Germany's Energiewende: Synergies, Trade-offs and Political Drivers

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Summary

There has been a significant policy shift in Germany's energy transition – the Energiewende – resulting from Russia's invasion of Ukraine and the subsequent war. The Easter Package, rolled out in Spring 2022, set a series of ambitious renewable energy targets and laws to enable both climate action and energy security. These are to be implemented in tandem with existing laws such as the Coal Exit Law and the Federal Climate Change Act. Aligning policies and targets to reduce greenhouse gas (GHG) emissions and ensure energy reliability and affordability requires concerted policy coherence, a policy process to pursue multiple goals in a way that maximises synergies and minimises trade-offs. Reducing trade-offs (and their consequences) is especially crucial if the energy transition is to be just for all and become a vehicle towards a broader Just Transition, as well as to achieve the aims of the 2030 Agenda for Sustainable Development (including "leaving no one behind") and the Paris Agreement.

This policy brief first examines some of the most important policies – and (in)coherences – pertaining to the Energiewende, with a specific focus on the state of North Rhine-Westphalia (NRW), one of Germany's main coal-mining regions. The brief then goes on to explore the main political drivers – through the lens of ideas, interests and institutions – of policy (in)coherence in two parallel Energiewende policy processes that are particularly relevant to the electricity sector: the coal phase-out and the phase-in of onshore wind. Although solar power and green hydrogen are also key to a successful Energiewende, these are not the subject of this brief. Our insights derive from policy document analysis and 28 semi-structured interviews.

To move towards a Just Transition, the following recommendations are made to promote coherence in Germany's Energiewende and inform the ongoing revision of the NRW Sustainability Strategy (last updated in 2020). The recommendations may also be of interest to the newly appointed NRW Advisory Board on Sustainability:

- **Mitigate ideological, institutional and interest-based barriers to ambitious climate action** by ensuring a political commitment to policy coherence. In NRW in particular, this means meeting recent promises to deliver a coal phase-out by 2030 and lift the 1,000 metre (m) "rule" (i.e. 1 kilometre (km) between residential buildings and wind turbines), as well as mitigating arising conflicts between residents' interests, particularly around the sharing of profits. Such commitments should be made explicit in the revised NRW Sustainability Strategy and legislated.

- **Promote greater political equality in all Energiewende policy-making decision processes at all governance levels** (i.e. federal, state and municipal) in consultative and participatory mechanisms towards greater energy democracy. Reducing political inequality is key to increase the public's acceptance of renewable energy projects (e.g. through cooperatives) – one of the aims of the latest NRW Sustainability Strategy.

- **Integrate notions of social and climate justice into Energiewende policy** to ensure the German energy transition is a just one for all individuals, and not just for German coal workers. Notions of procedural, distribution and recognition justice are featured here and should be highlighted in the updated NRW Sustainability Strategy.

Recent reforms in the German energy transition: Synergies and trade-offs

The federal elections in September 2021 resulted in the so-called traffic-light coalition of the Social Democratic Party (SPD), the Free Democratic Party (FDP) and Alliance 90/The Greens forming a government committed to pursuing an ambitious energy reform programme to, among other things, meet the aims of the Paris Agreement, that is, limit global warming to 1.5 degrees Celsius. Long-term reforms were accelerated when, in February 2022, Russia invaded Ukraine, greatly aggravating energy insecurity in Europe and in Germany, which was heavily dependent on Russian gas (in 2021, 55 per cent of Germany's gas supply came from Russia). Amidst a worsening energy crisis, in April 2022 the new government rolled out the so-called Easter Package, a sweeping set of new policies (both short- and long-term) to deliver energy security and climate action. The Package was claimed to be "the largest energy policy revision in decades" (BMWK, 2022) and passed into law in the summer of that year.

Prior to these events, Germany had already undertaken a series of steps to move away from fossil fuels, particularly coal. The Coal Exit Law, enacted in July 2020, set 2038 as the last possible year by which the country must phase out all coal – a deadline criticised by civil society and activists as being far too late for the kind of ambitious climate action Germany has committed to. This includes reducing GHG emissions by at least 65 per cent by 2030 and by at least 88 per cent by 2040 compared to 1990 levels. The Coal Exit Law was accompanied by other laws, notably the Structural Development Act, which mandates payments of up to €41 billion for coal regions – including NRW – and a series of transitional payments for coal workers aged 58 and over. The first federal report evaluating the Investment Act for Coal Regions, published in August 2023, reveals that employment in the lignite sector is decreasing, with rising overall employment in the affected coal regions (BMWK, 2023).

There have been significant changes to the Renewable Energy Sources Act (EEG), which has been repeatedly updated since its enforcement in 2000, as part of the Easter Package. For example, 80 per cent of Germany's gross electricity consumption is to derive from renewables by 2030. In addition, almost all of the power supply is to derive from renewables by 2035. The Amendment to the EEG stipulates that the country is to allocate 2 per cent of its surface area for wind turbines by 2032, with specific spatial requirements for individual states. At the same time, the latter may be compromised by the target to create new afforestation areas of 10,000 hectares per year (between 2023 and 2030) across the country, as per the Federal Action Plan on Nature-based Solutions for Climate and Biodiversity (published in autumn 2022). In addition, wind parks are to be permitted in land protection areas to accelerate the phase-in of wind power, with the aim of expanding onshore wind capacity by 10 gigawatts (GW) per year to achieve a total capacity of 115 GW by 2030. Such policies can come at the expense of biodiversity, compounding the so-called green-green dilemma, that is, conflicts between expanding wind energy and protecting biodiversity. Other revamped targets (part of the Easter Package) to increase solar power, green hydrogen capacity and offshore wind should put Germany on two paths: towards climate neutrality by 2045 and energy security. Social justice measures to weather the energy crisis have also been introduced; for example, the abolishment of the renewable energy surcharge, which for years had been fundamental to Germany's renewable energy expansion, has aimed to relieve consumers from soaring energy bills.

In 2022, renewable energies made up 46.2 per cent of gross electricity consumption in the country (up from 41.2 per cent in 2021), with wind power accounting for the majority of this supply. Renewables also accounted for 17.4 per cent of heating, but only 6.8 per cent in the transport sector. The share of renewables in gross final energy consumption was only 20.4 per cent (Umweltbundesamt, 2023). These numbers are

too low if Germany is to meet its ambitious climate targets as well as its new renewable energy ones.

In addition, the energy insecurity resulting from Russia's aggression in Ukraine has led the federal government to enact laws that could counter climate efforts. For example, the acceleration of the instalment of liquefied natural gas (LNG) terminals to boost energy supply prolongs CO_2 emissions and can create carbon lock-ins. Less stringent environmental protection requirements to speed-up implementation have been cited as concerns with the current LNG expansion. In addition, the short-term continuation of lignite-fired power plants in NRW until March 2024 could also compromise the coal phase-out, even if 2030 is provisionally set (though not legislated) as the new deadline by which coal will be phased out in the Rhenish mining area. The latter resulted from a political agreement between the federal government, the state government and the energy utility company RWE in October 2022.

Moreover, there are realities on the ground that can significantly slow and undermine ambitious climate action. For example, during the same time the Coal Exit Law was enacted, the controversial coal-fired power plant Datteln IV, in NRW, started its operations, even after more than a decade of legal setbacks driven by activists and non-governmental organisations, as well as a court ruling that the plant had been built illegally. That the plant requires hard coal (when the latter ceased to be produced in the country in 2018), speaks to incoherences between federal-level targets and policy implementation, especially given that most of this hard coal had, until the war in Ukraine, come from Siberia. The federal government has defended the project, arguing that Datteln IV will contribute to lowering emissions by replacing

three other less-efficient power plants (Bundesregierung, s.a.). Another example is the eviction and demolition of small villages to expand opencast lignite mining. In January 2023, Germany made headlines around the world when the village of Lützerath, also in NRW, was cleared to extend the Garzweiler II mine, Germany's second-largest mine. This expansion also led to the dismantling of a wind farm.

The so-called green-green dilemma has also stalled policy implementation. In 2021, the installation of more than 100 wind turbines with the energy capacity of more than 500 megawatts was stalled in NRW over concerns surrounding the collision risks for bats and birds (which is much higher for older wind turbines that operate without mitigation schemes). Even more controversial is the 1,000 m rule – a federal law mandating 1 km between wind turbines and residential buildings – to be implemented at the discretion of each state. This is especially problematic in NRW, the most densely populated state in the country, and a state whose share of nature reserves has been steadily increasing. One report from the NRW Ministry of the Environment noted that eliminating the 1,000 m rule would free up 40 per cent more land for wind energy (LANUV, 2022). In March 2023 – and in recognition of the barriers that the 1,000 m rule places on the state's capacity to meet its onshore wind targets – the state coalition, which consists of the Christian Democratic Union (CDU) and Alliance 90/The Greens, adopted the first measures to gradually eliminate the 1,000 m requirement. This includes lifting the rule for repowering purposes (i.e. the process of replacing old wind turbines with new ones). A renewed commitment to lift the rule – and to install a minimum of 1,000 new wind turbines in NRW – was made by the state government in August 2023.

Table 1: Some identified trade-offs in the pursuit of climate, energy and land use policies

Progress on policy 1…	….can create trade-offs with policy 2:
Short-term continuation of lignite-fired power plants in NRW until March 2024	Reduce GHG emissions by at least 65% by 2030
Accelerate the installment of LNG terminals	Reduce GHG emissions by at least 65% by 2030 and by at least 88% by 2040 compared to 1990 levels and ensure climate neutrality by 2045
Gradually phase-out coal by 2038	Reduce GHG emissions by at least 65% by 2030 and by at least 88% by 2040 compared to 1990 levels
1,000 m between wind turbines and residential buildings	2% of the country's surface area to be reserved for wind turbines by 2032
1,000 m between wind turbines and residential buildings	80% of Germany's gross electricity consumption to derive from renewables by 2030
New afforestation of 10,000 hectares per year (between 2023 and 2030) across the country	2% of the country's surface area to be reserved for wind turbines by 2032

Source: Authors

Policy (in)coherence: A political matter

Policy coherence – a process for pursuing multiple goals in a way that maximises synergies and minimises trade-offs – can be an important tool to advance more effective, and less costly, policy outcomes. Policy Coherence for Development (PCD) and its successor, Policy Coherence for Sustainable Development (PCSD), have long been heralded by academics, practitioners and international bodies such as the Organisation for Economic Co-operation and Development (OECD) as crucial tools to systematically meet several policy aims simultaneously and in a coordinated fashion, where benefits are expected to be greater than if policies are implemented in silos. Sustainable Development Goal (SDG) 17 – on Partnerships for the Goals – specifically recognises the need to "enhance policy coherence for sustainable development" (United Nations, 2015), particularly if the 2030 Agenda is to meet its overarching aim of "leaving no one behind". However, efforts towards coherence have tended to focus on so-called technocratic fixes, such as improving capacity, better policy design, greater communication between government ministries and departments, and more nuanced interlinkage identification. Although these

are undoubtedly necessary for coherent policy-making and policies, an overemphasis on such solutions has led to a neglect of the politics that are part and parcel of policy-making decision processes (Brand, Furness, & Keijzer, 2021). These could be blocking policy coherence – whether intentionally or otherwise.

Engaging with comparative politics concepts around ideas, institutions and interests holds promise in being able to shed light on the political drivers of policy (in)coherence (Shawoo, Maltais, Dzebo, & Pickering, 2022). **Ideas** generally refer to discourses and framings around policy issues, as well as societal norms and values (e.g. which SDGs or policy domains are prioritised). **Institutions** involve structures and systems (of ministries and governance bodies), laws, regulations and the so-called rules of the game, as well as coordination and consultation mechanisms. **Interests** are the preferences and agendas held by actors, the asymmetrical relationships, and the broader power dynamics that shape how policies are designed, determining the ones that become legislated and if and how they are implemented.

Linked to interests are inequalities in decision-making processes – what we have equated here to **political inequality**. In particular, inequality of voice (i.e. the ability to bring up issues and

interests, particularly through participation), representation (i.e the ability to be represented in the absence of voice), treatment (i.e being discriminated against and/or actively excluded) and influence (i.e. access to decision-makers and the ability to influence them) can all impact policy (in)coherence. Such dimensions of political inequality can also drive (in)coherence at different policy stages. The latter include the emergence of problems, agenda-setting, the consideration of policy options, decision-making, implementation and evaluation. In the following, we identify important political drivers of incoherence related to the coal phase-out and the onshore wind phase-in of Germany's Energiewende.

Political drivers of incoherence in the Energiewende

The coal phase-out

Owing to national resource endowments, coal has long been a critical resource for energy production in the country and has thus enjoyed special status in German energy policy. First framed as a driver of economic prosperity and energy security (an "idea"), parliamentary debates on coal have only shifted towards the energy transition in more recent decades due to rising environmental and climate concerns (Müller-Hansen et al., 2021). Ideas around unemployment are especially critical to the overall focus of the Energiewende, with claims that the coal phase-out in Germany has become highly politicised, in part, due to the experience of massive unemployment from drastically reducing coal production in eastern Germany in the late 1990s. It is often overlooked that far fewer coalminers would be left unemployed now than were during that time. In addition, fears of the rise of the far-right Alternative für Deutschland (AfD) party in eastern Germany have been used as recurrent arguments to favour job security in coal.

Questions arise as to why the 2038 deadline to phase out coal is incoherent with Germany's ambitious climate targets. The interests of several corporate actors – not least coal mining and utility companies – are well-embedded in Germany's political economy. Indeed, the privileged – and to an extent monopoly – position of energy companies such as RWE (which is headquartered in the NRW city of Essen) reflects its well-known ties to regional and state politicians and the parties they belong to. Known informal meetings between top-level state ministers and RWE in the lead-up to the Coal Commission's release of its conclusions raise important questions about differentiated abilities to pursue interests and, consequently, about inequality of influence. Questions about inequality of participation also feature here, with critiques that civil society was given ambiguous information – sometimes provided too late – to adequately address the Commission's recommendations. In addition, interests are also held by many municipalities in NRW who own shares in RWE, leading to financial dependencies (i.e. these municipalities often depend on the company to do well to cover their own projects). RWE itself is something of an "institution" in the state, earning respect and support through social projects (such as building schools and hospitals), the re-naturalisation of formerly mined land and growing investments in renewables. In addition, unions' interests have managed to have a commandeering effect on the coal exit policy process through so-called labour power (Prinz & Pegels, 2018). Such interests – highly centralised – have disproportionate influence on decision-making.

Furthermore, although the setting-up of the Coal Commission – by former Chancellor Angela Merkel's government in 2018 – was motivated, in part, to fulfil climate mitigation targets, it did not readily integrate climate justice notions into its conclusions, despite representation of environmental organisations such as the Bund für Umwelt und Naturschutz (BUND), which has strong views on climate justice. In addition, the Commission did not incorporate ideas of a Just Transition for groups other than German coalminer workers, such as those in other sectors or residents living close to coal mines and their facilities. This is tied to an issue of representativeness. The fact that youth were not part of the Commission at all (when

they have the most to lose from a delayed coal phase-out), and that only 10 of the 31 members were women, raises questions about the political (in)equality of representation, particularly at the stages of agenda-setting, the consideration of policy options and decision-making. In addition, industries that will be directly affected by the coal phase-out – such as steel or renewable energy – were not specifically represented, nor were non-coal regions. Indeed, the committed €41 billion to be spent in coal regions for structural trans-formation has led to criticism from other states in the country also in need of financial support to weather the transition. Little consideration, too, was given to those beyond Germany's own borders (i.e. a delayed coal phase-out in a highly polluting country such as Germany has implications for global emission reductions), with climate injustice consequences. For example, Datteln IV relies on hard coal imported from Colombia to operate, thus it is tied to the displacement of thousands of people in the country (BUND, 2020). The case represents a hard coal mining phase-out domestically but not a hard coal burning phase-out internationally. Questions about representativeness, however, are being increasingly addressed. For example, in summer 2023 the NRW State Youth Council launched a consultation with youth – under the motto #MitmischenNRW (i.e. "get involved") – to help shape the NRW Sustainability Strategy. Such an initiative is a welcome step in the right direction.

Another positive development – and coherent with federal climate goals – has been the decision to bring forth the 2038 deadline to 2030 to phase out coal in NRW. However, this came as a result of a *political agreement* between RWE, the NRW government and the federal government – an agreement that remains unlegislated and contains a risk of revocation. This agreement also included the provision that Lützerath would be demolished (though other villages saved) to extend the opencast lignite mine of Garzweiler II, raising other issues of inequality. Furthermore, there is little discussion on what exactly coal is supposed to be replaced with for combustion purposes, nor how a

greater reliance on fossil gas (considered a less carbon-intensive resource than coal or oil) will affect methane emissions.

The ongoing – albeit decelerating – onshore wind phase-in

A commitment to accelerate the phase-in of renewables through the Easter Package – and rapid decision-making on this front – has, in turn, led to increased coherence with federal climate targets, at least in policy content. However, resistance to wind and the resistance of residents to nearby construction of new wind parks continue to be important barriers to accelerating onshore wind in Germany. The 1,000 m federal rule implemented in many of the *Länder* (German states) – and the more stringent 10-H rule in Bavaria (i.e. the distance between a wind turbine and a residential building must be at least 10 times the height of the turbine, blades included) – elucidates the power of ideas and interests against wind, even if they are held by few. Indeed, most people in Germany – though arguably those that are not affected by the disruptions that onshore wind projects entail – are in favour of renewable energies. In addition, public acceptance has only heightened since Russia's aggression in Ukraine (AEE, 2022). Those that oppose wind are usually those for whom the costs – particularly burden distributions – outweigh the benefits. In addition, auctions (i.e. an "institution") to deploy additional GW of onshore wind capacity have been under-subscribed. In 2022, only half of the 3 GW of capacity offered for tender were auctioned, and even the 3 GW amount was excessively below the federal target of expanding onshore wind by 10 GW per year (in 2023, 12 GW are being offered in comparison). Licensing bottlenecks have been cited as key obstacles to more successful bids.

Importantly, the 1,000 m rule highlights the role of federalism (i.e. another "institution") in driving incoherence in the Energiewende. Power plays between states and federal bodies, as well as political parties, appear to be part and parcel of Energiewende politics, especially given that insti-tutional mechanisms to ensure vertical coherence

appear to be lacking. In addition, the German energy system – both centralised and decentralised – grants municipalities significant power to make decisions about energy matters, despite issues of capacity and finance. None-theless, although the onshore wind phase-in is easier in municipalities where land is municipality-owned, the planning regime for wind farms is tightly subservient to the rights of private land-owners (with much of the land in the country being privately owned, especially in western Germany). A lack of transparency over land ownership means landowners' interests can more easily prevail over federal or regional policies to phase-in wind. The situation is aggravated by the fact that resistance to wind often translates into strong political campaigning, with municipal leaders often being pressured to conform to local anti-wind interests. These problems have been compounded by growing criticisms of the inter-regional inequalities at play, given onshore wind's differentiated burdens and benefits (Reitz, Goshen, & Ohlhorst, 2022), as well as rural–urban divides (i.e. electri-city produced by wind energy is often consumed in regions where it was not produced). Inequalities of representation (i.e. of wind supporters) and influence also feature here.

Wind companies, too, have their own interests (despite being far more decentralised than those of coal), and these can clash with those of biodiversity conservationists. Containment or mitigation schemes to avert bat collisions were only introduced in Germany in the late 2000s, meaning wind turbines from before this time – around 15,000 to 20,000 remaining in the onshore sector – continue to operate without a scheme. Wind companies' opposition is due, in part, to the fact that such schemes can accrue revenue losses of 1-2 per cent annually, given the reduced speed at which wind turbines have to operate to reduce collision risk. In allowing wind turbines on land protection areas, the Easter Package could deter the full implementation of strict uniform standards to assess collision risk. This would result in gains for wind companies and their interests, and losses for biodiversity and conservationists.

Indeed, biodiversity concerns appear to have been sidelined in practice in favour of energy security and climate action. That the European Commission has taken Germany to court for failing to implement the 1992 EU Habitats Directive is telling of a broader historical neglect of biodiversity issues. Furthermore, the speed at which the German government has developed energy policy in the last year has led to the exclusion of many civil society organisations (including biodiversity groups) in consultations and decision-making processes, elucidating inequali-ties of voice, representation, treatment and thereby influence.

Not only do these inequalities undermine demo-cratic practice, but they also raise the question of whether the government (as claimed) is truly considering both the climate and biodiversity crises to be of equal importance, or whether the need for energy security (both an "idea" and "interest") has instead trumped all other Energie-wende policy areas. The latter would be unsurprising in light of the *Zeitenwende* – a complete U-turn in German defence policy announced by Chancellor Olaf Scholz in the wake of Russia's invasion of Ukraine – which has been accompanied by a quick and reduced dependence on Russian oil and gas. Rapidly phasing-in onshore wind – and, in the case of NRW, lifting the 1,000 m rule – are key policies towards this end.

Opportunities for greater coherence

In 2022, the federal government made welcome steps in the right direction to meet its ambitious climate targets, and to ensure the country's energy security. The NRW government, too, has made important commitments – to phase out coal by 2030 and eliminate the 1,000 m rule – in recognition of the state's crucial role in meeting federal goals. Although Russia's aggression in Ukraine has highlighted the need for greater coherence in Energiewende policy, there must also be a vision to ensure ongoing coherence in the long term, both horizontally (between ministries and departments) and vertically

(between federal, state and municipal governance levels), as well as in its implementation. This is especially important given the widespread support for climate action and the Energiewende in the country. The newly created NRW Advisory Board on Sustainability is well placed to bring in new perspectives given its cross-sectoral and transdisciplinary nature, and it can inform the state's policy output and implementation.

As this brief has shown, coherence is being undermined by various ideas, interests, institutions and political inequalities that continue to block policy implementation in the Energiewende. Although these cannot all be realistically tackled, they can be, at a minimum, mitigated, if federal and state governments make a political commitment towards policy coherence, as the OECD has long asked of its members. In NRW in particular, the government must learn from past instances of policy incoherence and ensure coherence by truly phasing out coal by 2030 and lifting the 1,000 m rule, as promised. A commitment to both should be made explicit in the revised NRW Sustainability Strategy and legislated by the NRW government and the state parliament (i.e. the "*Landtag*"). A similar recommendation – to make the coal phase-out by 2030 legally binding – was made by the #MitmischenNRW youth project to inform the Strategy. Eliminating the 1,000 m rule in particular is in line with statements in the current Strategy outlining the "outstanding importance" of renewable energies "for the sustainable energy supply" in the state (Nachhaltigkeitsstrategie NRW, 2020). Lifting the rule will also drastically reduce the need to use land protection areas for wind generation, creating gains for species of birds and bats, among others, and broader biodiversity. This can also contribute to new afforestation targets.

Political drivers of policy incoherence can also be reduced by ensuring greater political equality – of voice, representation, treatment and influence – at all stages of policy-making decision processes and across all governance levels (federal, state and municipal). In particular, ensuring equal voice in current participation platforms and in new formats, such as in citizens' assemblies based on representation provisions that ensure all segments of society are included, is crucial for the sharing of benefits and increasing acceptance for policy change. Similarly, guaranteeing equal access to decision-makers and the ability to influence through adequate – and timely – consultation mechanisms will strengthen the democratic process (and reduce trade-offs between quick decision-making and democratic practice). For example, creating spaces for those affected by phasing out coal – other than coal workers – can lead to new ideas for structural transformation and create better political leverage in the transition. As such, promoting real and meaningful political equality (and not just equality on paper) can be an overarching aim of the updated NRW Sustainability Strategy, in line with existing companion civil engagement and mobilisation strategies. In addition, potentiating bottom-up processes (which is how the Energiewende first started) to incentivise decentralised, citizen-led energy (and, importantly, the sharing of profits) can also lead to greater ownership of the phase-in of renewables, and hence enhance political voice, participation and influence. Strengthening such mechanisms will be key to ensure that any additional trade-offs are identified, and that they do not, at a minimum, deepen within-country inequality (in its many dimensions). These mechanisms can also offer in-between solutions to counter trade-offs between broad stakeholder participation and the speed and urgency that the Energiewende requires.

Finally, notions of social and climate justice should be better integrated in current Energiewende policy and planning if the transition is to be more than a merely technical process. For example, procedural justice (i.e. how decisions are made and by whom), distributional justice (to fairly allocate costs and benefits) and recognition justice (i.e. adequately recognising all actors affected) should be better addressed. They should also be integrated into the updated NRW Sustainability Strategy if the latter is to be a roadmap for a broader Just Transition. Currently, the justice

component of the coal phase-out remains heavily centred on workers (who represent only one demographic of German society) and coal regions. Additional justice measures (and policy targets) to address trade-offs for other groups, such as young people, and other regions are needed. In addition, trade-offs for those living beyond Germany's own borders must be acknowledged and mitigated if the Energiewende is to be a just one for all, and especially for those with less capacity to adapt to climate change. This is particularly crucial if Germany is to contribute to the 2030 Agenda's overarching aim of "leaving no one behind" – both within its own borders and beyond – while fostering international cooperation and maintaining its reputation as a global climate leader.

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