

## **Green Economy and Directions of Regional Economic Transformation in the Post-War Recovery Period**

Nataliia Shyshpanova

Mykolaiv National Agrarian University, Mykolaiv, Ukraine

### **Significance of the Topic**

Ukraine and its regions have endured 13 years of aggression from the Russian Federation, resulting in catastrophic consequences across all spheres of life: economic (destruction of critical infrastructure, industrial, and agricultural facilities), environmental (environmental pollution and threats to nuclear safety), social (crises in education and healthcare, increasing psychological trauma), and demographic (human losses and humanitarian crises), among others.

The recovery of Ukraine requires a comprehensive and innovative approach focused on "green" transformation. This will foster economic growth, job creation, energy efficiency, energy independence, and integration into the European and global spaces while improving the quality of life.

### **Purpose of the Study**

The purpose of this study is to identify the main directions for the green transformation of the Ukrainian regional economies in the post-war period.

### **Research Methodology**

The research is based on an interdisciplinary approach that combines the analysis of legal and regulatory frameworks, statistical data, strategic documents, and expert sources. In particular, it examines international practices in implementing the "green" transition (such as the European Green Deal and the UN Sustainable Development Goals), as well as key Ukrainian documents, including the "Green Deal for Ukraine," the National Energy and Climate Plan, and the Green Transition Roadmap.

The synthesis of economic, environmental, and social data was carried out through a systematic analysis of open sources. Economic indicators covered the state of production in industry, energy, and agriculture; environmental indicators included pollution levels, waste management, protected areas, and greenhouse gas emissions; while social indicators encompassed quality of life, demographics, access to services, and environmental rights.

### **Research Results**

The realization of long-term sustainable development goals and a green economy is outlined in the Association Agreement between Ukraine and the European Union. The European Green Deal represents a comprehensive transformation of the EU economy. Key areas include achieving climate neutrality by reducing greenhouse gas emissions, promoting renewable energy, and modernizing energy systems. Particular attention is given to the circular economy: decarbonization of industries, waste reduction, and the development of markets for sustainable products. The Green Deal also addresses sustainable mobility: reducing transport emissions, supporting electric vehicles, and advancing multimodal transportation.

In food production, the goal is to minimize its ecological impact, reduce pesticide use, and encourage the production of environmentally friendly goods. Biodiversity preservation is another important area: protecting ecosystems, expanding nature reserves, and greening cities. The success of this transformation relies on investments in green technologies and innovations across all sectors.

To outline pathways for achieving Ukraine's green transformation and its regions, the study analyzed the Green Future Index from MIT Technology Review Insights.

In the context of post-war recovery, the integration of green technologies into reconstruction processes becomes a key task, enhancing energy efficiency, preserving natural resources, and reducing environmental impacts.

Concrete models of green recovery have already been developed: **Ambitious Model:** Focuses on active support for green initiatives in climate resilience, green growth, and sustainable agriculture. Its core element is the post-war "Green Deal for Ukraine," aiming to create a "Green Ukraine" integrated into the global economy with climate neutrality. **Pragmatic Model:** Prioritizes green goals as tools for broader objectives, including non-environmental ones. **Inertial Model:** Limits actions to isolated environmental tasks without integrating them into other sectoral goals.

## Conclusions

The implementation of the green transformation of Ukraine's regional economies during the post-war recovery requires a systematic approach that involves the integration of international experience and its adaptation to national realities, the development of public-private partnerships for the implementation of green technologies, and the creation of incentives for businesses and citizens to transition to a sustainable lifestyle.

These conclusions are based on the synthesis of economic, environmental, and social data obtained from open national and international sources, as outlined in the methodology. In particular, the analysis included Ukraine's official statistics, analytical materials from **The Green Future Index (MIT Technology Review Insights)**, as well as the provisions of national strategic documents in the field of green transformation. A comprehensive analysis of these data has made it possible to identify the main directions, risks, and potential of regional economies for implementing the principles of a sustainable economy in the context of post-war recovery.

## Keywords

green economy, regional transformation, sustainable development, environmental policy