



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

Reform Institute in cooperation with Ecologic Institute

Warsaw 2024

REFORM



© Fundacja Instytut Reform, 2024

Copying is permitted if the source is provided.

Authors

Maria Niewiata-Rej (Reform Institute)

With contributions from:

Aleksander Śniegocki (Reform Institute), Eike Karola Velten and Nora Sophie Kögel (Ecologic Institute)

Suggested citation:

Niewiata-Rej, M. (2024), *Territorial and Distributional Aspects of Just Transition in the final updated German National Energy and Climate Plan*, Reform Institute, Warsaw.

Graphic design

Zofia Lasocka, Sylwia Niedaszkowska

Publication date

December 2024

Image on the cover: wildpixel/iStock

Instytut Reform

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

Table of contents

I. Introduction and purpose of the document	4
II. Methodology and development of assessment criteria	5
III. Territorial aspects	6
Aspect 1. Ambitions and targets	6
Aspect 2. Supporting local economies and communities	10
Aspect 3. Local clean energies and decarbonised industries	11
Aspect 4. Inclusivity of regional transition	12
Aspect 5. Regional just transition governance	13
IV. Distributional Aspects	15
Aspect 6. Overarching impact assessment of distributional impacts	15
Aspect 7. Energy poverty	16
Aspect 8. Transport poverty.....	18
Aspect 9. Financing needs and sources of funding	19
Aspect 10. Tax, insurance and social security policies.....	20
Aspect 11. Work conditions and re-training	22
Aspect 12. Stakeholder engagement and public consultation	23
V. Summary	25
Annex. Summary table for the aspects considered in the assessment.....	28

I. Introduction and purpose of the document

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

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

The final updated versions of the NECPs should include revisions made by the national governments based on the feedback and recommendations provided by the EC², as well as the results of extensive dialogue with stakeholders and the wider public. The European Commission pointed out, among other things, that the draft updated NECP lacks provisions for early public participation in decision-making and does not establish a multi-level energy and climate dialogue. While it provides some insight into social policies to address energy poverty, such as price and income support, it fails to set specific targets and timelines to address vulnerable groups. The plan provides limited detail on just transition measures, including employment, education and regional support, and does not adequately coordinate with other strategic planning tools or the Social Climate Plan.

The deadline for the submission of the final document was on 30 June 2024. The German final plan was published with a delay in August 2024. The NECP 2024 partially addresses the Commission's recommendations. A just transition gained importance during the public consultation and a new strategy on employment was proposed. However, the issue of the Social Climate Plan has not improved.

Previously, following the publication of the draft NECPs, the Reform Institute provided the **methodological framework** to evaluate both the content of the draft plans and the procedures of their preparation. It constituted a comprehensive checklist of good governance criteria, which should be fulfilled to properly integrate just transition policies and measures into NECPs. **The methodology was used to assess four draft NECPs: Italian, German, Polish and Bulgarian.** These publications serve as the basis to evaluate the final version of the German NECP. The assessment examines whether the final version of the plan has improved issues related to just transition in a territorial and distributional context.

¹ For more details, see [Governance of the Energy Union and Climate Action](#)

² https://commission.europa.eu/system/files/2023-12/SWD_Assessment_draft_updated_NECP_Germany_2023.pdf

II. Methodology and development of assessment criteria

This document follows a comprehensive assessment methodology developed by the project team³. 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
-------------------------------------	---	---	--------------------

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

Furthermore, where relevant, we mention the final version of the NECP (**NECP 2024**)⁴, the draft NECP (**NECP 2023**)⁵ and the previous version of the NECP (**NECP 2019**)⁶.

³ Stefańczyk, A., Grzeńczyk, 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

⁴ We provide page references to the English version of the document, available online https://commission.europa.eu/publications/germany-final-updated-necp-2021-2030-submitted-2024_en

⁵ Available online: https://commission.europa.eu/publications/germany-draft-updated-necp-2021-2030_en

⁶ Available online: 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 territories most affected by fossil fuel phase-outs are located in North Rhine-Westphalia, Brandenburg, Saxony, and Saxony-Anhalt.

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.

Aspect 1. Ambitions and targets

Clear objectives and targets are the backbone of any climate policy. 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. 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. However, the overall ambitions could be greater which was pointed out during the consultation. Stakeholders highlighted the lack of ambition in the decarbonisation dimension, the renewable energy expansion targets as well as in energy efficiency dimension. The targets included in the draft NECP have not been changed in the final version. However, the fossil fuel-related data updated in the NECP 2024 indicate an acceleration of the transition away from fossil fuels. It is worth noting and is reflected in the assessment below.

1. Ambitions and targets			
Criterion	NECP Score		Description
	Draft	Final	
1.1 Increasing ambition and avoiding backsliding on targets from Territorial Just Transition Plans	1	↑	2
	<p>2 – targets set in TJTP are not mentioned, but the increase in ambition is clear</p> <p>The score improved between the draft and final versions as a result of the following actions. Unfortunately, most of the territories affected by the fossil fuel phase-out are still not highlighted in the NECP 2024. However, it is worth to highlight the mentions of ambition in the NECP 2024. At the end of 2023, the first Federal Climate Adaptation Act was adopted and came into force in mid-2024.</p> <p><i>The Act creates a first strategic framework for precautionary climate adaptation at all administrative levels in Germany. Cities and municipalities are particularly affected when it comes to concrete measures to achieve preparedness for the consequences of the climate crisis. This Act therefore mandates the federal states to ensure systematic and comprehensive climate adaptation strategies in the federal states and climate adaptation concepts for the areas of the municipalities and districts. At the same time, the Federal Government is committed under this Act to develop and implement a precautionary climate adaptation strategy with measurable targets by September 2025 at the latest and to update this strategy every four years, taking into account the latest scientific knowledge.</i> (P. 90)</p> <p>It is also worth noting the increased ambition compared to the NECP 2023 in the area of fossil fuel phase-out.</p> <ul style="list-style-type: none"> ▪ Clarification on the ban on fossil heating from 2045 <i>For the first time, the Buildings Energy Act lays down fundamental regulations on the use of renewable energies in all new heating systems: the so-called '65% rule' and the ban on fossil-fuelled heating systems from 2045. These measures highlight the increase in ambition.</i> (P.78) ▪ Attempts to phase out coal faster than target <i>The main instrument for controlling the use of coal is the Act to Reduce and End Coal-fired Power Generation (KVVG) from 2020. Under this Act, which applies to the use of hard coal and lignite to generate electricity, the last coal-fired power plant in Germany is to be decommissioned by 2038 at the latest. Other forms of coal utilisation are not directly addressed in this Act. Due to rising carbon prices in the European Emissions Trading System, the model-based analyses in Sections 4 and 5 come to the conclusion that, depending on carbon and fuel prices, which were applied as exogenous parameters in the analyses, coal-fired power generation will, due to market developments, come to an end before the target date specified in the Act (see Subsection 3.4.3.iii.). This includes industrial power plants. The political goal remains to phase out coal, ideally by 2030.</i> (P. 101) <p>Unfortunately, the mentioned sub-chapter is empty.</p> <p>The above-mentioned attempts to accelerate the transition away from coal, the clarification of the fossil fuel heating ban and the entry into force of the Federal Climate Adaptation Act have led to an improvement compared to the 2023 NECP, raising the score from 1 to 2.</p>		
1.2 Clear and science-based timeline for coal exit in the power sector	1	=	1
	<p>1 – shutting down the last coal-powered plant is declared 'at the latest' till 2038 with attempts to phase-out by 2030</p> <p>The phase-out date for coal has been maintained. By 2038 at the latest, the last coal-fired power plant in Germany will be shut down.</p> <p>It should be added that CCS will not play a role in extending the life of coal in the power sector:</p> <p><i>The phase-out of coal is here to stay: Access to CO₂ pipelines and CO₂ storage facilities will be excluded for emissions resulting from coal-fired energy generation (power and heating plants).</i> (P. 258)</p> <p>NECP 2024 mentioned the attempts to phase out coal faster – in 2030.</p> <p><i>The political goal remains to phase out coal, ideally by 2030</i> (P. 101). However, this it is not a target. That is why the assessment remains unchanged.</p>		

1.3 Clear and science-based timeline for transition away from coal in the whole economy	1	↑	2	<p>2 – addresses the issue of sectoral decoupling and shows an almost complete shift away from coal in the economy but does not mention the precise exit timeline for transition away from coal in the whole economy</p> <p>The score improved between the draft and final versions as a result of the following actions. The amendment to The Buildings Energy Act (GEG) (obligation to use 65% renewable energy in new buildings), which has already been in force since 1 January 2024, added the ban on fossil fuel boilers. The NECP 2024 clarifies explicitly that from 2045, no boilers will be allowed to run on fossil fuels (p. 136). There is no clear timeline, but the shift away from coal in the economy as a whole is reflected in the decline in primary energy consumption over the years.</p> <p>The values in 'Table B18: Primary energy consumption by energy source for 2024 to 2050, in PJ (p. 293)' for coal have changed in NECP 2024 compared to the draft. In comparison, NECP 2023 assumed a consumption of 381 PJ of hard coal and 4 PJ of lignite in 2050. The NECP 2024 assumes a consumption of 16 PJ of hard coal (decrease) and 15 PJ of lignite (increase) in 2050.</p> <p>The following note has also been added:</p> <p><i>According to the results in the model, the use of hard coal will drop to 86 PJ by 2035. This represents a decline of 95% compared to 2010. After 2035, the use of hard coal will continue to fall. Most of the remaining quantities of hard coal that will be used after 2040 are expected to be utilised for the production of metal and basic chemicals. Very small quantities of all of the above energy sources are also present in a multitude of subsectors. (p. 293)</i></p> <p>As a result of the planned reduction in the share of coal in primary energy, the clarification of the fossil fuel heating ban, the score has increased from 1 to 2.</p>
1.4 Clear and science-based timeline for transition away from fossil gas in the whole economy	0	↑	1	<p>1 – there is no clear timeline, but a number of measures have been identified for transition away from fossil gas</p> <p>The score improved between the draft and the final version as a result of the following actions.</p> <p>A decrease in gas consumption is mentioned in the NECP 2024.</p> <p><i>Gas consumption in Germany fell by 17.4% year-on-year to 849.8 TWh in 2022 and by a further 4.7% to 810.4 TWh in 2023 as a result of the high prices caused by the crisis and the measures to reduce gas consumption. In structural terms, however, demand for gas in Germany and therefore also demand for imports are likely to continue to fall due to measures to increase energy efficiency, promote the heating transition in buildings and the decarbonisation of industry. According to various long-term scenarios commissioned by the Federal Ministry for Economic Affairs and Climate Action, gas demand could fall to between 549 and 648 TWh by 2030 as a result of the measures to achieve the climate action targets. The decline would then accelerate further. Accordingly, demand for imports would also decrease in the future. (p. 88)</i></p> <p>Also 'Table B18: Primary energy consumption' shows that gas consumption decreases until 2050. In comparison, the NECP 2023 assumed a consumption of 1,222 PJ in 2050 and the NECP 2024 assumed 868 PJ.</p> <p>The NECP 2024 therefore forecasts a 69% decrease in gas consumption between 2024 and 2050. The NECP 2023 projected a decrease of 57%.</p> <p>An increasing role for hydrogen is also highlighted.</p> <ul style="list-style-type: none"> ▪ In the context of grids: <p><i>In July 2024, the transmission system operators filed a joint proposal for the hydrogen core network with the Bundesnetzagentur. Under this proposal, a core network with a length of roughly 9,700 km is to be created by 2032, serving ports, the industrial sector, storage facilities and power plants. In a second stage, the hydrogen core network is then to be further developed in line with requirements and as part of the regular integrated network development planning for gas and hydrogen. (p. 297)</i></p>

			<p>■ In the context of power plants:</p> <p><i>To this end, the power plant strategy provides for the early addition of a total of 10 GW of new, controllable H2-ready power plants and controllable capacities in order to quickly achieve a no-regret quantity of power plants. (P. 99)</i></p> <p><i>In addition, as part of a major shift in 2022, the requirement for hydrogen compatibility was introduced. As a result, new CHP plants with an electrical capacity of more than 10 megawatts must be planned and built in such a way that they can later be retrofitted for hydrogen operation with minimal additional costs. This measure helps avoid lock-in effects that would otherwise restrict power plants to fossil fuel use. (P. 146)</i></p> <p><i>The first pillar will be a tender for 5 GW of H2-ready gas-fired power plants, which will run entirely on hydrogen from the eighth year of operation onwards for the purposes of decarbonisation. Added to this are 500 MW of hydrogen power plants that run on hydrogen from the outset (so-called "hydrogen sprinter power plants"). This ensures that CO₂ emissions are reduced as quickly as possible and that the ramp-up of the hydrogen economy (power plant technology, hydrogen demand) is incentivised. (P. 216)</i></p> <p>However, there is still no clear timeline for the transition away from gas. Chapter 5.1 is supposed to include such information, but it was missing in the draft, and the final NECP does not contain such information either. As a result of the planned reduction in gas consumption and the increasing role of hydrogen, the score has increased from 0 to 1.</p>
1.5 Clear and science-based timeline for transition away from oil in the whole economy	0	↑	<p>1 – there is no clear timeline, but a number of measures have been identified for transition away from oil</p> <p>The score improved between the draft and final versions as a result of the following actions. 'Table B18: Primary energy consumption' shows that mineral oil consumption decreases until 2050. In comparison, the NECP 2023 assumed a consumption of 1,685 PJ in 2050 and the NECP 2024 assumed 1,447 PJ.</p> <p>The NECP 2024 therefore forecasts a 65% decrease in oil consumption between 2024 and 2050. The NECP 2023 projected a decrease of 60%. However, there is still no clear timeline for the transition away from oil. Chapter 5.1 is supposed to include such information, but it was missing in the draft, and the final NECP does not contain such information either.</p> <p>As a result of the planned reduction in oil consumption, the score has increased from 0 to 1.</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>2 – industrial transition to net zero emissions is declared to be achieved till 2045 and the NECP 2024 identifies measures to reach it, but few threats/requirements are still identified</p> <p>The score improved between the draft and the final version as a result of the following actions.</p> <p>The NECP 2024 identifies new measures to support the decarbonisation of industry.</p> <ul style="list-style-type: none"> ■ <i>Establishing digital and data-based ecosystems for a climate-neutral industry. (P. 21)</i> ■ <i>Decarbonisation in the industry funding programme, in future federal funding for industry and climate action. (P. 22)</i> <p>In the context of the support programme 'Decarbonisation in the industry', the NECP 2024 has added the information, that <i>in 2024, the programme will be merged into the Federal Fund for Industry and Climate Action, which makes decarbonisation funding accessible to other industrial sectors and even more SME-friendly. (P. 128)</i></p> <p>The NECP 2024 highlights measures to increase the share of RES in industry.</p> <p><i>To increase the share of renewable sources in the energy sources used for final energy consumption and non-energy purposes in the industrial sector, the Federal Government relies on national and European emissions trading systems and a number of other national measures. These include, in particular, the funding programme for Carbon Contracts for Difference, the "Federal funding for energy and resource efficiency in industry" (EEW)</i></p>

			<p>programme, the IPCEI Hydrogen programme for industrial production, the "Decarbonisation in Industry" funding programme (as of 2024: Federal Funding for Industry and Climate Protection), as well as the creation of markets for climate-friendly basic materials (green lead markets). (P. 139)</p> <p>The NECP 2024 also mentions the Net Zero Industry Act (NZIA).</p> <p><i>The NZIA was approved by the European Parliament on 25 April 2024 and formally approved by the Council of Ministers on 27 May 2024. (...) Since it is an EU regulation, the NZIA is directly applicable. The Federal Ministry for Economic Affairs and Climate Action is currently working on a national implementation plan that is aligned with the regulation (harmonisation of national law, implementation, coordination between the responsible bodies).</i> (P. 254)</p> <p>There is still no reference to the most affected territories and no consistent timeline is given. However, as a result of the new measures to support the decarbonisation of industry, increase in the share of RES in industry and the Net Zero Industry Act the score has increased from 1 to 2.</p>
--	--	--	---

Aspect 2. Supporting local economies and communities

The energy transition disproportionately affects regions whose local economies are most dependent on the fossil fuel industry. Unless national climate policies take this into account, these regions will be left behind. A just energy transition should support the most affected communities to move away from this dependency and find new opportunities for endogenous growth and socio-economic prosperity. It should also recognise the importance of preserving the traditional identities of these communities despite industrial change and revitalising the natural environment affected by past extraction.

The draft did not place too much emphasis on supporting local economies and communities. Unfortunately, this has only been partially improved in the NECP 2024.

2. Supporting local economies and communities			
Criterion	NECP Score		Description
	Draft	Final	
2.1 Policies and measures supporting local economies through stimulating their endogenous growth potential, including promoting entrepreneurship, supporting SMEs and social economy	1	2	<p>2 – many policies or measures in this area are discussed, but some important details are missing</p> <p>The score improved between the draft and final versions as a result of the following actions.</p> <p>In addition to what was introduced in the draft NECP, the <i>Skilled Labour Strategy</i> is frequently mentioned in the NECP 2024.</p> <p><i>On 12 October 2022, the Federal Government adopted a new Skilled Labour Strategy.</i></p> <p><i>The aim of the Skilled Labour Strategy is to support the efforts of firms and businesses to attract and retain skilled workers by means of legal and sub-legal measures. To this end, five priority fields of action have been identified:</i></p> <ol style="list-style-type: none"> 1. up-to-date vocational training, 2. targeted continuing education and training, 3. using labour force potential and increasing labour force participation 4. improving the quality of work and work culture and 5. modernising immigration policy and curbing emigration <p><i>The Skilled Labour Strategy is designed to be both cross-industry and cross-regional. Each industry and each region is called upon to analyse which measures are appropriate in which area and for which occupation. Since this varies greatly from region to region and from company to company, the appropriate solutions must always be found by the local stakeholders on the ground.</i> (P. 263)</p> <p>As a result of the Skilled Labour Strategy, the score has increased from 1 to 2.</p>
		↑	

2.2 Policies and measures for preservation of the identity of mining/traditional industrial communities	1	=	1	<p>1 – none such policies are mentioned but they are implemented and have been described in other documents</p> <p>In the context of national consultation of stakeholders, including social partners, and cooperation with civil society and the public there is a new mention in the NECP 2024:</p> <p><i>Round table on skilled trades for climate change mitigation: Since March 2023, the Federal Ministry for Economic Affairs and Climate Action has been conducting the dialogue on the future of skilled trades together with trade unions and the skilled crafts organisation. This industry dialogue focuses on topics such as the energy transition and sustainable management. A central component of the dialogue on the future is the round table on skilled trades for climate change mitigation. This focuses on those skilled trades that are particularly relevant to the success of the energy transition and aims to achieve a common understanding between the trades concerned and between the skilled trades, trade unions and other stakeholders as a whole on topics specific to the skilled trades and concrete measures of particular importance to the transformation process. The round table generates important momentum for other political or technical processes, for example with a view to improving cross-trade cooperation between skilled trades businesses by optimising processes and developing digital interfaces or discussing overarching issues relating to the qualification of skilled workers in the skilled trades sector. (p. 33)</i></p> <p>However, this is not enough to raise the rating, so it remains unchanged.</p>
2.3 Policies and measures for revitalisation of natural environment, both for restoring biodiversity and recreational purposes	1	=	1	<p>1 – there is variety of policies mentioned in this context, but they are not described on the level of particular regions</p> <p>No change compared to the NECP 2023. Among the policies and programmes are e.g.: ClimateWilderness (KlimaWildnis), increasing and funding urban trees, urban forests and forest gardens. The assessment remains unchanged.</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)	1	=	1	<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 affected territories are not even mentioned by their names</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>

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 but the NECP 2024 presents only a national-level perspective. 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 should be mentioned. This was the case in the NECP 2023 and has not improved in the NECP 2024.

3. Local clean energies and decarbonised industries				
Criterion	NECP Score			Description
	Draft		Final	
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	=	0	0 – does not assess the level of needs in this area yet
				No change compared to the NECP 2023. The assessment remains unchanged.
3.2 Policies and measures to fulfil the needs in the area of affordable clean energy (including – if applicable – district heating), energy efficiency and/or decarbonised industrial processes	1	=	1	1 – some policies or measures in this area are mentioned, but it is difficult to assess if they have chance to be effective
				<p>There are new mentions that can be linked to the topic. For example:</p> <ul style="list-style-type: none"> ▪ <i>The photovoltaic strategy;</i> (P. 133) ▪ <i>Electricity storage strategy;</i> (P. 241) ▪ <i>Federal funding for energy efficiency in the economy (EEW);</i> (P. 24) ▪ <i>Energy efficiency specifications for climate-neutral new buildings/extensions and building refurbishments by the Federal Government 'Exemplary role of federal buildings for energy efficiency' (EEFB).</i> (P. 24) <p>Preparations are also underway to provide 100% renewable energy.</p> <p><i>In response to the fundamental transformation of the electricity system towards electricity generated 100% from renewable sources of energy as well as sector coupling technologies (e-mobility, heating, hydrogen), the Federal Government has worked with the industry to develop a Roadmap for System Stability, which was adopted at the end of 2023. The Roadmap contains a schedule for the safe and robust operation of a grid that uses electricity generated 100% from renewable sources of energy. In the process, the need for action was identified and processes and responsibilities were clearly defined in order to address this need for action. The requisite measures are also to be implemented and monitored in cooperation with the industry. As one building block for this, transmission system operators are to regularly prepare a System Stability Report in the future, which will contain the required measures and requirements as well as options for action towards the stable operation of a grid that uses electricity generated 100% from renewable energy sources. The Federal Network Agency will monitor its implementation.</i> (P. 217)</p> <p>Unfortunately, these actions are not related to territorial aspects, so the rating remains unchanged.</p>

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. In the NECP 2024 the region-related policies are mentioned too vaguely and Germany tends to present only a national-level perspective. This was the case in the NECP 2023 and has not improved in the NECP 2024.

4. Inclusivity of regional transition				
Criterion	NECP Score			Description
	Draft		Final	
4.1 Promotion of gender equality to address the specific situation and role of women in the transition to the climate-neutral economy	1	=	1	1 – does not mention any policies or measures in this area but they are implemented and have been described in other documents
				During the consultations, attention was paid to gender issues. <i>Most of the participants in the online consultation were associations and civil society organisations, but some companies and private individuals also took part. The weighting of the various dimensions was only partially assessed as adequate. Additional comments were in favour of, among other things, greater consideration of impact assessments and investment requirements, gender equality aspects, the reduction of fossil subsidies and energy efficiency (including the utilisation of waste heat). A certain overweighting of energy security was also noted. (p. 37)</i> However, this is not enough to raise the score, so it remains unchanged.
4.2 Special attention paid to vulnerable groups (such as people with disabilities) that suffer disproportionately from the adverse effects of the transition	1	=	1	1 – does not mention any policies or measures in this area but they are implemented and have been described in other documents
				No change compared to the NECP 2023. The assessment remains unchanged.
4.3 Policies and measures addressing demographic impacts of the ageing population of regions in transition	1	=	1	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))
				No change compared to the NECP 2023. The assessment remains unchanged.

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. Just transition governance issues have not improved in the NECP 2024, as can be seen in the assessment below.

5. Just transition governance				
Criterion	NECP Score			Description
	Draft		Final	
5.1 Consistency of regional and national transition planning process	1	=	1	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
				Regional policies found in external documents are supposed to contribute to the overall federal objectives outlined in the draft, but unfortunately both versions of the NECP fail to identify and assess these links.

			<p>The NECP 2024 contains new important information on the consistency of the planning process.</p> <p><i>The updated NECP goes hand in hand with the German Recovery and Resilience Plan (GRRP). The GRRP focuses on tackling climate change and the digital transformation. It therefore also contains measures that serve to achieve the objectives of the updated NECP. The updated NECP is in line with other key initiatives of the EU and the Federal Government, tapping into synergies to enable their implementation. (p. 27)</i></p> <p>However, this is not enough to raise the score, so it remains unchanged.</p>
5.2 Institutional coordination on just transition implementation between regional and national authorities	1	=	<p>1 – institutional coordination of just transition is provided with a few mentions, unsatisfactory both in quantity and details provided</p> <p>An example from the NECP 2023 was '1.2.iv. Administrative structures for implementing national energy and climate policies'.</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>
5.3 Inclusion of stakeholders and citizens into regional transition governance	1	=	<p>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</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</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

The implementation of energy and climate measures and policies has far-reaching consequences. Germany assesses them in several areas, including the stability of energy supply and the transition to a greener economy.

However, the NECP 2024 still has a significant shortcoming in assessing the socio-economic side of the proposed policies. The document itself does not properly define socially vulnerable groups and devotes very little attention to the distributional aspects of the transition. However, the issue of measuring progress towards the targets has improved, as can be seen from the assessment below.

6. Overarching impact assessment of distributional impacts				
Criterion	NECP Score			Description
	Draft		Final	
6.1 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by income groups	1	=	1	1 – distributional impacts are mentioned in few parts of the draft. However, the mentions seem to be very vague
				No change compared to the NECP 2023. The assessment remains unchanged.
6.2 Assessment of overall distributional impacts of the policies and measures covered by NECP update – by other relevant groupings (e.g. rural households, pensioners)	1	=	1	1 – expected overall distributional impacts are mentioned, but descriptions are scarce
				<p>There is one new important mention related to this topic.</p> <p><i>Furthermore, the social monitoring of climate action will mean the distributive effects of relevant measures are analysed in future while they are still at the development stage and measures are designed to be as socially equitable as possible.</i> (P. 329)</p> <p>Setting up the social monitoring of climate action seems to still be in the early development stages and the plan does not contain any further information on it. Thus, it is not possible to predict how effective it will be.</p> <p>Setting up such a monitoring process marks a significant change compared to the status quo and holds potential for better assessments of distributional impacts in the future. However, details are missing, so the assessment remains unchanged.</p>
6.3 Common understanding of terms and measuring progress toward targets	1	↑	2	2 – framework for measuring progress toward targets is established (based on quality indicators and including policies for data collection)
				<p>The score improved between the draft and final versions as a result of the following actions.</p> <p>The vast majority of tables that appear in NECP 2024 include updated (usually better) values. In addition, the NECP 2024 has been complemented by an annex linking policies and measures to the five dimensions of the Energy Union.</p> <p>Table 'Strategic measures to achieve the energy savings pursuant to Article 8 paragraph 1 of Directive 2023/1791/EU (P. 345)' has been supplemented with "Expected cumulative energy savings 2021-2030 in ktoe". It is a way of measuring progress.</p> <p>As a result of the improvements in measuring progress, the score has increased from 1 to 2.</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 activity. The NECP 2024 mentions a number of new measures that will contribute both directly and indirectly to combat energy poverty. These have improved the score for this criterion.

7. Energy poverty				
Criterion	NECP Score			Description
	Draft		Final	
7.1 Inclusion of indicative objectives aimed towards reduction of energy poverty	0	=	0	0 – objectives aimed at reducing energy poverty are not mentioned
				No change compared to the NECP 2023. The assessment remains unchanged.
7.2 Assessment of the level of energy poverty and quality of used indicators	0	=	0	0 – Does not assess the level of energy poverty
				No change compared to the NECP 2023. The assessment remains unchanged.
7.3 Direct support to alleviate energy poverty	1	↑	2	2 – existing and planned policies or measures in this area are described and expected to deliver a meaningful change
				<p>The score improved between the draft and final versions as a result of the following actions.</p> <p>The NECP 2024 identifies a number of new measures that directly support people in energy poverty. The document notes that the increase in energy prices in 2022 and 2023 put a greater burden on low-income households due to the higher share of basic goods such as energy in their expenditure. This is why solutions such as increasing the basic tax-free allowance, strengthening the disposable income of families, increasing the statutory minimum wage have been introduced. Electricity, gas and heat price brakes and the abolition of the EEG-surcharge were also introduced in 2023. (P. 105)</p> <p>The direct subsidy system has also been modified.</p> <p><i>Through the Federal Funding Programme for Energy-efficient Buildings (BEG), measures aimed at increasing energy efficiency in residential and non-residential buildings are supported, including the replacement of old, fossil-fuel-based heating systems with heating systems powered by renewable energy. The programme supports complete renovations to achieve the "Efficiency House" standard through low-interest loans from the KfW development bank with repayment subsidies, as well as individual measures, particularly for building envelopes, through grants from BAFA. As of January 2024, grants for renewable heat generators can now be applied for through KfW. There are special funding incentives (bonuses) for the refurbishment of buildings with poor energy performance, the implementation of serial renovations, and heat pumps that are particularly efficient or use natural refrigerants (see 3.2.ii). (P. 145)</i></p> <p>From 2024, the scheme provides an income bonus of 30% for owner-occupiers with a taxable household income of up to €40,000 per year.</p> <p>Work is also under way on solutions for the future.</p> <p><i>In order to provide the population with faster and more targeted support in future, the Federal Government is continuing its work on establishing a mechanism for direct payments to private individuals. With the Annual Tax Act 2022 of 16 December 2022, the Federal Government created the legal basis for allowing the collection and storage of the IBAN (and BIC, if applicable) in the database of tax identification numbers (IdNr. database). The implementation of storage as the basis for the direct payment mechanism is underway. The Federal Government will soon decide on key points for the specific administrative organisation of the direct payment mechanism and appoint a competent authority. (P. 107)</i></p> <p>As a result of the aforementioned new measures that directly support people in energy poverty, the score has increased from 1 to 2.</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>↑</p>	<p>2</p>	<p>2 – many policies or measures in this area are discussed</p> <p>The score improved between the draft and final versions as a result of the following actions.</p> <p>The Federal Government has strengthened social security in the course of the transition through education and further training. (P. 95)</p> <p><i>As part of the Electricity Saving Check (SSC) project, trained, formerly long-term unemployed people provide low-income households with advice on how to save heating energy, water and electricity. The focus of the consultation is on energy-saving behaviour in the areas of heat, water and electricity as well as on achieving additional savings by replacing cooling appliances. The project is being implemented by two partners (Deutscher Caritasverband e. V. and Bundesverband der Energie- und Klimaschutzagenturen Deutschlands e. V.). These two partners work at locations throughout Germany (around 150) where they organise and conduct advisory visits to households, among other things. In addition, nationwide online and telephone counselling is offered. The aim is to reduce CO₂ emissions and lower energy costs for households and the public sector.</i> (P. 109)</p> <p>There are new measures that can structurally help combat energy poverty. For example:</p> <ul style="list-style-type: none"> ▪ Photovoltaic strategy; (P. 133) ▪ Electricity storage strategy; (P. 241) ▪ Federal support for energy efficiency in the economy (EEW); (P. 24) ▪ Energy efficiency specifications for climate-neutral new buildings/extensions and building refurbishments by the Federal Government 'Exemplary role of federal buildings for energy efficiency' (EEFB). (P. 24) <p>Changes have also been made to housing rental law in the context of rented dwellings.</p> <p><i>Provided this modernisation measure fundamentally satisfies the qualifying criteria for grants from public budgets and the landlord claims such funding, the rent can be raised by 10% of the costs spent on the property less the third-party funds that have been claimed. Should the landlord not have received any funding, the rate by which the rent can be increased is 8%. This is intended to create incentives for climate-friendly modernisation using renewable energies and steps to enhance the energy efficiency with which heating systems are operated. At the same time a special cap on rent increases after modernisation work involving the installation of heating systems has been introduced in order to protect tenants. As a consequence, monthly rents are not allowed to go up by more than 50 cents per square metre within six years. In the case of a 100-m² flat, the maximum rent rise that can be demanded is therefore €50 a month.</i> (P. 329)</p> <p>As a result of the aforementioned new measures that can structurally help combat energy poverty, the score has increased from 1 to 2.</p>
<p>7.5 Addressing energy market inefficiencies which negatively affect vulnerable customers</p>	<p>1</p>	<p>=</p>	<p>1</p>	<p>1 – mentions the issue but too vaguely</p> <p>Where appropriate, the Federal Government systematically develops the framework for the protection of household customers, for example through the introduction of the electricity and gas price brakes.</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>

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.

The concept of transport poverty is not defined in the NECP 2024. However, the NECP 2024 mentions a few new measures that will help combat transport poverty, which has slightly improved this aspect but not enough to rise the assessment.

8. Transport poverty				
Criterion	NECP Score			Description
	Draft		Final	
8.1 Inclusion of indicative objectives aimed towards reduction of transport poverty	0	=	0	<p>0 – objectives aimed at reducing transport poverty are not mentioned</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>
8.2 Assessment of the level of transport poverty and quality of used indicators	0	=	0	<p>0 – does not assess the level of transport poverty</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>
8.3 Direct support to alleviate transport poverty	0	=	0	<p>0 – does not mention existing and planned policies or measures in this area</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>
8.4 Measures to structurally decrease transport poverty by investment in sustainable and zero-emission mobility options	1	=	1	<p>1 – policies in this area are proposed. However, they have not been adequately linked to the goal of reducing transport poverty. Thus, it is difficult to consider their potential impact</p> <p>In the NECP 2024 there are a few new measures which can potentially help combat transport poverty.</p> <ul style="list-style-type: none"> ▪ Acceleration of climate neutrality for cars (charging infrastructure masterplan, various short-term measures to increase the expansion of charging points, amendment to the Federal Car Sharing Act to speed up the conversion of car sharing fleets); (p. 21) ▪ Support programmes for sustainable urban mobility plans and corporate mobility management; (p. 22) ▪ Strengthening urban and regional rail transport (for instance, by boosting rail investments and strengthening and digitalising the existing rail network, pro-rata promotion of track access charges in rail freight transport as an investment incentive, introduction of the 'Deutschlandticket'). (p. 22) <p>However, this is not enough to raise the rating. Notably, the 'Deutschlandticket' has already appeared in the NECP 2023. The assessment remains unchanged.</p>

Aspect 9. Financing needs and sources of funding

Identifying concrete financial needs and sources of funding for each of the proposed policies and measures is key to ensure the transparency of the process and to build confidence among stakeholders and the general public. It is also a prerequisite for effective resource allocation, prioritisation and long-term planning.

The NECP 2024, similar to the NECP 2023, pays some attention to the financing needs of the proposed policies, but this aspect has not been improved. In the case of distributional policies, the description of financing needs and sources is rare.

9. Financing needs and sources of funding				
Criterion	NECP Score			Description
	Draft		Final	
9.1 Description of financing needs for each proposed policy and measure addressing the distributional impacts	1	=	1	1 – describes financing needs of some of the proposed policies and measures, but not much detail is provided
				Similar to the draft NECP, some information about the financing needs for the proposed policies has been provided, but in most cases, the details are lacking. The assessment remains unchanged.
9.2 Description of sources of funding for each proposed policy and measure addressing the distributional impacts	1	=	1	1 – describes sources of funding of some of the proposed policies and measures, but not much detail is provided
				As in the draft NECP, some cash flows anticipated during the transition are outlined, but in the vast majority of cases, there is no detail on what proportion of the funding needs will be covered by each source. The assessment remains unchanged.

Aspect 10. Tax, insurance and social security policies

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

Through well-designed policies, governments can incentivise investment in renewable energy, energy efficiency and environmental initiatives. Tax incentives or similar incentives can motivate both businesses and citizens to adopt more sustainable practices. In addition to the information contained in the NECP 2023, the NECP 2024 includes many new positive measures. This is reflected in the assessment below.

10. Tax, insurance and social security policies				
Criterion	NECP Score			Description
	Draft		Final	
10.1 Use of income from climate-related tax, levies and fees (or similar instruments, e.g. EU ETS revenues) for the support of the most vulnerable groups	1	=	1	1 – the principle is reflected in some of the proposed policies and measures for which it would be reasonable to apply it but is neglected in the vast majority of the cases
				As in the draft NECP, the ETS 1 is discussed mostly as an incentive for emissions reduction, not as a source of financing. There are a few mentions of ETS 2, but not in the context of distributing money. Income from climate-related taxes, levies and fees can be used for Just Transition purposes in Germany, but this is not explicitly stated in the NECP. The assessment remains unchanged.
10.2 Accounting for and preparing framework for utilisation of the Social Climate Fund	0	=	0	0 – only one example of the utilisation of SCF is mentioned
				The following information has been added to the vague reference provided in the draft: <i>The updated NECP outlines the political framework for the German Social Climate Plan, in which the Federal Government will present an internally coherent package of national measures that is consistent with the NECP and designed to tackle the impacts of CO₂ pricing on disadvantaged groups, and will thus guarantee affordable heating/cooling and reasonably priced mobility, while contributing to the attainment of the climate targets set for Germany and the European Union. In this way, the German Federal Government will ensure the consistency of the two plans and the analytical assumptions and projections upon which they are founded.</i> (P. 326) However, this is not enough to raise the score. The assessment remains unchanged.

<p>10.3 Recognition and consistent application of 'polluter pays' principle across the economy</p>	<p>1</p>		<p>2 – the principle is applied in most of the proposed policies and measures for which it would be reasonable to apply it, but some inconsistencies remain</p> <p>The score improved between the draft and final versions as a result of the following actions. The table in the attachment "Measures for the implementation of Article 8 of Directive (EU) 2023/1791" provides an overview of the existing and planned alternative measures under Article 10 of the Energy Efficiency Directive (EED) and the expected cumulative end-use energy savings for the period 2021-2030. The following actions can be linked to the "polluter pays" principle:</p> <ul style="list-style-type: none"> ▪ Aviation tax <i>Increase in the aviation tax from 01.04.2020 for destinations within Europe by €5.53 to €13.03, for medium-range distances up to 6,000 km by €9.58 to €33.01, and for long-range flights by €17.25 to €59.43.</i> ▪ Making railway travel cheaper <i>Reduction of VAT for long-distance passenger rail journeys from 19% to 7% (local passenger rail transport was already taxed at 7%, and freight stays at 19%).</i> ▪ CO₂ differentiation and widening of the truck toll <i>Zero-emission vehicles are fully exempt from the truck toll until the end of 2025. After this time, zero-emission vehicles will pay only 25% of the part of the toll for infrastructure costs plus the part of the toll for the costs of noise and air pollution. Zero-emission vehicles with a technically admissible total mass of up to 4.25 tonnes are permanently exempted from the toll. Since 01.12.2023, an additional part of the toll has been levied on traffic-induced carbon emissions via the truck toll. It is based on a price of €200 per tonne of CO₂. The truck toll was extended on 01.07.2024 to cover trucks with a technically permissible total mass of more than 3.5 tonnes.</i> ▪ Increased weighting of the carbon emission charge contained in the motor vehicle tax <i>In order to steer demand more clearly towards cars with reduced emissions potential, the CO₂ tax rate has been given even greater weight via the introduction of a progressive CO₂ rate in motor vehicle tax for vehicles with internal combustion engines. Cars with a CO₂ type approval test of up to 95 g/km which were first registered from 12 June 2020 until 31 December 2024 are given favourable treatment worth €30 per year in motor vehicle taxation until 31.12.2025.</i> ▪ Energy and electricity duty <i>The Energy Duty Act and the Electricity Duty Act regulate the taxation of various energy carriers (e.g. heating oil, gasoline, diesel, natural gas, LPG, CNG) and of electricity. Thanks to their price-stimulus-providing effect, these duties influence the behaviour of end-users, encouraging greater use of energy-efficient technologies and a sparing use of energy. The energy duty and the electricity duty are based on EU-wide harmonised law (Directive 2003/96/EC). The Energy Duty Act entered into force in 2006 (replacing the Oil Duty Act), and the Electricity Duty Act came into effect in 1999. The acts are revised on an ongoing basis (most recently in 2024).</i> <p>As a result of the overview of the existing and planned alternative measures under Article 10 EED and the expected cumulative end-use energy savings, the score has increased from 1 to 2.</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>2 – the protection is available in most of the proposed policies and measures for which it would be reasonable to apply it</p> <p>The score improved between the draft and final versions as a result of the following actions.</p> <p>NECP 2024 mentions measures such as increasing the basic tax-free allowance, strengthening the disposable income of families, increasing the statutory minimum wage.</p> <p><i>In 2024, in addition to the adjustments made as part of the Inflation Compensation Act, the Federal Government will also ensure that wage increases actually reach income taxpayers</i></p>

by increasing the basic tax-free allowance by €180 to €11,784. The increase in child benefit from €219 to €250 in 2023 has also strengthened the disposable income of families. At the lower end of the wage spectrum, the increase in the statutory minimum wage to €12 as part of the Minimum Wage Increase Act in October 2022 led to noticeable wage increases. According to the Federal Statistical Office, this increase had an impact on around 5.8 million jobs. As a result, the proportion of low-paid jobs among all employees fell from 19% to 16% within one year. On 1 January 2024, the minimum wage was further increased to €12.41 – again on the basis of a decision by the Minimum Wage Commission. The Federal Government expects real wages to rise in 2024. A return to rising real wages is a prerequisite for maintaining prosperity. (P. 106)

As a result of the above action related to built-in protection of the most vulnerable groups in tax instruments, the score has increased from 1 to 2.

Aspect 11. Work conditions and re-training

Creating safe working conditions in emerging sectors and retraining people at risk of unemployment due to the transition are crucial aspects of the decarbonisation process, especially in regions that may be most affected. Up-skilling and re-skilling of workers must be adapted to the changes in the labour market and go hand in hand with the creation of decent green jobs. Special attention should be paid to supporting decent employment for social groups that face additional barriers, such as women or people with disabilities.

Unfortunately, this issue is still not well covered in the final version of the NECP. On the positive side, a new skills strategy has been added to the NECP 2024, which has improved the score.

11. Work conditions and re-training			Description
Criterion	NECP Score		
	Draft	Final	
11.1 Coverage of retraining, upskilling and reskilling of the workers affected by the transition	1	2	<p>2 – provides an adequate set of measures to support a transition-relevant retraining, upskilling and reskilling of the workforce</p> <p>The score improved between the draft and final versions as a result of the following actions. NECP 2024 discusses Skills strategy, which is important in the context of coverage of retraining, upskilling and reskilling of the workers affected by the transition.</p> <p><i>The Federal Ministry of Labour and Social Affairs, along with the participation of all departments and numerous federal commissioners, has reorganised the Federal Government's cross-industry Skilled Labour Strategy. At the Skilled Labour Summit on 7 September 2022, the new Skilled Labour Strategy was discussed with the heads of the social partners, chambers, Länder, municipalities and the Federal Employment Agency. On 12 October 2022, the Federal Government adopted a new Skilled Labour Strategy.</i></p> <p><i>The aim of the Skilled Labour Strategy is to support the efforts of firms and businesses to attract and retain skilled workers by means of legal and sub-legal measures. To this end, five priority fields of action have been identified:</i></p> <ol style="list-style-type: none"> 1. up-to-date vocational training, 2. targeted continuing education and training, 3. using labour force potential and increasing labour force participation 4. improving the quality of work and work culture and 5. modernising immigration policy and curbing emigration. <p>(...)</p>

			<p>The Federal Government has already implemented two key measures from the Skilled Labour Strategy by passing the law to strengthen the promotion of training and continuing education and the law to further develop the immigration of skilled workers in the summer of 2023. This has created further levers for securing skilled workers. The training and further training programmes of the dual vocational training system are the central basis for allowing the next generation of skilled workers to gain qualifications. The Federal Government is thus working tirelessly with the social partners to modernise the regulations and adapt them to the current needs of the economy. There is a particular focus on the skills requirements associated with the green and digital transformation. In all training programmes, cross-occupational basic skills, including in the areas of environmental protection and sustainability, as well as the digitalised world of work, are included as a compulsory part of the curriculum. In addition, the ordinances include a varying range and depth of competences relevant to the transformation process, depending on the specific occupation. (P. 263)</p> <p>As a result of the new Skilled Labour Strategy, the score has increased from 1 to 2.</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	0	=	0
			<p>0 – no such measures are even vaguely mentioned</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</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	0	=	0
			<p>0 – pays no attention to the impact of green transition on work health and safety</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</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 representation of stakeholders on the issue of just transition. Conducting extensive and early enough consultations, including trans-border dialogue, is also crucial for developing a well-informed and situationally appropriate NECP update. The consultation took place and the issues of just transition were taken into account during the consultation process, resulting in an increase in the score for the one criterion under this aspect.

12. Stakeholder engagement and public consultation			
Criterion	NECP Score		Description
	Draft	Final	
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	2	<p>2 – effective consultations were organized and most of the crucial issues related to just transition were discussed, but not all of them</p> <p>The score improved between the draft and final versions as a result of the following actions.</p> <p>The NECP 2024 includes additional mentions related to the engagement of social partners, civil society actors and the general public in discussion of just transition related issues during public consultations. As required by the NECP template, the consultation process is the subject of chapter 1.3.i. 'National consultations with stakeholders, including social partners, and cooperation with civil society and the public'. In particular, it is worth highlighting the following public consultation formats:</p> <ul style="list-style-type: none"> ▪ 'Round table on skilled trades for climate change mitigation', (P. 33) ▪ The 'Industry dialogue on accelerating grid connections', which also considers skilled labour, (P.32) ▪ 'Building Refurbishment Compass dialogue process'. (P.34) <p>Although the summaries should be more detailed and clearer on how the outcomes will be considered in the future, there is an improvement compared to the NECP 2023. As a result, the score has increased from 1 to 2.</p>
12.2 Establishment of permanent body of consultation with stakeholders, covering issues related to just transition	0	0	<p>0 – some permanent consultation bodies were formed but they don't cover just transition issues</p> <p>There is one new mention which can be related to the topic: <i>In addition, hearings, consultations and participations are regularly organised as part of legislative and planning procedures.</i> (P. 36)</p> <p>However, it is not explicitly stated whether it pertains to the issues of just transition. The assessment remains unchanged.</p>
12.3 Organisation of early and effective dialogue with local authorities, regarding issues related to just transition	1	1	<p>1 – provides some possibilities of dialogue with local authorities on issues related to just transition, but these measures are largely insufficient</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>
12.4 Identification of opportunities for trans-border dialogue on issues related to just transition	1	1	<p>1 – few transborder programs are mentioned, but it is mostly hard to find their application to the just transition/social aspects</p> <p>No change compared to the NECP 2023. The assessment remains unchanged.</p>

V. Summary

The NECP 2024 takes more account of just transition issues and is therefore better than the NECP 2023. Many of the aspects assessed have improved in the final version of the NECP. However, these are not decisive and significant improvements, but rather improvements in the individual criteria. There is still a lot of room for improvement, particularly in terms of including territorial aspects for the most affected territories, which have been again omitted.

The key elements that were improved in the NECP 2024 include:

- Taking note of the lack of ambition and highlighting the reduction in demand for fossil fuels;
- Identifying several important actions to support the fight against energy poverty;
- Mentioning a strategy to retrain workers during the transition process.

It is also worth noting that the NECP 2024 pays even more attention to the development of RES than the NECP 2023, although not in the context of the most affected territories, which was assessed in this report.

There was no improvement in the following aspects:

- 3. Local clean energies and decarbonised industries;
- 4. Inclusivity of regional transition;
- 8. Transport poverty;
- 5. Regional just transition governance;
- 9. Financing needs and sources of funding.

In general, the NECP 2024 is very similar to the draft but includes more measures, which resulted in higher ratings than in the NECP 2023. The table below compares the average scores of the draft and final versions.

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

		NECP Score	
		Draft	Final
Territorial Aspects	1. Ambitions and targets	0.67	1.5
	2. Supporting local economies and communities	1	1.25
	3. Local clean energies and decarbonised industries	0.5	0.5
	4. Inclusivity of regional transition	1	1
	5. Regional just transition governance	1	1
Distributional Aspects	6. Overarching assessment of distributional impacts	1	1.33
	7. Energy poverty	0.6	1
	8. Transport poverty	0.25	0.25
	9. Financing needs and sources of funding	1	1
	10. Tax, insurance and social security policies	0.75	1.25
	11. Work conditions and re-training	0.33	0.67
	12. Stakeholder engagement and public consultation	0.75	1

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

In the end, the best rated aspect is ‘1. Ambitions and targets’ with a score of 1.5. The following ‘6. Overarching assessment of distributional impacts’ received a score of 1.33. Nevertheless, the scores are relatively low. Aspect ‘8. Transport poverty’ and Aspect ‘3. Local clean energies and decarbonised industries’ are still the lowest points of the NECP 2024.

The final version of the document has already been submitted, so there is no room for improvement. However, the German government should consider the following issues in the future strategic documents and plans.

- **Increase the level of detail in the description of the measures and policies outlined** e.g. by identifying funding needs and sources, and the target groups of the identified strategies.
- Putting a greater emphasis on **regional issues**, particularly for the most affected territories or providing references to similar plans at Lander level.
- The governments should provide more information on the intended utilisation of the Social Climate Fund, including **guiding principles for the Social Climate Plan which should be published well in advance of the plan itself to effectively facilitate stakeholder dialogue on the SCF.**
- Policy design and planning of funding the transition should consider in more detail the distributional issues beyond the topic of energy poverty, including in particular **transport poverty** and the **overall distributional impact** of the climate and energy policy on different socio-economic groups. The social monitoring of climate change mentioned in aspect 6 should be one of the tools applied for this purpose. It should be used to establish and enhance links between policy design and the assessment of distributional impacts.

- A separate **document analysing the funding landscape** should be prepared, as this was not done in the NECP. Key information on the **planned policies and measures from other documents**, such as territorial plans, should be **reviewed** in the context of increasing the ambition of the measures where appropriate. This applies, for example, to information on the support for the local economies and communities.

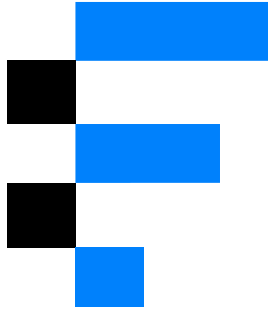
Annex. Summary table for the aspects considered in the assessment

		NECP Score			
		Draft		Final	
Territorial aspects	1 Ambitions and targets				
	1.1 Increasing ambition and avoiding backsliding on targets from Territorial Just Transition Plans	1	↑	2	2 – targets set in TJTP are not mentioned, but the increase in ambition is clear
	1.2 Clear and science-based timeline for coal exit in the power sector	1	=	1	1 – shutting down the last coal-powered plant is declared 'at the latest' till 2038 with attempts to phase-out by 2030
	1.3 Clear and science-based timeline for transition away from coal in the whole economy	1	↑	2	2 – addresses the issue of sectoral decoupling and shows an almost complete shift away from coal in the economy but does not mention the precise exit timeline for transition away from coal in the whole economy
	1.4 Clear and science-based timeline for transition away from fossil gas in the whole economy	0	↑	1	1 – there is no clear timeline, but a number of measures have been identified for transition away from gas
	1.5 Clear and science-based timeline for transition away from oil in the whole economy	0	↑	1	1 – there is no clear timeline, but a number of measures have been identified for transition away from oil
	1.6 Clear and science-based industrial transition to net zero emissions timeline (conversion or closure of industrial plants which emit GHGs from fossil fuels use or industrial processes)	1	↑	2	2 – industrial transition to net zero emissions is declared to be achieved till 2045 and the NECP 2024 identifies measures to reach it, but few threats/requirements are still identified
	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	↑	2	2 – many policies or measures in this area are discussed, but some important details are missing
	2.2 Policies and measures for preservation of the identity of mining/traditional industrial communities	1	=	1	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	=	1	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	=	1	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	=	0	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	=	1	1 – some policies or measures in this area are mentioned, but it is difficult to assess if they have chance to be effective	

Territorial aspects	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	=	1	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	=	1	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	=	1	1 – mentions the issue but highly insufficiently. However, another document addressing the issue more in detail is mentioned
	5 Just transition governance				
	5.1 Consistency of regional and national transition planning process	1	=	1	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	=	1	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	=	1	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	=	1	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	=	1	1 – expected overall distributional impacts are mentioned, but descriptions are scarce
	6.3 Common understanding of terms and measuring progress toward targets	1	↑	2	2 – framework for measuring progress toward targets is established (based on quality indicators and including policies for data collection)
	7 Energy poverty				
	7.1 Inclusion of indicative objectives aimed towards reduction of energy poverty	0	=	0	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	=	0	0 – does not assess the level of energy poverty
	7.3 Direct support to alleviate energy poverty	1	↑	2	2 – existing and planned policies or measures in this area are described and expected to deliver a meaningful change
7.4 Measures which support investments which structurally decrease energy bills by investment in energy efficiency and zero-emission energy sources	1	↑	2	2 – many policies or measures in this area are discussed	
7.5 Addressing energy market inefficiencies which negatively affect vulnerable customers	1	=	1	1 – mentions the issue but too vaguely	

Distributional aspects	8 Transport poverty				
	8.1 Inclusion of indicative objectives aimed towards reduction of transport poverty	0	=	0	0 – objectives aimed at reducing transport poverty are not mentioned
	8.2 Assessment of the level of transport poverty and quality of used indicators	0	=	0	0 – does not assess the level of transport poverty
	8.3 Direct support to alleviate transport poverty	0	=	0	0 – 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	=	1	1 – policies in this area are proposed. However, they have not been adequately linked to the goal of reducing transport poverty. Thus, it is difficult to consider their potential impact
	9 Financing needs and sources of funding				
	9.1 Description of financing needs for each proposed policy and measure addressing the distributional impacts	1	=	1	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	=	1	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	=	1	1 – the principle is reflected in some of the proposed policies and measures for which it would be reasonable to apply it, but is neglected in the vast majority of the cases
	10.2 Accounting for and preparing framework for utilisation of the Social Climate Fund	0	=	0	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	↑	2	2 – the principle is applied in most of the proposed policies and measures for which it would be reasonable to apply it, but some inconsistencies remain
	10.4 Built-in protection of the most vulnerable groups in tax instruments and cross-sectional support programmes related to green transition	1	↑	2	2 – the protection is available in most of the proposed policies and measures for which it would be reasonable to apply it
	11 Work conditions and re-training				
	11.1 Coverage of retraining, upskilling and reskilling of the workers affected by the transition	1	↑	2	2 – provides an adequate set of measures to support a transition-relevant retraining, upskilling and reskilling of the workforce
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	=	0	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	=	0	0 – pays no attention to the impact of green transition on work health and safety	

12 Stakeholder engagement and public consultation					
Distributional aspects	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	↑	2	2 – effective consultations were organized and most of the crucial issues related to just transition were discussed, but not all of them
	12.2 Establishment of permanent body of consultation with stakeholders, covering issues related to just transition	0	=	0	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	=	1	1 – provides some possibilities of dialogue with local authorities on issues related to just transition, but these measures are largely insufficient
	12.4 Identification of opportunities for trans-border dialogue on issues related to just transition	1	=	1	1 – few transborder programs are mentioned, but it is mostly hard to find their application to the just transition/social aspects



www.ireform.eu