [6], proposed by the World Bank Group in the Global Economic Outlook report [7].

[6] *Monetary and Fiscal Policy Analysis with DSGE Models (DSGE).URL : https://www.imf.org/en/Capacity-Development/Training/ICDTC/Schedule/HQ/2020/DSGEHQ20-12*

[7] *Global Economic Prospects. Analitical Chapters URL : https://openknowledge.worldbank.org/bitstream/handle/10986/33748/9781464815539.pdf*

# THANK YOU!