TO
THE MEMBERS OF SCIENTIFIC COMMITTEE
D. A. TSENOV ACADEMY OF ECONOMICS
INTERNATIONAL ECONOMIC RELATIONS DEPARTMENT

SVISHTOV

OPINION

ON A THESIS SUBMITTED FOR ACQUISITION OF OF THE EDUCATIONAL AND SCIENTIFIC DEGREE OF DOCTOR IN THE PROFESSIONAL FIELD 3.8 "ECONOMICS", DOCTORAL PROGRAMME "WORLD ECONOMY AND INTERNATIONAL ECONOMIC RELATIONS" AT D. A. TSENOV ACADEMY OF ECONOMICS – SVISHTOV

Reviewer:	*Assoc. Prof. Karina Agop Sarkisyan-Dikova, PhD, D. A. Tsenov Academy of Economics - Svishtov*
Author of the doctoral thesis:	*Ivan Vasilev Ivanov*
Title of the doctoral thesis:	*IMPACT OF ENERGY EXCHANGES ON THE FUNCTIONING OF THE ENERGY MARKET IN THE EUROPEAN UNION*
Scientific Supervisor:	*Prof. Tanya Gorcheva, DSc (Econ)*
Opinion submission grounds:	*No. 184 /16.04.2021 of the Rector of D. A. Tsenov Academy of Economics for participation in dissertation defense panel*

I. General presentation of the dissertation:

The total volume of the dissertation is 145 pages and comprises introduction, three main parts, conclusion, reference list, list of the figures, tables and abbreviations The different parts of the paper are well balanced, there is a logical link between them and all the bibliographical sources are used according to the good practices.

The **subject** of this study is the EU energy market and in particular the wholesale electricity market in the context of European energy policy.

The **object** of the study is the impact of energy exchanges on the functioning of the electricity market as a whole in the EU.

The **aim** of the study is to analyze the impact of energy exchanges on the functioning of the energy market in the European Union in relation to electricity trade in the light of European energy policy.

The main hypothesis of the author is that the energy exchanges are at the center of the liberalized and single European energy market, as the most effective way known so far for trading in electricity and energy. Stock trading provides transparency in pricing, liquidity, easy market access for multiple participants, competition and security of supply.

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

The volume of the dissertation thesis is optimal both in terms of its structure and contents. Its constituent parts are logically connected and relevant to the main research hypothesis

The topicality of the dissertation is determined by the growing need in the EU countries for secure, stable and affordable energy for households and businesses within the Union.

The existence of an integrated energy market, operating on the principle of fair competition, innovation and a stable regulatory framework can be a guarantee for transparent trade in electricity and energy. The development focuses on the importance of energy exchanges as a major component of energy markets. Exchanges and independent market operators shall ensure and facilitate neutral market access. They are the binding force of the increasingly diverse markets. They ensure price transparency, stimulate innovation, investment and competition.

The dissertation is written according to the requirements in the terms of style, and has adequate summaries and analyzes. Both general and private scientific methods of scientific research are used, which provide the achievement of the set tasks, fulfillment of the goal and proving of the research thesis.

The **executive summary** consists of 36 pages and summarizes correctly the dissertation paper. It includes a reference with the scientific and attached contributions formulated by the author and a reference with the author's publications related to the topic of the scientific research.

III. Scientific and scientific-applied contributions of the dissertation.

The scientific and scientific-applied contributions are adequately formulated. The doctoral student has indicated four contributions:

1. The research on the essence of the EU policy in the field of energy is systematized and analyzed, which allows the construction of a multifaceted theoretical foundation for clarification of the general principles and objectives of the common policy.

2. Based on a retrospective analysis of the development of European energy policy in the period 1951 - 2019, the conceptual framework of the EU electricity market is built, contributing to the analysis of the interaction between the evolution of European energy policy and changes in the EU electricity market which presents the current challenges to energy policy.

3. Revealing the importance of the EU electricity market, its essential characteristics are outlined, including the specifics of the energy mix in the Member

States and the way the market works. On this basis, the models for reforming the electricity sector in order to liberalize the electricity sector in the EU are outlined.

4. A factor analysis is carried out to determine the structure of the wholesale electricity market in the EU, on the basis of which the impact of energy exchanges on its functioning is highlighted. A classification of the types of energy exchanges is made in Europe, which allows the construction of an index measuring the impact of energy exchanges on the functioning of the energy market in the EU - EXIEM.

IV. Questions and recommendations on the dissertation.

I have no significant remarks on the dissertation.

As a recommendation, I can suggest that the results of the doctoral student's research be published in publications, references indexed in world-famous scientific databases with scientific information.

V. Summarized evaluation of the dissertation and conclusion.

The dissertation thesis is a topical, thorough and feasible scientific work. It reflects the doctoral student's skills to conduct independent scientific research and has significant scientific and practical contributions. The thesis meets the requirements of the Law for Development of the Academic Staff of the Republic of Bulgaria and the Regulations for Development of the Academic Staff in D. A. Tsenov Academy of Economics.

The qualities of the dissertation thesis entitled "IMPACT OF ENERGY EXCHANGES ON THE FUNCTIONING OF THE ENERGY MARKET IN THE EUROPEAN UNION" **allow me to confer a positive opinion and propose to the Scientific Committee to confer to Ivan Vasilev Ivanov the educational and scientific degree of Doctor of Philosophy in the scientific field 3.8. Economics, Doctoral Programme "World Economy and International Economic Relations".**

Date: 12.05.2021

Prepared by:

(Assoc. prof. Karina Sarkisyan-Dikova, Ph.D.)