

## OPINION

on PhD dissertation submitted for obtaining the educational and scientific degree  
"Doctor" at the D. A. Tsenov Academy of Economics, Svishtov

Prepared by: **Assoc. Prof. Plamen Hristov Milev, PhD,**

Department of Information Technologies and Communications, University of National and World Economy – Sofia. Grounds for writing the opinion: **Order 324 / 16.04.2025** of the Rector of the D. A. Tsenov Academy of Economics, Svishtov, for the appointment of a Scientific Jury and the decision of the first meeting of the Scientific Jury held on 17.04.2025.

PhD Candidate: **Abrar Ashraf.**

The PhD Candidate has been enrolled in a doctoral program in Area of study 3. Social, economic sciences and law, Field of study 3.8. Economics, doctoral programme "Application of Computing in Economics" at the Department of Business Informatics at the D. A. Tsenov Academy of Economics, Svishtov.

Title of the dissertation: **The potential of information and communication technologies in the transition towards green economy.**

### **I. General presentation of the dissertation**

The presented dissertation addresses a relevant and significant scientific issue – the role and potential of Information and Communication Technologies (ICT) in the transition towards a green economy. The topic is particularly relevant in the context of global efforts for sustainable development, reduction of carbon emissions, and digitalization of economic processes.

The dissertation consists of 223 pages and is clearly structured into an introduction, three main chapters, and a conclusion, along with a bibliography and appendices. It explores the interaction between ICT and green transformation through an analysis of political, economic, and technological factors, supported by empirical data.

The literature used by the author is current and interdisciplinary – encompassing scientific publications in the fields of ICT and sustainability, as well as strategic documents from the EU, international organizations, and national policies. The appendices include graphs, tables, and indicators that support the argumentation in the analysis.

### **II. Assessment of the form and content of the dissertation**

The research problem is addressed systematically, with good logical consistency between theoretical concepts and empirical findings. The author applies a combination of

methods – comparative analysis, policy analysis, statistical tools, etc., demonstrating an interdisciplinary and analytical approach.

The exposition is written in precise and clear academic language, and the structure of the text is well-organized. The length of the dissertation is appropriate, and the methodological tools are adequate for the objectives set.

The abstract correctly reflects the main points of the dissertation – goals, objectives, methodology, analysis, and contributions, thus ensuring the transparency of the research.

### **III. Scientific and practical contributions of the dissertation**

The dissertation contains both scientific and applied contributions. I accept the contributions as formulated by the author, and I would summarize them as follows:

- Scientific contributions:
  1. A theoretical framework for the interaction between ICT and the green economy has been systematized, outlining the main models of digital transformation in the context of sustainable development.
  2. Indicators have been developed to measure progress in the green transition through the integration of ICT indexes and sustainability indicators.
  3. A critical comparison of approaches in different countries and regions has been made, offering classifications based on the level of ICT integration in environmental policies.
- Practical contributions:
  1. An analytical model for the assessment of ICT policies in the context of the green transition has been proposed, which can be used by public institutions and researchers.
  2. Guidelines for ICT strategies supporting sustainable economic practices have been developed.
  3. Good practices have been presented, which can be adapted to both Bulgarian and international contexts, including by the private sector.

### **IV. Questions regarding the dissertation**

The following questions could be addressed to the PhD candidate:

1. What is the view of the PhD candidate on the challenges facing developing countries in integrating ICT into sustainable development?

2. To what extent is the transfer of good practices from the EU possible to countries with different levels of digitalization?
3. What ICT tools would the PhD candidate recommend for monitoring and accountability of green policies?

#### **V. Summary evaluation and conclusion**

In conclusion, I believe that the presented dissertation meets all the regulatory requirements, and the contributions described in this opinion are clearly identifiable within the work. I express my **positive assessment** and recommend that the established scientific jury **award** the educational and scientific degree "Doctor" in the scientific specialty "Application of Computing in Economics" to Abrar Ashraf.

Sofia

May 8, 2025

Prepared by

/Assoc. Prof. Plamen Milev, PhD/