

THEORETICAL AND PRACTICAL DIMENSIONS OF THE GREEN ECONOMY TRANSITION²

The article presents the results of recent implemented and current research on up-to-day trends, challenges, risks and social and economic consequences of the green transition for economic development on a national and European level discussed at the annual scientific conference, organised by the Economic Research Institute at the Bulgarian Academy of Sciences.

Keywords: green economy; sustainable development; growth; labor market; European Union; financing; sectoral and regional policy; green transformation of companies
JEL: E00; F00; G00; J00; M00; O1; Q00; R1

Economic Research Institute at the Bulgarian Academy of Sciences (ERI-BAS) was an organiser and host of the traditional Annual scientific conference “*Economic Development and Policies: Realities and Prospects*”, held on December 5, 2023, in Sofia. The 2023 edition of the forum was focused on the *National and European challenges of the transition to the green economy*³.

Over 70 researchers took part in the scientific event where 43 presentations were given. They discussed the problems of economic development of Bulgaria and the European Union (EU) in regional and global contexts in the new conditions of green transition. Conference speakers and guests were distinguished Bulgarian scientists and university professors, including 22 young researchers and doctoral students, representatives of the state administration and non-governmental organisations.

The presentations reflected achieved and intermediate results in recently implemented and current research and applied projects related to up-to-day trends, challenges, risks and social and economic consequences for the development of the economy on a national and European level in the context of the green transition. They were systematised in five panel sessions: Plenary speaker session; Sustainable development, economic growth and the labour market in the transition to a green economy; European perspectives and financing of the green

¹ Prof. Dr. Alla Kirova, Economic Research Institute at the Bulgarian Academy of Sciences, e-mail: a.kirova@iki.bas.bg.

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³ The collection of articles presented at the conference is published by the renowned international Prof. Marin Drinov Publishing House of Bulgarian Academy of Sciences (ERI-BAS, 2024).

transition; Impacts of the transition to a green economy on the regional and sectoral economy; The transition to a green economy and companies.

The Director of the Institute Prof. Irena Zareva opened the forum with a welcome speech. In it, she noted that for years the Institute has been paying special attention to issues related to the transition to a green economy, and in accordance with the new priorities of its research activity, this issue was defined as one of the main directions of work in view of its great importance on a national and European level. During the period 2021-2023, several projects related to green transformation in various areas of economic development were elaborated at the Institute and published, and research in this direction continues. It was emphasised that the transition to a green economy requires combining the efforts and experience of the administration, business, science and education to find practical solutions to increase the efficiency and effectiveness of the country's policy for its successful implementation, and hope was expressed that the conference will contribute in this direction.

The forum started with the **keynote speech** by *Prof. Daniela Bobeva* on the topic **“Theoretical deficits and political illusions of the green transition”**. She underlined that the European Union has set the ambitious goal of reforming its economy and creating a new (green) economy – a low-carbon, resource-efficient efficient and socially inclusive one. The “green transition”, sealed in The Green Deal, started optimistically. However, the first three years have outlined some successes and challenges that need reflection in order to right the wrongs and the way the transition happens. In her opinion, the problems of the beginning of the transition could be avoided if the theoretical deficits and political illusions about the transition, explored here, are overcome. A review of the foreign and Bulgarian academic literature was presented, looking for the place of the green transition theory in economic science and the foundations of the policy is built on. The methodologies for assessing the progress of the transition were analysed and their applicability for Bulgaria was tested. Grounds for a reconsideration of the approach to assessing the effects of the transition were discussed. The presentation combined analysis of the theory, the evaluation methodology, and the policies as well as recommendations in these three areas were made on this basis (Bobeva, 2024). The plenary session was finalised by the prof. Bobeva’s debates with Prof. Stefan Stefanov from the New Bulgarian University – specially invited discussant on this extremely sinister topic. The exchange of ideas between them set the tone for further lively discussion on all thematic areas included in the conference program. More specifically, the discussion in the plenary session focused on clarifying the issue of balancing in economic theory micro-level opportunities and macro-level dangers in view of upcoming re-industrialisation as well as of the national interest and effects of the green transition in Bulgaria.

The conference proceeded in accordance with the scheduled panel sessions with a wide range of thematic fields of presentations grouped into relevant problem areas.

SUSTAINABLE DEVELOPMENT, ECONOMIC GROWTH AND THE LABOR MARKET IN THE TRANSITION TO A GREEN ECONOMY

The discussions during this session were concentrated around two main thematic areas.

The first one treated a series of issues related to ***sustainable development, economic security and competitiveness of the economy***. Gergana Slavova and Teodorina Turlakova studied *sustainable development through green investments*. They pointed out that recent years have seen not only higher average temperatures and global warming on planet Earth, but also a significant increase in the percentage of air, water and soil pollution in Europe. Prompted by this and by the EU's desire to direct not only people's thinking but also their actions towards the application of renewable energy sources, eco-mobility, the development of environmentally friendly agriculture and the improvement of energy efficiency, their presentation aimed to define what sustainable development is and how it can be achieved through the application and use of different types of green investments, using good real practices implemented in Bulgaria and Europe (Slavova and Turlakova, 2024). Ivan Tsanov described, analysed and interpreted the issue of *green economy, economic security and the relationship that exists between them*. The thesis was argued that the relation a green economy – economic security is available but underestimated in Bulgaria. The fundamental conclusion was drawn that the improvement of the green economy in the Bulgarian economy can be completed successfully only if they are built based on a universal managerial model, tailored to the local specifics, while not neglecting the problematic connection with economic security (Tsanov, 2024). Lyubomira Gancheva studied *challenges in achieving the objectives of the Green Deal in the EU and Bulgaria and the opportunities that modern technologies provide to preserve the competitiveness of the economy*. She indicated that the EU Industrial Plan for the Green Deal together with the adopted higher target of reducing emissions are a big topic not only for the energy sector, but also for the business and for the general economic development of Bulgaria which faces many challenges under the transformation to low-carbon emissions. Both the EU and Bulgaria are threatened with a loss of competitiveness but the Green Deal should be seen not as a threat, but as an opportunity for our country being a catalyst for accelerated economic growth and technological improvement. There are several proven technologies for carbon capture and recovery, thanks to which the local specifics of the industry in our country, the security of the energy system and the possibility of sufficient flexibility in decision-making will also be considered when achieving the European climate goals. Through them, the Bulgarian economy can not only maintain its competitiveness, but also increase it, especially in the part of implementing innovative business models and technological transformation (Gancheva, 2024).

The second thematic area was referred to ***new challenges facing the labour market and the necessary changes in social security and social protection***. Iskra Beleva discussed *the main challenges to the structure of employment by sectors and branches of the economy, resulting from the transition to the green and digital transformation of the economy*. She underlined that the expected structural transformations will impose significant changes in the employment distribution by main sectors and branches and new requirements for the labour force skills to participate effectively in this process. The author tried to answer questions like to what extent the Bulgarian economy is ready for these changes and what policies and instruments will be implemented (Beleva, 2024). The focus of the presentation by Pobeda Loukanova was on *green jobs and their requirements for changes in vocational education and training*. The main challenges in the preparation of the labour force in connection with the forthcoming deployment of the green transition in Bulgaria were discussed (Loukanova, 2024). *The educational structure of the population in Bulgaria and the EU in the context of*

the transition to a green economy was an object of the presentation by *Kristina Stefanova*. In it, she stated that the education system is an important part of the toolkit for meeting the challenges of the transition to a green economy and the long-term labour market changes that will result. An education system providing a higher overall share of the population with secondary vocational and tertiary education can be an asset in the transition to a green economy and in reducing youth unemployment (Stefanova, 2024). *Silvia Toneva* continued with the analysis of the *dual vet system and the transition to a green economy*. An overview of the new requirements for the implementation of dual training in the transition to a green economy was presented and the conclusion was made that the widespread implementation of this specific form of training can contribute to the development of the necessary sustainability-related competencies. The expectations of education and training systems, their ability to prepare learners for the future and their crucial role in the green transition were examined (Toneva, 2024). *Yordan Hristoskov* examined *the minimum monthly incomes from social security and social assistance, their relevance and synchronicity in dynamics in the context of the Recovery and resilience plan as well as their role in reducing poverty and inequality*. Based on an empirical analysis, it was concluded that the minimum income policy lacks rules for measuring these incomes with the poverty line and the minimum wage. There is also no practice of annual indexation of these incomes, which is why their purchasing power decreases. The author recommended mechanisms for tying the minimum income from social security to the poverty line and the minimum wage, and for the income from social assistance – only to the poverty line. It was proposed to use the Swiss rule for the annual update of all minimum incomes. Decisions were also made to limit access to social benefits to persons who are not really in need. To achieve a greater effect of social benefits, it was recommended to provide them in kind or through vouchers for families where women and children are at risk of violence (Hristoskov, 2024). The purpose of the presentation by *Georgi Shopov* and *Teodora Peneva* was to evaluate *mechanisms for the social protection of households in the conditions of energy transition*. The research tasks were to prepare a synthesized analytical review of the programs for financial support for energy renovation of residential buildings, to provide compensations in a liberalized electricity market and to provide targeted subsidies for heating in the winter season, on the one hand, and to offer assessments and recommendations to optimize social protection mechanisms in the conditions of energy transition, on the other (Shopov and Peneva, 2024).

The ensuing discussion turned to the issues raised by the speakers related to costs-benefits of the green transition in Bulgaria; the need for specialised national statistical information in this area; the impact of wars on ecology and green transition policies.

EUROPEAN PERSPECTIVES AND FINANCING THE GREEN TRANSITION

The presentations in the second-panel session mainly concerned three groups of questions.

Firstly, a series of issues related to the *implementation of the European Green Deal* were argued. *Emil Panusheff* examined *the challenges for the Bulgarian economy to achieve the European green goals in the conditions of global fragmentation*. He argued that adopting the approach to achieve climate neutrality and support for the technological renewal of European industry is a significant challenge for Bulgaria's participation in the integration mechanism.

The openness of the Bulgarian economy is affected by global fragmentation and poses significant challenges for participation in European global value chains. The pursuit of "strategic autonomy" in the common trade policy of the European Union gives rise to measures with protectionist solutions, which are extended by the European Economic Security Strategy. At the same time, the green transition conditions the application of instruments of a non-market nature, which reinforces the need for enhanced cooperation between countries, following the principles of the World Trade Organisation (Panusheff, 2024). *Eduard Marinov* and *Milena Ivanova* emphasised on *the connection of the European Green Pact with the Global sustainability initiative*. Their presentation explored the intricate interplay between the European Green Deal (EGD) and the United Nations' Sustainable Development Goals (SDGs). The EGD, a transformative initiative by the EU, aims to propel Europe towards climate neutrality while fostering economic growth. Aligned with a significant portion of the SDGs, the EGD represents a dynamic force for global leadership in addressing climate change. The connections, synergies, and disparities between these two programs, shedding light on their impact on global sustainable development were examined. Through this analysis, the potential of the European Green Deal and the SDGs to chart a course for a more sustainable and interconnected world was revealed (Marinov and Ivanova, 2024). *Simeon Stoilov* analysed *projected economic burdens for the private sector at the implementation of the green transition*. The study aimed to analyze the impact on the private sector and individual commercial companies in the member states, as a result of the implementation of the EU Green Deal. The author stated that an overview of the activation processes, the scale and the impact of all components of the transition to a green economy, through an assessment of the economic effect on individual companies is a necessary approach to prepare the process and ensure an effective and smooth operational transition to the new requirements set and the new economic framework of the green transition. In parallel, the trends, requirements and expected economic structure of the rest of the world market were considered, given the looming irreversible changes in the developed markets worldwide (Stoilov, 2024). *Annie Dimitrova* and *Atanas Pavlov* investigated *migration in the green transition context*. They pointed out that the European Green Deal does not explicitly address the issues related to inclusion and integration of migrants, but the interrelationship between climate change and human mobility is undoubtedly critical to achieving the goals of the green transition. Such a thesis foregrounds the questions of whether and how human mobility and labour migration can contribute to the transition to a low-carbon, ecological and sustainable future. The main objective of their study was to analyse the potential of the migrants in the context of achieving green transition and developing green skills, as well as to identify good examples for supporting the achievement of environmental goals (Dimitrova and Pavlov, 2024).

The next thematic area was devoted to the *European green industrial policy*. *Iskra Christova-Balkanska* discussed *the EU's new industrial policy and the member states from Central and Eastern Europe*. She noted that in the post-crisis post-pandemic conditions in the EU, a new industrial policy is consistently being developed, aimed at overcoming the decrease in the importance of industry in the countries of Western Europe and building strategies for the development of environmentally friendly policies, energy-saving innovative policies and digitalisation of the economy in Europe. In this context, the focus of the study was on the specialisation of industrial production in the Member States of Central and Eastern

Europe and how these countries are adapting to the development of innovative industrial sectors within the EU (Christova-Balkanska, 2024). *Elena Spasova* conducted a *comparative analysis of the green industrial policies in the automotive sectors of the EU and the US focusing on electric vehicles (EVs)*. Her study explored key initiatives, regulations, and incentives. Specific criteria for the comparative analysis were outlined and the latest data on the scope and application of the respective measures were provided (Spasova, 2024).

The last round of problems discussed the ***financial aspects of the green transition***. *Iana Paliova* presented *public finance reform in the green transformation of the EU*. The study explored green public finances with European financing as a key element of governments' integrated strategies for the green transition and combating climate change. Public finance reforms in the EU were analysed to enable nationally determined contributions, arising from the 2015 Paris Agreement and the Green Deal's initiatives of the EU, to be translated into detailed government policies. Similarly, approaches were proposed in the medium-term budgetary planning and annual budget allocation decisions to reflect countries' development priorities related to the climate dimensions of the Sustainable Development Goals. New approaches to public financial management in the EU Member States were explored to be supported by robust processes and frameworks for the effective implementation of green transition policies (Paliova, 2024). *Svetlana Aleksandrova-Zlatanska* examined *the green transformation as a driving force for making the capital markets green*. She stated that achieving green transformation goals by 2050 would require significant amounts of investment. These investments can be provided by the capital markets; this expands traditional finance with new ones such as green bonds. The need for investment is expanding traditional finance with new ones like green bonds. The study provided a survey, focusing on green bonds market development, green loans and green securitisation. It showed that the green bonds issues currently constitute a smaller share in comparison to the traditional bonds in the international capital markets. International capital market dynamics show an increase in both supply and demand for green bonds. Bulgaria is one of those countries that do not mobilise private resources for green activities from the capital market (Aleksandrova-Zlatanska, 2024). *Virginia Zhelyazkova* presented the issue of the *exposure to climate transition risks – insights from the Bulgarian banking system in perspective*. She argued that climate change is currently an undisputed phenomenon of anthropogenic nature. Globally, there is a consensus on the need to undertake and carry out a systematic policy to limit their negative consequences. This is evident from the decisions contained in the Paris Agreement, as well as in the policies of the EU and, in recent months, of the United States. Global uncertainty, which has grown enormously as a result of the COVID-19 pandemic and then the war in Ukraine and the subsequent geopolitical tensions, are intensifying the global recession and raising the question of the need to modify the agenda on which to implement climate policies. The author provided her own perspective on this important issue based on an analysis of the exposure of the Bulgarian banking system to climate transition risks for the period of 2009-2022 (Zhelyazkova, 2024). *Sonya Georgieva* and *Petya Branzova* analysed *sources of funding for green deal projects*. They indicated that financing projects related to the European Green Deal could be provided through various sources and financial mechanisms. The European Green Deal is an initiative of the European Commission that aims to achieve climate neutrality and support sustainability in the EU. Therefore, the underlying aim of their study was to outline some of how projects can be funded under the

Green Deal (Georgieva and Branzova, 2024). *Liliya Rangelova* discussed *accounting issues and challenges in relation to the new Environmental, Social and Governance (ESG) risks disclosure requirements by banks*. According to her in today's economic environment, ESG is at the heart of sustainable and responsible investing and will be critical to governance in the future. Banks have an important role and responsibilities, because they can channel investments to more sustainable technologies and businesses, finance growth in a sustainable way over the long term and contribute to the creation of a low-carbon, climate-resilient and circular economy. The purpose of her presentation was to provide a brief overview of the new regulations in the area of non-financial reporting and the disclosure of information related to environmental, social and governance risks by banks. In it, she argued that gaps in the reporting of these risks could become a real risk to the financial system if banks do not integrate them into their business model, strategy and governance as soon as possible (Rangelova, 2024).

The main theses advocated in the following discussions were: impact assessment of global green transition initiatives shows unsatisfactory progress; the lack of common understanding by regional powers in the world cannot lead to a common policy; the question of economic security in the conditions of global uncertainty; pursued policies as green are often not so in practice and are sometimes at odds with the understanding of effective economic development.

IMPACTS OF THE TRANSITION TO A GREEN ECONOMY ON THE REGIONAL AND SECTORAL ECONOMY

The participants in this panel treated highly topical issues related to the problems in individual economic sectors and regions with an emphasis on the green transition and the reforms related to it from the perspective of sustainable development.

The session began with *analyses of the development of a number of economic sectors in the country*. *Stoyan Totev* presented *changes in the industry branch structure and their impact on its energy intensity*. A general picture of the changes in the indicators characterizing the energy consumption of the industry of the EU countries was demonstrated, with an emphasis on those in Bulgaria. The change in the energy efficiency of the manufacturing industry because of the alteration of the participation of energy-intensive branches was investigated. An analysis has been carried out of the economic reflection of the differences in the energy intensity of the manufacturing industry for selected European countries. The study, along with taking into account the influence of other factors such as comparative advantages, allowed outlining the possibilities for favourable changes in the branch structure of the manufacturing industry leading to an increase in its energy efficiency (Totev, 2024). *Anton Ivanov* settled on *achieving national priorities in the implementation of the green transition in Bulgaria's electricity sector*. He underlined that electricity has a major role to play in decarbonising the economy by 2030. The sector can maintain a leading role in the Balkans by developing a mix of renewable, hydro and nuclear projects. Financing conditions and the market environment favour renewable energy projects, putting the sustainability of the electricity system at risk. Strategic decisions require the explicit involvement of the State to guarantee the electricity balance (Ivanov, 2024). *Dimitar Sabev*

discussed the *European experience and Bulgarian perspectives of the coal regions*. He stated that the share of solid fossil fuels in the energy balance of the EU has sharply declined since 2015, yet even before the Paris Agreement, several European regions had abandoned coal mining for economic reasons. The imminent energy transformation in Bulgaria often faces opposition with the argument that the social price for the coal regions will be unbearable. So the experience of certain European areas abandoning coal mining fully or partially, with a wrapping up of recommendable approaches for the affected Bulgarian coal regions was examined (Sabev, 2024). *Plamena Yovchevska* considered the *challenges and risks facing Bulgarian agriculture in the transition to the green economy*. She emphasised that after the macro-social transformation, complex processes with ambiguous social and economic results took place in Bulgarian agriculture as well as the development of the primary sector is strongly influenced by the state and development of land relations. Trends with complex connotations and ambiguous economic results are registered in social relations arising in connection with the use of land. The "green policy" has a significant impact on the economic use of land as the main production factor. The transition to a green economy highlights a number of challenges and outlines certain impacts with the rank of risks for Bulgarian agriculture (Yovchevska, 2024). *Ognian Boyukliev* continued with the topic related to *the green transition and the food production and trade sectors in Bulgaria*. He said that food security in harmony with nature is a central goal of the Green Transition that gathers pace among the European Union member states. In this context, calculations and estimations of the expected price changes in the food production and trade sectors resulting from the implementation of the Green Transition goals and technologies in Bulgaria were presented. It was proved that dedicated public economic policies in food production and trade sectors are of central importance (Boyukliev, 2024).

Bioeconomy and circular economy were the subject of two presentations. *Maria Kotseva-Tikova* and *Milkana Mochurova-Georgieva* treated *bioeconomy and sustainable development*. They pointed out that the move towards sustainable approaches to the development of modern society, which cover the economy, the environment and the society requires looking for indicators to assess and measure the state each year and to show the direction of change. The global sustainable goals are wide-ranging and sometimes contradictory, requiring balancing between them. Various policies aim at realising improvements in individual objectives. The contribution of the bioeconomy to the realisation of some of the goals was assessed: Goal 2 Zero hunger and Goal 12 Responsible consumption and production. The channels for influencing them and the results of support for the development of the bioeconomy have been identified (Kotseva-Tikova and Mochurova-Georgieva, 2024). *Yana Kirilova* and *Dochka Velkova* considered *bio-waste management in Bulgaria in the circular economy transition context*. According to their statement, bio-waste landfilling poses social, economic and environmental consequences. Food waste forms 60% of bio-waste and its management is considered a global challenge. Assessment of the available data on bio-waste and the bio-waste treatment capacity in Bulgaria in the context of these global challenges was presented (Kirilova and Velkova, 2024).

The experience of EU countries in planning and implementing the principles of green restoration of regions and the possibilities of its realization in Ukraine was in the focus of the study by *Vira Lebedchenko*. The priorities of development in accordance with international obligations, with the goals and limitations systematically established at the

national level, according to which Ukraine should develop for green reconstruction, and which should be embodied in regional development plans and serve as a framework for planning the development of local communities were highlighted. It has been found that at the regional level, it is necessary to develop clear reconstruction plans based on the principles of sustainable development. They should be based on national-level recommendations and take into account local conditions and needs. Such regional development plans require awareness of the economic, social and environmental challenges of the regions, the solution to which should be based on the priority of sustainable long-term use and preservation of local resources (Lebedchenko, 2024).

The panel concluded with *Yani Dimitrov's* presentation of several ***municipal development plans and the needs of local communities***. The aim of his study was to assess the degree of compliance of the municipal development plans' goals, priorities and measures with the needs of local communities. He underlined that in recent years, there has been an irrational, accelerated absorption of European funds by the municipalities and the implementation of projects of all kinds without a detailed study of the need and rationale for their implementation, at the expense of municipal budgets. As a result of the study, the quantitative discrepancy based on the performance ratio corresponding to the performance evaluation has been demonstrated. The results for the various municipalities are indicative from the point of view that they planned poorly, did not follow the real needs of the population, and were guided by the funding that the funds provided (Dimitrov, 2024).

THE TRANSITION TO A GREEN ECONOMY AND COMPANIES

The last panel session was dedicated to various problems and challenges facing Bulgarian companies due to the green transition.

The first one concerned issues of ***management and strategies of the companies*** in the new conditions. *Adelina Milanova* and *Pavlinka Naydenova* presented the *organisational capacity for transition to the green economy*. Their purpose was to highlight and formulate organisational prerequisites in a social and cultural aspect, necessary for building a modern business attitude and behaviour, oriented towards a fair transition of companies to a green economy, to a conscious and responsible ecological change in their activity. They emphasised the need to focus on the identification of long-term trends and perspectives for the ecologically functioning and communication of the companies in the respective ecosystem. To guarantee this type of longevity, it is necessary to have a methodically and consistently built own potential and capacity to change, whose foundations should logically be sought in the creation of educated and modern human capital (Milanova and Naydenova, 2024). *Plamen Tchipev* has considered a *theory of property rights, firms and the green transition* aiming to look at how some of the goals of the green transition from the perspective of economic theory are being implemented. Of particular interest was to what extent the Emissions Trading Scheme (ETS) fits into the theoretical framework of requirements of some of the most important theories governing property rights, their infringements, and any compensation to be paid by the perpetrators to the sufferers. Based on a theoretical model, the characteristics that such a tool must possess in order to achieve an effective result were highlighted, and then their presence in the ETS was evaluated (Tchipev, 2024). *Radostina*

Bakardjieva treated *environmental taxonomy as an instrument of the green transformation of companies*. Theoretical and institutional approaches to the disclosure of environmental information on sustainability were systematised. Environmental taxonomy was presented as the core of the Green Deal and the foundation of the disclosure of the sustainability of the firms. The main stages and directions of ecological taxonomy have been analysed. Up-to-date statistical information on the ecological results of Bulgarian firms in a sectoral dimension was presented and recommendations to businesses and institutions have been formulated (Bakardjieva, 2024). *Mariya Ivanova* analysed the issue of *employer branding as a strategic people management approach to a green economy*. She emphasised that employer brand management is closely related to organisational change management strategies. This correlation requires a structured approach to employer brand change and development, rather than random one-off activities and initiatives. The methodological toolkit of the study included surveys and questionnaires to measure employee satisfaction, analysis of managerial abilities and the influence of the specifics of the business context. The author proposed a different from the established approach to creating an employer brand management strategy – it starts with building a new organisational culture oriented to the ideas of a green economy and ends with appropriate marketing activities (Ivanova, 2024).

The challenges of the green transition for *small and medium-sized enterprises* (SMEs) were within the scope of the next thematic area. *Milena Angelova* discussed *the green transition effects on SMEs in view of their access to finance and administrative burdens*. It was underlined that the green transition requires adopting a completely new approach to making business – motivated by the market requirements, but at the same time – by the unprecedented by its scope and number of acts regulatory framework that requires from businesses to disclose wide-ranging and diverse information. Although initially left out of the scope of these regulations, SMEs still must comply with them – if are part of the value chains and if searching for funding. The risks in case of failure are enormous, including loss of markets and impeded access to finance, while their resources in terms of funds, administration, time and human resources, are growingly scarce, exhausted by the multiple recent crises. These challenges and aims at identifying the problem areas with the view to suggest possible strategies and solutions for coping with them were studied (Angelova, 2024). *Yuliyana Mollov* and *Aygun Erturk-Mincheva* examined *the role of investments in technological modernization for the transition of SMEs into a green and circular economy*. Their study focused on the realised investments under the technological modernization procedure under the Recovery and Resilience Plan in the South-Central Planning Region and their role in orienting the activities of SMEs towards the green transition and achieving corporate sustainability. An empirical study was conducted to assess the impact of the Recovery and Resilience Plan on the transition of enterprises in Bulgaria into a green and circular economy (Mollov and Erturk-Mincheva, 2024).

In the last thematic area, some problems of the *companies in individual sectors* were touched upon. *Spartak Keremidchiev* substantiated the *application of circular economy principles in the use of water resources*. He informed that in March 2020, the EC adopted the new circular economy action plan as one of the main building blocks of the European Green Deal. The EU's transition to a circular economy is expected to reduce pressure on natural resources and create sustainable growth and jobs in EU countries. Water is at the heart of sustainable development and is critical to social and economic development, energy and food production,

as well as sustainable ecosystems and the benefits they bring to people. The recycling and reuse of water as the main principles of the circular economy were the focus of his study. The author dealt with the current situation of applying the circular economy concept in the water sector of Bulgaria, Romania, Slovenia and Hungary. His aim was not only to present the current state, but also to reveal what the main deficits are and how they can be overcome through future projects and programs. The study revealed a weak application of the circular economy concept in the surveyed countries. It was concluded that the implementation of programs for energy efficiency and reduction of water losses, the recycling of wastewater, the storage of rainwater and its use for irrigation and the use of sediments in agriculture and construction are initiatives in the direction of applying the principles of the circular economy, which should be realised (Keremidchiev, 2024). *Katerina Vojcheska-Nikodinoska* presented *opportunities and challenges for shared investment companies in photovoltaic power plants*. She characterised the nature and potential of renewable electricity source projects in the context of the economic situation in Bulgaria and the world. The financial benefits of an investment through a newly created company offering services related to remote own production of electrical energy through photovoltaic power plants have been analysed. The financial effect of the different scenarios for the realization of the produced energy was substantiated: sale of all energy at market prices and use of the produced energy. Regarding the financial effect on customers, it was said that regardless of whether they invest only in generation or also in storage of the electricity, as well as the way in which it will be realized, they will receive a long-term and sustainable return. Moreover, all this is generated in an environmentally friendly and sustainable way, contributing to the achievement of the "green" goals and the commitments made by the state in connection with the sustainable development of the economy and the decentralization of the electricity system (Vojcheska-Nikodinoska, 2024). *Shteryo Nozharov* and *Petya Koralova-Nozharova* focused on the *economic aspects of climate transformation of the tourism sector in Bulgaria*. They noted that climate change is an exogenous risk for the tourism sector and its nature is related to the expected long-term irreversibility, which exists, concerning the economic aspects of this phenomenon. Bulgaria is a region with high vulnerability to climate change: increased temperatures and extreme rainfall, droughts, and intense floods. In this regard, vulnerability and adaptation turn into an important issue in assessing the extent to which the tourism sector has the potential to cope with the risks and threats posed by climate change. The purpose of the presentation was to identify the opportunities for efficient climate transformation of the tourism sector in Bulgaria (Nozharov and Koralova-Nozharova, 2024).

The participants and guests of the conference appreciated the high scientific level and the exceptional relevance and significance of the presented theses and research results, as well as scientifically based and reasoned methodological and practical proposals for improving policies and measures for the implementation of the green transition and for evaluating its effects on the economy, the population and society as a whole.

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