



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

Reform Institute in cooperation with Ecologic Institute

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I. Introduction and purpose of the document

National Energy and Climate Plans (NECPs) are planning tools required under the EU Governance Regulation. Germany, like other Member States (MS), is updating its NECP to adjust the plan to a more ambitious climate agenda in line with the European Climate Law and the Fit for 55 package. The draft updates were expected to be submitted to the European Commission (EC) by the end of June 2023. Less than a third of Member States have met the deadline and submitted their Plans on time. The German plan was published with a delay in November 2023.

The final updated versions of NECPs should be made available by the end of June 2024. By then, documents should include revisions made by the national governments based on the feedback and recommendations provided by the EC, as well as based on outcomes of extensive dialogue with stakeholders and the wider public. National Energy and Climate Plans serve as a crucial tool for integrating national efforts into the broader European context, fostering sustainability, and ensuring a coordinated approach to address the challenges posed by climate change and the transition to a climate-neutral economy. The plans also provide the opportunity to include measures that encourage innovation in clean energy technologies and practices, fostering socio-economic development and competitiveness.

The purpose of this document is to present the assessment of the just transition aspects included in the draft updated NECP developed by Germany. The country is a key economic player with a diverse and advanced industry; however, like many other countries, Germany confronts the challenge of adapting to a changing world, especially in the context of climate change and its far-reaching effects.

The assessment focuses on both the territorial and distributional aspects of the just transition. We define just transition as a process that maximises positive opportunities and outcomes related to the transition to climate neutrality, while mitigating the challenges and minimising the negative effects for impacted regional and local communities (territorial aspects of just transition) and vulnerable individuals (distributional aspects of just transition).

This document summarises the extent to which Germany has implemented the principles of just transition in its draft updated National Energy and Climate Plan, published in the autumn of 2023.

II. Methodology and development of assessment criteria

This document follows a comprehensive assessment methodology developed by the project team¹. 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:

0 no mention of a given issue	1 issue addressed to a limited extent	2 issue addressed to a significant extent	3 good practice
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Each of the aspects has its own, more specific description that outlines what is required from a given NECP to be awarded a given number of points. These are described in more detail in the methodological report².

In the following chapters, we provide an assessment of each aspect, with the justification and the source provided (e.g. the page number of the document where the specific information can be found). Furthermore, recommendations for potential improvements in the final version of the updated NECP are highlighted. Where relevant, we compare the draft NECP update from the autumn of 2023 (NECP 2023)³ to the current version of NECP prepared in 2019 (NECP 2019)⁴.

¹ 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

² See above.

³ https://commission.europa.eu/publications/germany-draft-updated-necp-2021-2030_en

⁴ https://energy.ec.europa.eu/system/files/2022-08/de_final_necp_main_en.pdf

III. Territorial aspects

Territorial aspects of the 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 the green transition, provide incentives for decarbonisation at the local scale, ensure inclusive regional transition, and provide governance frameworks and tools conducive to the 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. In Germany, the most affected by fossil fuel phase-out territories are located in North Rhine-Westphalia, Brandenburg, Saxony, and Saxony-Anhalt. Verification of the actual activities carried out in Germany is complicated by the division into federal states.

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.

In the German NECP there are clear, quantitative targets in terms of emissions reductions: GHG emissions are to be reduced at least by 65% by 2030 and at least by 88% by 2040 (both compared to 1990), and achieving net zero emissions by 2045. This means these targets require a higher emission reduction when compared to the EU targets.

Germany has committed itself to closing down the last coal-fired power station not later than in 2038 and phasing out lignite coal in North Rhine-Westphalia by 2030. The legislation responsible for translating these targets into reality is the Act to Reduce and End Coal-Fired Power Generation (Gesetz zur Reduzierung und zur Beendigung der Kohleverstromung) from 2020, which establishes a tendering system with financial compensation going to the operators of coal-fired stations and a total budget of 40 million euros in compensations dispersed among all affected regions, communities and stakeholders.

As it was mentioned above, the most affected by fossil fuel phase-out territories in Germany are located in North Rhine-Westphalia, Brandenburg, Saxony, and Saxony-Anhalt. Before we proceed with the assessment, it's worth briefly describing the identified regions. The challenges they face have an impact on the adopted ambitions and goals. All regions are heavily tied to coal and industry.

North Rhine-Westphalia is a region where development is based on rich deposits of hard coal in the Ruhr Basin and lignite in the Lower Rhine Basin, as well as iron ore, zinc, lead, rock salt and potash. It is also a highly industrialised region.

Brandenburg's economy is industrial and agricultural. The region is home to the Lusatian Coal Basin, where lignite is mined, and the Jänschwalde and Schwarze Pumpe power stations are among the largest in Germany. Brandenburg is also home to large industrial plants, including the Schwedt oil refinery and the Eisenhüttenstadt ironworks. Saxony-Anhalt is a region where the chemical, mining, engineering, metallurgical, railway rolling stock and electrical industries have developed. Saxony is a region that underwent significant structural changes after the reunification of Germany. Unprofitable industrial enterprises were liquidated. Many lignite mines and power plants were closed or reorganised. Former mining sites are currently being recultivated.

The territories, however, were mostly not highlighted in the NECP 2023. **This is an aspect that definitely requires improvement.**

1. Ambitions and targets	
1.1 Increasing ambition and avoiding backsliding on targets from Territorial Just Transition Plans	<p>1 targets set in TJTP are not mentioned in the draft. However, the objectives set out in the TJTP are broadly in line with those of the NECP</p> <p>In the NECP 2023 the goal of reaching net zero emissions by 2045 is declared. North Rhine-Westphalia, Brandenburg, Saxony, and Saxony-Anhalt declare the same goal in the TJTPs.</p> <p>Ambitions in North Rhine-Westphalia have been heightened and the phase out of lignite is planned for 2030. However, most of the territories affected from fossil fuel phase-out are not highlighted in the NECP 2023. This is an area for improvement in the final version of the NECP.</p>
1.2 Clear and science-based timeline for coal exit in the power sector	<p>1 shutting down the last coal-powered plant is declared 'at the latest' till 2038</p> <p>In the context of Pentilateral Energy Forum plans also slightly more ambitious 2035 ('ideally by') is given. (P. 28)</p> <p>The draft NECP declares that lignite in North-Rhine Westphalia will be phased out earlier, by 2030. The declaration of <i>shutting down the last coal-fired at latest till 2038</i> is given (P. 46). However, elsewhere a less ambitious statement on phasing-out coal/lignite power generation is given: <i>Lignite fired electricity generation will be reduced by 2038 at the latest by means of a legally binding decommissioning path for lignite-fired power plants.</i> (P. 144)</p> <p>The market integration measures of coal exit plan are described on page 144:</p> <p><i>A gradual reduction and phasing out of coal-fired electricity generation in Germany is foreseen. To this end, the 'Law on the reduction and termination of coal-fired electricity generation and amending other laws' (the Coal Exit Act) entered into force in August 2020. The Coal Exit Act implements the Commission's energy policy recommendations on growth, structural change and employment. It includes provisions to reduce and end coal and lignite-fired electricity generation by 2038 at the latest, to continuously review security of supply, to cancel carbon allowances released and an adjustment allowance for older workers in the coal sector. The main component of the Coal Exit Act (Mantel Act) is the Coal Power Generation Determination Act (KVBG), which regulates the gradual reduction of coal-fired electricity generation with fixed target dates in 2022 (both 15 GW of coal, lignite), 2030 (8 GW of coal, 9 GW of lignite) and 2038 (0 GW). Coal-fired electricity generation is reduced first by tendering procedures and then by statutory requirements. Lignite fired electricity generation will be reduced by 2038 at the latest by means of a legally binding decommissioning path for lignite-fired power plants. The law on accelerating the phase-out of lignite in the Rhine basin accelerated the phase-out of lignite in the Rhine basin by about 8 years and brought forward from 2038 to 2030. The law on accelerating the phase-out of lignite in the Rhine basin entered into force in December 2022.</i></p>

	<p>NECP 2023 states that the decrease in power generation from hard coal will first occur via tenders, followed by obligatory regulations. Power generation from lignite will be phased out by 2038 through a legally mandated decommissioning process for lignite-fired power plants. However, it's worth adding more information on this topic in the final version of the NECP.</p> <p>To sum up, the set target represents a subtle adjustment from the NECP 2019, as back then, the goal was to phase out coal by 2038 across Germany. However, in North Rhine-Westphalia, which encompasses some of the most vulnerable territories, the coal phase-out has now been expedited by 8 years for lignite. Plans have circulated about extending such a target to the entirety of Germany, yet this remains a controversial subject and German finance minister rejects 2030 coal exit without affordable and secure alternatives⁵.</p>
<p>1.3 Clear and science-based timeline for transition away from coal in the whole economy</p>	<p>1 addresses the issue of sectoral decoupling but does not mention the precise exit timeline for coal in the whole economy</p> <p>The net-zero emission neutrality is mentioned but without a precise relation to coal-exit deadline.</p> <p><i>Central elements of Germany's energy and climate policy are the 2030 climate change programme with the Federal Climate Protection Act, which requires Germany to achieve net greenhouse gas neutrality by 2045. (P. 15)</i></p> <p>The general note on sector-specific trajectories is referred to in the introductory part. (P. 37)</p> <p>The Coal Exit Act (2020) goals are maintained and its main goals are described in the draft:</p> <p><i>The main component of the Coal Exit Act (Mantel Act) is the Coal Power Generation Determination Act (KVBG), which regulates the gradual reduction of coal-fired electricity generation. (P. 144)</i></p> <p>Also, despite not being bound into a consistent plan some other policies of sectoral decoupling are mentioned.</p> <p>The lignite exports from Germany are to be phased out till 2023. (P. 253)</p> <p>It is also worth to mention that the use of coal for heating buildings will be phased out soon, which is a key point in that context. This is also an improvement compared to the NECP 2019.</p> <p><i>Building Energy Act (GEG)</i></p> <p><i>The new construction standard in terms of permitted primary energy demand was raised to the 55 efficiency house in a first amended JIT. The JIT amendment entered into force on 01/01/2023. A second amendment to the JIT established that, as of 1 January 2024, any newly built-in heating must in principle be operated with at least 65% renewable energy. This applies immediately to new buildings within new building areas, and for existing buildings and new buildings outside new building areas, the obligation is introduced in staggered periods with the expiry of the heat planning deadlines (from mid-2026, or mid-2028). As a result, the law is closely intertwined with the future requirements for heat planning. If new oil or gas heating systems are installed during the transitional period, extensive advice should be provided beforehand, as these heating systems will also have to meet increasing renewable quotas from 2029 onwards. (P. 105 EN VERSION)</i></p> <p>The shift away from coal in the economy as a whole is reflected in the decline in primary energy consumption over the years under the reference scenario (P. 253). The NECP has only a reference scenario which still includes some coal use after 2038 (probably for industrial heat production and this use would not be totally clear). What is more, the projections for meeting the 2030 target and beyond are not included yet in the NECP (CHAP. 5).</p> <p>The information provided in the NECP 2023 is currently only fragmentary. In the final version of the NECP, there should be a mentioned schedule for the phase-out of coal in the whole economy.</p>
<p>1.4 Clear and science-based timeline for transition away from fossil gas in the whole economy</p>	<p>0 there is no clear timeline yet. Chapter 5.1 which is going to include such information is basically missing. The final version of the NECP is expected to include information on transition away from fossil gas</p> <p>The gas issue is treated much more in terms of ensuring the supply security than in terms of phasing-out (P. 42). The gas imports are to be diversified further in the context of Russia's war of aggression with Ukraine and the closer cooperation with EU gas exporters (Netherlands, Belgium, France) (P. 42-44). But unfortunately there is no timeline for the diversification.</p>

⁵ <https://www.cleanenergywire.org/news/german-finance-minister-rejects-2030-coal-exit-without-affordable-and-secure-alternatives>

		<p>However, the use of gas for heating new buildings will be phased out soon – Building Energy Act (Building Energy Act – GEG) – Same provisions as above. This is an improvement compared to the NECP 2019.</p> <p>There is no clear mention of gas phase-out in the Just Transition documents.</p> <p>In the final version of the NECP, clear information on transition away from fossil gas should be added, especially in the context of territorial aspects.</p>
1.5 Clear and science-based timeline for transition away from oil in the whole economy	0	<p>there is no clear timeline yet. Chapter 5.1 which is going to include such information is basically missing. The final version of the NECP is expected to include information on transition away from oil</p> <p>Moreover, oil shortages are planned to be substituted with imports from abroad. Oil, similarly as gas is considered more in term of supply security/crisis preparedness than phasing out policies. (P. 45)</p> <p>However, the use of oil for heating new buildings will be phased out soon – Building Energy Act (Building Energy Act – GEG). Same provisions as above. This is an improvement compared to the NECP 2019.</p> <p>There is no clear mention of oil phase-out in the Just Transition documents.</p> <p>In the final version of the NECP, clear information on transition away from oil should be added, especially in the context of territorial aspects.</p>
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)	1	<p>industrial transition to net zero emissions is declared to be achieved till 2045, few threats/requirements are identified. The policies declared are rather comprehensive, however no consistent timeline is given. Also, especially post-2030 situation and policies are to be yet assessed. There is no projections yet under chapter 5 and no insights as well what the 2030 target means for Germany</p> <p>There is little information on the industrial transition as hardly any information is provided in chapter 5 which shows the impact assessment of planned policies and measures. Some information is provided about the sectoral targets (including one for industry) which, however, still have to be defined.</p> <p><i>The Federal Climate Change Act, as amended on 18 August 2021, sets out overall reduction pathways for greenhouse gas emissions and also defines sector-specific pathways for energy, industry, transport, buildings, agriculture and other (waste) by 2030. The sectors are not defined according to ETS and non-ETS emissions. The Federal Government monitors compliance with the emission reduction pathways up to net-zero greenhouse gas emissions in 2045 each year in a monitoring process that is enshrined in the Federal Climate Protection Act alongside the abatement pathways. (P. 61)</i></p> <p>Below there is an example of measure connected with this aspect from Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027:</p> <p><i>The German government's steel action plan from 2020 aims to gradually replace the use of coking coal in steel production with hydrogen and provides for concrete implementation measures in the years up to 2025. (P. 150 EN VERSION)</i></p> <p>In the final version of the NECP, clear information on industrial transition with the timeline should be added, especially in the context of territorial aspects.</p>

Aspect 2. Supporting local economies and communities

The energy transition will disproportionately affect regions whose local economies are most dependent on the fossil fuel industry. If national climate policy will not take that into account, those regions will be left behind. Beyond direct employment, communities in those regions often rely on fossil fuel companies for investment and funding in areas ranging from local infrastructure to educational scholarships, which significantly impact 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. It should also account for the importance of preserving traditional identities of those communities despite industrial change, and revitalizing the natural environment affected by past extraction.

There is insufficient emphasis in the current draft on supporting local economies and communities. Some information is provided for industrial policy, environmental protection or public transport policy, but it is generally not considered in the context of supporting local communities. It is reasonable to assume that the implementation of these policies will benefit local economies and communities to some extent. Unfortunately, this relationship is often overlooked or vaguely addressed in the draft, with no proper explanation or assessment.

It is essential that this issue is addressed, and it is **strongly recommended** that more attention is given to this aspect in the final version of the Plan.

2. Supporting local economies and communities	
<p>2.1 Policies and measures supporting local economies through stimulating their endogenous growth potential, including promoting entrepreneurship, supporting SMEs and social economy</p>	<p>1 the idea of supporting local economies is present in the draft, however it lacks crucial details. The SMEs are mentioned, the subjects of social economy are not</p> <p>SMEs are considered to be 'important drivers of climate change mitigation'. (P. 163)</p> <p>There are many policies regarding:</p> <ul style="list-style-type: none"> ▪ Local public transportation; ▪ Local-level energy communities; <p>SMEs are addressed as desirable subjects of implementing ecological improvements, as a part of BMBF (Federal Ministry of Education and Research) programme.</p> <p>However 'Social economy' (or any similar term) as a concept is not present.</p> <p>In few places the problem is notified, mostly very vague. E.g. <i>the implementation of timber building initiative to support regional value chains.</i> (P. 68)</p> <p>The draft declares the BMDV support for <i>the creation of decentralized innovation and technology centre for hydrogen with the sites of Duisburg, Chemnitz, Peffenhausen and Northern Germany (cluster from Bremen/Bremerhaven, Hamburg and Stade)</i> (P. 82). Unfortunately, we do not find any reference to why these municipalities are chosen. It has not been indicated whether these territories belong to the most vulnerable areas identified in the territorial plans. There is no assessment on the impact of regional job markets etc. There is no social aspect of localization addressed at all.</p> <p>Specific measures related to regions in this matter are outlined in other documents. Below are some examples:</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027. (P. 156 EN VERSION)</p> <p>2.4. Types of planned projects</p> <ol style="list-style-type: none"> 1. Direct support for SMEs in operational transformation processes; 2. Direct support for SMEs in personnel transformation processes; 3. Promotion of knowledge and technology transfer in SMEs; 4. Start-up and technology centres; <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes. (P. 26 EN VERSION)</p> <p>RSO1.3 Increasing the sustainable growth and competitiveness of SMEs and job creation in SMEs, including through productive investments</p> <p>Programme of the State of Brandenburg for the European Regional Development Fund and for the Just Transition Fund. (P. 15 EN VERSION)</p> <p>Objective "Investment in employment and growth"</p> <p>Specific goal or own priority: 1.3 Increasing the sustainable growth and competitiveness of SMEs and creating jobs in SMEs, including through productive investment</p> <p>Territorial plan for a just transition on the ERDF/JTF programme Saxony. (P. 15 EN VERSION)</p> <p>2.3.4 Types of planned projects;</p> <p>2.3.4.1 Diversification and modernisation of the economy</p> <ul style="list-style-type: none"> ▪ Investments in regional SMEs; ▪ Start-up funding with a business angel bonus; ▪ Loan fund for SMEs;

	<p>It is worthwhile to delve into the subject in the final version of the NECP. Some reference to particular regional programs would facilitate understanding of the planned policies, that within the hitherto version were described too vaguely. It would also enhance the assessment of this aspect.</p>
<p>2.2 Policies and measures for preservation of the identity of mining/traditional industrial communities</p>	<p>1 none such policies are mentioned but they are implemented and have been described in other documents</p> <p>The support for some traditional mining regions (e.g. Altenburgen Land in Thuringia) from the central government is provided. (P. 151)</p> <p>However, the point of view of 'mining/traditional communities' is not present at all.</p> <p>The only mention related to miners' communities regards phasing out retiring miners' subsidies in 2027 and there's no plan to extend it. (P. 101)</p> <p>There is also mention about the award from Adjustment allowance (APG) to Employees of the Coal mines to ensure the socially and regionally compatible phasing out of the German coal mining industry by the end of 2018. (P.197)</p> <p>The Digital ecosystems for a climate friendly industry (P. 86) is mentioned very broadly and does not refer to any regional specifics.</p> <p>The actions have been highlighted in other documents. Examples are indicated below.</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027. (P. 151 EN VERSION)</p> <p>Low-skilled workers, older people and people with disabilities who are still employed in the coal industry will need individually tailored, preventative advice and training measures to ensure that they do not drop out of the labour market.</p> <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes. (P. 95 EN VERSION)</p> <p>Retention factors for professionals and families</p> <ol style="list-style-type: none"> Digital services of general interest in rural areas; Improving mobility services; Participation, integration, inclusion; <p>The mention of particular regional policies would be strongly recommended in the final, updated version of the draft. Their description and uncovering the logic behind how policies for different regions are suited would significantly facilitate readers the understanding of directions of German policy regarding social aspects of the transition.</p> <p>It is worthwhile to delve into the subject in the final version of the NECP.</p>
<p>2.3 Policies and measures for revitalisation of natural environment, both for restoring biodiversity and recreational purposes</p>	<p>1 there is variety of policies mentioned in this context, but they are not described on the level of particular regions</p> <p>Even if many of them are to be implemented on the level of <i>Lander</i>, the policies targeting given regions and their specifics are not mentioned. There is no reference to the situation and challenges of particular <i>Lander</i> at all.</p> <p>Among the policies and programmes are:</p> <ul style="list-style-type: none"> ■ Climate Wildness: A program to secure smaller wilderness areas; ■ Acceleration of bog rewetting (within National Moor Protection Strategy); ■ Strengthening urban trees and gardens; ■ Other policies regarding restoration/preservation of natural areas in face of climate change, e.g. 'climate-adapted forest management' funding programme is to be launched by Federal Ministry of Food and Agriculture; ■ program to secure smaller wilderness areas in post-mining landscapes. <p>The actions connected with vulnerable regions have been highlighted in other documents. Examples are indicated below. It is worthwhile to delve into the subject in the final version of the NECP.</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027. (P. 156)</p> <p>2.4. Types of planned projects</p> <ul style="list-style-type: none"> ■ 6. Water management measures; ■ 8. Additional private and public sector investment;

	<ul style="list-style-type: none"> ▫ Urban regeneration and redevelopment; ▫ Transition to a circular economy; ▫ Restoration of soils and ecosystems and decontamination, taking into account the polluter pays principle; ▫ biodiversity; <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes. (P. 158, P. 92 EN VERSION)</p> <p>2.4. Types of planned projects</p> <ul style="list-style-type: none"> ▫ Additional private and public sector investment; <p>2.1.1.3. Indicative breakdown of planned appropriations (EU) by type of intervention</p> <ul style="list-style-type: none"> ▫ RSO5.2 Promote integrated and inclusive local social, economic and environmental development, culture, natural heritage, sustainable tourism and safety outside urban areas; ▫ 079. nature conservation and biodiversity protection, natural heritage and natural resources, green and blue infrastructure facilities; <p>Territorial plan for a just transition on the ERDF/JTF programme Saxony. (P.18 EN VERSION)</p> <p>2.2.4.8 Additional private and public sector investment;</p> <ul style="list-style-type: none"> ▫ Restoration of soils and ecosystems and decontamination, taking into account the polluter pays principle; ▫ biodiversity; <p>2.1.4.5. Preserving land through strategic water management;</p> <p>It would be highly recommended to merge the narration on federal level directions of nature preservation policy with the regional policies of Lander. The coherent vision of how the two levels of the policy intermingle should be present in the final, updated version of the draft.</p>
<p>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)</p>	<p>1 mentions variety of policies in this area, many of them are given satisfying level of details. However, the policies do not address the issues of particular regions and their unique issues. Even if they are to be implemented on the regional level, only the general state-level direction is mentioned. The vulnerable regions are not even mentioned by their names</p> <p>There is, however, one vague mention:</p> <p><i>Further reform projects in the area of regional structural support, in particular the further development of the overall German support system for structurally weak regions during this legislative term, are also intended to further improve the sustainability of structurally weak regions.</i> (P. 206)</p> <p>The NECP 2023 also mentions about varies measures from region to region but not necessarily the most affected ones.</p> <p><i>Transport measures address mobility pressures that are particularly affecting people in rural areas.</i> (P. 205)</p> <p>Other policies include strengthening railroad system, building cycling routes parallelly with the main state roads (P. 98-100) and implementing charging infrastructure (to be coordinated on the federal/Lander/ municipal level through National Coordination Point from 2019). (P. 89)</p> <p>The actions have been highlighted in other documents. Examples are indicated below. It is worthwhile to delve into the subject in the final version of the NECP.</p> <p>Examples from Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027. (P. 176, P. 81 EN VERSION)</p> <p>2.4. Types of planned projects</p> <ul style="list-style-type: none"> ▫ 8. Additional private and public sector investment; ▫ renewable energies and environmentally friendly and sustainable mobility, including the promotion of green hydrogen and efficient district heating networks; <p>2.1.1. Priority: 4 Mobile NRW (specific objective of urban mobility under Article 3(1)(b)(viii) of the ERDF and Cohesion Fund Regulation);</p> <p>2.1.1.1. Specific objective: RSO2.8 Promoting sustainable, multimodal urban mobility as part of the transition to a carbon-neutral economy (ERDF) Measure 1 - Sustainable urban mobility;</p>

ERDF/JTF 2021-2027 Saxony-Anhalt programmes. (P. 73 EN VERSION)

- RSO2.8 Promote sustainable, multimodal urban mobility as part of the transition to a carbon-neutral economy;

It is worthwhile to delve into the subject in the final version of the NECP. It would be recommended to include some of the policies proposed in North Rhine-Westphalia and Saxony-Anhalt within the final version of the NECP.

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 affordable green energy consumption and for decarbonizing industrial processes. Based on those previously identified region-specific needs, it should further on introduce adequate policies for each region.

In general, Germany tends to promote developing green energy. According to the Fraunhofer Institute in 2023 the renewable energy sources solar, wind, water and biomass produced approx. 260 TWh in 2023. This is 7.2% above the previous year's level of 242 TWh. The share of renewable energy fed into the public electricity grid in Germany in relation to the load, i.e. the electricity mix that actually comes out of the socket, was 56.9% compared to 50.2% in 2022. The share of renewable energies in total net electricity generation, including the power plants of "businesses in the manufacturing, mining and quarrying sectors", is around 54.9% compared to 45.5% in 2022⁶.

In the NECP 2023, the issue of local clean energies and industry decarbonisation is addressed. However, most of the mentioned policies are not described in a way that is fully satisfactorily. More in-depth analysis may be found in other documents, including TJTPs of particular regions. It would be recommended to incorporate some of those details into the final version of the updated NECP to develop a better understanding of the territorial problems.

The current version of the plan presents only a national-level perspective and defers the detailed description of measures dedicated to regional and local communities. Despite it not being the purpose of the NECP to present detailed policies for each region, at least **the identification of a few crucial region-specific challenges and potential solutions to them would be highly recommended.**

⁶ https://www.ise.fraunhofer.de/content/dam/ise/en/documents/downloads/electricity_generation_germany_2023.pdf

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	0	<p>does not assess the level of needs in this area yet</p> <p>There are some policies mentioned, however, their embedment in particular regions and their specific situation is not mentioned. There is only statement that they will be (coordinated on the regional (Länder, municipal) level, but there is no reference to any particular areas within the draft itself.</p> <p>It would be recommended to show the assessment of needs in the area of deployment of affordable clean energy in the final version of the NECP.</p>
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	<p>some policies or measures in this area are mentioned, but it is difficult to assess if they have chance to be effective</p> <p><i>Better regionalisation of renewable energy expansion</i> is mentioned (P. 19). Despite the general mention of regionalization, particular regions and their unique challenges are not identified.</p> <p>However, specified measures related to regions are outlined in other documents.</p> <p>Examples from Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027 (P. 28, 59, 159 EN VERSION)</p> <ul style="list-style-type: none"> ▪ Programme strategy: key challenges and policy measures <ul style="list-style-type: none"> ▫ RSO1.1 Development and expansion of research and innovation capacities and the introduction of advanced technologies;

- RSO2.1 Promotion of energy efficiency and reduction of greenhouse gas emissions;
- 2.1.1. Priority: 3. sustainable NRW
 - Measure 2 - Energy-efficient heat supply;
- Types of planned projects
 - Additional private and public sector investment;
 - Renewable energies and environmentally friendly and sustainable mobility, including the promotion of green hydrogen and efficient district heating networks;

ERDF/JTF 2021-2027 Saxony-Anhalt programmes (P. 164 EN VERSION)

- Types of planned projects - Additional private and public sector investment
 - Renewable energies, including the promotion of RE H2 and efficient district heating networks;
 - sustainable energy, energy efficiency and integration measures, including the renovation and remodelling of buildings;

Programme of the State of Brandenburg for the European Regional Development Fund and for the Just Transition Fund (P. 17 EN VERSION)

- 2.A.2.2 Specific objective 2.2 "Promotion of renewable energy in accordance with Directive (EU) 2018/2001 on renewable energy, including the sustainability criteria set out therein";

Territorial plan for a just transition on the ERDF/JTF programme Saxony (P. 18 EN VERSION)

- 2.3.4.5 Additional private and public sector investment
 - RE and environmentally friendly and sustainable mobility, including the promotion of RE H2 and efficient district heating networks;
 - sustainable energy, energy efficiency and integration measures, including the renovation and remodelling of buildings;

It is worth to mention that the NECP 2023 also provides information about H2 infrastructure in many regions of Germany but not exactly in the most vulnerable ones.

It would be recommended to mention the policies proposed by the mentioned documents within the final version of the updated plan, addressing at least the crucial region-specific challenges and proposed policies.

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. If, for example, women lack political representation in the region generally, their gender-specific interests will also not be considered in the regional decision-making processes related to the energy transition⁷. Identifying such groups and including them and their interests in policymaking is key.

In the NECP 2023 the region-related policies are mentioned way too vaguely: this is generally a weak point of the draft in its current version. In the vast majority of cases, the regional policies are simply mentioned to be 'implemented on the level of Lander' without any details given.

Moreover, vulnerable groups are not approached in a broader context. The only way in which the German NECP draft mentions them is through the rather narrow term of 'energy consumers'. All other angles of being vulnerable to transition shifts (related to job market, regional specifics, age, gender etc.) are practically absent. It is strongly advised to include various angles of economic and social discrimination and assess their relation to risks caused by the transition.

⁷ [https://www.europarl.europa.eu/RegData/etudes/STUD/2024/754488/IPOL_STU\(2024\)754488_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2024/754488/IPOL_STU(2024)754488_EN.pdf)

Some assessments and policies, regarding gender and age-related exclusion are present in various documents issued by the German governments and administrations of the Lander. **It would be suggested to incorporate these policies into the final version of the updated draft and to streamline these approaches at the national level.**

4. Inclusivity of regional transition	
4.1 Promotion of gender equality to address the specific situation and role of women in the transition to the climate-neutral economy	<p>1 does not mention any policies or measures in this area but they are implemented and have been described in other documents</p> <p>The actions have been highlighted in other documents. Examples are indicated below.</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027 (P. 38 EN VERSION)</p> <ul style="list-style-type: none"> ▪ As part of the initiatives outlined in the document, "Equality, inclusion and non-discrimination are defined as part of the selection criteria that must be taken into account in every project selection procedure. Gender-specific indicators are collected in programme monitoring." This applies to all the highlighted measures. <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes (P. 82 EN VERSION)</p> <ul style="list-style-type: none"> ▪ CLLD projects contribute in an appropriate manner to eliminating inequalities, promoting equality between men and women, taking into account the gender perspective, combating any form of discrimination based on gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation, ensure accessibility for people with disabilities and support the transition from institutional care to care in the family and local community. <p>Programme of the State of Brandenburg for the European Regional Development Fund and for the Just Transition Fund (P. 27 EN VERSION)</p> <p>The information about equality is provided in the descriptions of the "Specific Objective."</p> <ul style="list-style-type: none"> ▪ Measures to protect equality, inclusion and non-discrimination <i>Due to the intended target groups and funding objects, the specific objective does not include any measures that are directly aligned with the cross-cutting objectives, although these will be taken into account during programme implementation. Applicants are informed of compliance with the principles of equality, inclusion and non-discrimination by means of an information sheet and sensitised to the objectives and possible areas of application. They must declare that they are aware of the cross-cutting objectives and that they will take them into account when implementing the projects. This must be confirmed when submitting the proof of utilisation.</i> <p>It is worthwhile to delve into the subject in the final version of the NECP. It would be recommended to mention the policies proposed by the mentioned documents within the final version of the updated plan.</p>
4.2 Special attention paid to vulnerable groups (such as people with disabilities) that suffer disproportionately from the adverse effects of the transition	<p>1 does not mention any policies or measures in this area but they are implemented and have been described in other documents</p> <p>The actions have been highlighted in other documents. Examples are indicated below.</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027 (P. 38, 151 EN VERSION)</p> <ul style="list-style-type: none"> ▪ As part of the initiatives outlined in the document, "Equality, inclusion and non-discrimination are defined as part of the selection criteria that must be taken into account in every project selection procedure. Gender-specific indicators are collected in programme monitoring." This applies to all the highlighted measures. ▪ Low-skilled workers, older people and people with disabilities who are still employed in the coal industry will need individually tailored, preventative advice and training measures to ensure that they do not drop out of the labour market. <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes (P. 95, 82 EN VERSION)</p> <ul style="list-style-type: none"> ▪ 2. Retention factors for professionals and families c) Participation, integration, inclusion [FK a); h); k); l); m); o)]; <p><i>Participation, integration and inclusion play a decisive role in keeping families in the MR and making the best possible use of the potential of the regional labour market. The establishment of an inclusion centre [FK a);</i></p>

	<p><i>k); m)] is planned, in which people with disabilities are to be transferred to the regular labour market in the skilled trades, but also in digital professions. In addition, a platform [FK h); l)] is to be set up that uses user-generated data to map employee potential, enables better management of further training programmes and shows employees opportunities to develop and live in the region in the long term and work in future-proof sectors of the economy. In addition, there should be the possibility of supporting the JTF measures through accompanying projects [FK k),o)], which are aimed at citizen participation (especially of young people) in the transition process and are supplemented by transformation-relevant further training measures.</i></p> <ul style="list-style-type: none"> ▪ CLLD projects contribute in an appropriate manner to eliminating inequalities, promoting equality between men and women, taking into account the gender perspective, combating any form of discrimination based on gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation, Ensure accessibility for people with disabilities and support the transition from institutional care to care in the family and local community. <p>The Brandenburg Disability Equality Act</p> <p>It is worthwhile to delve into the subject in the final version of the NECP. It would be recommended to mention the policies proposed by the mentioned documents within the final version of the updated plan.</p>
<p>4.3 Policies and measures addressing demographic impacts of the ageing population of regions in transition</p>	<p>1 mentions the issue but highly insufficiently. However, another document addressing the issue more in detail is mentioned (Joint Task for Improvement of the Regional Economic Structure (GRW))</p> <p><i>On the one hand, the transformation unleashes workers in certain areas and, on the other hand, labour and skilled labour shortages tend to increase as a result of demographic change and migration. In principle, less-favoured regions, which often also face specific structural challenges, are likely to be increasingly affected by ageing societies and by labour and skills shortages over the next few years and decades than structurally strong regions. Against this background, the Federal Government and the Länder have also focused on soft location factors in the reform of the Joint Task for Improvement of the Regional Economic Structure (GRW) adopted in December 2022. In addition to existing measures to create and safeguard jobs, regions should be encouraged to become more attractive not only for businesses but also for employees through increased funding opportunities in the field of regional services of general interest. With the reform, the Federal Government and the Länder aim to make the GRW an even more effective tool for shaping regional transformation processes. (P. 206)</i></p> <p>More measures related to regions are outlined in other documents:</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027. (P. 38, 151 EN VERSION)</p> <ul style="list-style-type: none"> ▪ As part of the initiatives outlined in the document, "Equality, inclusion and non-discrimination are defined as part of the selection criteria that must be taken into account in every project selection procedure. Gender-specific indicators are collected in programme monitoring." This applies to all the highlighted measures. ▪ Low-skilled workers, older people and people with disabilities who are still employed in the coal industry will need individually tailored, preventative advice and training measures to ensure that they do not drop out of the labour market. <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes (P. 82 EN VERSION)</p> <p>CLLD projects contribute in an appropriate manner to eliminating inequalities, promoting equality between men and women, taking into account the gender perspective, combating any form of discrimination based on gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation. Ensure accessibility for people with disabilities and support the transition from institutional care to care in the family and local community.</p> <p>Programme of the State of Brandenburg for the European Regional Development Fund and for the Just Transition Fund (P. 27 EN VERSION)</p> <p>Measures to protect equality, inclusion and non-discrimination</p> <p><i>Due to the intended target groups and funding objects, the specific objective does not include any measures that are directly aligned with the cross-cutting objectives, although these will be taken into account during programme implementation. Applicants are informed of compliance with the principles of equality, inclusion and non-discrimination by means of an information sheet and sensitised to</i></p>

the objectives and possible areas of application. They must declare that they are aware of the cross-cutting objectives and that they will take them into account when implementing the projects. This must be confirmed when submitting the proof of utilisation.

The policies proposed for various Lander seem to properly address different kinds of social vulnerability, including those that the NECP draft itself lacks (including focus on low-skilled workers, introduction of gender-related indicators).

It would be highly recommended to refer to the policies proposed for Brandenburg, North Rhine-Westphalia and Saxony-Anhalt in the final version of the updated plan.

Aspect 5. Regional just transition governance

Adequately managing and facilitating energy transition processes (transition governance) is key in achieving set objectives. And including relevant stakeholders and citizens whose interests are at stake in transition governance processes at the regional level is crucial for both a fair outcome of the processes and a perception of a fair transition process 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 complimentary objectives.

In Germany there are several carbon-intensive regions with Territorial Just Transition Plans. However, the policies for particular regions are not mentioned in the NECP as such. Of the many vulnerable territories in Germany, only few are highlighted in the NECP 2023. The plan mentions structural aid of up to €1.09 billion, which will be available to the affected states until at least 2038. The Free State of Thuringia will receive up to €90 million for the former lignite mining area of Altenburger Land from the funds allocated for the Central German mining area. **The final version should include more information dedicated to territorial aspects.**

The regional policies are usually mentioned in a way that ties them to specific regions and their needs. In the vast majority of cases, the NECP states that a given policy will be ‘implemented on the level of Lander’.

5. Just transition governance	
5.1 Consistency of regional and national transition planning process	<p>1 consistency of regional and national transition planning process is to some extent addressed. However, the Lander-level policies are mentioned very loosely and lack any details</p> <p>Regional policies to be found in external documents supposedly contribute to the general, federal-level goals outlined in the draft, regrettably the current version fails to show and assess these connexions.</p> <p>More information are outlined in other documents:</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027 (P.172 EN VERSION)</p> <p><i>National and regional climate protection plans The planned JTF funding in the Rhenish mining area is in line with the strategies and measures formulated in Germany's integrated National Energy and Climate Plan (NECP), which are further specified in the Climate Action Plan 2030 and other strategies of the Federal Government such as the Long Term Renovation Strategy (LTRS) and the North Rhine-Westphalian Climate Action Plan in the areas of energy conversion, energy efficiency, industry and transport, among others</i></p> <p>Territorial plan for a just transition on the ERDF/JTF programme Saxony (P. 26 EN VERSION)</p> <p>The planned JTF funding is in line with the measures described in the integrated National Energy and Climate Plan (NECP) and with the objectives and projects of the strategies and programmes of the Federal Republic of Germany included in the NECP, such as the</p>

		<p>Climate Protection Plan 2030, the Energy Efficiency Strategy 2050 and the 7th Energy Research Programme.</p> <p>The final version of the NECP should ensure the consistency of regional and national transition planning process.</p>
5.2 Institutional coordination on just transition implementation between regional and national authorities	1	<p>institutional coordination of just transition is provided with a few mentions, unsatisfactory both in quantity and details provided</p> <p>e.g. 1.2.1 v. administrative structures for the implementation of national energy and climate policies (P. 24)</p> <p>This is an area for improvement in the final version of the NECP.</p>
5.3 Inclusion of stakeholders and citizens into regional transition governance	1	<p>involvement of stakeholders and citizens is taken into account to some extent. However, the details of inclusion mechanisms are highly unsatisfactory and mentioned vaguely</p> <p>More details are to be found in other documents. The mentioned chapters in these documents address governance issues:</p> <p>Multi Funds Programme ERDF/JTF North Rhine-Westphalia 2021-2027 (P. 160 EN VERSION)</p> <ul style="list-style-type: none"> ▪ 3. Governance mechanisms; <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes (P. 165 EN VERSION)</p> <ul style="list-style-type: none"> ▪ 3. Governance mechanisms; <p>Territorial Just Transition Plan (TJTP) for the Brandenburg Lusatian coalfield 2021-2027 (P. 23 EN VERSION)</p> <ul style="list-style-type: none"> ▪ 3. Governance mechanisms; <p>Territorial plan for a just transition on the ERDF/JTF programme Saxony (P. 45)</p> <ul style="list-style-type: none"> ▪ 3. Governance mechanisms; <p>It would be recommended to refer to the policies proposed there, at least on the level of general directions, in the final version of the updated plan.</p>

IV. Distributional Aspects

Distributional aspects of the 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 related to the standard of living - both of the whole population and of vulnerable groups. The latter are especially impacted regarding 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 those 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 the 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 targeting the workforce (incl. reskilling initiatives), 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 need to be aware of the profound and multifaceted distributional impacts of just transition legislation and programmes. To adequately assess this impact, certain 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 of socio-economic impacts also need to be established to not lose track of the core justice aspect of the transition.

Implementing actions and policies for energy and climate has broad consequences. Germany assesses it in various areas including energy supply stability and transition to a greener economy.

However, the current version of the draft with a significant deficiency of evaluation of the socioeconomic side of proposed policies. The final draft should include a strategy on how data availability of the just transition can be strengthened.

The draft itself does not define socially vulnerable groups properly, devotes very little attention to the distributional aspects of the transition, encompassing both income and wealth distribution. The point of view of vulnerable energy consumers is included. However, other angles of social inequality, such as structural poverty, regional difficulties, gender, age and migrant issues are not addressed sufficiently.

Policies regarding the mentioned issues are proposed in other documents. A crucial task for the planners is to include them in the core structure of the further, updated version of the NECP. This has been, however, already announced in the plan (p. 204).

6. Overarching impact assessment of distributional impacts	
6.1 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by income groups	<p>1 distributional impacts are mentioned in few parts of the draft. However, the mentions seem to be very vague</p> <p><i>The transition from the ETS to ETS2 in 2027 also needs to pay particular attention to distributional effects with regard to lower and middle income groups. In addition to national measures, the European Social Climate Fund will have a special role to play here. The Federal Government will ensure that the funds earmarked for Germany from 2026 will support the target groups defined in Regulation (EU) No 955 (2023) in the transformation process. (P. 205)</i></p> <p>In some parts the draft refers to the social aspects (e.g. in the chapter on buildings emissions reduction: Social impacts must also be taken into account (P. 39)). In most cases the mentions are similarly basic.</p> <p>Some of the information which can be linked with this aspect is also mentioned in the chapter 5.2:</p> <ul style="list-style-type: none"> ▪ Housing Allowance Plus Act: the legal basis for targeted relief from higher housing and heating costs for lower income households in Germany. The reform focuses on increasing the entitlement to housing benefits and expanding the range of beneficiaries of housing benefits through the introduction of a heating cost component, a climate component and an increase in the general level of benefit (P. 205); ▪ CO₂ Cost Allocation Act: the cost of CO₂ for residential buildings is divided on the basis of the energy quality of the rented building. Tenants in buildings with poor energy renovation will be relieved. (P.205) <p>Industrial policies proposed by the draft are mostly described in their financial and environmental aspects only, usually ignoring the social angle. (P. 114)</p> <p>This is an area for improvement in the final version of the NECP.</p>
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)	<p>1 expected overall distributional impacts are mentioned, but descriptions are scarce</p> <p>Rural households are addressed as specifically vulnerable to the rising cost of transitioning hitherto existing car-based transportation.</p> <p><i>There is a vague declaration that the Federal Government (...) aims to ensure affordability for all citizens. In particular, the focus is on households at risk of being overburdened by high energy prices. In the context of the energy price crisis, the Federal Government is analysing the impact of high energy prices on household. (P. 55)</i></p> <p>The financial instruments provided for vulnerable households are described in external documents: Second and Twelfth Social Code (Basic Insurance for Jobseekers – Social Code II and Social Assistance – Social Code XII) (p. 55). Moreover, the Housing Allowance Act (Section 1) that provides housing benefit to provide economic security for an adequate and family-friendly dwelling is referred to. (P. 56)</p> <p>It is worthwhile to delve into the subject in the final version of the NECP.</p>
6.3 Common understanding of terms and measuring progress toward targets	<p>1 the main goals of the draft: transition to greener economy that would be introduced in a socially responsible way, 'leaving no one behind' are basically clear</p> <p>However, the draft leaves many challenges that deserve a more in-depth study only vaguely signaled and lacks specific discussion on proposed policies.</p> <p>Low-hanging fruits to address this issue at least to some extent: refer to definitions provided in other documents, e.g., Social Climate Fund Regulation, Just Transition Fund Regulation, Council Recommendation on "ensuring a fair transition towards climate neutrality").</p>

Aspect 7. Energy poverty

Energy poverty is a situation in which households are unable to access essential energy services and products. 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 is one where policy needs related to climate neutrality targets and socio-economic well-being intersect. Addressing both properly offers an opportunity to gain 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 activity⁸.

Two subchapters are devoted to the issue of energy poverty: the chapter 2.4.4 (p. 55), 3.4.4, and an annex (p. 220 (v)).

Significant number of policies addressed towards mitigating the energy poverty is mentioned: among them are those focused on direct financial support for vulnerable households, as well as more long-run oriented policies of buildings renovation leading to heating costs reduction. It is also worth noting that German law includes the heating and electricity costs in the accommodation costs that serve as a basis for calculation of being qualified as a recipient of various social welfare transfers.

Moreover, it is worth noting that the policies suited specifically for the more vulnerable members of society (low and low-middle income groups) are present.

Regrettably, in its current version the draft lacks a holistic evaluation and assessment of the macro-level impact of proposed policies. The document does not provide a coherent definition of the phenomenon of energy poverty. Despite referring to few desirable policies, neither their expected outcome, nor their funding sources are described in sufficient detail. Also, the chapters hardly include measures which support investments that structurally decrease energy bills through investment in energy efficiency and zero-emission energy sources – failing to seize the opportunity of utilising decarbonization measures to reduce energy poverty in the long term.

The approach visible in the NECP 2023 falls short of responding to many effects stemming from the dynamically evolving policy landscape. This approach fails to capture for example hidden energy poverty, i.e., vulnerable individuals restrict their energy consumption below their needs to lower their energy bills. In such an approach, a potential issue could be the creation of a vicious circle in which the high running costs of domestic heating prevent households from having the financial resources to invest in measures that would reduce these costs.

⁸ https://energy-poverty.ec.europa.eu/system/files/2023-12/JRC134832_01.pdf

7. Energy poverty	
7.1 Inclusion of indicative objectives aimed towards reduction of energy poverty	<p>0 objectives aimed at reducing energy poverty are not mentioned</p> <p>The draft quotes external documents that provides more information on the way energy poverty is interpreted and challenged in German policy, yet does not reference a definition of energy poverty. Regrettably, the paragraph is in the annex and does not refer to the core text.</p> <p>The definitions from other documents should be incorporated into the main text of the final version of the updated NECP to create a cohesive framework for the evaluation of energy poverty.</p>

<p>7.2 Assessment of the level of energy poverty and quality of used indicators</p>	<p>0</p>	<p>does not assess the level of energy poverty</p> <p>The indicators are to some extent defined within external social law documents (Social Code II and Social Code XII) but their in-detail, quantitative description is not given. Also, they do not focus on individual elements of demand, like energy, but understand energy poor households as household generally 'in need of help' ('hilfebedürftig'). A person registers as 'in need of help' if they cannot afford their subsistence (minimum subsistence level) from their own income and assets.</p> <p>However, the NECP draft itself does not attempt to define the phenomenon of energy poverty neither refers to the definition from other documents. Thus, the document does not provide satisfying definition of energy poverty. This is an area for improvement in the final version of the NECP.</p>
<p>7.3 Direct support to alleviate energy poverty</p>	<p>1</p>	<p>some existing and planned policies or measures in this area are mentioned, but they are insufficient to effectively alleviate the problem</p> <p>The NECP draft does not provide an overview of direct support for vulnerable households to alleviate energy poverty specifically. However, the energy needs are included in the basic needs of subsistence as defined by German law. Here, the Second (Basic Insurance for Jobseekers) and Twelve (Social Assistance) Social Codes are mentioned. According to them electricity and heating (both living space and water) expenditures are recalculated yearly to raise/start paying the subsistence benefits to new people/families. (P. 55-56)</p> <p>The draft authors highlight that the housing benefit, after being <i>substantially reformed</i> on January 2023 was <i>doubled on average</i> and the recipient group has, since then, been tripled. (P. 57)</p> <p>In the final version of the NECP, it would be advisable to identify more policies that directly contribute to combating energy poverty.</p>
<p>7.4 Measures which support investments which structurally decrease energy bills by investment in energy efficiency and zero-emission energy sources</p>	<p>1</p>	<p>few such policies of this kind are mentioned, many of them lack financial assessment</p> <p><i>Measure M23 StromsparCheck and M21 Energieberatungen (VZBV part) address energy poverty. The energy savingCheck is aimed exclusively at the target group of low-income households, thus making a significant contribution to combating energy poverty. Low-income households receive targeted advice on electricity and energy savings and are provided free of charge with energy saving products. In the context of the measures for energy advice to households by the consumer centres, which is part of measure M21 Energy advisory services, all the services offered by the consumer centres for low-income households are free of charge.</i> (P. 220)</p> <p>However, no quantitative indicators or info is given to assess their scope and effectiveness. A quantitative assessment for already installed measures should be made possible. For example, including numbers on how many low-income households have profited from an electricity or energy consulting service (compared to the number of low-income households overall), waiting times for consultancy services etc.</p>
<p>7.5 Addressing energy market inefficiencies which negatively affect vulnerable customers</p>	<p>1</p>	<p>mentions the issue but too vaguely</p> <p><i>In Germany, protected customers pursuant to Article 6(1) of Regulation (EU) 2017/1938 are defined in Section 53a of the EnWG and include households, basic social services and district heating installations that cannot switch fuel to the extent that they supply household customers, standard load profile customers and those providing basic social services. Gas supply undertakings shall also be required to supply natural gas to this customer in the event of a partial interruption of the supply of natural gas or in the event of exceptionally high gas demand. In Germany, this obligation is laid down in § 53a EnWG. The Gas suppliers may rely on market-based (grid or market-related, non-public) measures.</i> (P. 124)</p> <p><i>Where appropriate, the Federal Government systematically develops the framework for the protection of household customers. For example, consumer protection has been further strengthened in the implementation of the EU Electricity Market Directive by increasing transparency.</i> (P. 55)</p> <p><i>Through the introduction of the electricity and gas price brakes, the Federal Government has also taken measures to contain the sharply increased costs for energy. Citizens and businesses have been relieved from the increased costs since January 2023 thanks to price brakes for</i></p>

gas and electricity. The aim is to keep energy costs affordable while ensuring a secure supply of gas and electricity for consumers, industry and SMEs. To this end, household prices for gas were capped at 12 cents per kilowatt-hour and for electricity at 40 cents per kilowatt-hour for a base consumption of 80 % of historical consumption, usually compared to the previous year. For district heating, the capped price is 9.5 cents per kilowatt-hour. These price brakes benefit all citizens and aim to prevent emerging energy poverty. (P. 57)

It is worthwhile to delve into the subject in the final version of the NECP.

Aspect 8. Transport poverty

Transport poverty refers to the challenges faced by people with limited access to affordable public transportation or private means of transport. 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.

In the NECP 2023, transport (though not specifically transport poverty) is mainly covered in chapters 2.2, 3.1.2, 3.1.3, and 4.2.2.

People with lower incomes may encounter difficulties accessing efficient and affordable transport options, affecting their mobility and social participation. In response to these challenges, the efforts should be made to improve access to public transport, ensure the affordability of tickets, and develop alternative means of transportation, such as city bikes or car-sharing systems. In Germany, however, there is still a need for further transportation policy actions to effectively address the issue of transport poverty and create a more sustainable and accessible transportation environment for all citizens.

Therefore, there are several aspects that should be included in the final version of the NECP. First and foremost, it is essential to define the concept of transport poverty. Consideration could be given to adding a chapter that addresses issues related to transport poverty. It is important to focus on the technical side and not neglect the social dimension during implementation measures connected to this aspect. Measures aimed at structurally reducing transport poverty through investment in sustainable and zero-emission mobility options are not being approached through a transport poverty lens, making it difficult to identify challenges for vulnerable groups in the transition.

8. Transport poverty	
<p>8.1 Inclusion of indicative objectives aimed towards reduction of transport poverty</p>	<p>0 objectives aimed at reducing transport poverty are not mentioned</p> <p>There are some mechanisms proposed, which can be linked with the reduction of transport poverty but many of them without quantitative estimations.</p> <p>In vast majority of cases the transport policies are aimed towards a general advancement of infrastructure, without special attention to vulnerable regions/groups.</p> <p>Moreover, the approach is far more concerned with the technical and environmental than social aspects. Energy efficiency and GHG emissions reduction from transport seem to be paid much more attention (e.g. The Federal Climate Change Act stipulates that transport must reduce its greenhouse gas emissions by 48% by 2023 compared to 1990 (P. 41), than the social aspects, that are notified (e.g. people in rural areas cannot always use public transport (P. 205)) but the reflection on them is not really developed.</p> <p>In the final version of the NECP, it will be essential to include indicative objectives aimed at reducing transport poverty.</p>

<p>8.2 Assessment of the level of transport poverty and quality of used indicators</p>	<p>0</p>	<p>does not assess the level of transport poverty</p> <p>“Energy poverty” is there, but only in the narrow sense of home heating costs. Transport poverty is not conceptualized as such.</p> <p>Assessment of the level of transport poverty and quality of used indicators should be included in the final version of the NECP.</p>
<p>8.3 Direct support to alleviate transport poverty</p>	<p>0</p>	<p>does not mention existing and planned policies or measures in this area</p> <p>Some policies, even if having potentially significant positive impact (like the German Ticket for 49 euro introduced on 1 May 2023) are not shown and interpreted in the context of transport poverty mitigation. (P. 62)</p> <p>The low-carbon cars and their charging infrastructure are described thoroughly, however they social and regional aspects are not addressed at all. (P. 88)</p> <p>However, one very important measure in this context is ‘Pendlerpauschale’ which is tax release for commuters without access to public transportation. It is a direct support for people living in rural areas who cannot shift to public transport or biking.</p> <p>In the final version of the NECP, the implemented policies should be integrated with the issue of combating transport poverty.</p>
<p>8.4 Measures to structurally decrease transport poverty by investment in sustainable and zero-emission mobility options</p>	<p>1</p>	<p>the policies in this area are proposed. However, they are not assessed satisfyingly through the lense of transport poverty reduction</p> <p>Among mechanisms are:</p> <ul style="list-style-type: none"> ■ supporting the modes of transportation already less-emissive (LPT instead of MIT, railroads instead of airplanes, public transport instead of private vehicles...); ■ development of electricity-based fuels and support for advanced biofuels in transportation and related infrastructure (P. 96); ■ development of hydrogen-fueled applications for the transport sector through National Innovation Programme Hydrogen and Fuel Cell Technology (NIP2) (P. 95); ■ development of infrastructure for energy storage for electricity-based transportation; ■ tax incentives for employers to provide electric cars and bikes free of charge for their employees (P. 96); ■ development of hydrogen-based, electricity-based, and biogas-fueled public transportation in place of existing one (P. 96); ■ extension of cycle paths (incl. everyday cycle infrastructure) and bicycle parking facilities, improving bikers safety (P. 97); ■ tax release for commuters without access to public transportation (‘Pendlerpauschale’) (P. 149); ■ alternative powertrains for public transport that will make possible reducing pollution with no harm to transport density; ■ Deutschlandticket (P.82) . <p>Also, the strengthening of Local Public Transport (LPT) is provided: this is to be done at the Land-level policies. The draft emphasizes rising subsidies for Lands on the central level:</p> <p><i>By increasing federal funding under the GVFG for the expansion of public transport to EUR 1 billion annually from 2021 onwards, the Federal Government has created the conditions for improving the attractiveness of local public transport. This will make it possible to develop the local rail network.</i> (P. 98)</p> <p>The draft gives a promise to spend 86 billion euro by 2030 to renew the rail network.</p> <p>The above actions can support the fight against transport poverty by reducing travel costs and increasing public transport accessibility for individuals with limited budgets. Additionally, the development of alternative propulsion systems for public transport can reduce environmental pollution without worsening transport accessibility.</p> <p>In the final version of the NECP, the implemented policies should be integrated with the issue of combating transport poverty.</p>

Aspect 9. Financing needs and sources of funding

Establishing concrete financing needs and corresponding sources of funding for each of the proposed policies and measures is key for ensuring transparency of the process and building trust among stakeholders as well as the general public. It is also a prerequisite for effective resource allocation, establishing priorities, and long-term secure planning.

The 2023 NECP pays some attention to the financing needs of proposed policies. However, the sources of expenditure are described rather loosely. Sometimes precise amount of funds expected from particular sources are given, sometimes they are not. The plan addresses the issue, but inconsistently, which makes it hard to deduce a balanced financial plan on its basis.

It is noteworthy that the plan also addresses some policies that boost green investment through given financial instruments, including Green Federal Securities and Green Federal Bonds. Giving means for state green spending they are targeted to mobilise, through market attractiveness, private funds. These policies exist, in some shape, since 2019 (when the Sustainable Finance Strategy of the Federal Government was adopted) and the 2023 draft ensures to continue and further develop them (p. 70-72).

However, with regard to measures addressing distributional measures, description of financing needs and sources of funding is rare.

9. Financing needs and sources of funding	
9.1 Description of financing needs for each proposed policy and measure addressing the distributional impacts	<p>1 describes financing needs of some of the proposed policies and measures, but not much detail is provided</p> <p>In few parts of the draft some, at least basic, assessment of the financing needs seem to be lacking; such is a case of, i.e. subchapters on development of energy infrastructure on pages 49-52.</p> <p>In the final version of the NECP, for each proposed policy and measure, a description of the financial needs should be provided.</p>
9.2 Description of sources of funding for each proposed policy and measure addressing the distributional impacts	<p>1 describes sources of funding of some of the proposed policies and measures, but not much detail is provided</p> <p>Some cash flows to happen during the transition are suggested, but in vast majority there are no details on what share of needs is to come from what source.</p> <p>For example the Deutsche Bahn investment need of 45 billion are to be met by, <i>inter alia</i>, a share of revenues from the newly introduced CO₂ surcharge on the HGV toll. (p. 62)</p> <p>The available budget of Digital ecosystems for a climate-friendly industry is estimated at 550 million euro. (p. 71)</p> <p>There is also one vague mention about Social Climate Fund:</p> <p><i>The transition from the nETS to ETS2 in 2027 also needs to pay particular attention to distributional effects with regard to lower and middle income groups. In addition to national measures, the European Social Climate Fund will have a special role to play here. The Federal Government will ensure that the funds earmarked for Germany from 2026 will support the target groups defined in Regulation (EU) No 955 (2023) in the transformation process.</i> (p.205)</p> <p>Sums of 211.8 billion euro is to be allocated for the tasks of KTF (KTF – Climate and Transformation Fund is still undergoing changes) between 2024 and 2027 (p. 72). Of this:</p> <ul style="list-style-type: none"> ▪ 60.7 billion for the promotion of buildings; ▪ 18.6 billion for the development of hydrogen industry; ▪ 13.9 to promote the electro-mobility and further development of charging infrastructure; ▪ 12.2 (or 12.5) for railway infrastructure; <p>It's also worth mentioning the income bonus and a supplementary loan.</p> <p><i>As of January 2024, according to the Bundestag resolution of 8 September 2023, the Federal Funding for Efficient Buildings (BEG,</i></p>

individual measures, heating support) provides for an income bonus of 30 % for owner-occupied owners with a taxable household of up to EUR 40,000. A supplementary loan – with an interest rebate of up to EUR 90,000 of taxable annual household income – will also be available for the exchange of heating and other individual efficiency measures. (P.205)

These provisions will need to be updated in the light of recent policy developments, but even more so, the lack of clear provisions in the NECP makes it difficult to assess how it will impact the Plan.

Funding sources, if indicated, are distinguishable between national and EU sources.

In the final version of the NECP, it is valuable to include a detailed description for all sources of funding.

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.

Encouraging investment in energy efficiency technologies and solutions has the potential to reduce emissions and redirect investment towards more sustainable pathways. Community support is essential for the success of projects and to ensure social acceptance of energy and climate change efforts. However, the transfer of responsibility to social groups must be accompanied by the allocation of financial resources for these purposes.

It is advantageous for funds for 'positive investments' to come, for example, from revenues generated by climate-related taxes, levies and charges - an indirect application of the 'polluter pays' principle. Using revenues from climate-related costs to reduce these costs in the future seems to be a straightforward solution.

An example of a policy that aligns with this aspect is the German National Emissions Trading System, which complements the EU ETS by covering all fuel emissions not covered by the bloc's system.

The draft NECP 2023 addresses issues related to certain tax, insurance and social security policies. However, it appears that these aspects have not received sufficient attention, as indicated by the following assessment.

10. Tax, insurance and social security policies	
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	<p>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 the vast majority of the cases</p> <p>ETS is discussed almost exclusively as an incentive for emissions reduction, not as a source of financing. Despite the mention of 'The revenues from European and national carbon pricing – in so far as they are not needed to finance the German Emissions Trading Authority – are transferred to the Climate and Transformation Fund in accordance with Section 4 of the KTF Act (see 3.1.1.iii).' No details of transferring funds from ETS to transition-related expenditure are given.</p>

		<p>The relevant example of policy is German National Emissions Trading System, which complements the EU ETS by covering all fuel emissions not covered by the bloc's system. All revenues from the national ETS go into the Government's "Climate and Transformation Fund" (KTF). The fund is used to support measures under the climate protection program such as GHG reduction programs, e.g. incentivizing climate-friendly transport and energy-efficient buildings, and direct assistance to industry or households, e.g., as a way to re-finance renewable energy subsidies and reduce the "Renewable Energy Surcharge" on electricity. It is worthwhile to delve deeper into this topic in the final version of the NECP.</p>
<p>10.2 Accounting for and preparing framework for utilisation of the Social Climate Fund</p>	<p>0</p>	<p>only one example of the utilization of SCF is mentioned</p> <p><i>The transition from the nETS to ETS2 in 2027 also needs to pay particular attention to distributional effects with regard to lower and middle income groups. In addition to national measures, the European Social Climate Fund will have a special role to play here. The Federal Government will ensure that the funds earmarked for Germany from 2026 will support the target groups defined in Regulation (EU) No 955 (2023) in the transformation process. (P. 205)</i></p> <p>However, the mention seems highly insufficient and does not provide any details on how the SCF is going to be utilized. It lacks emphasis on the connection between funds received through ETS2 being transferred to SCF and further, to various federal and regional bodies engaged in planning for socially responsible transition.</p> <p>Thus, the draft does not refer to one of the most crucial EU-level coordinated policies regarding social aspects of the transition. It is highly recommended to include details on flows in and out the SCF and identify main targets of its spendings in the final version of the updated plan.</p>
<p>10.3 Recognition and consistent application of "polluter pays" principle across the economy</p>	<p>1</p>	<p>the principle is mentioned once, vaguely (p. 38). The mention refers to the principle in the context of energy consumption by buildings and the cost of their modernisation, the more important are tax policies which are not mentioned in this context</p> <p>Some other mechanisms, incl. financial incentives to reduce pollution are mentioned, e.g. tax reliefs for electric and/or low-carbon cars are provided; the lower the carbon emission, the lower the tax rate will get. Pure electric vehicles (up to 60k net worth) will have tax base of quarter of the regular one (P. 88). Various other tax policies, including electric car lease and support for electric bikes based on the commute distance are provided (P. 94). What is more, at the end of 2018, subsidies for domestic hard coal sales were terminated (P.184).</p> <p>However, it seems like most of financing is to come from various state and Union bodies that are not directly connected with the "polluter pays" principle and may come from the full spectrum of state-bodies income, just like any other government expenditure.</p> <p>From the other side, Germany has had introduced federal-level ETS payment system in a pioneering pace, leading to higher government revenue from carbon emission allowances. Thus, despite insufficient recognition of the "polluter pays" principle in the draft itself, it is worth appreciating the introduction of this policy on a broader level.</p> <p>In the final version of the NECP, it is worthwhile to refer to the 'polluter pays' principle in a greater number of examples of measures and policies.</p>
<p>10.4 Built-in protection of the most vulnerable groups in tax instruments and cross-sectional support programmes related to green transition</p>	<p>1</p>	<p>some protection mechanisms for more vulnerable (income-wise) groups are given. However, other groups (workers, post-mining communities) are not mentioned. The policies are dispersed in different parts of the draft and it is not clear how they form a cohesive framework</p> <p>Examples of policies:</p> <ul style="list-style-type: none"> ▪ The investments into replacement of heating and installation of more heat-efficient roofs, windows and walls will be refunded by 20% up to 40k per residential property. (P. 106) ▪ Owners of inefficient, older heating system will be obliged to change them and will receive compensation for expenses. (P. 104) ▪ CO₂ Cost Allocation Act: the cost of CO₂ for residential buildings is divided on the basis of the energy quality of the rented building. Tenants in buildings with poor energy renovation will be relieved. (P. 205) <p>In case of many other proposed policies their assessment from the point of view of socially vulnerable groups is not given. However, studied in-depth, these policies may contain such measures and policies, in the draft itself this is not outlined (for example tax reliefs for electric vehicles, P. 93).</p>

Also, according to the draft the government is conducting the evaluation of the existing tax benefits and incentives. However, it is not clear if the evaluation takes the situation of the most vulnerable citizens as an important factor:

In accordance with the subsidy policy guidelines, all subsidies taken into account in the subsidy report must in principle be evaluated on a regular basis in terms of the extent to which the objectives have been achieved, as well as their efficiency and transparency. Most recently, the Federal Government has carried out a systematic evaluation of a total of 33 tax advantages listed in the subsidy report in the context of a research report, in particular with regard to the achievement of objectives, efficiency, instrumental suitability and, for the first time, their sustainability. (p. 101)

The final version of the NECP should outline clear and coherent support frameworks, taking into account all groups in need of support.

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 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.

Unfortunately, this topic is covered weakly, and it needs to be substantially upgraded in the final version of the updated NECP.

However, chapter 5.2 briefly discusses transition impacts on employment structures. The problem of a shortage of skilled workers, exacerbated by Germany’s demographic structure, is clearly recognised. **Additional information on how to tackle the issue is promised for the final NECP update.**

11. Work conditions and re-training	
<p>11.1 Coverage of retraining, upskilling and reskilling of the workers affected by the transition</p>	<p>1 basically no policy regarding affected workers is mentioned. However, another document addressing the issue more in detail is mentioned</p> <p>There is mention of proportionally larger funds from KTF to ‘territories and workers most affected’ (p. 275), but the statements are very broad.</p> <p>Joint Task for Improvement of the Regional Economic Structure (GRW) can also be connected with the issue.</p> <p><i>The Federal Government and the Länder have also focused on soft location factors in the reform of the Joint Task for Improvement of the Regional Economic Structure (GRW) adopted in December 2022. In addition to existing measures to create and safeguard jobs, regions should be encouraged to become more attractive not only for businesses but also for employees through increased funding opportunities in the field of regional services of general interest. With the reform, the Federal Government and the Länder aim to make the GRW an even more effective tool for shaping regional transformation processes. (p. 206)</i></p> <p>However, ‘comments on the impact of further measures on the development of gross domestic product’ are to be mentioned in the final update. In the current version they are mentioned very broadly.</p> <p>There are, however, policies towards ensuring sufficient number of skilled workers and specialists to successfully conduct the transition but it does not seem like the opportunities of such training were anyhow targeted towards affected workers. The mentions are mostly central level, including embracing migration of skilled workers to the country.</p> <p>The final version of the NECP should provide more detail on the measures being implemented.</p>

<p>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</p>	<p>0 no such measures are even vaguely mentioned</p> <p>There's only mention about 'vulnerable consumers' but nothing similar from the angle of job market.</p> <p>Chapters on various industrial undertakings that could include the assessment of their impact on job market do not address the issue. That is the case with, for example development of advanced biofuels (P. 96) or modernization of inland waterway transport. (P. 100)</p> <p>It would be strongly suggested to assess the impact of proposed industrial policies on the job market. Chapter 5.2 of the NECP is supposed to cover the assessment macroeconomic and social aspects.</p> <p>Below there is an example from TJTP which can be added in that context to the final version of NECP.</p> <p>ERDF/JTF 2021-2027 Saxony-Anhalt programmes</p> <ul style="list-style-type: none"> ▪ 2. Retention factors for professionals and families <ul style="list-style-type: none"> c) Participation, integration, inclusion [FK a); h); k); l); m); o)]; <p><i>Participation, integration and inclusion play a decisive role in keeping families in the MR and making the best possible use of the potential of the regional labour market. The establishment of an inclusion centre [FK a); k); m)] is planned, in which people with disabilities are to be transferred to the regular labour market in the skilled trades, but also in digital professions. In addition, a platform [FK h); l)] is to be set up that uses user-generated data to map employee potential, enables better management of further training programmes and shows employees opportunities to develop and live in the region in the long term and work in future-proof sectors of the economy. In addition, there should be the possibility of supporting the JTF measures through accompanying projects [FK k),o)], which are aimed at citizen participation (especially of young people) in the transition process and are supplemented by transformation-relevant further training measures.</i></p> <p>In the final version of the NECP, it is valuable to include tailored measures to support hiring, job creation, and transition incentives, especially for women or persons with disabilities, and in the most affected territories. An example could be taken from the referenced section of the TPST.</p>
<p>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</p>	<p>0 pays no attention to the impact of green transition on work health and safety</p> <p>Draft pays some attention to the reduction of toxic emissions and healthier construction technologies and opportunities for better nutrition from more eco-friendly farming.</p> <p>However, the proposed policies are not shown in the context of working environment and workers wellbeing – they are rather general steps to be taken with some global impact, disregarding whether for workers, pensioners, children. However, we can assume that overall healthier environment will positively affect also workers, this is not specified (eg. PAGES 65-68 on various environmental policies describing forest and agricultural management do not take the workers' point of view into account).</p> <p>Moreover, described policies are not described in detail, mostly repeated from the 2020 draft (as the authors state themselves) and still 'to be discussed' in detail.</p> <p>Thus, the impact of green transition on the health and safety of the workers, however, may be a side-effect of some proposed policies but is not estimated within any defined criteria and addressed per se.</p> <p>In the final version of the updated draft, it would be highly recommended to include a more direct appraisal of the topic, one that directly addresses the interconnection between broader transition policies and working conditions.</p>

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 rep-

resentation 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. It is covered in chapter 1.3.

Germany has launched some mechanisms engaging the civil society, business, and academia. The external website (subpage of the Ministry) for further details on consultations is provided: [bmwk.de/Redaktion/DE/Textsammlungen/Energie/necp.html](https://www.bmwk.de/Redaktion/DE/Textsammlungen/Energie/necp.html).

It is noteworthy that Renewable Energy Communities (not included directly in this assessment) are considered (p. 85-85).

The consultative mechanisms proposed in the draft show that the general notion of public participation is present in German thinking about transition planning. However, for different aspects, crucial details are missing. Based solely on the draft, it is hard to infer what the process looks like in detail.

Moreover, the ongoing and planned rounds of consultation are depicted like they were focusing mostly on infrastructural and technical side of the transition process. In both cases - the national level dialogue between civic society and administration on the one side and the trans-national dialogue of Germany and its neighbours on the other – the socioeconomic aspects of the process seem to be relatively neglected.

12. Stakeholder engagement and public consultation	
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	<p>1 public consultations were organized on various levels, there are still gatherings to be organized. However, it is not explicitly stated whether they pertain to the issues of just transition</p> <p>The draft NECP mentions that information about the consultations will be updated later.</p> <p>The draft NECP also provides a link where it is possible to participate in the consultations.</p> <p>In this context it is worth to mention about an information campaign 80 million together for energy transitions is run. Its aims are both to educate on benefits from switching to renewable energies and create broad acceptance for the programs. (P. 116)</p> <p>During the consultation on the final version of the NECP, it is essential to engage social partners, civil society entities, and the general public in discussions on issues related to a just transition.</p>
12.2 Establishment of permanent body of consultation with stakeholders, covering issues related to just transition	<p>0 some permanent consultation bodies were formed but they don't cover just transition issues</p> <p>Most of them focused only on the infrastructural side of transition, incl. supply networks. The social aspect was not given satisfying level of focus within the consultation process, at least it is not emphasized within the draft.</p> <p>Among them The Federal Government Energy Research Programme (gathering views of 'business, academia and civil society') was formed in 2018.</p> <p>During the consultation process for drafting the next version of the NECP, it should be considered to establish a permanent body of consultations with stakeholders.</p>
12.3 Organisation of early and effective dialogue with local authorities, regarding issues related to just transition	<p>1 provides some possibilities of dialogue with local authorities on issues related to just transition, but these measures are largely insufficient</p> <p>In some extent municipal representatives are partaking not only in macro-scale infrastructural planning but also in human capital related areas (training centres, job opportunities resulting from transition).</p> <p>The municipalities are embraced to for networks within National Climate Action Initiative (NKI) <i>in order to ensure their energy (...) and resource efficiency and together (...) identify and implement savings through the support of a network team.</i> (P. 109)</p> <p>The NECP text does not allow for an assessment of whether the consultations provide a satisfactory framework for dialogue on issues related to the just transition. This is an area for improvement in the final version of the NECP.</p>

<p>12.4 Identification of opportunities for trans-border dialogue on issues related to just transition</p>	<p>1 few transborder programs are mentioned, but it is mostly hard to find their application to the just transition/social aspects</p> <p>They refer to such aspects as energy supply chains and security, joint crisis management scenarios and transnational cooperation in long-run infrastructure development.</p> <p>Unfortunately, these points of view do not include almost any social policy dilemmas and seem to (unfoundedly) present all these aspects as socially transparent.</p> <p>Among the trans-border dialogue bodies in which Germany participates are:</p> <ul style="list-style-type: none"> ▪ Mesberg Climate Working Group (Franco-German) meets 'at least once a year' since 2018. There is also a French-German Fellowship Programme; ▪ The North Sea Summit (Belgium, Denmark, Netherlands); ▪ Also the 'Bornholm Energy Island' program that clearly defines its purpose to transmit 3 GW of offshore wind from Bornholm to Germany and mainland Denmark. <p>Also, few other policies identify trans-border cooperation as an opportunity for upgrading the energy networks infrastructure (regarding hydrogen and oil). The electricity supply security is identified, as such as a 'cross-border' and probability-based approach to identifying potential risks is applied. (P. 135)</p> <p>However, the mentioned programs do not refer to the aspect of just transition directly, focusing mostly on technical cooperation and transnational efforts to secure supplies.</p> <p>Overall, the absence of social angle of mentioned international programs seems to be the main deficiency of the draft NECP part regarding the trans-border dialogue.</p> <p>The only, vague reference to the just transition appears in the context of European Climate Initiative (EUKI):</p> <p><i>EUKI funds non-investive climate change projects, in particular by civil society and sub-national administrations in Europe. Themes for bi- and multilateral projects under the EUKI are the development of climate strategies and their implementation at different levels of exchange on climate policy instruments, policies and projects in the relevant sectors: Climate policy, energy transition and climate-neutral buildings, mobility, just transition, carbon removal and sustainable economy.</i> (P. 33)</p> <p>Sub-state actors, civil society, business and academia are stakeholders involved in the project. (P. 70)</p> <p>During the development of the final version of the NECP and the identification of opportunities for trans-border dialogue, issues related to just transition should be taken into account.</p>
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V. Summary

Despite increased ambitions compared to the NECP 2019, the overly general approach and the lack of important details in many aspects are the main flaws of the German NECP 2023. In most of the assessed aspects, some policy measures have been mentioned, but insufficiently to assess whether their implementation will enable the achievement of the intended goals. Therefore, the most common rating in this report is '1'. Moreover, none of the assessed aspects received an average score higher than 1. There are several areas that require special refinement before the final version of the plan is released in 2024. These include in particular the following aspects of just transition:

- transport poverty,
- work conditions and re-training,
- local clean energies and decarbonised industries.

For these aspects, there were the most instances where the relevant issues were completely omitted in the draft of the updated German NECP. The most improvement is needed when it comes to transport poverty. Although the document includes some measures that can help combat transport poverty (e.g., extension of cycle paths, tax relief for commuters without access to public transportation), they are not directly related to this aspect. Another aspect requiring improvement is work conditions and re-training. Basically, no policy regarding affected workers is mentioned. Even if there are ongoing actions that could be listed in other documents, the NECP should also highlight them. In the context of local clean energy and decarbonised industries, despite Germany's focus on promoting clean energy, the NECP does not sufficiently mention the local level and virtually ignores it. In general, the NECP 2023 inadequately addresses territorial issues, focusing mainly on national-level matters.

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

Territorial Aspects	1. Ambitions and targets	0.67
	2. Supporting local economies and communities	1
	3. Local clean energies and decarbonised industries	0.5
	4. Inclusivity of regional transition	1
	5. Regional just transition governance	1
Distributional Aspects	6. Overarching assessment of distributional impacts	1
	7. Energy poverty	0.6
	8. Transport poverty	0.25
	9. Financing needs and sources of funding	1
	10. Tax, insurance and social security policies	0.75
	11. Work conditions and re-training	0.33
	12. Stakeholder engagement and public consultation	0.75

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

Below are our key recommendations regarding the final version of the updated German National Energy and Climate Plan.

- **Increase the level of detail in the description of the measures and policies outlined.**
- Putting a greater emphasis on regional issues, particularly for the most vulnerable territories.
- The text should provide more information on the intended utilisation of the Social Climate Fund, including **guiding principles for the Social Climate Plan** and provide a better connection between climate policy planning documents relevant to the social dimension.
- 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.**
- 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.**
- Significantly more efforts need to be allocated to the just transition aspects during public consultations. A summary report should be a mandatory part of the public consultation.
- Pay greater attention to issues concerning vulnerable recipients and the measures they can benefit from.
- Care should be taken to ensure that the English translation of the document is fully legible, with good numbering and vertical page orientation.

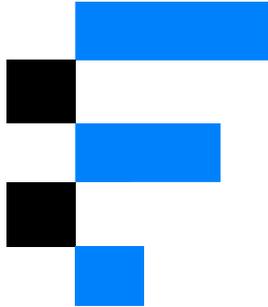
Overall, the additional work on improving just transition aspects of the updated Plan should be implemented as a part of a broader effort to deliver an ambitious vision for Germany's decarbonisation pathway, together with the associated robust governance framework.

Annex. Summary table for the aspects considered in the assessment

Territorial aspects	1 Ambitions and targets		
	1.1 Increasing ambition and avoiding backsliding on targets from Territorial Just Transition Plans	1	Targets set in TJTP are not mentioned in the draft. However, the objectives set out in the TJTP are broadly in line with those of the NECP.
	1.2 Clear and science-based timeline for coal exit in the power sector	1	Shutting down the last coal-powered plant is declared 'at the latest' till 2038.
	1.3 Clear and science-based timeline for transition away from coal in the whole economy	1	Addresses the issue of sectoral decoupling but does not mention the precise exit timeline for coal in the whole economy.
	1.4 Clear and science-based timeline for transition away from fossil gas in the whole economy	0	There is no clear timeline yet.
	1.5 Clear and science-based timeline for transition away from oil in the whole economy	0	There is no clear timeline yet.
	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)	1	Industrial transition to net zero emissions is declared to be achieved till 2045, few threats/requirements are identified. The policies declared are rather comprehensive, however no consistent timeline is given.
	2 Supporting local economies and communities		
	2.1 Policies and measures supporting local economies through stimulating their endogenous growth potential, including promoting entrepreneurship, supporting SMEs and social economy	1	The idea of supporting local economies is present in the draft, however it lacks crucial details. The SMEs are mentioned, the subjects of social economy are not.
	2.2 Policies and measures for preservation of the identity of mining/traditional industrial communities	1	None such policies are mentioned but they are implemented and have been described in other documents.
	2.3 Policies and measures for revitalisation of natural environment, both for restoring biodiversity and recreational purposes	1	There is variety of policies mentioned in this context, but they are not described on the level of particular regions.
	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)	1	Mentions variety of policies in this area, many of them are given satisfying level of details. However, the policies do not address the issues of particular regions and their unique issues. Even if they are to be implemented on the regional level, only the general state-level direction is mentioned.
	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	0	Does not assess the level of needs in this area yet.
	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	Some policies or measures in this area are mentioned, but it is difficult to assess if they have chance to be effective.
	4 Inclusivity of regional transition		
	4.1 Promotion of gender equality to address the specific situation and role of women in the transition to the climate-neutral economy	1	Does not mention any policies or measures in this area but they are implemented and have been described in other documents.
	4.2 Special attention paid to vulnerable groups (such as people with disabilities) that suffer disproportionately from the adverse effects of the transition	1	Does not mention any policies or measures in this area but they are implemented and have been described in other documents.
	4.3 Policies and measures addressing demographic impacts of the ageing population of regions in transition	1	Mentions the issue but highly insufficiently. However, another document addressing the issue more in detail is mentioned.

Territorial aspects	5 Just transition governance		
	5.1 Consistency of regional and national transition planning process	1	Consistency of regional and national transition planning process is to some extent addressed. However, the Lander-level policies are mentioned very loosely and lack any details
	5.2 Institutional coordination on just transition implementation between regional and national authorities	1	Institutional coordination of just transition is provided with a few mentions, unsatisfactory both in quantity and details provided.
	5.3 Inclusion of stakeholders and citizens into regional transition governance	1	Involvement of stakeholders and citizens is taken into account to some extent. However, the details of inclusion mechanisms are highly unsatisfactory and mentioned vaguely.
Distributional aspects	6 Overarching impact assessment		
	6.1 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by income groups	1	Distributional impacts are mentioned in few parts of the draft. However, the mentions seem to be very vague
	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)	1	Expected overall distributional impacts are mentioned, but descriptions are scarce.
	6.3 Common understanding of terms and measuring progress toward targets	1	The main goals of the draft: transition to greener economy that would be introduced in a socially responsible way, 'leaving no one behind' are basically clear.
	7 Energy poverty		
	7.1 Inclusion of indicative objectives aimed towards reduction of energy poverty	0	Objectives aimed at reducing energy poverty are not mentioned.
	7.2 Assessment of the level of energy poverty and quality of used indicators	0	Does not assess the level of energy poverty.
	7.3 Direct support to alleviate energy poverty	1	Some existing and planned policies or measures in this area are mentioned, but they are insufficient to effectively alleviate the problem.
	7.4 Measures which support investments which structurally decrease energy bills by investment in energy efficiency and zero-emission energy sources	1	Few such policies of this kind are mentioned, many of them lack financial assessment.
	7.5 Addressing energy market inefficiencies which negatively affect vulnerable customers	1	Mentions the issue but too vaguely.
	8 Transport poverty		
	8.1 Inclusion of indicative objectives aimed towards reduction of transport poverty	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	Does not assess the level of transport poverty.	
8.3 Direct support to alleviate transport poverty	0	The draft does not really address the phenomenon.	
8.4 Measures to structurally decrease transport poverty by investment in sustainable and zero-emission mobility options	1	The policies in this area are proposed. However, they are not assessed satisfyingly through the lense of transport poverty reduction.	

Distributional aspects	9 Financing needs and sources of funding		
	9.1 Description of financing needs for each proposed policy and measure addressing the distributional impacts	1	Describes financing needs of some of the proposed policies and measures, but not much detail is provided.
	9.2 Description of sources of funding for each proposed policy and measure addressing the distributional impacts	1	Describes sources of funding of some of the proposed policies and measures, but not much detail is provided.
	10 Tax, insurance and social security policies		
	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	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 the vast majority of the cases.
	10.2 Accounting for and preparing framework for utilisation of the Social Climate Fund	0	Only one example of the utilization of SCF is mentioned.
	10.3 Recognition and consistent application of "polluter pays" principle across the economy	1	The principle is mentioned once, vaguely (p. 38). The mention refers to the principle in the context of energy consumption by buildings and the cost of their modernisation, the more important are tax policies which are not mentioned in this context.
	10.4 Built-in protection of the most vulnerable groups in tax instruments and cross-sectional support programmes related to green transition	1	Some protection mechanisms for more vulnerable (income-wise) groups are given. However, other groups (workers, post-mining communities) are not mentioned. The policies are dispersed in different parts of the draft and it is not clear how they form a cohesive framework.
	11 Work conditions and re-training		
	11.1 Coverage of retraining, upskilling and reskilling of the workers affected by the transition	1	Basically no policy regarding affected workers is mentioned. However, another document addressing the issue more in detail is mentioned.
	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	No such measures are even vaguely mentioned.
	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	Pays no attention to the impact of green transition on work health and safety.
	12 Stakeholder engagement and public consultation		
	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	Public consultations were organized on various levels, there are still gatherings to be organized. However, it is not explicitly stated whether they pertain to the issues of just transition.
	12.2 Establishment of permanent body of consultation with stakeholders, covering issues related to just transition	0	Some permanent consultation bodies were formed but they don't cover just transition issues.
	12.3 Organisation of early and effective dialogue with local authorities, regarding issues related to just transition	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	Few transborder programs are mentioned, but it is mostly hard to find their application to the just transition/social aspects.	



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