



Republic of Bulgaria
ECONOMIC
AND SOCIAL COUNCIL

OPINION

on:

"EU strategy for energy system liberalisation and integration - tasks and prospects for Bulgaria. Effect on energy poverty and measures to tackle it".

(own-initiative opinion)

Sofia, April 2021

The Economic and Social Council of the Republic of Bulgaria included in its Action Plan in 2021 the elaboration of an opinion on the topic: "EU strategy for energy system liberalisation and integration - tasks and prospects for Bulgaria. Effect on energy poverty and measures to tackle it".

The elaboration of the opinion was assigned to the Economic Policy Commission and the Social Policy Commission. The Economic Policy Commission was appointed as the leading commission for the preparation of the draft opinion and as rapporteurs were appointed - Georgi Stoev, member of ESC from group I and Ognyan Atanasov, member of ESC from group II.

At the plenary session held on 21 April 2021 the Economic and Social Council adopted the opinion.

1. Conclusions and recommendations

1.1. The Economic and Social Council (ESC) considers the adaptation of the European rules on trans-European energy networks (TEN-E) to the objectives of the Green Deal for clean, affordable and secure energy supply, which includes decarbonisation of the energy system, the transition to climate neutrality, the development of renewable energy sources, energy efficiency and prevention of the risk of energy poverty. The Green Deal takes into account the fact that Europe needs an energy system that ensures security of energy supply for all EU countries, as well as access for all producers to energy at an affordable price based on rapid electrification, which takes place and by doubling the share of electricity production from renewable energy sources (RES).

1.2. As energy networks play a significant role in the balance, reliability and development of the dynamics of energy system integration, ESC proposes to encourage projects for decarbonised energy, as well as energy sources without carbon emissions, while respecting technological neutrality. ESC also calls for support for the EU's efforts in the framework of innovative pilot projects for the International Thermonuclear Experimental Reactor (ITER), projects for the creation of preconditions for the production of electricity from green hydrogen and for the capture and storage of CO₂ to achieve affordable and competitive energy after 2030. ESC believes that scientific efforts to develop artificial intelligence for the improvement and commercial use of nuclear fusion. ESC draws attention to the fact that these promising areas will play a significant role in the energy balance after 2030-2040, but cannot help overcome the challenges faced by our country in the short term, so national projects should be supported on the basis of real features, accumulated experience and proven technologies.

1.3. ESC supports the development of a strategy that takes into account the specifics of Bulgaria and outlines the individual path for its energy development in the period 2021-2030 and recommends that priority be given to innovation and the design of energy networks that lead to high efficiency in the management of energy flows in the transmission of electricity. ESC points out that priority should be given to developing projects which meet the criteria in order to be selected as projects of common interest or projects of mutual interest. ESC draws attention to the fact that achieving an energy supply at an affordable price under market conditions, as well as ensuring a high level of quality, reliability, equal treatment, promoting universal access and consumer rights, requires significant effort when prices are determined by the market conditions.

1.4. Regarding measures to overcome energy poverty and transparency of governance, ESC proposes the introduction of a formal definition and a clear criterion for the poverty line, taking into account energy costs. The development of specific measures related to such a definition will significantly support the work on the implementation of the measures to achieve the objectives of the transition to a low-carbon economy. Such a definition can use the energy poverty indicator and will encourage the government to develop and implement specific instruments, especially for vulnerable households, to meet differentiated income criteria.

1.5. ESC insists on a national strategy for coal mining and coal-fired power plants with defined commitments over time and ensuring a fair transition of coal-dependent areas. In addition, it is necessary to clarify the effect of increasing costs on the competitiveness of producers with the planned continuation of electricity production from coal-fired power plants.

1.6. According to ESC, specifying the place of natural gas in electricity generation and its impact on the "decarbonisation process", together with the assessment and contribution of renewable energy to energy security, is critical to the sustainability of the energy system. ESC points out that the key mechanism for the operation of lignite power plants has not yet been put into operation, and after June 2021 it should be the basis for achieving an overall balance of the system and ensuring continuity of supply, together with the market connectivity of national energy exchange platforms. The main problem facing the implementation of the capacity mechanism is the long-term contracts with coal-fired power plants, in connection with which ESC insists on accelerating the process of their termination, without leading to additional financial burdens for our country.

1.7. ESC draws attention to the fact that the flexible management of the energy system in our country requires the full use of the available energy infrastructure built around large energy complexes. Bulgaria is coping with the integration of the growing shares of energy produced from variable renewable sources, including the development of the systems of pumped storage hydropower plants (PSHs), rechargeable batteries and electrolyzers at the level of the electricity network. Difficulties in balancing electricity flows at the regional level in a number of extreme situations show that energy transformation policies should not erode the existing sustainable energy infrastructure.

1.8. ESC recommends changes in the market model for the period up to 2030 and the responsibilities of the national regulator in this regard to find a special place in the next version of the Strategy for Sustainable Energy Development, which is adopted by the National Assembly (the Strategy). The efficiency and transparency of the wholesale market is what will determine investor confidence, as well as attract the necessary investment in energy capacity and contribute to security of supply.

1.9. The national contribution to energy efficiency should reflect the potential for efficient energy savings and be supported by a long-term strategy for the refurbishment of buildings, as well as by measures to implement the energy saving obligation arising from Article 7 of Directive 2012/27/EU of the European Parliament and of the Council. ESC draws attention to the fact that the implementation of the long-term national strategy to support the renovation of the national building stock of residential and non-residential buildings until 2050 requires significant financial efforts on part of the consumers, which should be supported by available financial instruments and support programmes.

1.10. ESC considers it necessary to analyse the reasons why the scheme of energy savings obligations is not effective and to reform it so that it can provide the expected results. ESC proposes

to make an impact assessment in the form of expected energy savings and implementation schedule, which will contribute to a higher quality of energy efficiency policy.

1.11. The forthcoming liberalisation is the main and immediate task in the retail electricity market. According to the Integrated Energy and Climate Plan (IECP), Bulgaria envisages the liberalisation for households to take place by 2025. ESC recommends that the process be carried out on the basis of a Roadmap developed jointly with the Energy and Water Regulatory Commission (EWRC). ESC draws attention to the need to prepare and conduct a broad information campaign aimed at all consumers connected to the low voltage network.

1.12. ESC supports the opinion that good practices in the introduction of new data management models for flexible management of energy consumption and storage, as well as the key role of the electricity distribution network in the energy transition, can be an effective alternative to some direct infrastructure investments, together with the promotion of low-carbon and efficient heating and cooling. ESC notes that the latter are not subject to attention and does not appear in the legislative and regulatory practices in Bulgaria, as well as in strategic documents at the national level.

1.13. The Integrated Energy and Climate Plan, as well as the Strategy, include sufficient information on planned policies and measures, but most of them are a continuation of existing ones, such as preferential prices for the purchase of electricity from renewable sources, produced by installations with total installed power below 1 MW. The remaining funds in connection with this type of support are limited to what is necessary to pay the premiums due to existing installations. At the same time, the cost-effective scenario until 2030 prepared by the European Commission (EC) for Bulgaria envisages a significant increase in renewable energy production. In the context of the need for analysis of the place of coal in the production of electricity, ESC recommends a parallel consideration of the innovative alternatives applicable in our country, along with that for accelerated development of renewable energy production. ESC points out that the administrative barriers to the construction of installations for the production of electricity for own needs limit the opportunities for consumer participation in achieving optimal conditions for energy supply.

1.14. ESC points out that current trends in electrification bring the issues of sustainable base generation and decentralized production close to consumption. The introduction of new technologies in the production and management of energy flows should be linked to the construction of sustainable supply chains, including for batteries, electric vehicles and charging stations in buildings or industrial sites. The implementation of new equipment, networks and services must be encouraged and adequately managed in the context of an integrated energy system.

1.15. ESC recommends defining and assess the social dimension of actions for the implementation of measures for industrial transformation. Commitment to employees in industries that are heavily affected by green policies cannot be limited to retraining programmes. In these cases, it is

necessary to apply a variety of practices to ensure the employment of workers who are expected to be laid off and compensated with incomes commensurate with their income, as well as to implement targeted transition support programmes.

1.16. According to ESC, it is necessary to accelerate the work on the development of a definition of energy poverty as a precondition for the development of mechanisms to compensate households who experience energy poverty, which may be harmed during the liberalisation process.

1.17. ESC reminds that it is necessary to clarify and propose a mechanism to compensate for the immediate short-term effects of the transition to a fully liberalised retail electricity market for households.

2. Findings and targets

2.1. At present, there are a number of national thesis materials prepared in accordance with the requirements of European legislation, which should define targets, policies and measures in the field of energy and climate. For the period 2020-2030 and until 2050 **two main documents** have been developed consequently and have been linked to mechanisms for interaction, monitoring and control of their implementation. In order to ensure a coordinated and coherent approach throughout the EU and to implement the strategy of the Energy Union, Bulgaria presented to the EC its **Integrated Plan for Energy and Climate of the Republic of Bulgaria 2021-2030**, which was adopted by Protocol № 8 of the Council of Ministers of 27 February 2020¹. The National Integrated Plan should ensure transparency and predictability of national policies and measures in order to ensure security of investment and electricity supply for the next decade. The second main document - **Strategy for Sustainable Energy Development of the Republic of Bulgaria by 2030**, with a horizon until 2050 (The Strategy), developed by the Ministry of Energy, is adopted by the National Assembly and should be considered as the leading national document, as both documents provide for identical development until 2030 and with a horizon until 2050, based on developed projected energy balances of the country.

2.2. Two development scenarios are considered in both documents: Baseline scenario, in which the forecast is based on current policies and measures, and Target scenario. The main goals set in the Strategy and IPEC until 2030 are identical, such as: reduction of primary energy consumption, compared to the baseline forecast PRIMES 2007 by 27.89%; reduction of final energy consumption, compared to the baseline forecast PRIMES 2007 by 31.67%; achieving a 27.09% share of renewable energy in gross final energy consumption; at least 15% interconnection². ESC

¹ <https://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=1301>

² <https://www.strategy.bg/PublicConsultations/View.aspx?lang=bg-BG&Id=5872>

points out that both documents should be updated in view of the adopted in 2020 and 2021 documents under the EU Green Deal³.

2.3. According to ESC, IPEC and the Strategy give insufficient attention to the distribution networks. Such neglect of their growing importance, as well as the role of distribution system operators in the forthcoming energy transition, may jeopardise the achievement of the set goals and changes. The development of decentralised and own production, active consumption, electric mobility, energy storage and modernisation of heating and cooling systems may be threatened. The elaborated ten-year plan for development of the transmission network of Bulgaria for the period 2020-2029, as well as the role of the electricity system operator, must be updated and full compliance must be found in IPEC and the Strategy, taking into account regional electricity flows and market mergers. ESC emphasizes the need for a single connection for markets "Day ahead" SDAC⁴, as well as potential geographical locations of future generating capacities in the country - both concentrated (in case of new nuclear capacities) and decentralised (such as RES) with adequate assumptions for voltage distribution.

2.4. According to ESC, IPEC and the Strategy set macroeconomic forecasts in terms of gross domestic product (GDP) and population growth, which should be revised. The population estimates⁵ correspond to the latest demographic forecast developed at the National Statistical Institute (NSI) for 2018 for the development of the population until 2080, but not under the hypothesis of relative acceleration, defined as a realistic option, compliant with the regulatory requirements of the European Union for the demographic and socio-economic development of Member States⁶. If we assume that the approach to energy estimates in relation to the population is conservative, then the assumptions for GDP⁷ are definitely lower - even the first five-year period 2015-2020 categorically demonstrates the inadequacy of the forecasts, evident from the NSI data⁸. Due to COVID-19 and the economic crisis, the assumptions in the Strategy and IPEC for the average annual nominal GDP growth are very limited: 2.9% for the years 2021-2025; 2.7% for the years 2026-2030; 2.1% for the years 2031-2035; 1.5% for the years 2036-2040; 1.0% for the years 2041-2045 and 0.9% for the years 2046-2050, which differs from the stated intentions for catching

³ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

⁴ Priority of the EC, described in the preamble of Regulation 1222/2015.

⁵ Taken from (B)EST model, E3-Modeling

⁶ <https://www.nsi.bg/bg/content/2994/%D0%BF%D1%80%D0%BE%D0%B3%D0%BD%D0%BE%D0%B7%D0%B0-%D0%B7%D0%B0-%D0%BD%D0%B0%D1%81%D0%B5%D0%BB%D0%B5%D0%BD%D0%B8%D0%B5%D1%82%D0%BE-%D0%BF%D0%BE-%D0%BF%D0%BE%D0%BB-%D0%B8-%D0%B2%D1%8A%D0%B7%D1%80%D0%B0%D1%81%D1%82>

⁷ at current prices in million euros, taken from (B) EST model, E3-Modeling

⁸ <https://www.nsi.bg/bg/content/2206/%D0%B1%D0%B2%D0%BF-%D0%BF%D1%80%D0%BE%D0%B8%D0%B7%D0%B2%D0%BE%D0%B4%D1%81%D1%82%D0%B2%D0%B5%D0%BD-%D0%BC%D0%B5%D1%82%D0%BE%D0%B4-%D0%BD%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%B0%D0%BB%D0%BD%D0%BE-%D0%BD%D0%B8%D0%B2%D0%BE>

up with the accelerated development of Bulgaria. ESC considers it rational to reconsider power and electricity balances for the forecast period, incl. in the context of the redistributed base capacities and the capacities with priority production (RES, biomass, etc., as well as HPPs, working according to the schedule for water supply and irrigation) in order to achieve the set goals.

2.5. ESC draws attention to the fact that the implementation of the long-term national strategy⁹ to support the renovation of the national building stock of residential and non-residential buildings until 2050 requires significant financial effort on the part of consumers. The building stock is characterised by high energy intensity, and in most cases, homes in the country do not meet the requirements for energy efficiency. The assessment is that most non-renovated residential buildings are characterized by the worst energy performance with energy consumption classes E, F and G., and their renovation should be supported by affordable financial instruments and utilities.

2.6. The proposed technological solutions for end users are associated with an increase in investment costs, both in households and a change in network infrastructure and building stock. Increasing consumer rights, improving sustainability and security of supply comes at a price, and it must be commensurate with the opportunities that citizens in the countries concerned can achieve. Many of the new technologies offered are part of value chains in other countries. The risk of significant financial pressure on population groups under the transition plans is high, but this should not lead to restrictions on access to services of general interest. Therefore, the role of the state in the economic sectors of water supply, transport and energy should be preserved and developed.

2.7. Of paramount importance in this sense are the two assessments and recommendations of the EC for the interim version of IPEC of 2019 and for the final version of IPEC of 2020¹⁰. Based on the final IPEC and the priorities set for Bulgaria in the European Semester, the EC encouraged Bulgaria to consider climate and energy-related investments and reform measures in developing its National Recovery and Resilience Plan, based on existing legislation and the Mechanism for Recovery and Resilience. ESC points out that in addition to climatic aspects, the Recovery and Resilience Plan should provide support for the production of goods and services that are based on national supply chains. At the same time, ESC supports the efforts at European level to introduce a carbon tax on goods and services from third countries.

2.8. In January 2021, the EC (subsequently the Ministry of Energy) published a **Plan for the implementation** of reforms in the Bulgarian electricity market¹¹, prepared in accordance with Art. 20 (3) et seq. Of EU Regulation 2019/943. In the context of the overall provisions of the Regulation, the implementation plan is preceded by an **Assessment of the systemic adequacy of resources**, and the plan itself is the basis for requesting permission from the Member State from

⁹<https://www.strategy.bg/PublicConsultations/View.aspx?lang=bg-BG&Id=5315>

¹⁰https://ec.europa.eu/energy/sites/default/files/documents/staff_working_document_assessment_necp_bulgaria_en.pdf

¹¹https://ec.europa.eu/energy/consultations/consultation-bulgarian-market-reform-plan_en

the EC to introduce capacity mechanisms as a measure to solve problems. impeding security of supply from capacities in the system. ESC supports the introduction of capacity mechanisms and emphasizes that they are linked to a comprehensive reform of the energy sector in our country, including the termination of long-term contracts.

2.9. The Trans-European Energy Network Regulation (TEN-E Regulation) is expected to enable the European Union to meet the main objectives of its energy policy, as it lays down rules for the identification and timely development of projects of common interest to ensure operational compatibility of the trans-European energy networks, the functioning of the internal energy market and the integration of energy from different types of renewable sources. It also obliges Bulgaria and the Member States to streamline authorization procedures for projects of common interest, provides for regulatory assistance, contains rules and guidelines for cross-border cost allocation and risk compensation incentives, and sets out the conditions for obtaining funding from the Connecting Europe Facility (CEF).

2.10. The adopted in 2013 Regulation (EU) №347 / 2013 laid down rules for the development and interoperability of trans-European energy networks. In its proposal, the EC emphasizes that the regulation has contributed to the achievement of the objectives of the EU energy policy, according to which it is envisaged to increase interconnections throughout the Union.

2.11. The update of the TEN-E Regulation changes the conditions for the selection of projects of common interest with a view to their EU funding, introducing in particular the requirement that projects meet the criterion of sustainability and comply with the principle of "non-application harm" as provided for in the EU Green Deal. The categories of infrastructure eligible for financial assistance under the TEN-E policy have been changed, removing support for oil and gas infrastructure. ESC proposes a review of the legal framework related to the trans-European energy networks.

2.12. Particular emphasis is placed on offshore electricity networks and their integration with onshore infrastructure through the creation of a single point of contact. The construction of hydrogen infrastructure is part of the future energy transition. At the same time, the economic benefits of the rapid development of industries related to the offshore deployment of wind turbines in northern Europe or to the production of hydrogen near them will be of little importance to our economy.

2.13. As stated in the EC Communication on the European Green Deal and in the Communication entitled "A Clean Planet for All"¹², energy infrastructure is a key factor in achieving the energy transition. As infrastructure is a long-term asset, it will have to comply with the objective of climate neutrality and other environmental objectives in order to facilitate the rapid and cost-effective decarbonisation of the energy system and the wider economy. Therefore, the TEN-E Regulation is a key tool for the development of the internal energy market and is necessary for achieving the

¹² <https://eur-lex.europa.eu/legal-content/BG/TXT/?uri=CELEX:52018DC0773>.

liberalisation and integration of the energy system in Bulgaria and for the purposes of the European Green Deal.

2.14. New regulations should encourage investment in smart grids in order to integrate low-carbon biofuels or synthetic fuels (such as biogas, biomethane and renewable hydrogen) into existing grids. Attention is paid to the necessary modernisation of the electricity grids, as well as to the carbon storage and transmission networks. ESC supports Bulgaria's participation in associations and platforms for the absorption of hydrogen technologies, CO₂ management technologies, batteries and charging stations. When developing projects in these areas, the goals of environmental protection should be achieved while creating new sustainable jobs.

2.15. New provisions are proposed in order to better support the projects for interconnection with third countries, as well as the projects of mutual interest, which demonstrate their contribution to the common goals of our country and the European Union in the field of energy and climate, related to with security of supply and decarbonisation.

2.16. The governance framework has been revised in line with the stated objective of improving infrastructure planning and ensuring that it is aligned with climate objectives and the principles of integration of the EU energy system. It is envisaged to ensure greater stakeholder involvement in the whole process, as well as to strengthen the role of the European Union Agency for the Cooperation of Energy Regulators (ACER) together with EC supervision. ESC proposes to discuss measures to simplify administrative procedures so as to accelerate the implementation of projects of common interest and interconnection.

2.17. This opinion is part of the European energy policy as defined in the Treaties¹³, the Regulation on the governance of the Energy Union¹⁴, the development of trans-European networks¹⁵, as well as in a comprehensive "package" setting out the European Union's new strategy: "turning the EU into a just and prosperous society with a modern, resource-efficient and competitive economy"¹⁶. Thus, the EU seeks to combine Community objectives - the functioning of the energy market, security of energy supply, energy efficiency, energy saving, the development of renewable energy sources, the fight against climate change, the interconnection of energy networks, without prejudice to "the law of a Member State to determine the conditions for the use of its energy resources, to choose between different energy sources and to determine the general structure of its energy supply".

2.18. ESC supports the adaptation of Bulgarian legislation to the objectives of the Green Deal for "supply of clean, affordable and secure energy", which includes ensuring sustainable and decent jobs, decarbonisation of the energy system, the transition to climate neutrality, the development of

¹³ Title XXI, Article 194 TFEU.

¹⁴ Regulation (EU) № 2018/1999 of 11 December 2018

¹⁵ Title XVI, Articles 170 to 172 TFEU.

¹⁶ COM (2019) 640, 11 December 2019

renewable energy sources, energy efficiency and the prevention of the risk of energy poverty. When planning appropriate measures at the national level, policies should take into account the capabilities of the national budget, the funds available under European programmes, as well as the purchasing power of the population.

2.19. ESC supports the target of achieving climate neutrality by 2050 and to reduce greenhouse gas emissions by 2030, taking into account the social cost. Therefore, it should be considered that Europe needs an energy system to guarantee the security of energy supply for all EU countries, access to affordable energy for all, based on rapid electrification to be achieved by increasing the share of electricity production from renewable energy sources, while also ensuring decarbonisation of the gas sector and innovative solutions. For our country, nuclear energy will continue to play the role of a basic source, which will ensure the security of supply. The further development of this energy source requires adequate development of the national strategic framework, which should cover the new technologies and the entire life cycle of the nuclear facilities in our country.

3. Comments and summary of the strategy

3.1. In its Communication entitled "Powering the Climate Neutral Economy: An EU Strategy for Energy System Integration"¹⁷, the Commission emphasized that "coordinated planning and operation of the energy system as a whole, bringing together different energy sources, infrastructures and consumption sectors, is the path to effective, affordable decarbonisation of the European economy". In addition, the Commission points to the fact that "today's energy system is still based on a number of parallel, vertical energy value chains that link specific energy resources to specific end-use sectors", and that the "separate and unrelated areas model cannot lead to a climate-neutral economy".

3.2. ESC emphasizes that a smooth energy transition in our country, as well as cost-effective integration of the energy system, should be based on experience gained over the years in the operation of hydropower and nuclear power and integration of gaseous fuels in our energy mix. In the design of energy networks, priority must be given to innovation and the efficiency of transmission-related infrastructure, with a view to achieving better connectivity, including within regional markets. ESC notes that our country has a strong interest in market integration and effective access to the markets of Central and Western Europe. The planning of energy infrastructure in its integration with digital and transport systems, as well as the development of useful regional interactions, can be achieved by gradually upgrading existing capacities and integrating new ones.

3.3. ESC approves the integration strategy, which must cover all dimensions of our national and European energy policy and the prioritisation of projects to achieve the goals in terms of

¹⁷ COM (2020) 299.0 8 July 2020

decarbonisation, market integration, competition, sustainability and security. ESC expresses the position that the commitments for the integration of the energy system through the use of low-carbon fuels from renewable sources in industrial processes and sectors that are more difficult to decarbonise, together with blockchain technologies provide opportunities for the development of industrial applications based on modern agriculture, waste management and circular economy in our country. In this regard, the technological capabilities and experience already available in our country for the production of new generation biofuels and synthetic fuels throughout the value chain should be supported.

3.4. ESC emphasizes the need to achieve the objectives of energy policy, which is implemented through the TEN-E Regulation and the Strategy for an Integrated Energy System. Energy networks provide the interconnections between producers and users. It would be useful to include in this dynamic of integration the development of "producing consumers" and cooperatives, and achieve actual integration¹⁸ so that it can achieve its main objective of balance, sustainability and development of the energy system in accordance with the recommendations of the International Atomic Energy Agency¹⁹, and for the production of affordable energy after 2030. Projects for small modular reactors also have potential that our country should develop.

3.5. Appreciating Bulgaria's request for active participation in important projects of pan-European interest in the field of hydrogen (IPCEI -Hydrogen)²⁰, ESC proposes to develop a comprehensive strategy for the development of hydrogen technologies in the country - production of green hydrogen, storage and transportation in its various forms (liquefied, gaseous under pressure, LOHC, NH₃, etc.) through trailers, but also gas networks, industrial applications, energy sector, electric mobility and transport sector, in the field of households and various applications. It is necessary to purposefully and consistently implement incentive policies with adequate administrative and management capacity, applied research infrastructure, targeted investment programmes.

3.6. ESC recommends assessing the opportunities for coal-fired thermal power plants for technological modernisation in the direction of capture, storage and utilization of CO₂, as well as for the development of the fuel base, incl. gasification, incl. mixing with green hydrogen and green methane, combined coal combustion and hydrogen-containing fuels. This should be combined with the development of a clear roadmap for a sustainable transition of the energy system and the development of the coal regions, and the prospect of an innovative approach and the construction of significant RES capacities should be assessed, taking into account the available electricity connectivity and infrastructure.

¹⁸ Although the "integration of the energy system" is mentioned, the trans-European energy infrastructure is not given a place in this strategic dynamic of coordinated planning and operation.

¹⁹ <https://www.iaea.org/newscenter/news/nuclear-power-for-the-future-new-iaea-publication-highlights-status-of-smr-development>

²⁰ <https://www.hydrogen4climateaction.eu/ipcei-on-hydrogen>

3.7. ESC proposes to encourage innovation in a variety of energy sources without carbon emissions, while respecting technology neutrality, incl. it supports the EU's efforts within the framework of the International Experimental Thermonuclear Reactor (ITER) project in France²¹, recommends working in the direction of geothermal energy (given the proven potential in Bulgaria), solar energy, hydropower (conventional solutions, energy storage) through water reserves, hydropower complexes on the Danube River, pontoon power plants with submersible turbines), wind energy (on land, but also offshore installations in our waters in the Black Sea).

3.8. ESC recommends a preliminary analysis for the establishment of a single point of contact for renewable energy production facilities and hydrogen production plants. EU planning for offshore and offshore energy capacity, for example, creates a restrictive mechanism for setting target capacities that run counter to the projects and targets envisaged in the national energy and climate plans, as well as the envisaged freedom of choice of energy mix. Support for pilot plants for hydrogen production also has the potential to build competitive advantage at the regional level.

3.9. ESC proposes not to exclude support for gas infrastructure, because it is currently needed for securing the energy supply in Bulgaria and some EU territories and because natural gas is a less polluting transitional energy source. ESC recommends the development of specific ambitious goals for the development of gasification and the gas transmission network in Bulgaria in order to actively support the national natural gas market, incl. increasing the share of gasification of households. In the same way, ESC considers nuclear energy and large hydro-energy projects as necessary to achieve climate neutrality by 2050.

3.10. The natural gas infrastructure will potentially be able to be used in parallel for biogas as well as for upgrading the transmission of hydrogen, and it is therefore appropriate to continue investing in it. For these reasons, ESC expresses a common position that natural gas should not be excluded until it is replaced by other energy sources at a comparable price. According to ESC, projects related to natural gas transmission infrastructure should be considered eligible according to the criteria of the regulation in order to be selected as projects of common interest or projects of mutual interest. In this context, CO₂ transmission projects should also be considered.

3.11. ESC notes that the repeated mention of the term "renewable" in the project selection criteria leaves some doubt as to whether projects for transfer of decarbonised energy are taken into account, as these are projects which the EU really needs in order to achieve the climate-related parameters of the set goals.

3.12. ESC supports the proposal for the so-called "three-step approach" to be applied to the financing of energy projects of common interest. For projects essential for the fulfilment of the goals of the Bulgarian energy and the EU, the approach should be based on the Community

²¹ Also of interest is the developed by the Massachusetts Institute of Technology in 2020 SPARC experimental reactor.

principles and the combination of the different ways of financing, without them being graded in a hierarchy.

3.13. As a representative of organised civil society, ESC attaches great importance to the rights of users, small and medium enterprises and the population, as well as the transparency of governance. ESC calls for limiting administrative barriers to the construction of installations for electricity generation for own needs.

3.14. In order to prevent the development of an energy market in which there are huge inequalities and to improve the situation of the population living in energy poverty and low incomes, ESC confirms the need to supply energy at an affordable price, in accordance with the high level goals. in terms of quality, safety and accessibility, equal treatment and the promotion of universal access and users' rights in the EU.

3.15. ESC recommends a change in the legislation regarding the establishment of "energy cooperatives", thus allowing direct transmission and reception of electricity from neighbouring producers and consumers through direct power lines or through the electricity distribution network.

3.16. With regard to transparency in governance, ESC proposes to consider ways to reduce the existing asymmetries in relation to information and authority, so as to create a multi-stakeholder governance that relies more on civil society representatives - business and branch organisations, trade unions, user associations.

3.17. Given the specificities of electricity networks, ESC proposes to study together with all stakeholders and to consult a project to establish a trans-European operator that is both integrated and decentralised and based on multilevel governance. At the same time, account should be taken of the fact that such a public operator will have to rely on national and subnational operators and will therefore have to be decentralised to the level of the most appropriate territorial network, given the characteristics of each Member State.

3.18. According to a draft Partnership Agreement and informal consultations with the services of the European Commission, the main directions of investments with European funding in the next programming period are outlined, which include the prerequisites for a successful energy transition and overcoming energy poverty. These include an innovative and smart economic transition through innovation and applied science, a clean and equitable energy transition, green and blue investments, a circular economy, improved mobility and regional connectivity, and human resources development and education.

4. Measures to overcome the short-term effects of market liberalisation on energy poverty

4.1. The analyses show the impossibility of a full or tangible reduction of energy poverty by reducing energy costs, as household incomes are the more determining factor - and they remain low. In order to make better use of the possibilities of the financial instruments related to the Green Deal, it is important to expand the possibilities so that the measures have a double effect - to reduce costs, but also to generate revenues. Such are the measures for *prosumers* and micro-level energy cooperatives. Energy efficiency programmes should be long-term and targeted at the whole population, based on income criteria, especially when it comes to measures in buildings inhabited by families with different types of income.

4.2. The creation of a national legal definition of the term "energy poverty" is a necessary condition for clearly outlining the profile of energy-poor households, to which a set of compensatory measures should be applied. According to ESC, it is necessary to accelerate the work on the development of a definition of energy poverty as a precondition for the development of mechanisms to compensate households who experience energy poverty, which may be harmed during the liberalisation process.

4.3. The legal definition of the phenomenon of "energy poverty" is the basis of the transition from the concept of vulnerable energy customers/consumers to the concept of "energy poverty". Based on this, the essential difference between the so-called "vulnerable customers" and "energy poor" customers. While "vulnerable customers" are low-income people, "energy-poor customers" can be defined as people/households who are unable to maintain a normal, healthy temperature in the home as a result of a complex of four factors:

- 1) low income and/or;
- 2) low energy efficiency of the dwelling and/or;
- 3) high prices for heating and/or;
- 4) overconsumption of energy due to irrational consumer behaviour.

4.4. ESC reminds that it is necessary to clarify and propose a mechanism to compensate for the immediate short-term effects of the transition to a fully liberalised retail electricity market for households. Possible approaches should be discussed, namely:

- establishing a mechanism for applying social tariffs to energy-poor households and/or
- developing a mechanism for social assistance to energy-poor households through the implementation of various schemes and measures through social assistance institutions.

4.5. ESC recalls that in this process it is necessary to mobilise the knowledge, skills and experience of a wide range of stakeholders, including: social protection and assistance institutions; energy institutions; institutions in the field of building stock; civil society organisations, incl. for protection of consumers, social partners, as well as other organisations working in the field of energy, climate, housing policy, social sphere, etc.

4.6. ESC also recognises the need to develop a systematic policy on energy poverty in the long run, which should offer mechanisms and a set of tools to overcome it, such as consumption optimisation: by introducing intelligent measuring systems; by implementing measures to help guide and inform consumers in the context of a liberalising energy market; by creating conditions for the so-called *prosumers* (producing consumers); by stimulating the creation of energy communities on their own closed distribution networks, etc.; equal access to finance to improve the national building stock with the worst characteristics, for consumers affected by energy poverty through differentiated financing and/or interest-free financial resources for the implementation of energy efficient measures and activities to reduce costs and increase energy efficiency of buildings.

4.7. ESC calls for large-scale campaigns to form efficient and rational energy-saving consumer behaviour. Rational consumer behaviour is a proven means of saving energy costs in a number of EU countries.

4.8. The establishment of a Decarbonisation Fund under the Recovery and Resilience Plan of Bulgaria (as of February 2021) should be closely linked to the policy for overcoming energy poverty. This fund should be seen as one of the instruments for the priority provision of grants or for the facilitated provision of interest-free and low-interest loans for energy-poor households to make energy-efficient improvements.

signed by Zornitsa Roussinova

PRESIDENT OF THE ECONOMIC AND SOCIAL COUNCIL