

Just transition and the geopolitics of decarbonization in the EU



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"The concept of just transition has become a political tool to shape decarbonization policy."

Summary

This brief explores how the European Union (EU) Green Deal operationalizes the concept of just transition. It shows how the EU Commission's approach to just transition may influence the politics of decarbonization within the EU. The EU's "territorial" approach builds engagement with subnational carbon-intensive regions as a political strategy to generate action and bottom-up support towards decarbonization, despite the resistance of the national leadership.

Key messages

- The EU's territorial approach to just transition strengthens subnational authorities' agency in decarbonization efforts.
- By such "rescaling" of aspects of the EU's decarbonization policy, the Just Transition Mechanism of the EU Green Deal challenges the historical politics of decarbonization in the EU.
- Indicators proposed to assess the effectiveness of the Territorial Just
 Transition Plans lack provisions to monitor their impacts on vulnerable groups.
 The absence of monitoring raises questions about whether such plans will be fair in practice.
- EU member states must incorporate just transition into their foreign policy and aid programmes to support carbon-intensive regions outside the EU, especially in low-income countries.

1. Introduction

Policy debates about decarbonization have increasingly drawn attention to the concept of just transition in its broadest sense. That is, the idea recognizes that the benefits and costs of moving to a low-carbon economy should be allocated fairly across society, and that the workers and communities affected most by the shift away from fossil fuels should receive special support to make the shift (Gass et al. 2018; Healy and Barry 2017).

For many years, research and policy on energy transitions have focused on the emergence of new industries, technologies and behaviour rather than the destabilization of incumbent industries (Fouquet and Pearson 2012). There is however growing recognition that mitigating climate change also requires a managed retreat by carbonintensive firms (Bridge et al. 2013) and the production of fossil fuels (Green and Denniss 2018; Lazarus and van Asselt 2018). The concept of just transition explicitly draws attention to locations affected by the move away from carbon-intensive sectors, and recognizes them as sites of political action regarding decarbonization.

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Indeed, the call for just transition comes from the moral imperative of leaving no one behind, and the political imperative to reduce resistance to change among potential "losers" (Atteridge and Strambo 2020). Addressing equity concerns is essential to increase social acceptance of an accelerated low-carbon transition, and therefore, to establish its political feasibility (Gambhir et al. 2018; Healy and Barry 2017). The concept of just transition has thus become a political tool to shape decarbonization policy.

In this discussion brief, we adopt a geopolitical lens to understand how the European Union (EU) Commission's operationalization of just transition is challenging the historical politics of decarbonization at the EU level. We explore how the EU Commission operationalizes this concept to shape new geographies that can help reach its political objective of carbon neutrality by 2050 through the process of rescaling.

To do so, we first describe what just transition entails, and how the concept has been politically instrumentalized in defense of diverging views about low-carbon transitions. We then review key EU strategic policy documents in the fields of climate, energy, and industry over the past decade to understand how the principle of just transition has been progressively institutionalized at the EU level. In Section 4, we analyze how the EU Commission is territorially operationalizing the principle through the Just Transition Mechanism, and what it means for the geopolitics of decarbonization within the EU. Finally, in Section 5, we reflect on some additional policy challenges associated with the EU's territorial approach to just transition.

2. Just transition: inherent tensions and political instrumentalization

At the core of the concept of just transition lies the idea that the benefits and costs of decarbonization should be distributed fairly between and within countries (Gass et al. 2018; Healy and Barry 2017). Originally, just transition primarily reflected the concerns of workers likely to lose their jobs as a result of environmental policy (Sweeney and Treat 2018). However, the scope has expanded to cover a wider range of sources of job losses and possible negative consequences of low-carbon and other types of societal transitions. It addresses job loss (International Labour Organization 2015; International Trade Union Confederation 2017), associated with decarbonization and automation (Robins and Rydge 2019), socio-economic impacts in carbon-intensive communities and regions (Gambhir et al. 2018; Harrahill and Douglas 2019; UNFCCC 2016), environmental legacies of mining and heavy industry operations (Healy and Barry 2017), climate change impacts (Hirsch et al. 2017; Reitzenstein et al. 2018), and persisting (or deepening) socio-economic inequalities between and within countries (Hirsch et al. 2017; Newell and Mulvaney 2013).

Just transition is a concept that is being used by many actors to describe what the process of decarbonization should look like and what outcomes it should deliver (Ward 2018), with different stakeholders emphasizing different kinds of equity issues (Atteridge and Strambo 2020). As a result of this lack of a universal definition, the concept has been put into practice in different ways around the world (Reitzenstein et al. 2018). The issues to be prioritized, the stakeholders to be supported, and the ways in which to support them under the framework of a just transition vary greatly, with some interpretations of the concept even appearing to contradict one another.



These inconsistencies reflect inherent tensions over the concept (Atteridge and Strambo 2020). Should countries support "losers" to reduce resistance to the transition, or increase overall social equity by prioritizing societies' most

vulnerable groups? Should countries decarbonize as quickly as possible to address global inequalities to limit negative impacts of climate change on most vulnerable populations, or should they seek to delay transitions domestically until a transitional assistance policy is in place, affected workers have been retrained, and regions have become more diversified?

The broadness of the concept and its inherent tensions have allowed for interpretations that, paradoxically, go against the principle of decarbonization itself. In South Africa, the National Union of Metalworkers of South Africa (NUMSA), one of the unions that represent coal workers' interests, used the just transition concept to legally stop the public electricity utility Eskom from signing renewable energy contracts with independent power producers. It argued that the contracts would lead to the loss of tens of thousands of jobs in the coal sector and to higher electricity prices that would be detrimental to the working class (Cock 2018).

In Europe, just transition has been used both in efforts to accelerate decarbonization and in attempts to push back against it. On one hand, Germany and Spain set up multi-stakeholder dialogues to agree on the timeline and modalities of coal phase-out based on principles of a just transition (Government of Spain 2019; Reitzenstein and Popp 2019). On the other hand, just transition has also been mobilized in discourses that seek to artificially maintain increasingly uneconomical, carbon-intensive industries rather than support affected workers and communities to adjust to inevitable changes (Gaventa 2019). For instance, the first draft Poland proposed for the Solidarity and Just Transition Silesia Declaration did not mention climate justice, and appeared to prioritize maintaining coal employment over protecting the climate (Zygmunt 2018).

3. Just transition in European Union's policy



The EU's climate, energy and industrial policy only recently incorporated just transition. In this section we provide a brief overview of how policy sectors' strategic documents over the past decade have integrated fairness, and how the concept of

just transition has been progressively institutionalized at the EU level.

The European Green Deal – a roadmap towards a new growth policy for Europe unveiled in December 2019 that also aims for carbon neutrality by 2050 – makes just transition a central element of the EU's industrial, energy and climate policy. Indeed, the Commission emphasizes the need for the transition to a net-zero carbon economy to be "just and inclusive", to "put people first, and pay attention to the regions, industries and workers who will face the greatest challenges" (European Commission 2019, p. 2). The Commission presents just transition as essential for reducing resistance to needed changes and, therefore, for ensuring the political feasibility of the transition.

However, the issue of fairness with regards to the likely "losers" in the transition has not always be a central element of the EU's industrial, energy and climate policy. In fact, until 2015, with few exceptions, fairness considerations were first and foremost about the allocation of the decarbonization effort between member states (European Commission 2008; European Commission 2013; European Commission 2014), or about market and trading conditions (European Commission 2010; European Commission 2012; European Commission 2017). Trade unions however were already referring to just transition when responding to the EU Commission's 2012 Industry Strategy proposal; IndustriAll Europe highlighted the need for "adequate employment strategies that provide for a socially just transition in cases of restructuring and reorganisation" (Jacobsen 2012).

From 2015, just transition concerns become more prominent in energy and climate policy. Key EU policy documents – "A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy" and the "Clean energy for all Europeans" package – both mention the need to support affected workers for a just transition (European Commission 2015; European Commission 2016). Clean Energy for All Europeans goes further by also addressing concerns about "transformative impact on sectors, regions or vulnerable members of society negatively affected by the transition" (p. 2). The EU 2050 long-term strategy (European Commission 2018a) elevates social fairness as an overarching objective of the EU when it comes to energy and climate policy, with "just transition" also featuring in the document's principles. The document mentions issues of energy poverty, support to workers, skill development, and the risk of increasing social and regional disparities associated with the transition.

To support just transition in practice, the European Commission initially referred to various European structural and investment funds, the Energy Poverty Observatory, and to the European Pillar of Social Rights – the terms of which include providing adequate social protection systems, inclusive education, training and lifelong learning for labour market and professional transitions (European Commission 2016; European Commission 2018a). In 2017, the Junker Commission created country teams to support pilot coal regions in their transition, and a dedicated Platform for Coal Regions in Transition, which enables knowledge and experience sharing between multiple stakeholders from EU coal regions. In 2019, a Secretariat was established to coordinate technical assistance to regions in transition, and support their economic diversification and decarbonization efforts. The European Commission also set up a pilot programme in 2018 to support industrial transitions in carbonintensive regions across the EU (European Commission 2018b).

The EU Green Deal has further institutionalized the concept by creating a Just Transition Mechanism (JTM). The JTM aims to help the regions and sectors that will be most affected by the transition because of their dependence on carbon-intensive industries. By establishing this mechanism,

the EU Commission signals that it recognizes the patterns of uneven development that may result from decarbonization policy. The decision to embed the JTM into the EU's Cohesion Policy, which seeks to strengthen economic and social cohesion by reducing disparities in the level of development between regions, underscores this connection.

The JTM comprises a Just Transition Fund (JTF), which will provide grants to help economic diversification in areas most affected by the transition, and to support the inclusion of workers and unemployed in new economic sectors. The JTM

"The EU Green Deal has further institutionalized the concept by creating a Just Transition Mechanism."

also comprises a dedicated scheme under InvestEU and a public-sector loan facility with the European Investment Bank Group to mobilize additional public and private investments to enable activities related to the energy transition in affected regions (European Commission 2020b). In addition, building on the Coal Regions in Transition Platform, the Commission created a new Just Transition Platform to provide advisory support and technical assistance to EU member states and regions to access JTM funding.

4. JT and the geopolitics of decarbonization in the EU



In Section 2, we highlighted how the concept of just transition has been instrumentalized in various ways to promote different – sometimes diverging – interests. In this section, we dig

further into the political implications of the EU Commission's territorial approach to just transition. We find that by strategically rescaling its approach to decarbonization and focusing on subnational regions that are carbon intensive, the EU draws attention to and increases the agency of subnational actors in decarbonization policymaking within its member states.

Because carbon-intensive regions face both common and specific challenges, and because existing economic opportunities, levels of socio-economic resilience and inhabitants' perceptions of fairness vary across these regions, there is no one-size-fits-all solution to navigate the transition in a just way (Healy and Barry 2017; International Labour Organization 2015; Jenkins 2019). The EU Commission's way of operationalizing just transition is very much specific to each location. In collaboration with member states, it has identified 100 key regions that are eligible for financial aid from the Just Transition Fund (European Commission 2020a). These are the territories that are expected to suffer the most from the economic and social impacts of the transition,



¹ Two exceptions are 1) the 2012 industrial policy, which mentions the need for measures that enable "smooth employment transitions" and the importance of social dialogue for resilient labour markets (European Commission 2012, p. 26), and 2) the 2050 Energy Roadmap, which highlights the social dimension of the energy transition and calls for "social dialogue in line with the just transition and decent work principles" (European Commission 2011, p. 17).



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especially in terms of job losses and the transformation of carbon-intensive industries (European Commission 2020b).

The 100 regions have been selected based on certain territorial qualities: industrial greenhouse gas emissions; level of employment in industry; level of coal, peat and oil shale production; and the member state's level of economic development and related investment capacity (European Commission 2020b). Importantly, the scale at which the 100 regions have been drawn is relatively small. The EU uses a three-level classification system (Nomenclature of territorial units for statistics, NUTS) to divide its economic territory. While regions eligible for support from cohesion policy have been defined at NUTS 2 level, regions eligible for support from the JTF have been defined at NUTS 3 level (the smallest spatial unit of NUTS) (European Commission 2020a).

This choice of spatial unit can be interpreted as a deliberate move to partly rescale decarbonization efforts within the EU, and in this way, to overcome some of the political barriers to reach carbon neutrality. Rescaling, i.e. the redefinition of the material size and areal extent of a phenomenon (Bridge et al. 2013), is here understood as way of restructuring modes of governance that ultimately modify the relationship between state and society (see Gualini 2006). One example of such process is when, through (re-)municipalizing energy services, some local governments have used rescaling to strengthen their autonomy and capacity in the field of sustainable energy (Kuzemko 2019).

With its territorial approach to just transition, the EU Commission follows a similar logic. The remainder of this section explains how so.

In the EU, decarbonization, migration and the rule of law have become more and more contentious during the 2010s (Basile and Olmastroni 2020; Coman 2016; Skjærseth et al. 2016). Over the period from 2009 to 2011, as economies suffered the consequences of the 2008 financial crisis, EU member states heavily disagreed over increasing emission reduction targets for 2020 (Skovgaard 2014).

Countries of Central and Eastern Europe (CEE) - especially Poland and Hungary – have increasingly opposed proposals for raising EU decarbonization ambitions (etkovi and Buzogány 2019). In Poland, key reasons for opposition greater decarbonization efforts are the historically important role of coal industry in the country, its perceived role in ensuring the country's energy security, and the stake of the state in major coal companies (Schwartzkopff and Schulz 2017). In Hungary, where climate and energy are not among priority issues, the national government has taken a position of backing Poland to receive support on other issues in exchange, such as migration and rule of law inquiries (Schulz et al. 2017). This was evident at the EU summit in June 2019, when Poland and Hungary, together with Estonia and the Czech Republic, blocked the adoption of the EU Council conclusions, and removed the passage referring to carbon neutrality by 2050 (Morgan 2019).

Because energy policy legally requires unanimity, the EU has very limited power to address national-level obstacles to decarbonization (Oberthür 2016). At the same time, there is citizen support for more ambitious climate action and for improving air quality across the CEE region (Gaventa 2019). There are also indications of bottom-up backing of low-carbon transition from carbon-intensive communities in the region, although higher-level support remains necessary to make these priorities mainstream, provide stability, and allow for long-term planning (Jenkins 2019; Popp 2019).

In the past, disagreements over climate ambitions have been addressed by providing financial transfers from West to East, and introducing derogations giving CEE countries more time to transition (Gaventa 2019). The Just Transition Mechanism was designed along this principle, as a way to reduce the resistance of CEE countries and EU citizens to greater decarbonization ambitions by 2030 and carbon neutrality by 2050.

However, unlike in the past, through rescaling, the Just Transition Mechanism also attempts to challenge the domestic political economy in countries whose national governments disagree with the carbon neutrality objective. Through targeted financial transfers and technical support, it aims to create opportunities, and to deliver development improvements directly on the ground, and, therefore, to gain public support for faster decarbonization. At the same time, as a requirement for accessing JTF support, countries must elaborate Territorial Just Transition Plans for their eligible regions together with the authorities of the territories concerned and the relevant social partners. These plans need to identify ways to best address social, economic and environmental challenges associated with the transition. Making JTF support only available to pre-identified regions in member states, and requiring their participation in elaborating Just Transition Territorial Plans, may encourage subnational authorities to put some pressure on national governments to increase their climate ambitions.

At the negotiations of the EU's long-term budget, an early draft of the budget agreement stipulated that access to the JTF would be limited to countries that have committed to a national target carbon neutrality by 2050. This further illustrates how the EU Commission has attempted to leverage the JTM for accelerating decarbonization, and to bring recalcitrant countries on board. However, the requirement was modified during the negotiations. The final agreement stipulates that half of the JTF remains available to countries that do not subscribe to the carbon neutrality target (Morgan 2020).

5. Policy implications

The EU Commission's operationalization of just transition represents an important attempt to address resistance to decarbonization within the EU, and to address territorial inequalities that can arise (or worsen) during the process. This has become even more relevant in the context of the COVID-19-induced economic crisis and debates about recovery measures. The situation directs more attention to the JTM as part of broader efforts to align recovery, the European Green Deal, and climate neutrality. The EU Commission's approach to just transition, however, faces four important challenges.

Though strengthening the capacities of subnational actors is key for a successful transition, national governments may undermine such efforts.

The scale at which the JTF support is implemented draws attention to the importance of local authorities in steering the transition to their specific needs and capacities. History shows that local authorities are often left to bear many of the burdens associated with industrial and mining decline (Harrahill and Douglas 2019). Hence, strong local leadership and capacities, including effective lobbying of national governments to engage in and to provide resources for appropriate responses to decline, are essential for navigating the transition (Strambo et al. 2019).

Historically, national governments have not been transparent about the upcoming closure of large-scale industrial or mining plants. Nor have they been inclined to engage with transition planning (Atteridge and Strambo

² NUTS 1 represents major socio-economic regions. NUTS 2 represents basic regions for the application of regional policies and NUTS 3, small regions for specific diagnoses.

forthcoming). In the context of the JTM, concerns are already emerging that national governments, which serve as gatekeepers in the application processes for certain funds, may impede access to funding by lower-level governments in targeted regions (Keating 2020).

After the first reading of the EU Commission's proposed regulation for establishing the JTF, the EU Parliament's Committee on Regional Development proposed to add a provision requesting *Member States to ensure that "municipalities and cities have direct access to the JTF resources to be made available to them according to their objective needs"* (European Parliament 2020, p. 11).

Safeguards are needed to prevent mobilization of rescaling against decarbonization.

Subnational support only is insufficient. Political leadership and ambitious climate mitigation goals at national level remain essential for reaching carbon neutrality. National leadership could leverage rescaling to bypass or delay transition. If the emphasis on territorial just transition plans is utilized to slow down climate action or to delegate political responsibility, as has been argued to be the case in Germany with the Coal Exit Commission, the legitimacy and stability of the transition may be in peril (Reitzenstein and Popp 2019). Discussions about establishing the endorsement of carbon neutrality by 2050 as a condition to access JTF resources are indicative of the potential for such measures to either incentivize or delay action.

A regional focus does not guarantee transition support to the most vulnerable groups.

One key principle of the just transition is that it should help address underlying social inequalities (Healy and Barry 2017; Hirsch et al. 2017). Nevertheless, past cases of transition highlight that a regional focus alone cannot ensure that support and opportunities will be available for those who need them the most. Examples – such as the collapse of Kodak in Rochester (NY) in the United States and the decline of the coal industry in the Latrobe Valley in Australia – show that transitions that appears to be successful in terms of demographic, economic and employment growth may nevertheless be incomplete. Even "successful" transitions can obscure and exacerbate inequalities among the most vulnerable segments of society and lower-skilled workers who are left behind in the wake of industrial decline (Doucette and Fitts 2017; Weller 2019). To avoid such outcomes, implementation of just transition measures must occur within the context of a broader social policy package that tackles persistent social inequities along various axes of difference.

Many communities and regions affected by decarbonization lack socioeconomic resilience as a result of past economic crises, globalization, or negative environmental impacts from former industrial and mining operations. However, none of the proposed requirements for the Territorial Just Transition Plans' contents entails identifying and addressing existing underlying inequalities in targeted regions.

Moreover, none of the indicators currently proposed by the Commission to assess the effectiveness of the Territorial Just Transition Plans focuses on the impacts on most vulnerable groups (see European Commission 2020b). The Committee on Employment and Social Affairs has proposed additional indicators that can help measure progress on addressing underlying inequalities (European Parliament 2020). Focusing on a given scale may help overcome some political obstacles to the transition, but social acceptance also depends on addressing inherited socio-economic inequalities and environmental injustices.

The EU just transition policy must consider its global consequences on fossil fuel-producing countries and regions.

Finally, the EU Commission has so far concentrated on the political potential of the just transition to accelerate decarbonization within the EU. At the same time, it is also important to explore the global implications of the EU Green Deal through the lens of just transition. Moving to renewable energy, energy efficiency and fossil-free transport will negatively affect fossil fuel suppliers outside the EU, potentially leading to instability (Gaventa 2019).



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This constitutes an important concern for fossil fuel-producing countries, as reflected by the highlighting of potential negative impacts of climate change measures, known as "response measures", which several of them put forward in their Nationally Determined Contributions (Verkuijl et al. 2019).

A key question therefore is how to integrate just transition into foreign policy to address these concerns, and to encourage more rapid decarbonization abroad, too (Ranft et al. 2019; Tänzler et al. 2019). In this context, the EU could provide transition support in fossil fuel-producing regions outside Europe, especially to low-income countries. Initial steps could support clean infrastructure investment in EU's neighboring countries and in Africa (for example, Nigeria, Algeria and Kazakhstan, which the EU imports oil and gas from), foster economic diversification in fossil fuel-producing countries, and steer global investment in climate resilience and adaptation (Gaventa 2019). Diplomacy can also be a vehicle for sharing the experiences of structural transition from other countries and regions to inspire action. This would provide a channel to identify best practices, building on the Platform for European Coal Regions in Transition, and to reshape global discourses about development, highlighting the multiple benefits of low-carbon development (Ranft et al. 2019).

This brief illustrates how the changing geography of climate action may influence decarbonization politics in the EU. Thanks to its territorial approach to just transition, the EU Commission creates opportunities for subnational actors to be more involved in shaping decarbonization plans and to increase their capacities to implement them. Strengthening their agency, together with delivering social, economic and environmental benefits in regions that have already suffered from deindustrialization in the past and are most vulnerable to the consequences of decarbonization, can increase the political feasibility of all EU member states reaching carbon neutrality by 2050. Still, in practice, addressing the four challenges described above is necessary for the transition to a net-zero society to be just, both within and beyond EU's borders.

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³Estonia has since changed its position. A few months later, after securing assurances regarding its nuclear programme, Hungary agreed to the EU's plan to end carbon emissions by 2050. In the face of the COVID-19 crisis, however, the Czech Republic, Hungary and Poland have called for dropping the European Green Deal (Khalid 2020).

⁴ Following the publication of the EU Green Deal Communication, the EU Commission announced that it would assess the impacts of increasing the EU's greenhouse gas emission reduction target for 2030. To ensure consistency with the 2050 object, the commission said it would examine impacts of targets of at least 50%, and towards 55% of 1990 emission levels. A second step will involve reviews of the EU Emissions Trading System and Effort Sharing Regulation, which are the EU's main instruments for climate mitigation.

References

Atteridge, A. and Strambo, C. (forthcoming). Historical cases of industrial decline. Lessons for planning low-carbon transition. Stockholm Environment Institute, Stockholm.

Atteridge, A. and Strambo, C. (2020). Seven Principles to Realize a Just Transition to a Low-Carbon Economy. Stockholm Environment Institute, Stockholm

Basile, L. and Olmastroni, F. (2020). Sharing the burden in a free riders' land: The EU migration and asylum policy in the views of public opinion and politicians. European Journal of Political Research, 59(3). DOI: 10.1111/1475-6765.12363

Bridge, G., Bouzarovski, S., Bradshaw, M. and Eyre, N. (2013). Geographies of energy transition: Space, place and the low-carbon economy. Energy Policy, 53. 331–40. DOI: 10.1016/j.enpol.2012.10.066

etkovi , S. and Buzogány, A. (2019). The Political Economy of EU Climate and Energy Policies in Central and Eastern Europe Revisited: Shifting Coalitions and Prospects for Clean Energy Transitions. Politics and Governance, 7(1). 124–38. DOI: 10.17645/pag.v7i1.1786

Cock, J. (2018). Contesting the colour of a Just Transition in South Africa. University of the Witwatersrand, Johannesburg, 24 April 2018. https://www.wits.ac.za/news/latest-news/in-theirown-words/2018/2018-04/contesting-the-colour-of-a-just-transition-in-south-africa.html Coman, R. (2016). Strengthening the Rule of Law at the Supranational Level: The Rise and Consolidation of a European Network. Journal of Contemporary European Studies, 24(1). 171–88. DOI: 10.1080/14782804.2015.1057482

Doucette, L. A. and Fitts, H. (2017). Wage Disparities in Monroe County by Race and Gender. Mayor's Office of Innovation and Strategic Initiatives, Rochester, New York

European Commission (2008). 20 20 by 2020. Europe's Climate Change Opportunity. COM(2008) 30 final. European Commission, Brussels

European Commission (2010). An Integrated Industrial Policy for the Globalisation Era. Putting Competitiveness and Sustainability at Centre Stage. COM(2010) 614 final. European Commission, Brussels

European Commission (2011). A Roadmap for Moving to a Competitive Low-Carbon Economy in 2050Brussels. https://ec.europa.eu/clima/sites/clima/files/strategies/2050/docs/roadmap_fact sheet en.pdf

European Commission (2012). A Stronger European Industry for Growth and Economic Recovery. COM(2012) 582 final. European Commission, Brussels

European Commission (2013). A 2030 Framework for Climate and Energy Policies. COM(2013) 169 final. European Commission, Brussels

European Commission (2014). A Policy Framework for Climate and Energy in the Period from 2020 to 2030. COM(2014) 15 final. European Commission, Brussels

European Commission (2015). A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy. COM(2015) 80 final. European Commission, Brussels European Commission (2016). Clean Energy For All Europeans. COM(2016) 860 final. European Commission, Brussels

European Commission (2017). Investing in a Smart, Innovative and Sustainable Industry. A Renewed EU Industrial Policy Strategy. COM(2017) 479 final. European Commission, Brussels European Commission (2018a). A Clean Planet for All. A European Strategic Long-Term Vision for a Prosperous, Modern, Competitive and Climate Neutral Economy. COM(2018) 773 final. European Commission, Brussels

European Commission (2018b). Structural Support Action for Coal and Carbon Intensive Regions. European Commission, Brussels

European Commission (2019). The European Green Deal. COM(2019) 640 final. European Commission, Brussels

European Commission (2020a). Overview of Investment Guidance on the Just Transition Fund 2020-2027 per Member State. Annex D. European Commission, Brussels

European Commission (2020b). Proposal for a Regulation of the European Parliament and of the Council Establishing the Just Transition Fund. COM(2020) 22 final. European Commission, Prussels

European Parliament (2020). Report on the proposal for a regulation of the European Parliament and of the Council establishing the Just Transition Fund. COM(2020)0022 – C9-0007/2020 – 2020/0006(COD). European Parliament, Brussels

Fouquet, R. and Pearson, P. J. G. (2012). Past and prospective energy transitions: Insights from history. Energy Policy, 50. 1–7. DOI: 10.1016/j.enpol.2012.08.014

Gambhir, A., Green, F. and Pearson, J. G. (2018). Towards a Just and Equitable Low-Carbon Energy Transition. 26. Imperial College of London, London. https://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/briefing-papers/26.-Towards-a-just-and-equitable-low-carbon-energy-transition.pdf

Gass, P., Gerasimchuk, Y., Suharsono, A., Moerenhout, T., Oharenko, Y. and Zinecker, A. (2018). Real People, Real Change Strategies for Just Energy Transitions. IISD, Geneva. https://www.iisd.org/sites/default/files/publications/real-people-change-strategies-just-energy-transitions.pdf

Gaventa, J. (2019). How the European Green Deal Will Succeed or Fail. E3G, London. https://www.e3g.org/publications/essay-summary-how-the-european-green-deal-will-succeed-or-fail/Government of Spain (2019). The Just Transition Strategy within the Strategic Energy and Climate Framework. Government of Spain, Ministry for the Ecological Transition, Madrid. https://www.miteco.gob.es/images/es/etj-english_tcm30-508314.pdf

Green, F. and Denniss, R. (2018). Cutting with both arms of the scissors: the economic and political case for restrictive supply-side climate policies. Climatic Change, 150(1–2). 73–87. DOI: 10.1007/s10584-018-2162-x

Gualini, E. (2006). The rescaling of governance in Europe: New spatial and institutional rationales. European Planning Studies, 14(7). 881–904. DOI: 10.1080/09654310500496255 Harrahill, K. and Douglas, O. (2019). Framework development for 'just transition' in coal producing jurisdictions. Energy Policy, 134. 110990. DOI: 10.1016/j.enpol.2019.110990 Healy, N. and Barry, J. (2017). Politicizing energy justice and energy system transitions: Fossil fuel divestment and a "just transition". Energy Policy, 108. 451–59. DOI: 10.1016/j.

Hirsch, T., Matthess, M. and Fünfgelt, J. (2017). Guiding Principles and Lessons Learnt For a Just Energy Transition in the Global South. Friedrich Ebert Stiftung

International Labour Organization (2015). Guidelines for a Just Transition towards
Environmentally Sustainable Economies and Societies for All. https://www.ilo.org/wcmsp5/
groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf
International Trade Union Confederation (2017). Just Transition - Where Are We Now and
What's next. ITUC Climate Justice Frontline Briefing. ITUC. https://www.ituc-csi.org/IMG/pdf/
ituc_climate_justice_frontline_briefing_2017.pdf

Jacobsen, H. (2012). Unions: EU's industrial policy 'absolutely contradictory' with austerity. Euractiv, 16 October 2012. Science & Policymaking. https://www.euractiv.com/section/science-policymaking/news/unions-eu-s-industrial-policy-absolutely-contradictory-with-austerity.

Jenkins, K. E. H. (2019). Implementing Just Transition after COP24. Climate Strategies, London Keating, D. (2020). A European Green Deal with justness for all? Euractiv, 4 March 2020. Energy & Environment. https://www.euractiv.com/section/energy-environment/news/a-green-deal-with-justness-for-all/

Khalid, F. (2020). The EU could face a worse pandemic than COVID-19 if it waters down its Green Deal. Euronews, 10 April 2020. https://www.euronews.com/2020/04/10/if-the-euwaters-down-its-green-deal-next-pandemic-could-be-far-worse-than-covid-19-view

Kuzemko, C. (2019). Re-scaling IPE: local government, sustainable energy and change. Review of International Political Economy, 26(1). 80–103. DOI: 10.1080/09692290.2018.1527239

Lazarus, M. and van Asselt, H. (2018). Fossil fuel supply and climate policy: exploring the road less taken. Climatic Change, 150. 1–13. DOI: 10.1007/s10584-018-2266-3

Morgan, S. (2019). EU climate deal falls at summit, four countries wield the axe. Euractiv, 20 June 2019. Energy & Environment. https://www.euractiv.com/section/energy-environment/news/eu-climate-deal-falls-at-summit-four-countries-wield-the-axe/

Morgan, S. (2020). Climate policy endures rough EU budget summit. Euractiv, 22 July 2020. Climate change. https://www.euractiv.com/section/climate-environment/news/climate-policy-endures-rough-eu-budget-summit/

Newell, P. and Mulvaney, D. (2013). The political economy of the 'just transition'. The Geographical Journal, 179(2). 132–40. DOI: 10.1111/geoj.12008

Oberthür, S. (2016). Where to go from Paris? The European Union in climate geopolitics. Global Affairs, 2(2). 119–30. DOI: 10.1080/23340460.2016.1166332
Popp, R. (2019). Just Transition of European Coal Regions. Assessing Stakeholder Positions

Popp, H. (2019). Just Transition of European Coal Hegions. Assessing Stakeholder Positions towards the Transition Away from Coal. E3G. https://www.e3g.org/publications/summary-a-just-transition-of-european-coal-regions/

Ranft, F., Schulz, S., Uhl, J., Wendel, P. and Wollensack, F. D. (2019). Foreign Policy and the Just Transition. Dimensions. Challenges. Opportunities. Das Progressive Zentrum, GIZ, Berlin Reitzenstein, A. and Popp, R. (2019). The German Coal Commission – A Role Model for Transformative Change? E3G, London

Reitzenstein, A., Tollmann, J., Popp, R., Bergamaschi, L. and Dimsdale, T. (2018). A Just Transition for All or Just a Transition? E3G. https://www.e3g.org/docs/DiscussionPaper_GlobalJustTransition_E3G_November2018.pdf

Robins, N. and Rydge, J. (2019). Why a Just Transition Is Crucial for Effective Climate Action. Inevitable Policy Response. Vivid Economics Limited, London

Schulz, S., Amon, A., Goritz, A. and Schwartzkopff, J. (2017). Hungary: The Political Economy of the Low-Carbon Transition. E3G, London. https://www.jstor.org/stable/resrep17779
Schwartzkopff, J. and Schulz, S. (2017). Poland: The Political Economy of Th Low-Carbon Transition. Climate & Energy Snapshot. E3G, London. https://www.jstor.org/stable/resrep17776

Raistion: Climate & Energy Snapshot. Eds., Condon. https://www.jstof.org/sable/resteph/17 Skjærseth, J. B., Eikeland, P. O., Gulbrandsen, L. H. and Jevnaker, T. (2016). Linking EU Climate and Energy Policies: Decision-Making, Implementation and Reform. Edward Elgar Publishing, Cheltenham

Skovgaard, J. (2014). EU climate policy after the crisis. Environmental Politics, 23(1). 1–17. DOI: 10.1080/09644016.2013.818304

Strambo, C., Aung, M. T. and Atteridge, A. (2019). Navigating Coal Mining Closure and Societal Change: Learning from Past Cases of Mining Decline. Stockholm Environment Institute, Stockholm. https://www.sei.org/publications/navigating-coal-mining-closure-and-societal-change/

Sweeney, S. and Treat, J. (2018). Trade Unions and Just Transition. The Search for a Transformative Politics. Working Paper, 11. Trade Unions for Energy Democracy, Rosa Luxemburg Stiftung—New York Office, Murphy Institute at the City University. http://www.rosalux-nyc.org/wp-content/files_mf/tuedworkingpaper11_web.pdf

Tänzler, D., Oberthür, S. and Wright, E. (2019). Give Me Five! - Key Blocks to Guide a European Green Deal for EU Foreign Policy on the Geopolitics of Decarbonization. Climate Diplomacy, Berlin

UNFCCC (2016). Just Transition of the Workforce, and the Creation of Decent Work and Quality Jobs. UNFCCC. https://unfccc.int/sites/default/files/resource/Just%20transition.pdf Verkuijl, C., Jones, N. and Lazarus, M. (2019). Untapped Ambition: Addressing Fossil Fuel Production through NDCs and LEDS. Stockholm Environment Institute, Stockholm Ward, M. (2018). Just Transitions and the Green Economy. Navigating the Fault Lines. University of Witwatersrand's Centre for Researching Education and Labour, Johannesburg, South Africa

Wehrmann, B. (2020). Experts criticise proposed German coal exit law for deviating from commission compromise. Clean Energy Wire, 25 May 2020. https://www.cleanenergywire.org/news/experts-criticise-proposed-german-coal-exit-law-deviating-commission-compromise

Weller, S. A. (2019). Just Transition? Strategic Framing and the Challenges Facing Coal Dependent Communities. Environment and Planning C: Politics and Space, 37(2). 298–316. Zygmunt, I. (2018). Poland's harmful duplicity on Just Transition. Just Transition Info. 4 December 2018. http://www.just-transition.info/polands-harmful-duplicity-on-just-transition



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