

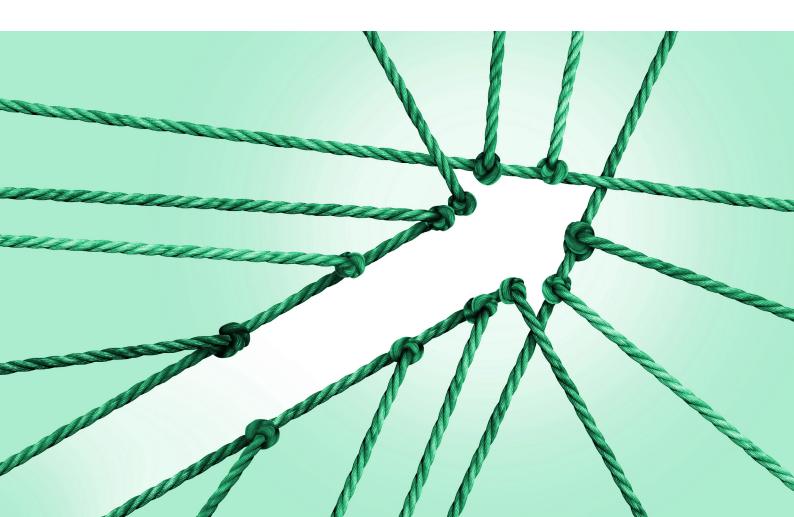
Territorial and Distributional Aspects of Just Transition in the updated Bulgarian National Energy and Climate Plan

Reform Institute in cooperation with BlueLink

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Authors Maria Niewitała-Rej (Reform Institute)

With contributions from:

Aleksander Śniegocki, Michał Wojtyło (Reform Institute), Plamen Peev (Blue Link)

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Instytut Reform office@ireform.eu | Puławska 26/1, 02-512 Warsaw | www.ireform.eu

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I. Introduction and purpose of the document

National Energy and Climate Plans (NECPs) are planning instruments required by the EU Governance Regulation and serve as a key tool for integrating national efforts into the broader European context, promoting sustainability and ensuring a coordinated approach to the challenges posed by climate change and the transition to a low carbon economy. The plans also provide an opportunity to include measures to stimulate innovation in clean energy technologies and practices, thereby promoting socio-economic development and competitiveness.

The previous NECPs were published by Member States in 2019. After several years, the plans had to be adjusted to a more ambitious climate agenda in line with the European Climate Law and the Fit for 55 package as outlined in the Regulation on the Governance of the Energy Union¹. For a start, the draft updates had to be submitted to the European Commission (EC) by the end of June 2023. The Bulgarian draft plan was published with a delay in February 2024.

The final updated versions of the NECPs should include revisions made by the national governments based on the feedback and recommendations provided by the EC, as well as the results of extensive dialogue with stakeholders and the wider public. The deadline for the submission of the final document was on 30 June 2024. The Bulgarian plan has been available for consultation on the government website since 14 June 2024, but there is no information on the impact of the consultation process and the plan has not been submitted to the European Commission.

Previously, following the publication of the draft NECPs, the Reform Institute provided the **methodological framework** to evaluate both the content of the draft plans and the procedures of their preparation. It constituted a comprehensive checklist of good governance criteria, which should be fulfilled to properly integrate just transition policies and measures into NECPs. **The methodology was used to assess four draft NECPs: Italian, German, Polish and Bulgarian**. In this report it is used to evaluate the updated version of the Bulgarian NECP. The assessment examines whether the updated plan has improved issues related to just transition in a territorial and distributional context. 1 For more details, see Governance of the Energy Union and Climate Action

II. Methodology and development of assessment criteria

This document follows a comprehensive assessment methodology developed by the project team². It includes the checklist of criteria that should be fulfilled by the updated NECPs if they aim to be effective in addressing the just transition challenge.

The assessment follows two essential dimensions of just transition: territorial and distributional, which are further divided into sets of criteria covering their most important aspects.

Territorial Aspects	1. Ambitions and targets
	2. Supporting local economies and communities
	3. Local clean energies and decarbonised industries
	4. Inclusivity of regional transition
	5. Regional just transition governance
Distributional Aspects	6. Overarching assessment of distributional impacts
	7. Energy poverty
	8. Transport poverty
	9. Financing needs and sources of funding
	10. Tax, insurance and social security policies
	11. Work conditions and re-training
	12. Stakeholder engagement and public consultation

Each of these criteria can be assessed using the following scale:



In addition, the report examines whether the score given in the draft assessment should be maintained, increased or decreased. The study thus contains two assessments: the first for the assessment of the draft plan, and the second for the assessment of the updated version of the plan. Each of the aspects has its own, more specific description.

Furthermore, where relevant, we mention updated version of the NECP published in June, 2024 (updated NECP)³ – English translation, the draft NECP published in February, 2024 (draft)⁴ and the previous version of the NECP (NECP 2019)⁵.

2 Stefańczyk, A., Grześczyk, A., Lipiński, M., and Śniegocki, A. (2023), Territorial and Distributional Aspects of Just Transition in the updated National Energy and Climate Plans – Assessment Methodology, Reform Institute, Warsaw. https://ireform.eu/s/ uploads/Assessment_ Methodology.pdf

3 https://www.moew. government.bg/bg/ aktualiziranintegriran-nacionalenplan-energetika-iklimat-inpek/

4 https://commission. europa.eu/document/ download/58f949db-7df0-4a6d-abf9befdac47485a_ en?filename= Bulgaria%20-%20 Draft%20updated%20 NECP%202021-2030%20EN.pdf

5 https://energy.ec. europa.eu/system/ files/2020-06/bg_ final_necp_main_ en_0.pdf

III. Territorial aspects

Territorial aspects of just transition focus on the impact of the transition on regions, communities, and local economies, with special attention paid to those particularly vulnerable to changes brought by the new EU energy and climate policies. In this part, we focus primarily on the assessment of NECP elements that support local communities in the process of green transition, provide incentives for decarbonisation at the local scale, ensure inclusive regional transition, and provide governance frameworks and tools conducive to just transition. The assessment also investigates to what extent draft NECPs are consistent with Territorial Just Transition Plans (TJTPs) and guide actions on the regional level. Territorial aspects are only considered with respect to territories that have been recognised by the national governments as most affected by the decarbonisation process. Two regions in Bulgaria were identified as most affected by the transition to climate neutrality - Stara Zagora and Kyustendil. Additionally, the European Commission included Pernik region, recognizing that these three regions are potentially the most vulnerable to the transition due to their concentration of local coal mining and coal-fired power generation, as well as the economic structure associated with these activities.

Stara Zagora region stands out as severely affected due to its concentration of 4 coalfired power plants and mines. This not only impacts its economic structure but also makes it particularly vulnerable in terms of potential job loss. Stara Zagora's strategic position is due in part to the Maritsa Iztok Energy Complex, which attracts commuters from other regions – Yambol, Sliven and Haskovo. This causes the phaseout of coal mines and thermal power plants to affect a larger area, extending beyond the boundaries of the specific municipalities where the TPPs are located.

The Kyustendil region is the most vulnerable in terms of socio-economic and demographic trends because the phaseout of coal and lignite mining and coal-fired electricity production has been ongoing for the past two decades. No new jobs or economic activities have been planned during this period. The just transition to a climate-neutral economy is expected to cover the entire territory of Kyustendil region, with a focus on the coal and energy sectors.

Pernik region has experienced structural, demographic and transition challenges over the past 40 years. Pernik region is the region where the process of phasing out of coalbased energy production is already in progress. This directly impacts the labour market. In Pernik region, there is a concentration of employees, which are primarily based in the city of Pernik and nearby villages on the territory of Pernik municipality. On the other hand, the other municipality in the region – Radomir – is affected in terms of ETS emissions.

Aspect 1. Ambitions and targets

Clear objectives and targets are the backbone of any climate policy and a prerequisite for other elements to play their role. How ambitious the targets are, naturally sets the tone for the measures that the policy includes and determines to what extent the policy will be effective in addressing the real-life issues which it aims to address. It is also crucial that ambitious climate goals (and the timelines for them) are set in all the relevant sub-categories such as the phase-out of coal, oil and gas, so that the progress is comprehensive and the assessment of it is exhaustive.

The first category of this study focuses on these aspects. It examines the overall level of ambition reflected in the NECP, including their coherence with TJTPs and transition frameworks from fossil fuels, including coal (separately for the energy sector and the entire economy, as in practice actions in these areas are often developed separately by governments), oil, and gas. Timelines are also assessed in terms of ambition levels.

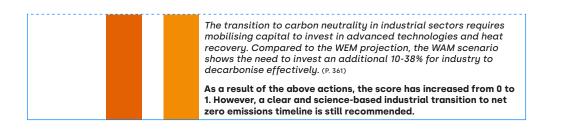
The updated NECP is more ambitious than the draft published in February. The WAM scenario has been published and the ambition for climate neutrality is repeatedly emphasised. The document makes reference to the Decarbonisation scenario (WAM+), but no further details are provided. Moreover, there is no mention that the WAM scenario is the leading one. Timelines for the transition away from coal, oil and gas across the economy are also missing.

Criterion	NEC	CP Sc	ore	Description
	Draft		Final	
1.1 Increasing ambition	0	↑	1	1 –the overall level of ambition has improved compared to the draft NECP and TJTPs are mentioned
and avoiding backsliding on targets from				The score improved between the draft and the updated version. The energy transition pathways have been mentioned.
Territorial Just Transition Plans				The 3 Territorial Fair Transition Plans (TFTP) of the regions of Pernik, Kyustendil and Stara Zagora together with 10 adjacent municipalities are annexed to the programme. In the coming decades, these territories will face a profound economic transformation as a result of the transition to climate neutrality. The energy transition pathways foreseen in the TSP also take into account Bulgaria's Recovery and Sustainability Plan (RSP), according to which coal-fired power generation should be phased out by 2038 at the latest. To consider the overall path to 2026, 2030 and then 2038, an Energy Transition Commission was established in 2022. The Commission's report was finalized in September 2023 and was approved by RMS No. 618/13.09.2023. (P. 23)
				An increase in ambition can be also seen in the publication of the WAM scenario with additional measures and an emphasis on the pursuit of climate neutrality.
				Long-term climate change mitigation strategy 2050 for the Republic of Bulgaria
				Bulgaria's 2050 Long-Term Climate Change Mitigation Strategy (the Long-Term Strategy) is a vision for achieving climate neutrality by 2050 and presents possible pathways for the development of the energy system beyond 2030 without committing to specific targets. () Three different scenarios are identified ():
				 Scenario with existing policies and measures (WEM); A scenario with complementary policies and measures (WAM); Decarbonisation scenario (WAM+) (P. 70-71)
				There are also signs of a significant increase in the use of renewable energy sources.
				Looking ahead, by 2050, the WAM scenarios project an 84.08% share of RES in the country's gross final energy consumption, which would require RES consumption to reach 6,170 ktoe. (P. 76)
				Electricity generation from renewable sources increases by nearly 2.5 times in 2030 compared to 2022 and by more than six times by 2050, resulting in a share of renewable energy of 55.51% and

				 68.55%, respectively. Under the WAM scenario, compared to the WEM scenario, in 2030 and 2050 the achieved share of electricity from RES in gross final electricity consumption is expected to be 13 and 14 percentage points higher, respectively. (P. 78) However, it is not clear which scenario is considered the baseline. The following extract from the updated NECP suggests that it is more likely to be the WEM. The scenario with existing measures (WEM) is considered as a reference case against which the alternative policy scenario is contrasted. The WEM scenario reflects the continuation of the current trends of Bulgaria's energy system based on a pre-defined macroeconomic outlook to 2050, includes the policies and strategic targets for energy efficiency and renewables (within the previous NECP targets) adopted since the end of 2022 and the projects already in the pipeline, follows the country's main strategic directions, has no specific long-term climate target and serves as a basis for assessing and quantifying the effects of alternative carbon pathways. (P. 265) In accordance with the requirements of Regulation (EU) 2018/1999, two projection scenarios were developed – WAM (with additional policies and measures) and WEM (with existing policies and measures). The projections in this section have only been prepared under existing national and European policies and measures. (P. 316) As a result of the above actions, the score has increased from 0 to 1, but there is still considerable room for improvement. The WAM scenario should be clearly indicated as the leading scenario.
1.2 Clear and science-based timeline for coal exit in the power sector	0	1	1	1 - coal exit in power sector is declared, but no precise timeline is delivered The score improved between the draft and the updated NECP. 2038 is mentioned as the date for phasing out coal.
				In the energy sector, coal is scheduled to be phased out by 2038, while the share of renewables in gross electricity generation almost triples, reaching 47.9% in 2030. (P. 367)
				A significant reduction of nearly 100% is projected in fossil fuel power generation, which will go from 68 605 GWh in 2022 to 15 GWh at the end of the period under consideration. (P. 95)
				In the updated NECP, there are many mentions of aiming for climate neutrality, increasing the share of RES and decarbonisation, which is an improvement compared to the draft.
				As a result of the above actions, the score has increased from 0 to 1, but there is still considerable room for improvement. The establishment of a clear timeline for the phase-out of coal is recommended, as is the separation of solid and fossil fuels.
1.3 Clear and science-based	0	=	0	0 – does not mention the exit timeline for coal in the whole economy
timeline for transition away from coal in				In the updated NECP, there are many mentions of aiming for climate neutrality, but there is no timeline for phasing out from coal across the economy.
the whole economy				The need for decarbonisation was identified during the public consultation. (P. 55)
				In the updated NECP solid fuels are mentioned in the context of reductions and it is not clear how much of this relates to fossil fuels. For example:
				A feature of heat generation in the period 2022-2040 is the projected cessation of energy production from solid fuel combined heat and power (CHP) plants after 2030. (P. 322)
				Hydrogen is set to play a significant role in decarbonising difficult sectors.
				Hydrogen produced from renewable sources is key to replacing natural gas, coal and oil in industries and transport that are difficult to decarbonise, which is also true to a high degree for Bulgaria. In this context and in line with Reform C4.R7 "Unlocking the potential of hydrogen technologies and hydrogen production and supply" in the National Recovery and Resilience Plan, in 2023 The Council of Ministers of the Republic of Bulgaria adopted the National Roadmap to improve the conditions for the deployment of the potential for the development of hydrogen technologies

				and mechanisms for the production and supply of green hydrogen. () There are opportunities for Bulgaria to be among the first in Europe to build new plants and hydrogen centres, also linked to the creation of new jobs with higher labour value added. (P. 133) This is not sufficient to raise the assessment. The establishment of a clear timeline for the phase-out of coal in the whole economy is recommended.
1.4 Clear and science-based timeline for	0	=	0	0 – does not mention timeline for transition away from fossil gas. Gas is regarded as a replacement for coal and is still expected to be used in 2050
transition away from fossil gas in the whole				In the updated NECP, there are many mentions of aiming for climate neutrality, but there is no timeline for transition away from fossil gas in the whole economy.
economy				Primary energy production from natural gas is expected to remain relatively constant until 2030, after which it will decrease to 12 GWh in 2050. (P. 95)
				Gas consumption is likely to increase in the coming years. A decline is expected only in the next decade.
				By 2035, natural gas-fired power generation is expected to increase by almost 12% to 189 GWh, after which it will decline to 168 GWh at the end of the period under consideration. (P. 319)
				An increase, albeit significantly smaller, is also expected in natural gas power generation, which will be 2.9 GWh at the end of the period, around 11% higher than in 2022. (P. 320)
				In 2022-2040, the final consumption of energy produced from fossil fuels, liquid fuels and natural gas is expected to decrease. The most pronounced reduction is projected for fossil fuel energy consumption, from 248 ktoe in 2022 to 146 ktoe in 2040, or a 12.9% reduction. (P. 321)
				Natural gas-fired power capacity is expected to increase by nearly 84% over the period under review, reaching 2.69 GW in 2040. ^(P. 344)
				The projected share of energy from natural gas is expected to increase by nearly 23 percent in 2040 compared to the beginning of the period, to 10.6 percent, respectively. (P. 322)
				Hydrogen is set to play a significant role in decarbonising difficult sectors.
				Hydrogen produced from renewable sources is key to replacing natural gas, coal and oil in industries and transport that are difficult to decarbonise, which is also true to a high degree for Bulgaria. (P. 232)
				An important new element in the updated Roadmap is the development of a "future-ready" gas transmission infrastructure in the Eastern Maritsa region (2026) and an increase in gas transmission capacity at the IP Kulata/Sidirokastro interconnection point (2027). The new infrastructure is planned to be "future-ready" (suitable for 100% hydrogen). (P. 133)
				This is not sufficient to raise the assessment. The establishment of a clear timeline for the for transition away from fossil gas in the whole economy is recommended.
1.5 Clear and science-based	0	=	0	0 – does not mention timeline for transition away from oil
timeline for transition away from oil				In the updated NECP, there are many mentions of aiming for neutrality, but there is no timeline for transition away from oil in the whole economy.
in the whole economy				Liquid fuels are expected to continue to account for the largest share of fuels in the country's energy mix in 2040, despite some decline from 40.2% in 2022 to 37.4% at the end of the period under review. (P. 322)
				However, no mention was made of what counts as liquid fuels.
				Hydrogen is set to play a significant role in decarbonising difficult sectors.
				Hydrogen produced from renewable sources is key to replacing natural gas, coal and oil in industries and transport that are difficult to decarbonise, which is also true to a high degree for Bulgaria. (P. 133)





Aspect 2. Supporting local economies and communities

Energy transition will disproportionately affect regions where local economies are most dependent on the fossil fuel industry. If national climate policy does not take that into account, those regions will be left behind. Beyond direct employment, communities in those areas often rely on fossil fuel companies for investment and funding in areas ranging from local infrastructure to educational scholarships, which significantly impacts life quality in the region. A just energy transition should support those most-affected communities in moving away from this reliance and finding new possibilities for endogenous growth and socio-economic thriving. Also, it should emphasise the importance of preserving traditional identities of those communities despite industrial change, and revitalizing the natural environment affected by past extraction.

The need to support local economies and communities is much more extensively addressed in the updated NECP. There are a number of measures highlighted for the most affected territories, particularly in relation to employment and retraining. The NECP still does not sufficiently address the cultural aspect of transition, leaving aside the issue of preserving the identity of mining/traditional industrial communities.

Criterion	NECF	P Score	Description
	Draft	Fina	
2.1 Policies and measures supporting local economies through stimulating their endogenous growth potential, including promoting entrepreneurship, supporting SMEs and social economy	1	3	 3 - policies or measures in this area form a comprehensive framework The score improved between the draft and the updated version. Many policies and measures supporting local economies through stimulating their endogenous growth potential, including promoting entrepreneurship, supporting SMEs and social economy are discussed. The whole part 'iii. where appropriate, financial measures in this field at national level, including Union support and use of Union funds' (P. 231-237) is linked to this aspect. In particular, a special attention should be paid to this part of the text: The mapping of the available skills, qualifications and attitudes for development of employees in the TPPs and coal mines in the regions of Stara Zagora, Kyustendil and Pernik will provide information for the scoping and thematic linking of future measures under the Just Transition Fund related to the qualification and retraining of the workforce, training for new skills, as well as for early referral to suitable jobs. The implementation of the action includes: Conducting a survey, including individual questionnaires of 15 100 employees and conducting a minimum of 20 focus groups - 10 focus groups with employees and 10 focus groups with management representatives from TPP and coal mines in the regions of Stara Zagora, Kyustendil and Pernik, with a total of at least 160 participants. The purpose of the survey is to collect individual information for each employee on their occupational status, demographic and social characteristics and information on attitudes to future development and needs for new skills and up-skilling.

				Moreover, RDP funding is worth mentioning.
				The RDP 2021-2027 funds will be targeted at activities and investments identified in the approved spatial plans that contribute to mitigating the negative socio-economic impacts on the three regions and supporting the people in them. This includes measures to improve the qualifications and skills of affected workers in the coal mining and fossil fuel power generation sectors, financing energy efficiency with a focus on vulnerable households, developing industrial parks and zones, developing component production and renewable electricity, supporting the diversification of the economy through new enterprises, restoring mining sites for industrial use. (P. 233)
				Two other measures are also worth mentioning: Strand 2: Social and Employment Support; Strand 3: Diversification of the local economy.
				The above measures, together with the sections of the TJTPs identified in the assessment of the draft NECP, constitute good practice.
2.2 Policies and measures for	1	=	1	 1 – some policies or measures in this area are mentioned, but they are largely insufficient to be effective
preservation of the identity of mining/traditional industrial communities	ining/traditional dustrial			No change compared to the draft. The updated NECP includes new information related to the most affected territories, but not in the context of the preservation of the identity of mining/ traditional industrial communities. The assessment remains unchanged.
2.3 Policies and measures for revitalisation	1	1	2	2 – many policies or measures in this area are discussed, but some important details are missing
of natural				The score improved between the draft and the updated version.
environment, both for restoring biodiversity and recreational purposes				During consultations the stakeholders observed The need for specifics for the implementation of land reclamation activities – timeframes, financial responsibility, areas of damaged land, necessary financing, development of working projects and a new regulatory basis for reclamation for disturbed areas with future industrial use and the development of detailed plans for the development of coal mining, which should be synchronized with the other fundamental documents for the development of energy (Roadmap for Climate Neutrality, draft Energy Strategy 2030. (P. 57)
				New measures to be taken in this area have also been mentioned.
				Biodiversity and ecosystems
				 BEA1 - Development and adoption of the new Biodiversity Strategy and its Action Plan and a new Green Infrastructure Strategy for ecosystem-based management, conservation, restoration and climate adaptation BEA2 - Operationalising ecosystem-based monitoring and environmental impact assessment BEA3 - Creating environmental carbon accounts BEA4 - Linking carbon and environmental carbon accounts BEA5 - Regional/local "red lines" to prevent loss of ecosystem services vital to climate adaptation BEA6 - Ecosystem restoration - a long-term business opportunity. (P. 169)
				There has also been a mention of action in the most affected territories.
				It is also planned to support measures in 10 municipalities of the Maritsa basin – Nova Zagora, Yambol, Simeonovgrad, Harmanli, Topolovgrad, Dimitrovgrad, Haskovo, Elhovo, Sliven and Tundzha in three main areas as follows:
				Strand 1: Industry for sustainable energy solutions – measures promoting the development and implementation of new sustainable energy solutions in line with transition objectives and supporting economic diversification/job creation. Restoration of land disturbed by mining activities is planned, respecting the "polluter pays" principle (outside the scope of activities, commitment of the concessionaire) and preparation for alternative economic activities (development of industrial/ logistics zones, construction of renewable energy capacities).

			The directly affected workforce will be involved in the activity due to their specific qualifications and skills. The sites do not represent any other form of environmental damage for which national legislation would provide for the liability of the operators (mining companies). (P. 233)
			As a result of the above actions, the score has increased from 1 to 2, but there is still considerable room for improvement, as details are still missing.
2.4 Dedicated, region-specific	2		2 – many policies or measures in this area are discussed, but some important details are missing
policies and measures promoting smart and sustainable mobility (both within territories most affected by the transition and connecting it with other regions)			No change compared to the draft. The assessment remains unchanged. There is still considerable room for improvement, as details are still missing.

Aspect 3. Local clean energies and decarbonised industries

A well-designed just energy transition should include the assessment of specific local needs of most affected regions in terms of the use affordable green energy and decarbonizing industrial processes. Based on those previously identified region-specific needs, it should further on introduce adequate policy for each region.

The use of renewable energy in Bulgaria is becoming increasingly important in all sectors: electricity, heating and cooling, and transport. As the NECP states, the national target is to achieve 34.48 % share of renewable energy in gross final energy consumption in 2030. The aim of all the regions analysed is to increase the use of renewable energy sources.

In general, actions are being taken in the field of local clean energy and decarbonised industries; however, the documents lack a clear assessment of needs in this area. New information on the increase in RES use refers to the country as a whole and not to the most affected territories. Therefore, the assessments remain unchanged.

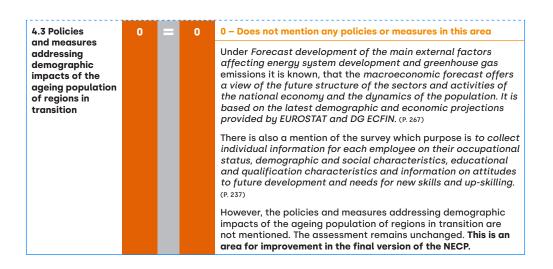
Criterion	NEC	CP Sc	ore	Description
	Draft		Final	
3.1 Assessment of needs in the area	1		1	1 – some overview is provided, but the assessment is of insufficient quality
of deployment of affordable clean energy (including – if applicable – district heating), energy efficiency and/or decarbonised industrial processes				New information on the increase in RES use refers to the country as a whole and not to the most affected territories. The assessment remains unchanged.
3.2 Policies and measures to fulfil the needs in the area of	1	=	1	1 – some policies or measures in this area are mentioned, but they are largely insufficient to be effective
affordable clean energy (including – if applicable – district heating), energy efficiency and/or decarbonised industrial processes				New information on the increase in RES use refers to the country as a whole and not to the most affected territories. The assessment remains unchanged .

Aspect 4. Inclusivity of regional transition

For the energy transition to be socially just it must both account for large pre-existing social inequalities and forms of exclusion and consider which social groups are particularly vulnerable to exclusion in the context of the transition. It will most often be the case that groups which face broader socio-political marginalization will also be at risk of exclusion throughout the transition if policymakers do not pay special attention.

Many aspects related to exclusion are intertwined with employment. The necessity of transforming the most vulnerable regions has a significant impact on the rise in unemployment, disproportionately affecting individuals who face greater challenges in adapting. The process of transformation will require additional efforts to secure quality alternative employment and compliance with the principle of "let no one be left behind". Creating alternative quality employment opportunities is key. This aspect has improved only marginally in the NECP. The most vulnerable groups are still not receiving the attention they need.

Criterion	NEC	CP Sc	ore	Description
	Draft		Final	
4.1 Promotion of gender equality to address the specific situation and role of women in the transition to the climate- neutral economy	0	=	0	0 – does not mention any policies or measures in this area No change compared to the draft. The assessment remains unchanged. This is an area for improvement in the final version of the NECP, especially as the TJTPs don't mention gender equality either.
4.2 Special attention paid to vulnerable groups (such as people with disabilities) that suffer dispropor- tionately from the adverse effects of the transition	0	1	1	 1 - some policies or measures in this area are mentioned, but they are largely insufficient to be effective The score improved between the draft and the updated version. The measure that responds to the identified problem in the most vulnerable territories has been highlighted. Strand 2: Social and Employment Support – supports social transition and supports workers and entrepreneurship, including vocational education and training for skills and career development of the existing workforce and transition to alternative, better jobs. The Strand foresees skills mapping of the affected workforce and measures for retraining and upskilling, as well as the preparation of a methodology and assessment of the skills and competencies of 15,000 employees in the TPP and coal mines under the Human Resources Development Programme. The strand will support energy efficiency (EE) activities in the building stock, including reducing fuel poverty and vulnerable electricity customers, supporting the creation of energy communities and encouraging active users. This will contribute to reducing consumption, electricity bills and emissions as well as improving living conditions. In contrast to EE under Priorities 1 and 2, under the Just Transition Fund (JTF), support for the implementation of measures and the identification of beneficiaries will use the national definition of households in fuel poverty and vulnerable customers for electricity supply under the Energy Act. (P. 233) As a result of the above actions, the score has increased from 0 to 1, but there is still considerable room for improvement, as details are still missing.



Aspect 5. Regional just transition governance

Adequately managing and facilitating energy transition processes (transition governance) is key in achieving set objectives. Including relevant stakeholders and citizens whose interests are at stake in just transition governance processes at the regional level is crucial for both a fair outcome of the processes and a perception of fairness among the general public. Successful governance must also coordinate the processes on regional and national levels so that those are part of one cohesive endeavour with complementary objectives. Good governance is essential for a just transition as it ensures that the shift to a low-carbon economy is equitable and inclusive, addressing the needs of all stakeholders. It coordinates policies across sectors, distributes costs and benefits fairly, and promotes transparency and accountability. This helps protect vulnerable groups and fosters social equity throughout the transition process.

The mention of Territorial Just Transition Plans has slightly improved the assessment of this aspect. However, there is still considerable room for improvement.

Criterion	Criterion NECP Score		ore	Description
	Draft		Final	
5.1 Consistency of regional and national transition planning process	0	1	1	 1 - consistency of regional and national transition planning process is rarely taken into account The score improved between the draft and the updated version. There are new references to TJTPs, which to some extent confirm the consistency of the documents. As a result, the score has increased from 0 to 1. However, this is an area for improvement in the final version of the NECP. A statement on the consistency of the documents is recommended.
5.2 Institution- al coordination on just transi- tion implemen- tation between regional and na- tional authorities	1		1	 1 - does not mention institutional coordination on just transition implementation but it is possible to find such references in other documents There is new information related to this aspect. The Ministry of Energy, the Ministry of Environment and Water and the competent authorities listed in Art. 4,(1) of the Climate Change Mitigation Act, through their representatives, are actively involved in the inter-institutional dialogue with local authorities in the field of climate transition as members of permanent working groups or task forces representing the respective departments in various forums, round tables and

				initiatives. Through participation in an inter-agency working group at Sofia Municipality to form a Climate Neutrality Transition Unit, part of the intensive exchange for the implementation of the Mission for 100 Climate Neutral and Smart Cities of the Future 2030 initiative (including Sofia and Gabrovo) is being implemented. Additionally, in the course of the preliminary public consultations, the opinion of the National Association of Municipalities in the Republic of Bulgaria was sought. (P. 49) This is not sufficient to raise the assessment. It is worth adding more information on institutional coordination on just transition implementation between regional and national authorities in the final version of the NECP.
5.3 Inclusion of stakeholders and citizens	1	↑		2 – involvement of stakeholders and citizens is taken into account in many, but not all of the relevant cases
into regional		Ľ		The score improved between the draft and the updated version.
transition governance				Inclusion of stakeholders and citizens into regional transition governance has been mentioned in the context of consultation process. It is worth emphasising.
				E.g.:
		Planning Georgie a metho	Familiarization with the book "Methodology for Strategic Planning of the National Energy Sector" by Prof. Dr. Eng. Dimo Georgiev Stoilov from Technical University – Sofia, as well as a methodological framework for NECP assessment, developed by Reform Institute in partnership with BlueLink Foundation. (P. 50)	
				Consultation of stakeholders, including social partners, and involvement of civil society and the general public (P. 50-59) contains a fairly detailed description of stakeholders' comments and recommendations by specific topic, compared to a few general paragraphs in the first version.
				As a result, the score has increased from 1 to 2, but there is still considerable room for improvement, as details are still missing.

IV. Distributional Aspects

Distributional aspects of green transition are principally related to the differentiated impact of climate policies, which are related to the unequal distribution of income, opportunities and challenges among the population. This is reflected in the changes in the standard of living of the whole population and vulnerable groups, especially in their access to essential public services, amenities and rights, as well as the labour market. Therefore, the NECP should explicitly recognise the distribution of costs and benefits of planned measures and focus especially on supporting the groups which are already in the most difficult position or are most likely to be negatively affected by the transition.

Thus, selected criteria chosen to assess the distributional dimension of just transition policies in NECP concern the following aspects: energy and transport poverty prevention (following the inclusion of buildings and road transport into the ETS framework), financing mechanisms and public policy instruments (especially fiscal and social security instruments) introduced to support vulnerable groups, policies affecting the workforce, and the overall quality of public participation in the NECP revision process. The assessment of the distributional aspects is conducted at the national level (in contrast to the territorial aspects).

Aspect 6. Overarching impact assessment of distributional impacts

Policymakers needs to be aware of the profound and multifaceted distributional impact of just transition legislation and programmes. To adequately assess this impact certain key socio-economic groups, which can be expected to face particular consequences of the transition, need to be identified (such as people of different income groups or rural vs. urban households). Clear objectives and criteria for progress measurement in terms of socio-economic impact also need to be established to not lose track of the core justice aspect of the transition.

It is worth remembering that while the implementation of the measures outlined in the National Energy and Climate Plan will contribute to reducing emissions across various sectors, decreasing fossil fuel consumption, and increasing the share of renewable energy sources, it will also have impacts that will particularly affect vulnerable consumers, including the poorest. Unfortunately, the document does not give sufficient attention to these aspects. The assessment of overall distributional impacts of the policies and measures covered by NECP update has improved slightly.

Criterion	NEC	P Sc	ore	Description
	Draft		Final	
6.1 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by income groups	0	=	0	 0 – expected overall distributional impacts are not mentioned The plan includes an impact assessment of planned policies and measures in areas such as the environment and adaptation to climate change but it does not focus on distributional impact on people by income groups. This is an area for improvement in the final version of the NECP. The assessment remains unchanged.
6.2 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by other relevant groupings (e.g. rural households, pensioners)	0	1	1	 1 - expected overall distributional impacts are mentioned, but the description is scarce and does not consider differentiation by relevant social groups The score improved between the draft and the updated version. The parts of the text that could be related to the topic have been identified. The transition to carbon neutrality is expected to have a multifaceted impact, manifested at both the country and energy sector levels, down to the level of individual consumers Consumer electricity prices, after some small increases in 2025 and 2030, mainly due to the CO2 price level, decline from 2035 onwards. Natural gas consumer prices are consistent with the mixed gas pipeline, which includes a significant share of hydrogen, biogas and synthetic methane from 2040 onwards, a fact that explains the upward trend in the 2040-2050 period. (P. 96) Figure 20: System expenditure in households by category in Bulgaria, (B)EST WAM projections (million euro'15). (P. 97) For households, total system costs follow an upward trend which stabilises by 2035. retrofit of residential buildings, the household cost structure shifts, with fuel costs having a declining share (reaching 13% of total household system costs by 2050) in favour of investment costs for equipment and direct efficiency. (P. 97) Services and agriculture in the WAM forecast show a declining share of fuel costs, offset by increased investment spending in direct efficiency measures and equipment purchases. Figure 21: System expenditure on services and agriculture by category in Bulgaria, (B)EST WAM projections (million euro'15). (P. 98) As a result of the above actions, the score has increased from 0 to 1. The highlighted sections, however, are not strictly an assessment of overall distributional impacts of the policies and measures covered by NECP update – by relevant groupings (e.g. rural households, pensioners). This is an area for increased in the fuel costs.
6.3 Common understanding of terms and measuring progress toward targets	1	=	1	improvement in the final version of the NECP. 1 – measuring progress toward targets has been partially addressed Checking the compatibility of terms is difficult because there is no official translation. The assessment remains unchanged.

Aspect 7. Energy poverty

Energy poverty means a household's lack of access to essential energy services that underpin a decent standard of living and health, including adequate warmth, cooling, lighting, and energy to power appliances, in the relevant national context, existing social policy and other relevant policies⁶. Addressing this phenomenon through climate policy is crucial from the perspective of social fairness and justice as it ensures that the most economically disadvantaged and vulnerable members of society are not disproportionately burdened with the costs of the energy transition. The issue of energy poverty

6 https://eur-lex. europa.eu/legalcontent/EN/ TXT/?uri=celex %3A32023R0955

is one where there is a crossover between policy needs related to climate neutrality objectives and socio-economic well-being, and addressing both accurately offers a chance to garner additional social support for the energy transition. Alleviating energy poverty also improves the wellbeing of communities in many crucial areas such as access to education, public health, or opportunities for business activity.

In the assessment of the draft, energy poverty was one of the highest rated aspects. There is no deterioration in the updated NECP, but the additional mentions are not enough to improve the assessment.

7. Energy poverty				Deep 1.11
Criterion		CP Sc		Description
7.1 Inclusion	Draft 1		Final	1 – objectives are there but they are not sufficiently detailed
of indicative objectives aimed				and/or do not use appropriate indicators
towards reduction of energy poverty				No change compared to the draft. The assessment remains unchanged. This is an area for improvement in the final version of the NECP.
7.2 Assessment of the level of energy poverty	2			2 – energy poverty is described thoroughly, and the assessment is based on good quality indicators, but some important details are missing
and quality of used indicators				There are new mentions that can be linked to the aspect.
				For example:
				Additionally, under the adopted definition of "vulnerable electricity supply customer" in the Energy Act, a person who is a residential customer purchasing electricity for the domestic needs of a household of which he or she is a member, and he or she and/or another member of the household is critically dependent on electrical equipment due to age and/or health and/or receives monthly welfare benefits and/or targeted heating assistance under the Social Assistance Act, falls within the definition. According to the Ordinance, the conditions relevant to determining the vulnerable customer status of eligible persons are related to age over 65, low disposable income (less than or equal to the poverty line after reduction by energy costs), established 50 per cent or more permanently impaired working capacity or type and degree of disability, need for assistive devices for independent living and/or life-sustaining medical devices whose functioning depends on a continuous supply of energy, and falling within the scope of other existing mechanisms for social support. (P. 129)
				The Energy Act obliges the Council of Ministers to designate or establish a body (department) to develop the National Social Climate Plan and, at the same time, to establish and maintain a functioning information system on the number of households in fuel poverty and vulnerable customers for electricity supply. (P. 247)
				However, this is not sufficient to consider the aspect as good practice. The assessment remains unchanged. In the final version of the NECP, it would be valuable to include concrete data. Also, it would be worthwhile to provide a more detailed explanation of the scale of the problem.
7.3 Direct support to alleviate energy poverty	2			2 – Existing and planned policies or measures in this area are described and expected to deliver a meaningful change, but do not address the problem comprehensively
				There are new mentions that can be linked to the aspect.
				For example:
				Currently in Bulgaria, a measure is applied to support the most vulnerable individuals and families who meet the defined criteria for income and property status, and during the heating season these individuals and families are provided with targeted heating assistance from the social assistance system. (P. 127)

			The electricity market in Bulgaria is partially liberalised, with a regulated share of 40%. In line with the EC's Third Liberalisation Package, Bulgaria has taken steps towards full liberalisation of the electricity market. () Prior to the start of the full liberalisation of the electricity market, a mechanism for the protection of vulnerable electricity customers will be put in place, which includes criteria for the identification of these customers as well as financial and non-financial measures for their protection. This support mechanism for vulnerable electricity consumers is intended to ensure that minimum electricity needs, beyond heating, are met throughout the year. (P. 246) However, this is not sufficient to consider the aspect as good practice. The assessment remains unchanged. In the final version of the plan, it would be worthwhile to add more details about the support.
7.4 Measures	2	=	2 – many policies or measures in this area are discussed
which support investments			There are new mentions that can be linked to the aspect.
which structurally decrease			For example:
energy bills by investment in energy efficiency and zero-emission energy sources			To achieve the required indicators in the 2030 Roadmap, existing policies need to be strengthened and new ones need to be formulated in the buildings sector. Detailed regulatory and financial measures to support national policies will be developed in the framework of the establishment of national building renovation plans.
			Policies to achieve updated indicators in the Long Term Sanitation Strategy:
			 Multi-family residential building, Single-family residential buildings. (P. 198)
			The above actions also include sufficient descriptions.
			However, this is not sufficient to consider the aspect as good practice. The assessment remains unchanged. In the final version of the plan, it would be valuable to incorporate more detailed aspects concerning the topic.
7.5 Addressing energy market	2		2 – many policies or measures in this area are discussed, but some important details are missing
inefficiencies which negatively affect vulnerable customers			No change compared to the draft. The assessment remains unchanged. In the final version of the plan, it's valuable to incorporate more detailed aspects concerning the topic.

Aspect 8. Transport poverty

'Transport poverty' means individuals' and households' inability or difficulty to meet the costs of private or public transport, or their lack of or limited access to transport needed for their access to essential socioeconomic services and activities, taking into account the national and spatial context⁷. It results in further serious disadvantages such as difficulties in accessing healthcare, education or employment. Part of a just energy transition is ensuring that climate policies focused on cutting emissions in the transport sector simultaneously prioritize providing all communities and members of society with access to reliable public transportation. Addressing transport poverty is a multifaceted challenge that requires a combination of measures, including investments in public transportation and the implementation of social policies to ensure equal access to mobility for all. The Bulgarian NECP includes a range of transport policies that are either currently in place or planned. However, the majority of these policies are primarily focused on reducing emissions from the transportation sector rather than addressing transport exclusion. The term 'transport poverty' appears only once in the context of the Social Climate Fund.

7 https://eur-lex. europa.eu/legalcontent/EN/ TXT/?uri=celex %3A32023R0955

Criterion	NEC	CP Sc	ore	Description
	Draft		Final	
8.1 Inclusion of indicative	0		0	0 – objectives aimed at reducing transport poverty are not mentioned
objectives aimed towards reduction of transport poverty				The term 'transport poverty' appears once in the context of the of aims of Social Climate Fund. This is not enough to raise the assessment. This is an area for improvement in the final version of the NECP.
8.2 Assessment of the level of	0		0	0 – does not assess the level of transport poverty
transport poverty and quality of used indicators				The term 'transport poverty' appears only once. This is not enough to raise the assessment. This is an area for improvement in the final version of the NECP .
8.3 Direct support to alleviate	0		0	0 – does not mention existing and planned policies or measures in this area
transport poverty				The term 'transport poverty' appears only once. This is not enough to raise the assessment, which remains unchanged. This is an area for improvement in the final version of the NECP.
8.4 Measures to structurally				2 – objectives are mostly well-defined and use appropriate measures, but some crucial information is missing
decrease transport poverty by investment in				In the updated NECP there is one new measure which is worth mentioning:
sustainable and zero-emission mobility options				T7 – Reducing the relative share of private motor vehicle travel by improving and developing public urban transport and by developing non-motorised transport Scope: Improvement of urban public transport and development of non-motorised transport.
				Greenhouse gases directly affected: $CO_{2^{\prime}}$, $CH_{4^{\prime}}$, $N_{2}O$
				Implementation period: 2012-2030
				Sources of funding: European funds with state and municipal co-financing, state and municipal budgets
				Scenario in which the measure is included: WEM (P. 140)
				However, the term 'transport poverty' appears once in the context of the Social Climate Fund. This is not enough to raise the assessment.
				In the final version of the NECP, the implemented policies should be integrated with the issue of combating transport poverty.

Aspect 9. Financing needs and sources of funding

Financial needs and sources of funding are key elements of national energy and climate plans. Firstly, they allow for a realistic assessment of the scale of the challenge of achieving the set climate and energy goals. Understanding the financing needs makes it possible to determine whether the available resources are sufficient or whether additional investment is needed. Secondly, transparency on financing facilitates more effective engagement with a wide-range of stakeholders, including the private sector, financial institutions and other partners. In addition, reporting on financing is key to effectively monitoring progress towards the objectives of energy and climate plans. The availability of financial resources and their effective use have a direct impact on the achievement of the targets set, so detailed information in this respect is essential.

The Bulgarian NECP gives a good description of the financial needs and the resources used. However, specific information on the amounts needed is not always provided. In the draft, "Financing needs and sources of funding" was one of the best assessed aspects. There is no deterioration in the updated NECP, but the additional mentions are not enough to improve the assessment.

9. Financing needs				
Criterion		CP Sc		Description
	Draft		Final	
9.1 Description of financing needs for each proposed policy and measure addressing the distributional impacts	2	=	2	 2 - identifies financing needs for most of the proposed policies and measures, but some of the important information is missing In the updated NECP there is one new mention which is worth noting: Under the 2021-2027 financial framework, Bulgaria intends to use the Structural Funds to finance investment needs for decarbonising the energy sector, ensuring climate adaptation and a just transition. According to Annex D of the Bulgaria Country Report, priority investment needs have been identified to promote energy efficiency measures, improve resource efficiency and waste management, and promote the transition to a circular economy. (P. 241) When the updated NECP discusses new measures, it often mentions funds and funding sources. The following recommendation emerged during the consultation. One of the recommendations of the Plan states that the descriptions and evaluations of measures should clearly show their links to relevant policies and objectives, using the same units of measurement for energy, and clearly demonstrate the contribution of each measure to achieving the relevant objective. When updating the NECP, according to another opinion, in addition to assessing potential energy savings and emission reductions, it is necessary to make a financial assessment of the investments and benefits. It is necessary to define a financial framework for the period of the Plan against which to assess whether the objectives set can be met, what priorities should be dropped and which measures can remain, which should be dropped and which measures and their funding sources, with amounts and descriptions. For now, the assessment remains unchanged.
9.2 Description of sources of funding for each proposed policy and measure addressing the distributional impacts	2			 2 - Identifies public and private funding sources of most of the proposed policies and measures, but some of the important information is missing In the updated NECP there is one new mention which is worth noting: Under the 2021-2027 financial framework, Bulgaria intends to use the Structural Funds to finance investment needs for decarbonising the energy sector, ensuring climate adaptation and a just transition. According to Annex D of the Bulgaria Country Report, priority investment needs have been identified to promote energy efficiency measures, improve resource efficiency and waste management, and promote the transition to a circular economy. (P. 241) When the updated NECP discusses new measures, it often mentions funds and funding sources. In order to become good practice, this aspect should precisely identify the public and private sources of funding that will be used to support the planned policies and measures (including EU funding instruments) and propose a timetable for accessing the funds. It is also good practice to have a table listing the measures and their funding sources, with amounts and descriptions. For now, the assessment remains unchanged.

Aspect 10. Tax, insurance and social security policies

Tax, insurance, and social security policies play a key role in influencing behaviour towards more sustainable and environmentally friendly development. If thoughtfully designed and implemented, these policies are essential to the effective implementation of national energy and climate plans.

Through well-designed policies, governments can incentivise investment in renewable energy, energy efficiency and environmental initiatives. Tax incentives or similar incentives can motivate both businesses and citizens to adopt more sustainable practices. Social policies, in turn, can act as a support mechanism for citizens engaged in projects related to the above areas.

Criterion	NEC	CP Sc	ore	Description
	Draft		Final	
10.1 Use of income from climate-related tax, levies and fees (or similar instruments, e.g. EU ETS revenues) for the support	1		1	 1 - the principle is reflected in some of the proposed policies and measures for which it would be reasonable to apply it, but is neglected in most of the cases No change compared to the draft. The assessment remains unchanged. Use of income from climate-related tax, levies and fees should be consistently applied in all of the proposed policies and
of the most vulnerable groups				measures for which it would be reasonable to apply it.
10.2 Accounting for and preparing framework	1		1	1 – SCF is mentioned but only basic framework for its utilisation is presented
for utilisation of the Social				In the updated NECP there is new information on The Social Climate Plan and The Social Climate Fund.
Climate Fund				The Social Climate Plan to be prepared and submitted to the European Commission by 30 May, 2025 will fulfil the objectives of the Social Climate Fund to support vulnerable households, vulnerable micro-enterprises and vulnerable transport users. The plan will contain a set of coherent existing and new national measures and investments addressing the specific economic impacts resulting from the inclusion of greenhouse gas emissions from buildings and road transport in a new Emissions Trading Scheme for these sectors from 2027.
				The plan will necessarily include national and, where applicable, based on analyses and mapping of the energy and transport poverty problem, local and regional measures and investments to renovate buildings and decarbonise their heating and cooling, including the integration of renewable energy production and storage, and to expand the use of zero- and low-emission mobility and transport. The plan may also include national measures to provide temporary direct income support to vulnerable households and vulnerable transport users. All measures and investments will be consistent with the Do No Significant Harm (DNSH) Principle, in terms of environmental and climate components, seeking additional benefits to accelerate decarbonisation efforts, adaptation to climate change, air quality and urban environment improvement. (P. 128)
				It is still only basic framework. It is not enough to rise the assessment. In the final version of the NECP, more information about the Social Climate Fund should be included.
10.3 Recognition and consistent application of	1	=	1	1 – the principle is applied in some of the proposed policies and measures for which it would be reasonable to apply it, but is neglected in most of the cases
'polluter pays' principle across the economy				In the updated NECP, the "polluter pays" principle has been added in two places:

Unfortunately, this aspect has not been improved in the updated NECP.

				T9 – Fiscal policy to stimulate the economy and curb the consumption of conventional fuels
				Scope: Financial policy through tax incentives for manufacturers and users of electric vehicles and better application of the principles "polluter pays" and "user pays". (P. 141)
				Strand 1: Industry for sustainable energy solutions – measures promoting the development and implementation of new sustainable energy solutions in line with transition objectives and supporting economic diversification/job creation. Restoration of land disturbed by mining activities is planned, respecting the "polluter pays" principle (outside the scope of activities, commitment of the concessionaire) and preparation for alternative economic activities (development of industrial/ logistics zones, construction of renewable energy capacities). (P. 233)
				It is still only basic recognition. It is not enough to rise the assessment. In the final version of the NECP, more information on application of "polluter pays" principle across the economy should be implemented.
10.4 Built-in protection of the most vulnerable	1	=	1	1 – the protection is available in some of the proposed policies and measures for which it would be reasonable to apply it, but is neglected in most of the cases
groups in tax instruments and cross- sectional support programmes related to green transition	nd cross- ectional support rogrammes elated to green			No change compared to the draft. The assessment remains unchanged. In the final version of the NECP it is recommended to include more detail on issues about built-in protection of the most vulnerable other than energy poverty.

Aspect 11. Work conditions and re-training

Creating safe work conditions in the emerging sectors and re-training people at risk of unemployment caused by the transition are crucial aspects of the decarbonization process, especially in regions that may be most affected by it. Up- and re-skilling of workers must be aligned with the shifts in what is in demand on the labour market and go hand-in-hand with the creation of green decent jobs. Particular attention should be paid to supporting decent employment of social groups which face additional barriers such as women or people with disabilities. The updated NECP pays significant attention to employment. There are a number of new measures and the aspect has improved considerably.

Criterion	NEC	CP Sc	ore	Description
	Draft		Final	
11.1 Coverage of retraining,	1	↑		2 – offers detailed plans to boost job creation in line with relevant inclusivity requirements
upskilling and reskilling of the workers affected by the transition				The score improved between the draft and the updated version
				The whole part 'iii. where appropriate, financial measures in thi field at national level, including Union support and use of Union funds' (P. 231-237) is linked to the employment aspect. In particular, a special attention should be paid to these points:
				Strand 3: Diversification of the local economy – support for economic diversification, development of new economic sectors, creation of new jobs and start-ups and enterprise development, incl. R&D for the transition to new jobs following the phasing out of the mining and coal energy sectors - full description for this measure.
				The measures listed below include a description with information on the number of people affected and financial information.

				 In parallel, under the Human Resources Development Programme, the following measures aimed at training the workforce are currently being implemented: Training support for unemployed and inactive people: "Starting work" "Digital Skills" Support for employee training: The procedure "Qualification, skills and career development of employees" The New Skills procedure In addition, it is worth mentioning horizontal policies. 8. Promoting and encouraging up-skilling with training programmes covering the key professions and specialties according to the roadmap developed under the European BUILD UP Skills initiative. Link training programmes in secondary and higher education to current trends and practices in EE and support the development of facilities in cooperation with manufacturers and suppliers of appropriate building materials and products. Special provisions for the training and qualification of installers and consultants; 9. Stimulate the establishment of continuing professional development systems and expand the scope of training courses in energy efficiency and renewable sources for planners (architects and engineers), construction professionals and workers, with the leading role of the relevant industry organisations. Establish registers for qualified construction professionals and workers and an effective system for recognition of professional qualifications acquired on the job; 10. Expanding the scope and increasing the intensity of training for energy efficiency consultants to qualify for energy efficiency audits and certification of buildings and entry in the register under Article 44 of the EE Act; 11. Software update for certification and training for energy auditors; (P. 200)
11.2 Tailored measures to support hiring, ich exertion	0	1	1	and entry in the register under Article 44 of the EE Act; I 11. Software update for certification and training for
job creation and transition incentives, in particular for women or persons with disabilities, and in most affected territories				The score improved between the draft and the updated version. The whole part 'iii. where appropriate, financial measures in this field at national level, including Union support and use of Union funds' (P. 231-237) is linked to the employment aspect. In particular, a special attention should be paid to the parts: Conducting a survey, including individual questionnaires of 15 100 employees and conducting a minimum of 20 focus groups – 10 focus groups with employees and 10 focus groups with management representatives from TPP and coal mines in the regions of Stara Zagora, Kyustendil and Pernik, with a total of at least 160 participants. The purpose of the survey is to collect individual information for each employee on their occupational status, demographic and social characteristics, educational and qualification characteristics and information on attitudes to future development and needs for new skills and up-skilling. (P. 237) Strand 2: Social and Employment Support – supports social transition and supports workers and entrepreneurship, including vocational education and training for skills and career development of the existing workforce and transition to alternative, better jobs. The Strand foresees skills mapping of the affected workforce and measures for retraining and up- skilling, as well as the preparation of a methodology and assessment of the Stills and competencies of 15,000 employees in the TPP and coal mines under the Human Resources Development Programme. (P. 233)

				However, there is no explicit mention of women, people with disabilities, etc. As a result of the above actions, the score has increased from 0 to 1. In the final version of the NECP it is worth to aim for offering a comprehensive framework or plan for new job creation that contains plans for SMEs and inclusivity.
11.3 Analyses the impact of the green transition on health and	0	=	0	0 – no attention to the impact of green transition on work health and safety
safety at work and preparation or continuation of measures to address the risks				No change compared to the draft. The assessment remains unchanged. This is an area for improvement in the final version of the NECP.

Aspect 12. Stakeholder engagement and public consultation

Active and systemic inclusion of all relevant stakeholders and a wide representation of the general public is crucial for procedural justice of the energy transition, which concerns itself with how decisions are made, and who is involved in the decision-making process, which further determines the legitimacy of the process. An extension of a well-conducted process is establishing a permanent consultative body with a representation of stakeholders on the issue of just transition. Conducting extensive and early enough consultations, including trans-border dialogue, is also crucial for developing a well-informed and situationally appropriate NECP update.

The obligation to conduct consultations through a multi-level dialogue platform on climate and energy stems directly from the regulation introducing the NECP⁸. According to the regulation, local governments, social organizations, entrepreneurs and investors, as well as other interested parties and the general public, should participate in the process. Public participation in decision-making processes is also one of the pillars of the Aarhus Convention.

8 https://eur-lex. europa.eu/legalcontent/EN/ TXT/?uri=uriserv% 3AOJ.L_.2018.328. 01.0001.01.ENG

Stakeholder engagement and public consultation is an aspect that has been improved in the updated NECP.

Criterion	NEC	CP Sc	ore	Description
	Draft		Final	
2.1 Engagement of social partners, civil society actors	1	1		2 – effective consultations were organized and most of the crucial issues related to just transition were discussed, but not all of them
and the general public in discussion of just transition				The score improved between the draft and the updated version.
related issues during public consultations of the NECP				 In the updated NECP there are parts about consultation process which are worth mentioning. Pay special attention to the basic parameters of their structuring and functioning, especially for the Social Climate Plan and the National Decarbonisation Fund; Familiarization with the book "Methodology for Strategia Planning of the National Energy Sector" by Prof. Dr. Eng. Dimo Georgiev Stoilov from Technical University - Sofia, as well as a methodological framework for NECP assessment, developed by Reform Institute in partnershi with BlueLink Foundation. (P. 50) Reflect and develop the territorial and distributive aspects of a just transition to a low carbon economy, with the ultimate goal of climate neutrality by 2050. (P. 51)
				As a result of the above actions, the score has increased from 1 to 2. In the final version of the plan, it is worth adding more detail.

12.2 Establishment of permanent body of consultation with stakeholders, covering issues related to just	0	=	0	 0 – does not provide a permanent body of public consultation either the one proposed is one-time only No change compared to the draft. The assessment remains unchanged. This is an area for improvement in the final version of the NECP.
transition 12.3 Organisation of early and effective	0	↑	1	1 – provides some possibilities of dialogue with local authorities on issues related to just transition, but these measures are largely insufficient
dialogue with local authorities, regarding issues		Ľ		The score improved between the draft and the updated version.
related to just transition				In the updated NECP there are parts about consultation process which are worth mentioning.
				Some of the contributions suggest that a new public consultation procedure should be organised after the next version of the plan is presented in order to meet the requirements of the EC and the EP on the Green Deal and EU energy policies.
				In this regard, proposals have been made to use the potential of energy and environmental experts and industry organisations, seek and analyse proposals from municipal administrations related to potential projects in their territories and allow at least 8 weeks for public consultation before the June 2024 deadline for submission to the EC. The proposals are for a qualitative process of public consultation and full participation and mobilisation of social partners and participation to start as soon as possible civil society and all stakeholders in the process of discussion and adoption of the updated NECP. (P. 58)
				As a result of the above actions, the score has increased from 0 to 1. In the final version of the plan, it is worth adding more detail.
12.4 Identification of opportunities for trans-border	1	=	1	1 – provides some possibilities of trans-border dialogue on issues related to just transition, but these measures are largely insufficient
dialogue on issues related to just transition				In the updated NECP there is one new mention which is worth noting:
-				() when the Republic of Bulgaria participates in international forums, round tables and various initiatives through its representatives, the main points of the current update of the Plan have been presented repeatedly as part of the national contribution to the common European objectives. (P.59)
				However, it is unclear whether the issues related to the Just Transition are addressed. In the final version of the NECP it is worth pointing out specific examples of collaboration.

V. Summary

In the majority of aspects the updated Bulgarian NECP is better than the draft, but no significant improvement can be claimed. The greatest progress has been observed in:

- 2. Supporting local economies and communities;
- 11. Work conditions and re-training.

The improvement in the assessments in these categories is mainly due to the addition of a chapter 'iii. where appropriate, financial measures in this field at national level, including Union support and use of Union funds' (pp. 232-238), which specifically addresses employment and retraining, particularly in the most affected territories. As a result, one aspect: "2.1 Policies and measures supporting local economies through stimulating their endogenous growth potential, including promoting entrepreneurship, supporting SMEs and social economy" has been recognised as good practice. In the end, the best-rated aspects are "9. Financing needs and sources of funding" and "2. Supporting local economies and communities".

The just transition received attention during the consultation, which is a progress. However, the assessed version of the NECP was published in June 2024, followed by a twoweek comment period. Unfortunately, following the consultation process, the final version of the NECP has not been published yet.

Bulgaria remains one of the most energy-intensive economies and has a high share of greenhouse gas emissions in the European Union. Although Bulgaria has experienced stable economic growth in recent years, this growth is moderate compared to more developed EU economies. Therefore, the challenge of achieving climate neutrality is greater in Bulgaria than in many other EU countries. The unfinished work on the NECP update is therefore a worrying sign.

There are several areas that require considerable improvements:

- ambitions and targets,
- inclusivity of regional transition,
- transport poverty.

The greatest need for enhancement in the area of ambitions and targets, and inclusivity of regional transition. Achieving climate neutrality by 2050 is mentioned but the phaseout of fossil fuels and the path to carbon neutrality are not clear. Goals for the phaseout of gas and oil have not been established. The date for the transition away from coal applies only to the power industry, not to the economy as a whole. Furthermore, despite the publication of the WAM scenario, which represents an increase in ambition, it has not been explicitly identified as the baseline scenario. There has been some mention of TJTPs, which is a good sign, but in general, the Bulgarian NECP inadequately addresses territorial issues, focusing mainly on national-level issues.

Bulgaria faces the problem of an ageing population and a high level of emigration of young people. This is leading to a shortage of skilled labour and putting pressure on the social security system. Unfortunately, as assessed in terms of the inclusivity of the regional transition, the NECP does not address these issues sufficiently, particularly from a territorial perspective. As mentioned above, the new employment and retraining policies send positive signals. However, the policies have not paid particular attention to vulnerable groups.

Another dimension requiring special improvement is transport poverty. Although the document includes some measures that can help combat transport poverty they are not directly related to the aspect. The term 'transport poverty' has been mentioned only once in the context of the Social Climate Fund.

The table below compares the average scores of the draft and the updated versions.

Average scores for the just transition aspects in the draft and the updated NECP

		NECP Score		
		Draft		Final
Territorial Aspects	1. Ambitions and targets	0	\rightarrow	0.33
	2. Supporting local economies and communities	1.25	\rightarrow	
	3. Local clean energies and decarbonised industries	1		
	4. Inclusivity of regional transition	0	\rightarrow	0.33
	5. Regional just transition governance	0.67	\rightarrow	1.33
Distributional Aspects	6. Overarching assessment of distributional impacts	0.33	\rightarrow	0.67
	7. Energy poverty	1.8		1.8
	8. Transport poverty	0.5		0.5
	9. Financing needs and sources of funding	2		
	10. Tax, insurance and social security policies	1		
	11. Work conditions and re-training	0.33	\rightarrow	1
	12. Stakeholder engagement and public consultation	0.5	\rightarrow	1

Note: 0 – no mention of a given issue, 1 – issue addressed to a limited extent, 2 – issue addressed to a significant extent, 3 – good practice

The final version of the document has not been submitted yet, so there is still the room for improvement. The Bulgarian government should consider the following issues in the final version of the updated National Energy and Climate Plan:

- Specific **targets and timelines** need to be established in the pursuit of climate neutrality and the phasing out of fossil fuels.
- Putting a greater emphasis on regional issues, particularly for the most affected territories.
- Key information on the planned policies and measures from other documents, such as territorial plans, should be added to the final version of the NECP. Some information has already appeared, but it is still missing in many sections.

- Special attention should be paid to vulnerable groups (for example, people with disabilities, elderly), not only in the context of energy poverty.
- Actions such as the promotion of gender equality are needed to address the specific situation and role of women in the transition to a climate-neutral economy.
- Increase the level of detail in the description of the measures and policies outlined especially in the context of the amounts of funds needed for investment. This will enable the achievement of good practices.
- The policies and measures should consider in more detail the distributional issues, including in particular transport poverty and the overall distributional impact of the climate and energy policy on different socio-economic groups.
- More details should be provided on the implementation of the planned actions up to date, to assess actual progress in the past and highlight areas for further improvements.

Overall, the additional work on improving just transition aspects of the updated Plan should be implemented as a part of a broader effort to deliver an ambitious vision for Bulgarian's decarbonisation pathway, together with the associated robust governance framework.

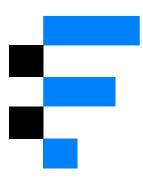
Annex. Summary table for the aspects considered in the assessment

		NECP Score		ore				
		Draft		Final				
	1 Ambitions and targets							
-	1.1 Increasing ambition and avoiding backsliding on targets from Territorial Just Transition Plans	0	1	1	1 – the overall level of ambition has improved compared to the draft and TJTPs are mentioned			
	1.2 Clear and science-based timeline for coal exit in the power sector	0	1	1	1 – coal exit in power sector is declared, but no precise timeline is delivered			
	1.3 Clear and science-based timeline for transition away from coal in the whole economy	0	=	0	0 – does not mention the exit timeline for coal			
	1.4 Clear and science-based timeline for transition away from fossil gas in the whole economy	0	=	0	0 – does not mention timeline for transition away from fossil gas. Gas is regarded as a replacement for coal and is still expected to be used in 2050			
	1.5 Clear and science-based timeline for transition away from oil in the whole economy	0	=	0	0 – does not mention timeline for transition away from oil			
	1.6 Clear and science-based industrial transition to net zero emissions timeline (conversion or closure of industrial plants which emit GHGs from fossil fuels use or industrial processes)	0	1	1	1 – industrial transition to net zero emissions declared, but no precise timeline is delivered			
cts	2 Supporting local economies and communities							
Territorial aspe	2.1 Policies and measures supporting local economies through stimulating their endogenous growth potential, including promoting entrepreneurship, supporting SMEs and social economy	1	1	3	3 – policies or measures in this area form a comprehensive framework			
	2.2 Policies and measures for preservation of the identity of mining/traditional industrial communities	1	=	1	1 – some policies and measures are mentioned and also this kind of information can be found in other documents			
	2.3 Policies and measures for revitalisation of natural environment, both for restoring biodiversity and recreational purposes	1	1		2 – many policies or measures in this area are discussed, but some important details are missing			
	2.4 Dedicated, region-specific policies and measures promoting smart and sustainable mobility (both within territories most affected by the transition and connecting it with other regions)		=		2 – many policies or measures in this area are discussed, but some important details are missing			
	3 Local clean energies and decarbonised industries							
	3.1 Assessment of needs in the area of deployment of affordable clean energy (including – if applicable – district heating), energy efficiency and/or decarbonised industrial processes	1	=	1	1 – some overview is provided, but the assessment is of insufficient quality			
	3.2 Policies and measures to fulfil the needs in the area of affordable clean energy (including – if applicable – district heating), energy efficiency and/or decarbonised industrial processes	1	=	1	1 – some policies or measures in this area are mentioned, but they are largely insufficient to be effective			

	4 Inclusivity of regional transition							
Territorial aspects	4.1 Promotion of gender equality to address the specific situation and role of women in the transition to the climate-neutral economy	0	=	0	0 – does not mention any policies or measures in this area			
	4.2 Special attention paid to vulnerable groups (such as people with disabilities) that suffer disproportionately from the adverse effects of the transition	0	1	1	1 – some policies or measures in this area are mentioned, but they are largely insufficient to be effective			
	4.3 Policies and measures addressing demographic impacts of the ageing population of regions in transition	0	=	0	0 – does not mention any policies or measures in this area			
	5 Just transition governance							
	5.1 Consistency of regional and national transition planning process	0	1	1	1 – consistency of regional and national transition planning process is rarely taken into account			
	5.2 Institutional coordination on just transition implementation between regional and national authorities	1		1	1 – does not mention institutional coordination on just transition implementation but it is possible to find information in other documents			
	5.3 Inclusion of stakeholders and citizens into regional transition governance	1	1		2 – involvement of stakeholders and citizens is taken into account in many, but not all of the relevant cases			
	6 Overarching impact assessment							
	6.1 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by income groups	0	=	0	0 – expected overall distributional impacts are not mentioned			
ects	6.2 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by other relevant groupings (e.g. rural households, pensioners)	0	1	1	1 – expected overall distributional impacts are mentioned, but the description is scarce and does not consider differentiation by relevant social groups			
	6.3 Common understanding of terms and measuring progress toward targets	1	=	1	1 – measuring progress toward targets has been partially addressed			
l asp	7 Energy poverty							
Distributional aspects	7.1 Inclusion of indicative objectives aimed towards reduction of energy poverty	1	=	1	1 – objectives are there but they are not sufficiently detailed and/or do not use appropriate indicators			
	7.2 Assessment of the level of energy poverty and quality of used indicators	2	=		2 – energy poverty is described thoroughly, and the assessment is based on good quality indicators, but some important details are missing			
	7.3 Direct support to alleviate energy poverty	2	=		2 – existing and planned policies or measures in this area are described and expected to deliver a meaningful change, but do not address the problem comprehensively			
	7.4 Measures which support investments which structurally decrease energy bills by investment in energy efficiency and zero-emission energy sources	2	=		2 – many policies or measures in this area are discussed, but some important details are missing			
	7.5 Addressing energy market inefficiencies which negatively affect vulnerable customers	2	=	2	2 – many policies or measures in this area are discussed, but some important details are missing			

	8 Transport poverty							
	8.1 Inclusion of indicative objectives aimed towards reduction of transport poverty	0	=	0	0 – objectives aimed at reducing transport poverty are not mentioned			
-	8.2 Assessment of the level of transport poverty and quality of used indicators	0	=	0	0 – does not assess the level of transport poverty			
	8.3 Direct support to alleviate transport poverty	0	=	0	0 – does not mention existing and planned policies or measures in this area			
	8.4 Measures to structurally decrease transport poverty by investment in sustainable and zero- emission mobility options		=		2 – objectives are mostly well-defined and use appropriate measures, but some crucial information is missing			
	9 Financing needs and sources of funding							
pects	9.1 Description of financing needs for each proposed policy and measure addressing the distributional impacts		=		2 – identifies financing needs for most of the proposed policies and measures, but some of the important information is missing			
	9.2 Description of sources of funding for each proposed policy and measure addressing the distributional impacts		=		2 – identifies public and private funding sources of most of the proposed policies and measures, but some of the important information is missing			
ional	10 Tax, insurance and social security policies							
Distri	10.1 Use of income from climate-related tax, levies and fees (or similar instruments, e.g. EU ETS revenues) for the support of the most vulnerable groups	1	=	1	1 – the principle is reflected in some of the proposed policies and measures for which it would be reasonable to apply it, but is neglected in most of the cases			
	10.2 Accounting for and preparing framework for utilisation of the Social Climate Fund	1	=	1	1 – SCF is mentioned but only basic framework for its utilisation is presented			
	10.3 Recognition and consistent application of "polluter pays" principle across the economy	1	=	1	1 – the principle is applied in some of the proposed policies and measures for which it would be reasonable to apply it, but is neglected in most of the cases			
	10.4 Built-in protection of the most vulnerable groups in tax instruments and cross-sectional support programmes related to green transition	1	=	1	1 – the protection is available in some of the proposed policies and measures for which it would be reasonable to apply it, but is neglected in most of the cases			
	11 Work conditions and re-training							
_	11.1 Coverage of retraining, upskilling and reskilling of the workers affected by the transition	1	1	2	2 – offers detailed plans to boost job creation in line with relevant inclusivity requirements			
	11.2 Tailored measures to support hiring, job creation and transition incentives, in particular for women or persons with disabilities, and in most affected territories	0	1	1	1 – offers little to no support for transition-relevant job creation			
	11.3 Analyses the impact of the green transition on health and safety at work and preparation or continuation of measures to address the risks	0	=	0	0 – pays no attention to the impact of green transition on work health and safety			

	12 Stakeholder engagement and public consultation						
spects	12.1 Engagement of social partners, civil society actors and the general public in discussion of just transition related issues during public consultations of the NECP	1	1		2 – effective consultations were organized and most of the crucial issues related to just transition were discussed, but not all of them		
tional a	12.2 Establishment of permanent body of consultation with stakeholders, covering issues related to just transition	0	=	0	0 – does not provide a permanent body of public consultation either the one proposed is one-time only		
Distribut	12.3 Organisation of early and effective dialogue with local authorities, regarding issues related to just transition	0	1	1	1 – provides some possibilities of dialogue with local authorities on issues related to just transition, but these measures are largely insufficient		
	12.4 Identification of opportunities for trans-border dialogue on issues related to just transition	1		1	1 – provides some possibilities of trans-border dialogue on issues related to just transition, but these measures are largely insufficient		



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