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Implementing just transition efforts across the EU: from decarbonisation to eco-social policies

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Introduction

Through the 2019 European Green Deal (EGD), the European Union (EU) and its member states are more than ever committed to transitioning towards a less carbon-intensive economic model. In this scenario, novel social risks are expected to emerge, raising new demands for a *just transition*. However, little is still known about the role of public policies in the pursuit of such a just transition in Europe. Against this background, this chapter strives to fill existing gaps by providing a mapping of just transition policies (JTPs) in EU countries, which are a particularly salient example of eco-social policies in the context of decarbonisation. It adopts a qualitative method, notably a systematic, manual textual analysis of the National Energy and Climate Plans (NECPs). The identified JTPs are carefully described to capture their eco-social features, disentangling their three constitutive components: strategy, instrument and governance.

Results show that JTPs are still relatively rare in the EU: only six countries – Czechia, Germany, Greece, Spain, Ireland and the Netherlands – have already adopted comprehensive JTPs, while others have put forward only partial JTPs or just general commitments to develop these policies in the future. A bird's-eye view of the current empirical landscape also reveals that, with rare exceptions, existing JTPs are mostly narrow, hence targeting only the most urgent 'low-hanging fruits' of decarbonisation; they often emphasise the role of investment-oriented measures; and they provide governance structures for stakeholder consultation.

With respect to the structure of the chapter, the first section is dedicated to reviewing the literature on decarbonisation and just transition. The subsequent section defines the object of this study, which is JTPs, and the following section presents the methodological premises of the study. A further section is dedicated to mapping and describing national JTPs, distinguishing strategies, instruments and governance. Finally, the findings are discussed in the conclusion.

Decarbonisation and just transition

Climate change is increasingly becoming a prominent political issue because of its catastrophic ecological consequences (IPCC, 2021). Countries around the globe have been mobilising to limit the global temperature rise to 2 °C above the pre-industrial level, aiming at 1.5 °C, through the 2016 Paris Agreement (United Nations, 2015). At the industrial level, curbing climate-altering emissions is primarily affected by a process referred to as decarbonisation. This expression indicates a peculiar type of sustainable socio-technical transition (Markard et al, 2012) entailing 'a change in sources of energy supply, conversion, infrastructure, or energy use' (Sovacool et al, 2021, p 2), replacing carbon-intensive technologies and practices with low-carbon ones (Green and Gambhir, 2020). Thus, by definition, decarbonisation is an intentional process, heavily driven by policy choices and characterised by political conflicts between winners and losers (Köhler et al, 2019). A report by the Climate Action Network (2018) finds a high heterogeneity in EU countries' ambition and progress in reducing carbon emissions, with Sweden, Portugal, France, the Netherlands and Luxembourg ranking highest, while Bulgaria, Cyprus, Estonia, Ireland, Malta and Poland rank lowest.

Different societal groups are predicted to be disproportionately affected by decarbonisation (Galgóczi, 2022). While according to the OECD the aggregate net employment impact of decarbonisation is expected to be limited worldwide (Botta, 2018), workers employed in emission-intensive sectors – which are normally concentrated in peripheral and often economically disadvantaged areas – will likely experience job reallocations, new skill needs and redundancies (Thomas and Doerflinger, 2020). Besides employment challenges, other social risks generated by industrial decarbonisation include 'the need for enterprises, workplaces and communities to adapt to climate change to avoid loss of assets and livelihoods and involuntary migration' (ILO, 2015, p 5).

Available data lead us to predict that the new social risks of decarbonisation will be distributed unevenly across EU countries. McCauley et al (2023) rank them with respect to 'fossil fuel energy dependency', placing Germany, the Netherlands, France, Italy, Poland and Spain as the most dependent EU countries, whereas Croatia, Slovenia, Estonia, Luxembourg, Latvia, Cyprus and Malta rank lowest. 56.8 per cent of the total EU employment in the coal and lignite sector is in Poland, followed by Romania (14.5 per cent), Czechia (9.6 per cent) and Germany (7.0 per cent) (European Commission, 2020). Europe Beyond Coal (2022) shows that most EU member states have committed to phasing out coal before or by 2030, whereas Bulgaria, Czechia, Germany, Croatia, Romania and Slovenia set later targets. Poland is again a negative outlier here, as the only remaining member state without a coal phase-out target. Among already coal-free countries, Austria, Belgium,

Portugal and Sweden stand out, since they managed to get rid of this fossil fuel after signing the Paris Agreement. The accelerated phase-out of coal in the EU has caused substantial redundancies: 'between 2010 and 2018, coal jobs decreased from 239 400 to 161 930, a decline of 32 %' (Alves Dias et al, 2021). Besides coal, decarbonisation will also affect other fossil fuels, such as peat, 46.6 per cent of which is produced in Ireland (European Commission, 2020).

Against this backdrop, the concept of just transition is becoming increasingly popular in both academic and political debates as a way to address the social implications of decarbonisation. This idea, first originated within the North American trade union movement in the 1980s, recently underwent a resurgence and a global diffusion until it found its way into the United Nations' climate policies (Stevis et al, 2020). A defining moment in the history of just transition came through the 2015 Guidelines by the International Labour Organization (ILO, 2015), which were later mentioned in the Preamble of the Paris Agreement (United Nations, 2015). At its core, just transition is meant to challenge the 'jobs versus environment dilemma' (Räthzel and Uzzell, 2011), and in the context of decarbonisation it can be defined as 'a fair and equitable process of moving towards a post-carbon society' (McCauley and Heffron, 2018, p 2). With increasing popularity, just transition is gradually growing into a contested concept (Stevis et al, 2020) applied to a wide variety of contexts and topics (Wang and Lo, 2021).

Many alternative interpretations of what a just transition should be exist (McCauley and Heffron, 2018; Stevis and Felli, 2020; Galgóczi, 2022). First, the literature typically distinguishes between narrow and broad conceptions of just transition, depending on the scale and scope – that is, the spatial-temporal reach – of the challenges considered. Second, just transition claims can be 'affirmative' or 'transformative', depending on the extent to which they strive to challenge the current socio-economic system based on capitalist and growth-intensive modes of production and consumption. Third, and finally, various studies differentiate between distributive just transition, which concerns the (re)allocation of resources, and procedural just transition, which has to do with participation in policy making and governance.

Just transition policies as an example of eco-social policies

Among the various aspects of the multifaceted just transition concept (Wang and Lo, 2021), just transition as a type of public policy has so far received relatively little attention, with only a few explorative exceptions (Mertins-Kirkwood, 2018; Cha, 2020; Green and Gambhir, 2020). This is surprising if we consider that decarbonisation is by definition policy driven. Against this background, this chapter focuses on JTPs. These are hereby defined as public policies explicitly aiming to integrate a social dimension into decarbonisation,

with the ultimate view to make it socially just. The scope is here further restricted to the productive sector, hence to industrial decarbonisation. This choice reflects the importance of industrial restructurings in the current climate policy debate and also allows us to control for the heterogeneity that we would have encountered if we were also to take into consideration consumption-side policies.

JTPs can be seen as peculiar examples of eco-social policies. The growing literature on eco-social policies deals with the integration between welfare and environmental policy goals, going way beyond the decarbonisation context. Most scholars studying eco-social policies advocate for a sustainable approach, aiming to meet human needs within ecological limits (Gough, 2017). This literature is dominated by prescriptive and outcome-based perspectives (Mandelli, 2022), leaving little space for the empirical analysis of policy outputs, aside from a few descriptive exceptions (for example, Schøyen et al, 2022). Therefore, studying JTPs allows us to introduce an empirical policy analysis perspective in the eco-social policy literature. Existing studies show that since the publication of the EGD in 2019, a just transition policy framework has emerged in the EU, notably leading to the adoption of the Just Transition Mechanism to channel investments in territories with carbon-intensive economies (Sabato and Mandelli, 2024). However, empirical studies on JTPs at the national level are visibly lacking.

JTPs are constructed through policy integration, a process that normally requires a high degree of complexity. Integrated policies indeed often come in the shape of policy mixes, hence a complex arrangement of different interconnected components (Rogge and Reichardt, 2016). Three of such components appear as the most relevant: a *strategy*, that is, a plan defining the scale and scope of the problems to be solved and setting overarching policy goals; an *instrument* component, entailing a set of policy measures targeted to specific agents in order to achieve the strategic goals; and *governance* mechanisms establishing institutional structures and procedures for the delivery of the policy mix. For JTPs to be comprehensive, they should comprise all three of these components, since these constitute the core building blocks in the architecture of the policy mix.

Methodological premises

The NECPs are selected as reference documents to map JTPs in Europe. Introduced under the Regulation on the Governance of the Energy Union (European Union, 2018), the NECPs are integrated multiannual plans monitoring national performances concerning decarbonisation, energy efficiency and renewable energy. Member states were asked to submit draft NECPs by the end of 2018 and a final version in late 2019. The NECPs have been chosen here as the reference documents for the analysis because

they are supposed to contain – among other things – indications about whether and how member states address, or are planning to address, the social impacts of their climate policies.

The systematic mapping of NECPs has been performed through a manual qualitative textual analysis of the final version of these documents, assessing whether they mention existing or proposed eco-social strategies, instruments and governance mechanisms. For each EU country and each component of JTPs, a positive score ('+') was attributed to already-adopted policies, whereas a negative score ('–') signifies that JTPs are missing. Finally, an uncertain score ('?') indicates the country's declared intention to adopt JTPs in the future. The analysis was carried out first by carefully reading sub-sections 5.2 of the NECPs, which are dedicated specifically to the social impacts of decarbonisation, and second, by searching for keywords such as 'employment', 'jobs', 'education', 'training', 'skills', 'social', 'just(ice)', 'fair(ness)' and 'equal(ity)'. As a cross-check, this was complemented by reading the 27 Staff Working Documents with which the European Commission assessed the NECPs.

Basing the analysis on the NECPs should provide a bird's-eye view of the diffusion of JTPs across the whole EU. However, this methodological approach also entails some potential shortcomings, including that NECPs were published a few years ago, and hence they might already be outdated; that NECPs might not be exhaustive, but rather potentially omit relevant information; and, finally, that cited national documents should be cross-checked to verify the information in the NECPs.

Mapping just transition policies in the National Energy and Climate Plans

The results of the cross-country mapping exercise are summarised in Table 17.1. The following sub-sections will be dedicated to presenting the findings in detail, which are all derived from the analysis of the NECPs.

The strategic component of JTPs

Among the 27 NECPs, only seven explicitly refer to existing just transition strategies. Several NECPs make references to a 'just', 'fair' or 'equitable' transition, but in some cases (Denmark, Finland, Latvia, Romania) this objective has not yet been translated into any concrete strategy. Existing just transition strategies can be classified in two types, those focusing solely on coal phase-out and broader strategies linked to climate mitigation as a whole. Firstly, the Czech, German, Greek and Slovak strategies are constructed by incorporating a social dimension into coal phase-out plans. In Germany, the Final Report of the Commission on Growth, Structural Change,

Table 17.1: EU member states' just transition policies (by component)

EU Countries	Strategy	Instrument	Governance
Austria	-	-	-
Belgium	-	?	-
Bulgaria	-	-	-
Cyprus	-	-	-
Czechia	+	+	+
Germany	+	+	+
Denmark	-	?	-
Estonia	?	?	-
Greece	+	+	+
Spain	+	+	+
Finland	-	-	?
France	?	?	?
Croatia	-	-	-
Hungary	?	?	-
Ireland	+	+	+
Italy	-	+	?
Lithuania	-	?	-
Luxembourg	-	-	-
Latvia	-	?	-
Malta	-	-	-
Netherlands	+	+	+
Poland	?	+	-
Portugal	?	?	?
Romania	-	+	-
Sweden	-	-	-
Slovenia	?	?	-
Slovakia	+	+	-

Source: Mandelli (2023)

and Employment – which was later translated into legislation – provides recommendations on socially responsible phase-out by 2038. In Czechia, Greece and Slovakia, just transition strategies are tailored to some specific coal territories. The 2015 Czech RESTART Programme is described in the NECP as a 'comprehensive framework for the restructuring of the Ústí, Moravian-Silesian and Karlovy Vary regions, which should contribute to

the fair transformation of coal regions' (Government of Czechia, 2019, p 314). The Greek government's 2020 Just Development Transition Master Plan is characterised as an integrated plan to accompany lignite phase-out in Western Macedonia and Megalopolis. This plan encourages tax incentives, the adoption of new infrastructures and technologies, support to local economies, the retraining and security of workers, and job creation. Finally, in Slovakia, the Upper Nitra Development Action Plan was approved in July 2019 to address the economic and social impacts of coal mining reduction.

A second group of countries, comprising Ireland, Spain and the Netherlands, set up just transition strategies by incorporating a social dimension into climate policies, hence – at least in part – transcending the fossil fuel sectors. In the Netherlands, a set of recommendations to enhance the opportunities and mitigate the social risks of the green transition was proposed by the Social and Economic Council and later inserted in the 2018 National Climate Agreement. In Ireland, 'just transition' is explicitly featured in the 2019 Climate Action Plan through a series of targets and actions so that 'the burdens borne are seen to be fair and that every group is seen to be making an appropriate level of effort' (Government of Ireland, 2020, p 122). Throughout Europe, Spain appears to be the only country with a stand-alone just transition strategy. This was adopted in 2019 to anticipate and manage the impact of the transition in carbon-intensive regions.

Despite only seven EU countries having already adopted initiatives that can be classified as just transition strategies, several other NECPs express commitments to put forward such strategies in the future. Proposed fossil fuel phase-out plans featuring just transition principles – or at least a significant social dimension – are found in the Estonian NECP, with reference to oil shale mining in Ida-Virumaa; the Hungarian NECP, targeting the revitalisation of the lignite-powered Mátra power plant; the Polish NECP, which commits to developing a 'restructuring plan for hard coal and lignite mining areas'; and the Slovenian NECP, which proposes a strategy for abandoning coal and restructuring coal regions. Finally, the French NECP indicates that 'a fair transition for everyone' will be included among the cross-sectoral guidelines of the National Low-Carbon Strategy, whereas Action Strategy No. 8.1 in the Portuguese NECP promises to develop a Fair Transition Strategy.

The instrument component of JTPs

Concerning the instrument component of JTPs, most European governments have either developed or are in the planning stages of developing measures to address the social repercussions of decarbonisation. Important exceptions are Austria, Bulgaria, Cyprus, Croatia, Finland, Luxembourg, Malta and Sweden. Predictably, countries exhibiting positive scores on the strategic

dimension also articulate policy instruments to achieve strategic objectives. However, the cases of Italy, Poland and Romania show that policy instruments addressing the social consequences of decarbonisation can also exist in the absence of a just transition strategy.

The instruments identified in the mapping exercise can be clustered into four types: i) active labour market policies for workers affected by decarbonisation; ii) passive labour market policies also for these workers; iii) funds for the socio-economic development of impacted territories; and iv) education and training measures promoting green skills across the population or workforce. The latter measures emerge as the most prevalent across EU member states, even though they consist only of generic commitments to enhance education curricula or develop training facilities for green skills. Such commitments are found in Belgium, Czechia, Denmark, Greece, Spain, France, Ireland, Lithuania, the Netherlands, Portugal, Romania and Slovenia.

Much more substantial are active labour market instruments. These aim to enhance or redirect workers' skills, as well as to facilitate their relocation in a transformed labour market. Greece, Spain, Ireland, Italy and the Netherlands allocate financial resources for this purpose, whereas Estonia, France, Hungary, Latvia and Poland pledge to do so in the future. For example, the Dutch government created a €22 million facility to address the employment effects of the energy transition by providing 'from-work-to-work' guidance and reskilling. In Italy, a maximum of €20 million per year will be channelled to a 'Fund for vocational retraining in areas in which coal-fired power plants are located'. Ireland adopted a national Just Transition Fund to provide, among other things, support for the retraining and reskilling of workers in the peat industry. In Spain and Greece, active labour market policies for coal and lignite workers are provided respectively through an Urgent Action Plan for Coal-Mining Regions and Power Plant Closures and the Just Development Transition Master Plan.

Passive labour market instruments are present in coal-intensive countries, offering direct monetary compensation to redundant workers. These policies were often originally conceived as part of state aid to the coal sector, but they have been later recalibrated in the context of decarbonisation. This is the case in the 1992 Czech Plan to end coal mining in uneconomic underground mines and quarries, which also covers the social costs for workers and communities, for instance through health benefits for miners. State aid benefiting redundant coal miners was also put forward in Slovakia and in Romania. Finally, the German NECP mentions that the government will guarantee 'transition monies to workers employed in the hard-coal mining sector', including through early retirement schemes.

The last types of just transition instruments mentioned in the NECPs are development funds for economic diversification and job creation in coal-dependent territories. Such funds are already present in several countries,

while Estonia and Romania intend to adopt them soon. Funds are dedicated to lignite regions in Greece, the peat-intensive Irish Midlands and the coal-dependent Polish regions of Silesia, Małopolska and Wielkopolska. In Czechia, periodic territorial development plans are set up to implement the RESTART Programme in the Ústí, Moravian-Silesian and Karlovy Vary regions, whereas the German government put forward a Structural Development Act for all its coal regions. Finally, it is important to note that numerous NECPs recognise EU funds and facilities – primarily the Just Transition Mechanism – as crucial instruments to address the social consequences of decarbonisation at the domestic level.

The governance component of JTPs

The governance component of JTPs is crucial to foster social consensus and mitigate conflicts associated with decarbonisation through dedicated institutional structures or formalised procedures for stakeholder engagement. The majority of NECPs register no governance schemes, and these are typically found where just transition strategies are also present. Slovak JTPs instead lack a governance component, despite scoring positively in the strategic component.

Regarding stakeholder engagement, various EU countries proposed multi-stakeholder platforms to promote a just transition. In Czechia, a Coal Commission was established in 2019 to assess the future needs of the lignite sector and to explore possibilities for diverting from it. This commission comprises 19 members, including representatives from ministries, governmental offices, trade unions, industrial associations, non-profit organisations, regions, members of the Chamber of Deputies and academics. Similarly, Germany established a multi-stakeholder Commission on Growth, Structural Change and Employment in 2018, responsible for formulating recommendations on national energy policies. Finally, Ireland and the Netherlands mandated their national Economic and Social Councils to provide participated recommendations about the social dimension of decarbonisation.

Greece, Ireland and Spain established ad-hoc institutional structures to facilitate the implementation of their JTPs. In Spain, a Just Transition Institute was established within the Ministry for Ecological Transition. This institute is responsible for developing and implementing Just Transition Agreements with at-risk sectors and territories, via the involvement of local authorities, business organisations, trade unions and other non-governmental organisations. The Spanish case stands out because stakeholders are not just consulted but also given proper decision-making powers through the Just Transition Institute and Agreements. Greece set up an Inter-Ministerial Committee to coordinate the Just Development Transition Master Plan

following inclusive procedures for the consultation of local administrative bodies and stakeholders. Finally, the Irish government appointed a Just Transition Commissioner with the duty to engage with relevant stakeholders in the Midlands.

The NECPs of France, Italy, Portugal and Finland express these countries' intentions to establish governance structures for a just transition. The French NECP mentions that the multi-stakeholder National Council for Ecological Transition will start dealing with the economic and social impacts of low-carbon strategies. The Italian NECP commits to organise sectoral working groups within the Ministry of Economic Development to safeguard jobs in regions significantly affected by decarbonisation. Finland plans to establish a Peat Industry Working Group to ensure geographic and social fairness in the government's efforts to halve peat use by 2030. Finally, the Portuguese NECP pledges to design a Fair Transition Strategy through a multi-stakeholder process.

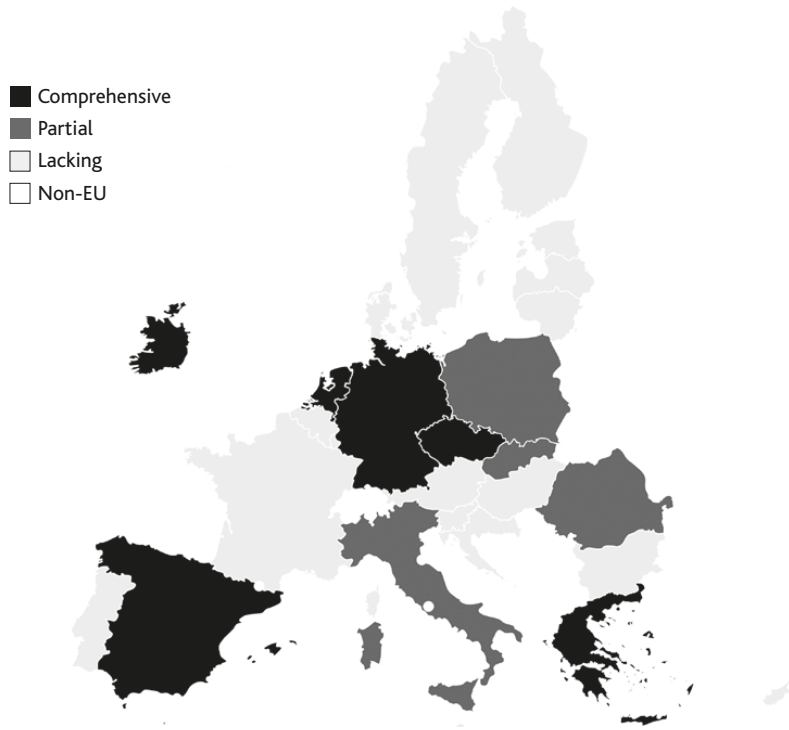
Conclusion

Just transition is becoming an increasingly popular narrative to address the social risks of industrial decarbonisation, but the empirical diffusion of deriving public policies remains limited. The comparative analysis of the NECPs has brought to light some puzzling findings. The first and most notable is that JTPs are still relatively rare across Europe. Only six EU countries – Czechia, Germany, Greece, Spain, Ireland and the Netherlands – have already adopted comprehensive JTPs comprising strategies, instruments and governance mechanisms. Italy, Romania and Poland have adopted some instruments without a governance or a strategic component, while in Slovakia only the governance component is missing. Therefore, only in ten European countries are JTPs already in place. Figure 17.1 illustrates these ten countries, distinguishing those that have adopted comprehensive JTPs (in black) from those that introduced only partial JTPs (in dark grey).

Some NECPs contain commitments to put forward national JTPs in the future, whereas seven countries – Austria, Bulgaria, Cyprus, Croatia, Luxembourg, Malta and Sweden – feature no existing or foreseen policies to address the social consequences of industrial decarbonisation.

Concerning the content of existing JTPs, the mapping exercise indicates that EU countries are promoting an understanding of just transition that is not so distant from the supranational approach envisaged in the EGD. First, just transition most often has a narrow scope, with deriving policies mainly targeting challenges that are framed as the most urgent. This translates into a strong focus on coal, with a more marginal role for other fossil fuels and energy-intensive industries. Only Spain, Ireland and the Netherlands adopted a slightly different approach, adding a social dimension to climate mitigation

Figure 17.1: Just transition policies in the EU



Source: Mandelli (2023)

as a whole, hence addressing – at least on paper – challenges that go beyond the most carbon-intensive sectors. Second, most national JTPs overstate the role of investment-oriented measures, including active labour market policies and training and development funds, which are largely preferred to more passive social protection instruments. Third, and finally, when present, the governance component of JTPs allows for multi-stakeholder consultation. However, governance schemes do not attribute proper decision-making powers to non-governmental agents, with the sole exception of Spain.

These findings show that a fully fledged eco-social perspective to accompany Europe's decarbonisation efforts is still very much in its infancy. However, it should be noted that EU countries do not enter the low-carbon transition from the same starting point. Facing a pressing risk appears to be associated with the emergence of JTPs: with the notable exceptions of Ireland and Slovakia, the ten EU countries having introduced partial or comprehensive JTPs are in the top half of the most fossil-fuel-dependent countries in Europe, with Germany and the Netherlands leading the rank. However, in the group of six countries that have adopted comprehensive JTPs, there are both climate leaders (the Netherlands and, to a lesser

extent, Germany), but also laggards (Czechia, Greece, Spain and, above all, Ireland). The fact that just transition is often endorsed by fossil fuel-intensive climate laggards shows that JTPs are often politically used to slow down decarbonisation efforts, with the allegation that abandoning fossil fuels would be too socially disruptive. In this sense, JTPs often problematically lack the ambition that they should have to be considered transformative eco-social policies.

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