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Navigating the Green Transition: Comparative Labour Market Policy Responses and Processes in France and Germany

Leonie Westhoff and Harry Crichton-Miller





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NAVIGATING THE GREEN TRANSITION: COMPARATIVE LABOUR MARKET POLICY RESPONSES AND PROCESSES IN FRANCE AND GERMANY

Leonie Westhoff and Harry Crichton-Miller



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1. Introduction

The green transition, that is, the broad set of policy responses to mitigate climate change and transition to a sustainable economy, is associated with significant social, economic, and industrial transformation, with notable upheaval in the labour market. On balance, across the economy, research tends to project that the green transition will have a modest impact on total employment, with some even foreseeing aggregate job *creation* (Galgóczi, 2019; Cedefop, 2021; Vandeplas *et al.*, 2022). Yet, employment effects will be unequally distributed across sectors, regions and socio-economic groups (Galgóczi, 2022; ILO, 2022; Bluedorn *et al.*, 2023). Further, some existing sectors, such as the automative industry (Galgóczi, 2023) or construction (ILO, 2022), do not face extinction but face the prospect of significant transformation, even as new sectors are emerging (ILO, 2022).

Against this background, a growing body of research is concerned with the connection between environmental and social policy. These policies, in the past, were pursued separately, with trade-offs implicitly seen between the two (Gough, 2019). Yet social and ecological risks are linked and may amplify each other, leading to a growth in 'eco-social' policy strategies that seek to leverage complementarities and tackle the two together (Fritz and Lee, 2023). At European level, the narrative of the "just transition" is gaining significant momentum, along with some eco-social instruments such as the 'just transition fund' or 'social climate fund', as concern about the distributional implications of the green transition grows (Sabato, Mandelli and Jessoula, 2022). The incorporation of 'just transition' components into several Member States' 'National Recovery and Resilience Plans' is further evidence of the growing use of eco-social policy design (Theodoropoulou, Akgüç and Wall, 2022).

In this context, recent scholarship has sought to explore how policies that integrate ecological and social objectives may be developed and what the role of the welfare state could – and should – be in the ecological transformation (for an overview, see Bohnenberger, 2023).



However, while work on the normative foundations and conceptual elements of ecosocial welfare states is rapidly expanding, relatively little comparative empirical research on eco-social policy responses to the green transition and how they are developed exists to date (Mandelli, 2023; Zimmermann, 2024). This is the gap this paper seeks to address, with particular focus on policies for the green *labour market* transition, given its important role in the green transition, and it being a space for the intersection of ecological, social and economic concerns.

Our aim is two-fold. First, we seek to map *which* policy strategies are being pursued by European countries aiming to address the labour market effects of the green transition¹. Second, we seek to understand *how* these policy responses to the green transition are being developed and potential enabling factors in the policymaking process, focusing in particular on the role of stakeholder coordination therein. Our aim is therefore not to engage in discussions on the merits of the policy strategies adopted or to establish causal mechanisms behind choices of certain policy strategies over others, but rather to develop an analysis, both of current areas of policy focus and strategy, and, separately, of the institutional factors that shape, enable, and hinder the development of said strategy.

To answer our research questions, we apply a 'Varieties of Capitalism' theoretical framework to understand how different political economies solve the coordination problems of structural change such as those within the context of the green transition. This provides the basis for our case selection of France and Germany, the former being a 'mixed' or archetypal 'statist' market economy, and the latter being an archetypal 'coordinated' market economy. We then conduct a qualitative comparative analysis of our two cases, first undertaking an extensive review of academic and grey literature, before conducting interviews with national-level experts and policy stakeholders to gain insight into the policy development processes.

Our analysis provides two key contributions to previous literature on labour market policy responses to the green transition. First, it provides a novel comparative empirical

¹ By 'strategy', we mean the broader approach taken by Member States, rather than looking at individual policies in isolation.



account of policy strategies adopted in response to the green labour market transition in two large European economies. Second, it illuminates not only the content of these policy responses, but also the institutional process in which they are developed. In particular, our analysis enables us to analyse ways of stakeholder coordination and interaction in policy development and the extent to which they are an enabling factor or barrier to the development of a green labour market policy strategy. In doing so, it provides novel empirical evidence on the current state of green labour market policy in Europe and potential for future development.

The rest of this paper proceeds as follows. We first review the literature on the green labour market transition more broadly, focusing on the conceptual definition and categories of eco-social (labour market) policies that we use to map green labour market policy strategies in Germany and France. We also build theoretical expectations on how different institutional configurations shape the ways in which different political economies respond to critical transformations, such as the green transition. We then provide some background information on the labour market structure and institutional characteristics of our two country cases and describe our empirical strategy. We then present our empirical findings, before discussing the implications of those findings for our research questions and further areas for research.

2. Approaches to labour market policies for the green transition

2.1. Conceptualising labour market policies for the green transition

To enable an analysis of current labour market policy design as it relates to the green transition, we first draw on the notion of 'eco-social' policy. The growing recognition of the interconnected nature of environmental and social risks has spurred increased conceptual scholarship on and design of interconnected green transition policy responses, commonly termed 'eco-social policy' (Bohnenberger, 2023). While there is some debate in the eco-social scholarship over the inclusion of economic growth in eco-social policy – notably that some scholars do not (e.g. Gough, 2022)– we seek to apply a



framework that includes growth-oriented approaches, so as to be most empirically valuable. We thus draw on Mandelli (2022), who defines eco-social policies as "public policies <u>explicitly</u> pursuing both environmental and social policy goals in an <u>integrated</u> way [our emphasis]" (Mandelli, 2022, p. 334).

On Mandelli's analysis, eco-social policies can be categorised according to two dimensions; Firstly, according to the 'direction' of policy integration – either a social dimension is added to or incorporated into existing environmental policies (reactive integration), or an environmental dimension is added on to existing social policies (preventive integration). This highlights the "core rationale of an eco-social policy" - greening' the welfare state or 'socialising' the eco state (Mandelli, 2022, p.341). Second, eco-social policies can be categorised according to the stated objective of the policy; either with a protective function – aiming to cushion individuals from the negative impact of green challenges – or an investment function – aiming to enhance individuals' ability to live and work in a green society. While there are some differences, eco-social policies with a protective and investment function are commonly associated with passive and active labour market policies respectively.

	Passive labour market policies	Active labour market policies	
	(protective function)	(investment function)	
	Concil protoction policies to suching		
"Socializing"	Social protection policies to cushion	Active labour market policies to strengthen	
environmental	workers from the potential negative	the capacity of workers affected by green	
policies	impact of climate change or the green	transition policies to participate in a green	
(reactive	transition on their labour market	labour market	
function)	position		
,			
Example	Income support measures for workers	Reskilling programs for workers facing job loss	
	facing job loss due to decarbonisation	due to decarbonisation measures in their sector	
	measures in their sector		
"Greening"	Redesign of social protection policies	Redesign of active labour market policies	
social policies	to reduce the environmental impact of	to reduce the environmental impact of	
(preventive	labour market participation	labour market participation	
function)			

Table 1 – Categories of eco-social labour market policies for the green transition	THA OLI I		a second and a second second
	Table 1 – Categories of eco	-social labour market	t policies for the green transition



Example	Long-term income support to allow working	Integration of sustainability skills into vocational
	time reductions	education and training

Source: Author's elaboration, adapted from Mandelli (2022)

Table 1 presents this typology as it relates to labour market policies for the green transition, with examples of potential policies. It should be stressed that these different types of policies are not mutually exclusive; national policy strategies may involve different types of eco-social labour market policies (see, e.g. Pignatti and Van Belle, 2021).

To elaborate further, first, the *investment* dimension of eco-social labour market policy has synergies with active labour market policy (ALMP) instruments – those measures that aim at removing obstacles to entering and remaining in the labour market (Scarano, 2022) – insofar as it aims to better equip individuals to work in a green labour market.

Reactive investment measures therefore may include training programmes or job search assistance aimed at re-skilling workers affected by labour market restructuring caused by the green transition, especially those most urgently in need of support (Keese and Marcolin, 2023). In this sense, an environmental policy (the transition towards a lowcarbon economy) has a labour market dimension (employment support for workers who are at risk of labour market disadvantage due to this transition) to better achieve its objectives, as well as ensure popular support for the green transition (Mandelli, 2022).

Preventive investment measures also aim to better prepare individuals for green labour markets, but with a broader scope, going beyond immediate or urgent risks to look at larger-scale or forward-looking policy measures. Notable measures might include the broader system of adult learning and vocational educational training (VET), or investment in the creation of green jobs and the development of green education and training programmes. In this sense it is an existing social, labour market policy (VET and education), accompanied and expanded by an environmental dimension (a specific focus on sustainable and green occupations and skills).

Second, eco-social labour market policy may also have a *protective* function. This protective function is more commonly found associated with *passive* labour market policies – generally understood as policies to replace income during periods of



joblessness or job search, including unemployment insurance or assistance and early retirement (Pignatti and Van Belle, 2021).

Reactive protective LMPs mainly seek to cushion individuals from the negative effects – especially employment effects – of both environmental issues and policies. This may, for example, take the form of income support or early retirement measures for workers in sectors such as coal, which are facing significant losses in employment due to the green transition.

Preventive protective eco-social LMPs, in contrast, refers to potential ways of modifying labour market systems in order to enable more sustainable ways of working. Policies going in this direction, mainly discussed in the literature on sustainable employment, include, for instance, unconditional basic income to support working time reduction (Bohnenberger, 2022). Other aspects, like job quality in the context health and safety adaptations to extreme, climate change-driven weather patterns, we exclude as they do not directly seek to reduce the environmental impact of labour market participation, but rather ensure labour market participation despite environmental degradation.

2.2. The role of institutional coordination mechanisms in eco-social policy development

In the growing eco-social policy scholarship, attention is increasingly turned to the question of how and why different labour market policies for the green transition are developed. Scholars have argued for various theories of welfare state development, including a functionalist view of policy change caused by the development of new green social risks and actor-based explanations focusing on the role of power resources (Mandelli, 2023; Zimmermann, 2024). In this paper, we explicitly do not seek to develop a comprehensive theory of social policy development as it relates to the green transition or to identify specific causal mechanisms behind the adoption of specific policies, both of which lie beyond our scope and aims.

We seek, by contrast, to contribute to this emerging field of scholarship by exploring the extent to which the structure of stakeholder coordinating institutions can be a potential enabling factor for managing structural transformations like the green transition. To this end, though we consider the process of social policy development a multifaceted



phenomenon, we draw on the literature on the Varieties of Capitalism as our main analytical frame of reference.

The Varieties of Capitalism ('VoC') approach (Hall and Soskice, 2001) examines variations in the institutional, structural, cultural patterns of production and coordination within a political economy at the national level, distinguishing between liberal market economies (LMEs) and coordinated market economies (CMEs). While it takes a firm-centric perspective, it identifies five key coordination problems that are addressed differently depending on national institutional factors, namely industrial relations, vocational training, corporate governance, inter-firm relations, and employee satisfaction. Many of these, particularly vocational training, relate to key issues of labour market policy (Bosch and Charest, 2008). In the former, competitive market arrangements are the primary mechanism for coordination, whilst in the latter, non-market institutions, actors and relationships – notably employers' associations and trade unions – play the central role in the coordination of economic activities (Culpepper, 2001; Thelen, 2001). Different types of market economy tend to be associated with specific types of welfare states and labour market institutions (Estevez-Abe, Iversen and Soskice, 2001; Stewart Wood, 2001).

While Germany is most frequently presented as the archetypal CME, and the USA or UK the archetypal LME, the Soskice and Hall LME-CME spectrum is broad, seeking to account for most market economies, with anomalies classified as 'mixed-market economies' despite significant differences (Schmidt, 2003; Hall and Gingerich, 2004; Royo, 2008; Nölke and Vliegenthart, 2009). Some scholarship argues there are meaningful institutional similarities between some of these anomalies, such that three (Zysman, 1983; Schmidt, 2003), four (Boyer, 2004), or even five (Amable, 2000) varieties should be recognised within the broad Varieties of Capitalism approach.

In particular, the LME-CME dichotomy struggles to account for are those where the state, more than other non-market actors, plays an active, intervening role in coordination between key actors, like France, Italy, or Spain (Soskice and Hall, 2001; Della Sala, 2004; Schmidt, 2012). Scholarship after Soskice and Hall thus often makes use of a third, 'active-state' category, such as the "public-institutions-based model", the "developmental state", or "state capitalism" (Amable, 2000; Schmidt, 2003, 2012; Weiss,

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2003). In this study, whilst we borrow strongly from the Variety of Capitalism framework as an analytical tool, we also depart from it in this way, following political economy approaches that seek to integrate this third 'state-influencing' category into their market economy typologies, and capture the important role states place in the coordination processes of these countries (Zysman, 1983; Coates, 2000; Boyer, 2004).

The state may be considered largely 'hands off' in an LME – once it has set rules and acted to preserve markets – and 'enabling' in an CME – facilitating firm-labour, non-market collaboration. By contrast, in a 'state-influencing' market economy (SME), the state, unsurprisingly, influences, intervening where it sees fit in non-market coordination processes, driven by a hierarchical, rather than collaborative, logic that may nationalise industries, re-orient markets and set wage-coordination mechanisms (Soskice and Hall, 2001; Howell, 2009; Schmidt, 2017).

Within this study, we seek to investigate whether different types of market economy have institutional comparative advantages over others when it comes to navigating structural changes, and specifically the structural changes of the labour market linked to the green transition.

We posit that CMEs' well-established, institutionalised coordination mechanisms may function as an institutional comparative advantage and enabling factor for CMEs in such transformations, and that SMEs' more centralised system, with less institutionalised non-market, non-state coordination mechanisms, instead functions as a limiting factor.

As highlighted above, in CMEs, organization of labour market activities depends upon collaboration with organized labour (Stewart Wood, 2001). Where coordinating partnerships between stakeholders, their representatives, and an enabling state are institutionalized, scholarship suggests that transition policy may be more effectively developed, because there are more institutions for deliberation, coordination and collaboration regarding transitioning. Further, there is research to suggest that SMEs tend to have weaker social partners, in a way that may limit their capacity to drive socioeconomic change and hinder policy development (Grossman and Saurugger, 2006; Woll, 2009). As Woll notes, "With a strong central government and a highly technocratic tradition, interest groups had but a marginal role to play in the policy-making process [in



SMEs], and "consultation only supplements bureaucratic decision-making" (2009, pp. 2– 3).

Indeed, that some coordination institutions may be more suited to structural transitions than others is an idea first suggested by Hall and Soskice, who note that "deliberative institutions can enhance the capacity of actors in the political economy for strategic action when faced with new or unfamiliar challenges. [...] deliberation can be instrumental to devising an effective and coordinated response, allowing the actors to develop a common diagnosis of the situation and an agreed response" (Hall and Soskice, 2001, p. 12).

There is scholarship suggesting this is the case in broader contexts of uncertainty and structural transition – such as the global financial crisis (Jabko and Massoc, 2012; Delpech *et al.*, 2016). More explicit focus in scholarship on the green transition is growing, though largely limited to vocational educational training – for example, Stroud et al. (2014, p. 21) look at the (re)development of (green) industrialisation skills strategies in three former industrialised regions, concluding that "key to any effective transition is collaboration between a range of relevant stakeholders, including representatives of employers, trade unions, community groups, different levels of government (namely regional and local) and educational institutions". Antonazzo *et al.* similarly conclude that the key factor for success in VET system reform for adaptation to technological transformation across different market economies is the "[...] institutionalisation of unions' participation in different domains of the political economy, particularly their incorporation in formal feedback mechanisms" (2023, p. 40).

Nonetheless, this research is limited, especially with regard to structural change like the green transition beyond vocational educational training, and it largely confines itself to comparisons between CMEs and LMEs. Whilst still beyond our scope to posit causal relations, we thus seek to build on this body of research so as to investigate the role of institutional coordination mechanisms, as present in coordinated market economies, can be a facilitating factor in managing transformative change processes related to the development of eco-social labour market policy.



3. Case Selection and Methodology

3.1. Case selection

Given the complexity involved in understanding the type of market economy, comprehensively mapping all elements of the policy strategy, and its role as an enabling – or hindering – factor in managing structural changes such as the green transition, in the context of eco-social labour market policy, we limit our analysis to in-depth qualitative comparison of two country cases: Germany and France. These two countries make natural cases for comparison, comprising two of Europe's largest economies and labour forces, and both with large, albeit significantly diminished, industrial and coal sectors. As such, mapping the labour market policy responses to the green transition in these two countries is of substantial interest. Further, they have some strong institutional and historical similarities but differ in the type of market economy they are each considered archetypical of – with differences in their collective bargaining systems that reflect this. Such variation offers a chance to explore the institutional factors that facilitate or limit labour market responses to structural transformation in the context of the green transition.

In the following section we elaborate on the institutional similarities between France and Germany, before comparing the modes of capitalism embedded and employed within each country, so as to motivate our use of them as case studies.

Firstly, both countries have similarly structured labour forces: Both are commonly understood to be social market economies, with highly educated labour forces, high levels of investment and developed infrastructure (Culpepper, 2001). Both have undergone periods of high unemployment and low growth, addressed by reforms broadly advocating deregulation, greater reactivation in labour market policy, and modernisation of collective bargaining processes all whilst protecting core national industries (Palier and Thelen, 2010; Nikolka and Poutvaara, 2019).

Further, France and Germany share a style of welfare regime, both traditionally seen as 'corporatist-conservative' (Esping-Andersen, 1990). Both involve a Bismarckian form of social protection wherein employers are heavily involved in the funding and provision of welfare to their employees, particularly of the male 'breadwinner' (Lewis, 1992; Starke,



2022), and a horizontal emphasis on status- and income-preservation over other objectives like poverty alleviation or redistribution (Esping-Andersen, 1990).

Finally, whilst both France and Germany also have deeply institutionalised industrial relations and collective bargaining systems, there are two key differences: First, whilst in France working conditions are derived primarily from the state and legislation – especially the Labour Code - in Germany, industry-level collective agreements are the core of labour regulation (Delpech et al., 2016, p33). Secondly, The German collective bargaining system is one traditionally characterised by decentralization, with core industries playing a key 'pacesetting' role in a system of pattern bargaining, and firm-level derogation encouraging greater internal flexibility available since the 1990s (Wood, 2001; Addison J.T. et al., 2010; Palier and Thelen, 2010). By contrast, the French 'tripartite' system is more centralised, with the state playing the pace-setting role via public sector pay and minimum wage legislation (Howell, 2009; OECD and AIAS, 2021). This can limit the scope of social partners, whose agreements may be superseded by government and national regulation, for instance on minimum wage (Bonoli and Palier, 1996; Nikolka and Poutvaara, 2019), though recent reforms have sought to emulate the German system (Delpech et al., 2016; Rehfeldt and Vincent, 2018). Further, fragmented trade unions, complex legislation, and prior poor-quality labour relations hinder this shift (Rehfeldt and Vincent, 2023). Germany's highly autonomous federal states, compared with France's more centralised governance system, also complement and facilitate this decentralisation with regards to collective bargaining (Woll, 2009; Palier and Thelen, 2010).

A potential criticism of our case selection might be to argue that France no longer qualifies as an SME, given the substantial liberalisation of the French political economy of the last 30 years (Woll, 2009). Whilst beyond the scope of this study to address this argument in full, we hold that key, salient, state-influencing features still endure today. Scholars such as Woll (2009), Massoc and Jabko (2012), and Schmidt (2017) argue the French market economy is now distinctly 'post-*dirigiste*', as institutional and historical legacies continue to have an effect, despite changes. As Schmidt says, "even as the state has given up on organizing management–labor relations, its involvement is even more



necessary for purposes of coordination" between weakened employers organisations and fragmented labour unions (Schmidt, 2017, p. 624).

3.2. Methodology

Having chosen our cases for detailed examination, we apply our analytical framework to both cases.

We first conducted a systemic review of key academic and policy literature on green labour market policy in both France and Germany, making particular use of grey literature to map the contours of the policy strategies and build a 'state of the art' of the current set of policy instruments in each case. In this sense, official documents, national and international reports, and the associated laws and regulations themselves were the key object of focus. Additionally, our semi-structured interviews were conducted with country and green labour market policy experts, who were encouraged to send any additional material to ensure no parts of the key policy responses in either France or Germany were omitted.

Our interest is in eco-social labour market policy, meaning that we confine ourselves to policy strategies that explicitly target the labour market, in line with the definition of ecosocial LMP as *explicit* and integrated (Mandelli, 2022). Thus, examining green policy measures, such as that which aims at reducing emissions, is beyond our remit in both countries, even in such cases where legislation may have an indirect impact on the labour market. The same is true for other policy fields that may indirectly impact labour markets, such as industrial or regional policy. Similarly, while this paper aims to identify policy strategies for the green transition and the policy making process, it does not seek to establish a (causal) relationship between types of institutional arrangements and types of policy strategy.

In addition to this extensive review of academic and policy literature, we conducted fifteen semi-structured interviews (seven in France, eight in Germany) with experts and key stakeholders. Their insights offered a more granular and textured understanding of the policy landscape, particularly of the policy *development* process. A variety of backgrounds – from academic experts to those working within relevant government departments and key trade union and employers' association representatives – were



interviewed to provide the broadest possible set of perspectives and stakeholders. Finally, we codified and analysed our interview findings according to our analytical frameworks. The following sections first present our findings – both a 'mapping out' of contours of the policy landscape in both countries, and a closer examination of the role of institutional collective bargaining policy development process, and the role of social partners and market economy structures therein.

Importantly, as is implicit thus far, we follow Soskice and Hall's approach (2001) in largely concentrating our analysis on policies and institutions at the national level. Whilst important regional variation exists, we believe this is justified as, not only would an analysis of all regional and sub-regional actors, policies and institutions be beyond the scope of this paper, but also as many of the key labour market, welfare state, and environmental institutions and actors largely operate at the national level.

4. Findings: Labour market policies for the green transition

4.1. Mapping labour market policies for the green transition in France and Germany

In this section we map the main elements of national labour market policy strategies for the green transition in Germany and France, according to the Mandelli (2022) framework presented. Again, this is explicitly not exhaustive, but rather serves to elaborate the analytical lines set out earlier, distinguishing between active and passive LMPs and their direction of eco-social integration.

First, in both Germany and France, our analysis shows that an overarching, deliberate strategy for the systematic integration of green and social objectives in the labour market does not yet exist. In both countries, awareness of the green labour market transition and associated transformation processes is high, with a lot of ongoing policy discourse. However, with regard to concrete policy strategy we do not yet find an integrated approach to eco-social labour market policy.



As stressed in interviews, in Germany, "the green transition [...] has started a huge debate [...] it's in my view much more debate than development" [DE-1]. As such there are "no deliberate [labour market] policy approaches towards the green transition" [DE-2], and policy responses address structural change more broadly – including digitalisation and demographic change [DE-2; DE-6; DE-7]. Likewise in France, interlocutors felt the green transition was largely overshadowed by the policy discussion around it, and fell short of an integrated, systematic approach to achieve eco-social objectives. One interviewee stressed that "from my point of view there is not a [national] green labour market policy" [FR-3], another claiming that "at this stage, we don't really have [such] a policy strategy" [FR-5], and a third suggesting that "we don't really have a vision, that is, there are only different visions" [FR-7].

Despite this, we have identified labour market policy measures have been introduced to address the labour market impact of the green transition, or structural labour market change more broadly. These findings are summarised in Table 2.

	Germany		France	
	'Protective'	'Investment'	'Protective'	'Investment'
'Reactive'	Limited	Well developed	Limited	Well developed
Example	Kurzarbeit	Qualifizierungschancengesetz	Transition Collectives	Congé de mobilité
'Preventive'	None	Developed	None	Developed
Example	N/A	Fachkräftestrategie	N/A	'CREFOPs'

Table 2 - Eco-social LM policies in France and Germany

Source: Author's elaboration based on desk research and semi-structured interviews

Perhaps unsurprisingly, we find that the focus is overwhelmingly on investment – *active* labour market policy – to encourage skills development for workers 'at risk' due to the green transition (e.g. DE-2; DE-6; FR-3; FR-4). Skills and training are the bedrock of both French and German LM policy responses, replicating the approach taking at the EU level (Petmesidou and Guillén, 2022). This is consistent with interviewees tending to identify labour shortages as one of the key issues the green transition is likely to aggravate [DE-1;



DE-6; FR-1; FR-3]. We also find an emphasis on 'reactive' investment functions over 'preventive' investment functions, that is, those social policy functions aimed at those who have lost or are at risk of losing their job due to the green transition, and in that sense incorporate a social policy dimension onto what are fundamentally green and environmental policy responses towards net-neutrality.

4.1.1. Reactive-investment labour market policies

Focusing first on the reactive dimension, in Germany, a number of new active labour market policy instruments have been introduced in recent years. In 2019, the Qualification Opportunities Act (Qualifizierungschancengesetz) introduced an up- and re-skilling subsidy for all employees exposed to structural labour market change (Strukturwandel), with measures co-financed by the employer (BMAS, 2024c). Subsequently, the Work of Tomorrow Act (Arbeit-von-morgen-Gesetz), introduced in 2020, further expanded the set of subsidies available (BMAS, 2024a). Most recently, the Act on the Strengthening of Vocational Education and Reskilling (Gesetz zur Stärkung der Aus- und Weiterbildungsförderung or Aus- und Weiterbildungsgesetz) relaxed the eligibility requirements for these subsidies, opening them up to all companies. However, it also introduced an additional qualification subsidy (Qualifizierungsgeld) for workers in companies at risk due to structural change², with the aim of enabling continued employment within the company following the reskilling process (BMAS, 2024b). Taken together, these legislative initiatives can be seen to constitute a paradigm shift in German ALMP design, in so far as they place new emphasis on skills development of all workers, including employees, rather than only jobseekers [DE-1; DE-6; DE-7].

France similarly priorities reactive investment labour market policies over others. The concept of professional reskilling (*reconversion professionnelle*) is well established in France, given its experience of phasing out and reskilling much of its coal industry (see Duriez and Hallak, 2022). The 2021 Collectives for the Transition (*transitions collectives*, or 'Transco') tool entitles 'at-risk' companies to receive funding for 24 months of reskilling training, a personalised careers advisor, and the maintenance of salaries, for all their

² Eligibility for the subsidy requires at least 20 per cent of workers in the company to show need for up- or re-skilling due to structural change within a span of three years (10 percent for companies with fewer than 250 employees).



workers who at risk of losing their job due to structural change. FNE-Formation, one of France's largest reactive investment public bodies, operates similarly, subsidising vocational training for employees of companies "in difficulty" who are "facing significant economic or technological changes" – *inter alia* the green transition – and need support in adapting.

As in Germany, together with the project for professional transition (*projet de transition professionnelle -* 2019) and employee reskilling mobility leave (*congé de mobilité d'un salarié -* 2018), two earlier policies on which the Transco policy is built, these policies constitute a new strategic direction in ALMP for its emphasis on the skills development of *employees* and not just unemployed people, even whilst using tools traditionally associated with reactivation [FR-3, FR-4, FR-5].

4.1.2. Preventive-investment labour market policies

Policies that have investment and preventive functions – 'greening' labour market policies to reduce the environmental impact of work – are also frequently used in both countries, particularly when incorporating green skills into the vocational education and training (VET) systems.

The German Skilled Labour Strategy (*Fachkräftestrategie*) identifies modernization of the apprenticeship system, including in view of the need for green skill development, as a key policy priority (BMAS, 2022). To this end, counselling and job orientation processes for young people are being strengthened to emphasize jobs relevant to the labour market transformation processes (Ibid.). In addition, in line with the strategy, curricular content for all apprenticeships within the dual VET has been revised, adding a strengthened component on environmental protection and sustainability, meaning that all apprenticeship teaching includes content on sustainable work patterns (BIBB, 2022).

The French vocational education and training system has also recently incorporated green elements. CPCs ('Commissions professionnelles consultatives'), 14 important sectoral committees comprising VET providers, social partners, and government, are tasked with adapting existing educational courses and qualifications to the future (CEDEFOP, 2022). One such adaption has been the inclusion of two new 'renewable energy technician' (post-graduate) qualifications following discussion with the

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construction <u>CPC</u>. Similarly, the national 'one young person, one solution' youth plan in 2020 aimed to improve VET to facilitate young people's entering the labour market, with an emphasis on integrating sustainability into these curricula.

4.1.3. Reactive-protective labour market policies

In comparison to this investment function, we identify a much less pronounced focus on the protective function of eco-social policy in both countries [DE-1; DE-6; DE-7; FR-1; FR-2; FR-4; FR-5]. In Germany, "when you think of passive labour market policies, there are no specific changes that are addressing the green transition" [DE-7]. Similarly in France; "I don't think [passive LMP is] a strategy, I haven't heard it described as an established strategy or as an intention for the sectors affected by the ecological transition" [FR-5].

Despite this we nonetheless identify *some* specific protective-reactive policy measures, tending to be deployed in tandem with *investment* reactive policy measures. This is the case, for example, with France's Transco, which offers a replacement wage for workers – cushioning them from the social implications of the green transition – whilst they are reskilling. Similarly, as part of the Work-of-Tomorrow Act, the German *Kurzarbeit* (short-time work) scheme has been expanded to be accessible to specific regions or sectors who are facing significant labour market disruption due to structural change, with the aim of keeping workers in employment and providing income support, cushioning them from environmental challenees (BMAS, 2024a). At the same time, it should be noted that the aim of this scheme is very much to use the time workers are in short-time work for retraining [DE-6].

In Germany, the most prominent example is also the unusual use of early retirement measures implemented in the transition away from coal (Galgóczi, 2014; Abraham, 2019). This included various agreements on managing the social consequences of the coal phase out, with early retirement support first introduced in 1972 and is still valid today (Baker *et al.*, 2023). In 2007, a tripartite agreement on the phase out of hard coal by 2018 stipulated various measures, including early retirement options for miners from age 49, as well as assistance in job relocation, training and transition support (Ibid.). Most recently, the German government agreed on the Coal Exit Law in 2020, which included the extension of transition payments to the lignite sector. These measures were further



developed through collective bargaining (IG BCE, 2024)³. While the French used a similar early retirement tool when it closed its own mines up to 2004, this is no longer in use retired (Duriez and Hallak, 2022)⁴.

4.1.4. Preventive-protective labour market policies

In neither France nor Germany do we find examples of significant national-level preventive protective policy measures [DE-2; DE-7; FR-3; FR-5]. This is despite some conversation about how to use social policy measures to support workers in living and working more sustainably. For example, in Germany, there has been some discussion of and sectoral trials on working time reduction. However, no such policies exist at national level and discussions generally are not framed around the green transition issue.

Overall, then, a strikingly similar picture emerges across both countries. Both countries lack an explicit, integrated picture of eco-social labour market policies. Further, eco-social policies are not explicitly developed, but largely involve adapting existing policies to the green transition context. Where they do emerge, there is an emphasis on measures with 'investment' and 'reactive' functions over 'protective' and 'preventive' functions, though the VET system is a well-developed site of eco-social policy with a preventive function. Finally, we observe an interesting paradigm shift in active labour market policy; making available reactivation policy tools, traditionally for those out of the labour market, to those still in employment but at risk.

4.2 Stakeholder coordination for green labour market policy in France and Germany

³ Some examples of early retirement policies can also be found in other sectors, at plant-level. For instance the VW transition to battery mentioned above included an early retirement option, which was accepted by 50% of eligible workers at the Braunschweig site (Bosch, 2023).

⁴ Whilst other early retirement policies, such as the '<u>congé de fin d'activité</u>' for truck drivers, do exist, and may be considered a form of protective policy, they are not eco-social, given the lack of explicit focus on the green transition.



In the previous section, we have mapped and categorized the labour market policy approach to the green transition currently employed in both Germany and France. In the following section, we turn our attention to our second key subject of research interest; how certain institutional mechanisms, particularly of stakeholder coordination, enable and drive the development of eco-social labour market policies.

We broadly find that the policy development processes in France and Germany function according to the hypotheses developed in Section 2.2, that, despite the new transition context, France functions as a state-influencing market economy (SME) and Germany as a coordinated market economy (CME). They particularly differentiate themselves from one another around six key themes, as elaborated in Table 3. In what follows, we first present the case of Germany, before turning to France.

Germany	France
Stakeholders formally embedded early in	Stakeholders consulted more ad-hoc
policy process; multilateral	though sometimes deeply; unilateral
Coordinating non-market actors	Coordinated non-market actors bypassed
empowered by the state	by state
Horizontal, multi-level governance	Vertical, centralised governance
Regional- and sectoral-policy common	Regional- and sectoral policy uncommon,
and facilitated by state; can shape	less well-developed; implementation of
national policy	national policy
Broadly unified, coherent policy strategy	Fragmented strategy, with multiple
	initiatives running in parallel
Stakeholder relations harmonious and	Stakeholder relations fractious and
consensus-building	misaligned

Source: Author's elaboration based on semi-structured interviews and desk research



4.2.1 Eco-social labour market policy development processes in Germany

We find that in Germany, policy development is fundamentally characterized by a multilevel process, with institutionalized spaces for interaction and deliberation between different stakeholders playing a prominent role [DE-1; DE-2; DE-3, DE-4, DE-6]. Legislative processes receive input from a number of stakeholders. Social partners have a formal and institutionalized role in consultation on legislative proposals, while there are multiple multilateral deliberation fora, such as the National Further Education Strategy (Nationale Weiterbildungsstrategie), for discussions on the green transition and labour markets [DE-2; DE-3]. The strategy was jointly created between federal ministries, Länder (regional govenrments) social partners, and public employment services, and is regularly updated as it serves as a space for discussion and working groups. Throughout, the emphasis is that the whole system is "from the beginning, aligned on and focused on collaboration and doing things together and finding a compromise [...] it's a process which is driven by a broad coalition of partners" [DE-6]. In this sense, our findings about the eco-social policymaking process are consistent with the established literature on this topic (Wood, 2001).

Stakeholder interactions at national level are complemented by interaction at lower levels, including the regional and plant level, which play a key role in the transformation process. Regions play a significant role in shaping national-level policy and can also introduce legislation independently to supplement the federal framework [DE-1]. The work of the public employment service also has a significant regional dimension, with local agencies who build local networks for transition [DE-6].

At plant level, collective bargaining also plays a key role. For instance, companies can conclude future agreements (*Zukunftsvereinbarungen*), negotiated between the company and the works council (or trade union), to jointly define parameters for the future development of the company in the transformation process, including for instance employee qualification (Scholz, 2021). For instance, in the German case, the chemical sector's 2019 collective bargaining agreement introduced a number of initiatives aimed at counselling and awareness-raising for skills development in the context of structural



change (BAVC, 2019). This even occurs at firm-level, with VW notably introudcing a retraining programme at several sites to facilitate the move towards battery production (Bosch, 2023). The federal government also seeks to actively facilitate collective bargaining at lower levels, for instance with the legislation on the qualification subsidy introduced in April 2024⁵ (Bundesagentur für Arbeit, 2024).

In coordinating on labour market policy for the green transition within and across the different levels of governance, stakeholders place strong emphasis on building compromise and joint solutions [DE-1, DE-6]. As one social partner put it, "we agree on the goal, not always on the path [...] but ultimately, the aim [of the different spaces for deliberation] is to achieve a result" [DE-3].

One interesting aspect reflected among interviewees was that the strong emphasis on compromise-building found in Germany can also be associated with a slower overall pace of change. Given that the complex nature of the multi-level system and the need for agreement by many stakeholders, progress on issues – including pressing issues such as the green transition – may sometimes be slower than desired, particular at the rate needed for eco-social policymaking [DE-3; DE-5].

In our analysis, many of the features identified in the Varieties of Capitalism theory are at play with regards to eco-social labour policy in Germany. The decentralised policymaking system characteristic of CMEs seems to operate with regard to eco-social policy; non-market actors are central, with multiple interviewees mentioning how strong a place they have in the policymaking process, legally involved from the outset, and even covering significant issues independently, without government involvement with regards to eco-social policy [DE-3, DE-5; DE-6] (Soskice and Hall, 2001).

What is more, and while beyond the scope of this study to conclusively state, the emphasis on stakeholder coordination and compromise-building found in the German context emerges as a strength in managing the transformational labour market change brought about by the green transition [DE-1; DE-2; DE-6; DE-7]. By involving all

⁵ For companies exposed to structural change stipulates that to be eligible, a need for qualification due to structural change needs to be agreed on in the company's collective bargaining agreement. For company's with fewer than 10 employees, a written declaration is sufficient.



stakeholders in the design of policy from the beginning, focusing on collaboration and taking different opinions into account, interviewees felt that the design of policy can be improved, and eventual acceptance can be increased [DE-2; DE-3; DE-6]. Citing a controversial reform, one interviewee said that "in the end this was a real success [...] because the different societal views on this highly contested issue had been taken into account and the final outcome [was] quite good actually" [DE-2].

Other experts interviewed explicitly linked this to the German institutional design, and its 'enabling' function (Soskice and Hall, 2001; Schmidt, 2017). "This is what Germany is good at, creating spaces for dialogue, bringing different actors to the table and working on solutions [...] this is something we are institutionally prepared for" [DE-3]; "the [German] state sets incentives for social partnership and then leaves it to social partners to design, to develop the responses and to design the policies" [DE-2]. Indeed, this is an explicit part of the policymaking process, with a policy expert remarking that "we're trying to let them find solutions because they are the most qualified experts in these sector specific topics." [DE-7].

4.2.2. Eco-social labour market policy development processes in France

The French eco-social policy development process also conforms to the hypotheses about SMEs generated in Section 2.2. Whilst the process often incorporates stakeholders' views, this can be done in a less systematic, institutionalised way, with non-market actors and regions playing a smaller role, and the state more hierarchical, leading to overall a more fragmented eco-social policy strategy and more fractious stakeholder relations, than in Germany [FR-3; FR-5; FR-6; FR-7]. The policy development landscape was frequently described as complicated by interviewees [FR-2; FR-3; FR-5; FR-6], with one summarising that "the answer is not simple because we are in France" [FR-3]. This reflects wider literature on labour market policy development in France (CEDEFOP, 2022, p.1).

Nonetheless, a picture of the landscape is visible, within which the public sector is the main actor, in particular the secretary-general for ecological planification and associated ministries (e.g. for education, labour, and energy). Associated public actors,



such as *France Stratégie*, the public body for developing a national skills strategy, the OPCOs ('Operateurs de compétences'), who support companies and sectors in making their own green transition, both financially and via their expertise, and ADEME ('Agence de l'environnement et de la maîtrise de l'énergie'), a public green industrial investment vehicle, also play vital roles. The state also has important powers to mandate collective agreements where stakeholders have failed, to new industries and geographic areas [FR-4; FR-6; FR-7] (ETUI, 2024). This legislative power is reflected in interviews – "[the strategy] is top-down and not bottom-up like in a real social dialogue, [...] it's from up there to down here" [FR-7].

Again, this suggest that France reflects the theoretical archetype of an SME with regards to eco-social policymaking, as encapsulated in Woll's description of a "strong central government and a highly technocratic tradition" (2009, p. 2; Schmidt, 2017).

Recent reforms have further pushed collective bargaining away from regional- or national-levels and towards the firm level (specifically 'comités sociaux et économiques') – especially the 'Macron Ordonnances' of September 2018, which assume the precedence of company-level agreements (ETUI, 2024), suggesting the comparatively marginal role that traditional social partners play in France (Grossman and Saurugger, 2006).

Nonetheless, social partners do formally have a role in legislation concerning of industrial relations, working conditions, employment, and training, and relevant company-level derogations must not be less favourable to employees than these agreements (ETUI, 2024). Yet even here, if an agreement is not reached, the government may bypass this system and unilaterally enact legislation [FR-4; FR-6]. Whilst most interviewees felt they were able to engage in the policy development process in this way, some felt stakeholder engagement was less deeply-tied to the process and could be heterogenous, depending on the relevant government body and even individual they faced [FR-4; FR-5; FR-6; FR-7]. This perhaps reflects the lower degree of coordination in the SME model in contrast to that in CMEs, where coordination is more institutionalised and less top down (Schmidt, 2017).



Importantly, almost all interviewees felt that the current response fell short of a unified, coherent approach that incorporated the diverse views of all major stakeholders. Many felt there was insufficient space for genuine, multilateral dialogue – "There isn't really a discussion at the national level" [FR-5] – something exacerbated by the sheer number of actors, structures, and stakeholders [FR-2; FR-6; FR-7]. These can even work against one get in another's way – "there will sometimes be competition between *branches* and a lack of coordination, meaning also [...] a lack of a common approach" [FR-4]. Discussions aren't usually multilateral [FR-4; FR-5; FR-7] – "unions can discuss issues with government, but bilaterally" [FR-5].

This issue has led to divergence in decarbonisation strategies in some contexts; "There is nowhere to discuss the gap between the two trajectories towards decarbonisation [of government and the private sector] in terms of economic transformation" [FR-6]. Nominal spaces, like the CSFs ('comités stratégiques de filière'), important industry-level committees for the co-construction of green transition roadmaps, exist, but "we don't use it to construct shared forward-looking visions for what kind of green transition we should do" [FR-6]. In some situations, this means that the social partners are less aligned than in Germany, and relations can be fractious – "in the energy renovation sector, there are major issues in cooperating with the employers' associations" [FR-2]; "it is clear that employers' associations want to do the green transition as minimally as they can" [FR-7]. Again, this reflects broader literature, such as the conclusions of the Conseil economique social et environnemental (Tutenuit and Mayol, 2024), and specifically the variety of capitalism approach (Woll, 2009; Schmidt, 2017).

Whilst interviewees noted that France was much more centralised (FR-1, FR-2, FR-5) at the national level than Germany, there are nonetheless important responsibilities at the regional level in France, though largely confined to implementation. For example, regions must develop their own plans towards sustainable development ('SRADDET') in line with national policy, and they conduct regional roundtables for the development of new green skills qualifications ('CREFOPS'), though they can only suggest new qualifications to national-level government. That said, multiple interviewees noted infrequent take-up of green transition objectives in regions, as the SRADDET has many competing objectives, including



infrastructure, territorial equality, and protection of biodiversity. This is even more the case with regards to labour market responses to the green transition, which is often dealt with only indirectly [FR-2]. FR-5 summarises that "there is a regional governance space, but it is not dedicated to the ecological transition, sometimes it takes up the ecological transition, but honestly in a very heterogeneous way".

In our analysis, there has been renewed effort put into the stakeholder coordination mechanisms of the policy development process in the French context [FR-1; FR-3; FR-4; FR-5]. Nonetheless, key stakeholders aren't always deeply integrated into the development of policy, or have multilateral discussion spaces [FR-4; FR-5; FR-6]. The confines of this current structure limit the development of an integrated and explicit ecosocial labour market policy strategy for the green transition, and may make the process more conflictual [FR-2; FR-3; FR-7].

The hierarchy within parts of the social dialogue space in France, particularly with a predominate state, appears to act as an occasional block on ensuring deep and effective stakeholder involvement, with stakeholders sometimes feeling like they have only been perfunctorily consulted. This appears particularly apparent in policy *implementation*, with green transition and social dialogue tools not functioning as designed, despite many that nominally would have these objectives.

Thus, overall, we find that the eco-social policy development process is one in which the institutional differences of CMEs and SMEs are starkly drawn out. Elements of hierarchy, inadequate coordination, centralisation with regards to sectors and regions, a lack of multi-lateral, multi-level fora for discussion, and an ever-present state come through across our analysis in France, while greater coordination, stakeholder engagement, institutionalised systems, regional and sectoral decentralisation, and multi-lateral discussion spaces are apparent in Germany.

5. Conclusion

This paper contributes to the emerging literature on social policy responses to the green transition by analysing eco-social labour market policy responses to the green transition



in two major European economies, and by examining the extent to which different institutional configurations for stakeholder coordination shape the policymaking process in this field, drawing on the literature on Variety of Capitalism as a theoretical lens.

Overall, we find that while awareness of the issue among stakeholders and at political level is high, policy responses are still in early stages of development, and strategies that comprehensively integrate environmental and social goals and engage with the specific challenges of the labour market impact of the green transition are (generally) lacking in both countries.

Of those policy responses, focus is overwhelmingly on active labour market policies, with an 'investment' function, and, further, skills development for the green transition. This is particularly with a 'reactive' function, being aimed at workers who are already vulnerable to negative impacts of green transition policy, such as in the case of the French 'Transco' instrument or German Qualification Opportunities Act. It is also frequently with a 'preventive' function – addressing the broader systems of VET and skills development – as in Germany, whose Skilled Labour Strategy integrates green skills into curricula, or in France, where regional CREFOPs and sectoral CPCs can propose new regulation to the state.

It should also be noted that in practice, the line between these two categories is often blurry, as policy instruments do not exist in isolation. Indeed, they are often framed around broader policy goals that include both addressing the impact of environmental policies on the labour market (including in specific sectors) and creating more sustainable ways of working through proactive (skills) investment. Further, multiple policy functions and tools are often combined – particularly reactive investment and reactive protective functions – for instance, supporting 'at-risk' workers in reskilling both by maintaining their wage and job contract *and* by covering the costs of their training, such as the expansion of the German *Kurzarbeit* (short-time work) scheme or the French development of the *Transitions Collectives*.

Most of the labour market policy responses we observe are continuations of preexisting instruments – like the German Act on the 'Strengthening of Vocational Education and Reskilling', which relaxed existing criteria for reskilling subsidy eligibility, or the French



use of CPCs for green skills. Nonetheless, some paradigmatic shifts within the field of ALMP can be observed, particularly with regards to the use of active labour market policy for the *employed* population, not just jobseekers. While we cannot link this exclusively to the green transition alone, it is one of the structural shifts driving this change.

On the passive labour market policy side, that is, policies with a protective function, there is much less policy focus, especially beyond specific industries (specifically, Coal in Germany). Where they exist, such as the *Kurzarbeit* in Germany, they are used in combination with ALMP and are tied to the large focus on investment-based policies evident in the overall policy strategies.

A through line in our findings is the interaction between national eco-social policy responses, and regional or sectoral policy responses. The highly local and sector-specific impact of the green transition means that this is an important, cross-cutting dimension in discussions of eco-social policy, and we do note that recent trends in both countries have facilitated more sub-national policy measures and derogations from national level policy. While sub-national policy responses were not the explicit focus of this study, particularly given the theoretical link between national-level policy and a 'Varieties of Capitalism' lens, further research may valuably seek to investigate this interplay.

The similarities of policies implemented in both France and Germany, despite their institutional variation in market economy, is a surprising finding and fertile ground for further research, particularly in relation to the European Union and it ensuring some coherence in policy strategy.

Turning to the eco-social labour market policy development process, we do observe similarities but also significant differences between France and Germany, which reflect the Varieties of Capitalism literature and their respective institutional coordination mechanisms in this new context of the green transition and eco-social policy. These differences are particularly around how embedded stakeholders, the verticality of the state, and the coherence and harmony of the policy strategy and stakeholder relations.

Overall, stakeholder coordination emerges as an enabling factor for managing the green transition process, in line with the Varieties of Capitalism literature on institutional navigation of structural change (Stroud *et al.*, 2014; Delpech *et al.*, 2016; Antonazzo,



Stroud and Weinel, 2023). Such a finding might suggest the importance of strengthening social dialogue and other fora for stakeholder interaction, to ensure the joint management of the green transition. Recent political push-back against the green transition only heightens the need for this form of policy strategy.

While this paper identifies policy strategies for the green transition and the policy making process, it does not seek to establish a (causal) relationship between types of institutional arrangements and types of policy strategy. This is, however, a clear area for future research and highly relevant – especially as green transition labour market policy strategies are further developed and there are more concrete outcomes to analyse.

If specific institutional arrangements are an enabling factor in policy development, as we posit, then this implies that differences in policy outcome may emerge (though these are shaped by a multitude of factors) as shaped by that enabling factor, an idea suggested by interviewees on multiple occasions. We thus hold that this paper can be seen as a base on which to build more direct, causal analysis of institutional arrangements and outcomes (while acknowledging the multiplicity of factors influencing these outcomes).

At this current stage of early development of green transition policies, this difference in policy outcome is not something that we observe in the two countries, though this could very well change as eco-social LM policies are further developed and their impacts felt in the coming years.

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Appendix I

Interviewees

Interviewee Code	Country Case Study	Type of Stakeholder
DE-1	DE	Employer organisation
DE-2	DE	Expert
DE-3	DE	Employer organisation
DE-4	DE	Trade union
DE-5	DE	Trade union
DE-6	DE	Public Employment Service
DE-7	DE	Expert
FR-1	FR	Public Partner / Public Employment Service
FR-2	FR	Ministry of Labour
FR-3	FR	Expert
FR-4	FR	Employer organisation
FR-5	FR	Expert
FR-6	FR	Trade union
FR-7	FR	Trade union



About the TransEuroWorkS project

TransEuroWorkS is a multi-disciplinary EU-funded research project that conducts analysis and policy recommendations for the future world of European work and social protection. It will provide new, more integrative understandings of how fundamental changes to the labour market and European context can be better and more proactively managed through national and European Union (EU) level social protection policies. At the centre of TransEuroWorkS are three critical structural labour market transformations: green transition and decarbonisation, technological change, and the internationalisation of the workforce. For more information, see https://transeuroworks.eu/.



