



Embracing policy paradoxes: EU's Just Transition Fund and the aim “to leave no one behind”

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Abstract

With the adoption of the 2030 Agenda, UN Member States pledge “to leave no one behind” and “endeavour to reach the furthest behind first”. The EU Just Transition Fund (JTF) was designed to meet these policy objectives. It is one of three pillars of the Just Transition Mechanism, aiming at fair *delivery of the European Green Deal* and reducing adverse social and economic impacts of the transition towards a climate-neutral Europe. We examine the formulation of the JTF Regulation, from January 2020 until July 2021 and analyse seven topics of importance during the JTF formulation. Based on the results, we identify and discuss four paradoxes related to governance scales, offsetting exclusion, equity illusion, and eligibility criteria. The paradoxes arise from tension between the all-inclusive objective to leave no one behind, and selective affirmative actions, seeking to reach the furthest behind first. Results of the analysis enabled us to put forward plausible strategies to embrace these policy paradoxes to offer important lessons learned for the JTF and also to future policies that seek to leave no one behind.

Keywords European green deal · Governance innovation · Affirmative action · Sustainability · Climate policies · Just Transition · Policy document analysis · Territorial cohesion

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1 Introduction

The Brundtland Report stressed that *Sustainable development is the development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs* (UN, 1987). The United Nation's (UN) 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) (UN, 2015) put forward the imperative to “*leave no one behind*” and “*reach the furthest behind first*” (UNSDG, 2019: p 7). This policy recognizes the need to “*combat poverty, end discrimination and exclusion, and reduce the inequalities and vulnerabilities*” (UNSDG, 2019: p 6). The UNDP (2018) urges to realize the Agenda for Sustainable Development and do it by drawing on mutually reinforcing “levers”, which are: (1) to examine why people are left behind; (2) empower those who are left behind, and (3) enact policies, laws, reforms, interventions to confront the drivers that leave people behind.

The European Green Deal is an integral part of the European Commission (EC) strategy to implement the UN 2030 Agenda and its SDGs, especially of nr. 13 on climate action. The European Green Deal aims to make Europe the first in the world climate-neutral bloc by 2050 (EC, 11 Dec 2019; Ringel et al., 2021). The European Green Deal is considered as a major policy driver towards sustainability, and it is expected to provide new benefits and opportunities, but will bring in socio-economic challenges to some regions, sectors, and groups of people (EC, 8 June 2021) leaving some behind (Menton et al., 2020). Therefore, the Just Transition Mechanism (JTM) is introduced to accompany the European Green Deal *to ensure that the transition to a climate-neutral economy happens in a fair way, leaving no one behind* (EC, 14 Jan 2020b).

The three pillars of the JTM are: (1) the Just Transition Fund (JTF), (2) InvestEU “Just Transition” scheme, and (3) A new Public Sector Loan Facility. The present paper focuses on the JTF Regulation that outlines also the requirements and framework for territories to develop their Territorial Just Transition Plans (TJTP). TJTPs define the territories to which JTF resources will be allocated, and identify the territorial challenges related to green transition and types of operations envisaged and specify governance mechanisms. Approval of TJTPs by the European Commission opens doors to dedicated financing also under the other two pillars of the JTM (EC 2021c).

The EC proposal on the JTF Regulation (EC, 14 Jan 2020a, b; c.f. Widuto & Jourde, 2021) was published shortly after the adoption of the European Green Deal and subjected to comments and amendments (European Parliament, 17 Sept 2020a). Civil society actors took part in discussions. Subsequent meetings among the European Parliament (EP), the EC and the Council of the EU took place, culminating in a compromise agreement of 9 December 2020 (EP News 2021; Widuto, 2021), its confirmation by the Council (25 Feb 2021); and the JTF Regulation entered into force in July of 2021. Article 2 of the JTF Regulation outlines that “*the JTF shall contribute to the single specific objective of enabling regions and people to address the social, employment, economic and environmental impacts of the transition towards the Union's 2030 targets for energy and climate and a climate-neutral economy of the Union by 2050, based on the Paris Agreement*” (EC, 24 June 2021). In addition, the JTF seeks to further the UN SDGs by concentrating EU funding on green objectives and works in the context of its cohesion policy (EC, 24 June 2021).

The JTF was designed to support EU regions, industries and workers facing challenges (Environment Analyst, 2021; Council of the EU, 2021). It seeks to mitigate negative repercussions of a green transition on employment by financing the diversification and modernization of local economies and supporting workers to be employed in new industries

and sectors (Strambo, 2020; EC, 24 June 2021). The JTF aims to target adaptation due to job losses in fossil fuel production industries and transformation needs of industrial facilities with the highest greenhouse gas (GHG) intensity. To get access to the JTF, EU member states “together with the relevant local and regional authorities” (EC, 24 June 2021) need to develop their Territorial Just Transitions Plans (TJTJs) where the territories most affected by the transition will be identified (EC, 11 December 2020).

These policy developments are important for meeting the objective to leave no one behind (i.e. by making the green transition socially just). However, they are not fully understood. In their review of 115 recent papers, Rempel and Gupta (2021) identified 28 approaches to the green transition and assessed their environmental effectiveness, cost effectiveness, justice and equitability, and institutional feasibility. At the national level, the peer-reviewed paper by Moodie et al. (2021) addressed TJTJs in Sweden. Carnegie LaBelle et al. (2021) focused on implications of the European Green Deal and the JTF for Romanian coal miners. However, we are not aware of peer-reviewed papers specifically examining the policy formulation process of the JTF to leave no one behind and to reach the furthest behind first. Therefore, the *objective of our paper* is to fill this knowledge gap by examining the formulation of the JTF Regulation.

To meet this objective, we develop and apply an analytical framework to understand how a policy to leave no one behind can be designed (Sect. 2). Our research is based on relevant policy documents and examines the ongoing debates by analysing the topics discussed during the JTF formulation. We show that the policy objective to leave no one behind embraces an overarching paradox. If everyone is included, and no one is special—a weak one will remain being disadvantaged and a powerful one will prevail (Sect. 3). We detail this overarching paradox through an in-depth analysis of the formulation of the JTF Regulation. We propose four strategies to manage this paradox (Sect. 4) and conclude that it may be more constructive to embrace the paradox in the policy objective to leave no one behind rather than be aiming to reduce, quantify (in search of a solution) or to neglect it (Sect. 5).

2 Methodology

2.1 Background of the case

We focus on the JTF, because this new Regulation provides a good example of a topical and ambitious policy to leave no one behind. A new set of the rules came into force after policy formulation processes, which included the setting of priorities, definition of objectives and consideration of alternatives (Jann & Wegrich, 2007; c.f., Peters, 2001; Princen, 2007). EU policy formulation is based on the openness and multiple access points—on the one hand, and the authority (illustrated by the EC prerogative to draft and initiate the Community legislation)—on the other (Daviter, 2007). Thus, it is crucial to provide answers to the questions of how various issues enter a discussion during the formulation process and what issues are important in the first place, and/or are included in and excluded from the final formulation.

When sustainability objectives are set, governance measures and instruments are to implement the objectives (Howlett, 1991; Jordan et al., 2003). However, a policy cannot effectively implement new rules without adequate resources. This is especially true when new rules involve compensations and financing of new opportunities. Thus, the

budgetary planning, with assessing of options to finance the leaving of no one behind interventions, is to be sought (UNDP, 2018; UNSDG, 2019).

TJTPs are used to address challenges resulting from the transition, create new opportunities and organize multi-level interactions between the EU, member states and local territories (c.f., Newig & Fritsch, 2009). TJTPs justify the identification of most affected territories, transition challenges they face and expected contribution of JTF resources to overcome the challenges, with a description of governance mechanisms and processes put in place. TJTPs describe transition processes at the national level, including timelines of the steps linked to the National Energy and Climate Plans, and they should be linked to the territorial strategies and other plans at multiple levels (Widuto & Jourde, 2021). To gain access to the JTF funds, territories will have to develop TJTPs justifying their dependence on natural capital, and specifically on fossil fuels (notably coal, lignite, peat, oil shale, heavy oil and diesel) and/or on GHG-intensive industrial activities. TJTPs also outline expected negative economic and social impacts resulting from the green transition (e.g. job losses; transformation of the production processes of industrial facilities with the highest greenhouse gas intensity (EC, 23 September 2021)).

The approval of TJTPs by the EC will open access also to the InvestEU and the European Investment Bank (EIB) public sector loan facility (EC, 2020a, b) being two other pillars of the JTM. While the JTF will provide financing primarily in the form of grants, the two other financing streams will leverage public and private investment by backing the projects of financial partners, such as the EIB (EC, 14 Jan 2020c.; EU Funding overview, 2021; Annex 1).

TJTPs require establishing of new multi-level governance processes to leverage the unique capacities of actors at multiple scales to enhance the fairness in decision-making and resolve potential controversies (Epstein et al., 2015; Moodie et al., 2021). The TJTPs will detail social, economic and environmental challenges and needs for economic diversification, reskilling and environmental rehabilitation (EC, 8 June 2021; Widuto & Jourde, 2021). The Just Transition Platform (EC, 2020c) will provide tailored technical support to the authorities drafting TJTPs to ensure that the TJTPs reflect specific needs of each region (EC, 26 June 2020; EC, 2021b; EU Funding overview, 2021).

The JTF uses the criterion of regional vulnerability to climate change mitigation measures to identify those that are most at risk. The vulnerability to a shock caused by a green transition is considered as not being based on an environmental change, but on a policy change to mitigate the environmental change. The shock is thus seen as a transitional environmental policy (EEA, 19 Nov 2019). The JTF gives the priority to regions that are most dependent on fossil fuels and carbon-intensive industries. It also recognizes remote and marginalized (c.f., SIMRA, 2020) regions experiencing hardships.

Affirmative measures will also be designed to repair structural inequities and enhance the position of disadvantaged groups in societies (Stuart & Samman, 2017; Sommer & Asal 2019; Prys-Hansen, 2020). Thus, characteristics associated with people's vulnerability to shocks and geographical hardships due to the transition, as well as their socio-economic statuses can be used as the eligibility criteria for introducing affirmative measures and positive discrimination. Moreover, socio-economic statuses of individuals are linked to their employment opportunities, and reskilling programmes for workers at risk of becoming unemployed are foreseen (EC, 14 Jan 2020b). The JTF seeks to protect most vulnerable people, sectors and regions (Fig. 1) and is part of a larger structure of the JTM. Allocation of resources from the JTF is based on TJTPs and given to territories.

Structure of the Just Transition Mechanism (JTM)

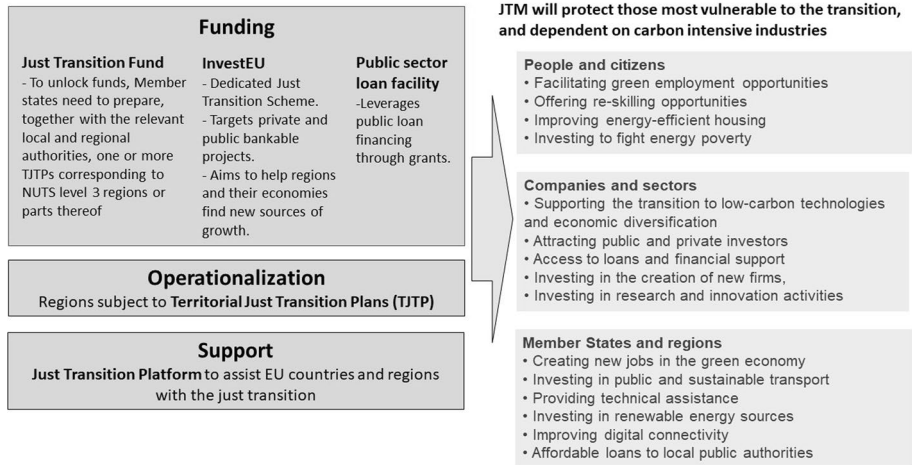


Fig. 1 Structure of the Just Transition Mechanism and its targets. Source: Developed from the EC documents of 2020 & 2021 provided in the reference list

2.2 Materials

A preparatory phase of the JTF lasted approximately 1.5 years and included discussions on the content of the Regulation. Our research was informed by the policy analyses targeting the JTF formulation phase (c.f. Fischer et al., 2007). To capture the discussions, we reviewed a rich body of information derived from the EC databases and news, relevant www pages and policy documents, complemented with policy briefs and reports (Table 1). We focus on documents related to the JTF Regulation. Furthermore, discussions on TJTPs are an integral part of the JTF Regulation, as the JTF provides a regulatory framework for the TJTPs. The discussions on the InvestEU and Public sector loan facility are not included in our analysis.

We adapted the analytical approach of Hsieh and Shannon (2005) and Elo and Kyngäs (2008) to the JTF. Document analysis (Bowen, 2009) can be inductive or deductive (Elo & Kyngäs, 2008). We modified the approach to be integrated (i.e. an intermediate approach between inductive and deductive analyses). Our preparatory phase included defining the objective, followed by an initial screening of the policy documents presented in Table 1 and a survey of the literature on the JTF and on governance (e.g. Bennett & Satterfield, 2018). This enabled us to develop the framework (provided in Sect. 2.3) and identify and examine the categories to focus on.

2.3 A framework to analyse the policy objective of leaving no one behind

The following concepts of the UN SDG (2019) were examined to assess who is being left behind and why: governance, discrimination, vulnerability to shocks, geography and socio-economic status (Annex 2). The UN framework considers these concepts as equally important (UNDP, 2018), while we propose their reordering in a hierarchical manner (Fig. 2).

Table 1 Materials used for examining the formulation of the JTF Regulation

Analysed documents

EC official documents

Proposal for a Regulation of the European Parliament and of the Council establishing the Just Transition Fund (14 Jan 2020a), Annex to the Amended proposal for a Regulation of the European Parliament and of the Council establishing the Just Transition Fund (EC, 28 May 2020),

Regulation (EU) 2021/1056 of the European Parliament and of the Council establishing the Just Transition Fund (EC 24 June 2021)

Documents of the European Parliament

The Committee on Regional Development report tabled for plenary, first reading (EP, 15 July 2020)

Amendments adopted by the European Parliament on the proposal for a regulation of the European Parliament and of the Council establishing the Just Transition Fund (EP, 17 Sept 2020a)

Just Transition Fund. 2020/0006(COD)—17/09/2020. Text adopted by Parliament, partial vote at reading/single reading (EP, 17 Sept 2020b)

Just Transition Fund. 2020/0006(COD)—18/05/2021. Text adopted by Parliament, 1st reading/single reading (EP, 18 May 2021)

Documents of the Council of the EU

Just Transition Fund (JTF) Regulation—Confirmation of the final compromise text with a view to agreement (25 Feb 2021) (Council of the EU 2021)

Supporting documents for policy makers

European Parliamentary Research Service briefs on JTF (Widuto & Jourde, 2021; Widuto, 2021)

Legislative train schedule on establishing JTF (REGI, 2021)

Policy briefs and reports

Report on JTF by Policy Department for Budgetary Affairs Directorate General for Internal Policies of the Union (Cameron et al., 2020)

Analytical report on the JTM published by The Robert Schuman Foundation (Marty, 2020)

European Policies Research Centre blog on TJTPs (Mendez & Fonseca, 2021)

Working Paper on socially just transition by the European Green Deal published by European trade union institute (Sabato & Fronteddu, 2020)

Working paper on the European Green Deal published by the Institute for New Economic Thinking, (Storm, 2020)

Central Europe Energy Partners Report on JTM (Theisen, 2020)

News items in various forums $N=28$

Sources: for details see the list of references

Governance seeks to manage societal problems and create societal opportunities (Kooiman et al., 2005, 2008; Nijnik et al., 2021). Therefore, we consider governance to be crucial for reaching the objectives of sustainable development (Glass & Newig, 2019), while the other concepts to be dependent on it.

In this paper, we focus on policies and other formal institutions (of the ‘rules of the game’, c.f., North 1990; Nijnik et al., 2021), governance arrangements, with measures and instruments set up to make decisions (Jordan et al., 2003), and decision-making structures and processes (Bennett & Satterfield, 2018; Lemos & Agrawal, 2006) put in place. The JTF Regulation promotes social and governance innovation underpinned by a new set of rules, and specifies those having important implications on who is included and who might be left behind (c.f., Gupta et al., 2015) (white box in Fig. 1).

A key financial instrument that the JTF uses for its operationalization is the budgetary planning. The operationalization across the localities proceeds within the frame of TJTPs, and governance processes involve the EU, member states and local level actors. Having the priority for the furthest behind to be reached first, the JTF governance underpins positive discrimination or/and affirmative actions (light grey box in Fig. 1). Affirmative policies

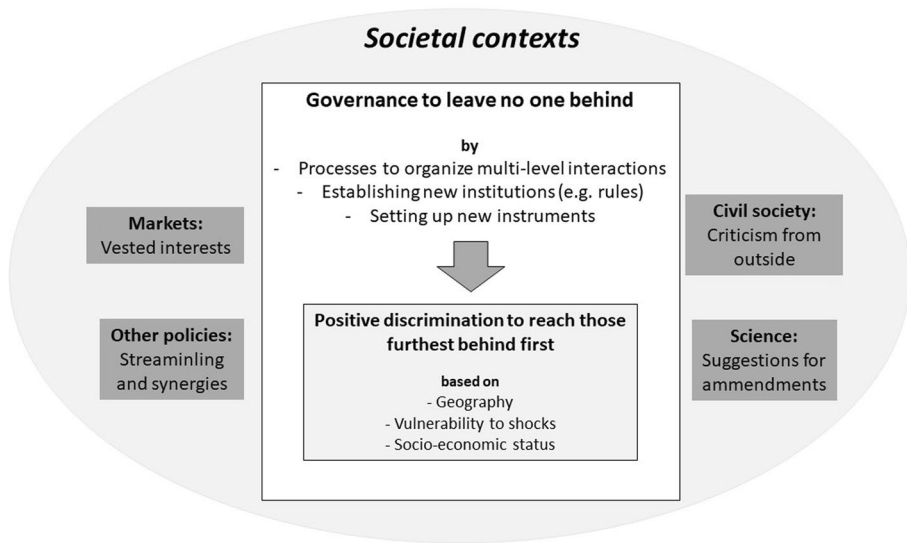


Fig. 2 An analytical framework to examine the policy objective of leaving no one behind.

and measures target the disadvantaged groups (identified according to the eligibility criteria) and facilitate their integration in society (Prys-Hansen, 2020; Sommer & Asal, 2019). The JTF is primarily meant for those who are vulnerable to shocks, deriving from climate change mitigation measures. In addition, it uses the geography and socio-economic statuses as criteria and places affirmative measures into the societal contexts (e.g. of markets, civil society, other policies and international environmental agreements) that influence the JTF content and its operationalization (dark grey boxes in Fig. 1).

2.4 Policy paradoxes and objective to leave no one behind

The concept of paradox has been used widely in policy analysis (e.g. Kunseler & Tuinstra, 2017; Pollans, 2019; Smith, 2015; Wesselink et al., 2013). Stone (2002) argued that rational policy analysis with the goal to improve governance has been based on a profound disgust for ambiguities and paradoxes of politics where everything is considered to have a single meaning. This way, a policy paradox is not congruent with the problem it is meant to solve but rather reveals the “hidden” agendas and interests of policy makers or their constituents themselves (Pollans, 2019; Stone, 2002). Therefore, the identification of paradoxes associated with policies can play an important role in improving governance and policy processes put in place to better tackle the socio-environmental problems.

Lindqvist (2019) notes that paradoxes emerge during policy formulation rather than its implementation phase. Therefore, the formulation of the JTF Regulation offers a good case to identify paradoxes relevant for policy formulation and ways by which they can be coped with. Previous literature has proposed ways by which policy paradoxes can be managed. For example, dealing with policy paradoxes requires responding to those paradoxes via iterative negotiations (Lannon & Walsh, 2020), and continuous evaluation of potential responses to yet emerging paradoxes (Lindqvist, 2019). Jarzabkowski et al. (2013) identify acceptance, confrontation and transcendence as active responses to paradoxes. Acceptance relates to the perception that policy paradoxes and inconsistencies are part of policy

Table 2 The topics discussed during the formulation of the JTF Regulation in association with its aim to leave no one behind*Governance to leave no one behind*

Topic (1): Processes to operationalize the JTF: Territorial Just Transition Plans

Topic (2): Budget allocation: is there enough to include all?

Topic (3): Establishing the rules: Inclusion and exclusion from the JTF support

Positive discrimination to reach furthest behind first

Topic (4): Regional, socio-economic, or vulnerability-based support by the JTF

Topic (5): Recognizing and connecting the JTF to social policies in general

Topic (6): Will the JTF consume funds from the cohesion policy (EFS + ; ERDF)?

Topic (7): Methods to pre-define the most vulnerable target regions

formulation and implementation, and that acceptance and confrontation of paradoxes, rather than avoidance of paradoxes, can help to obviate overtly juxtaposed debates. Transcendence requires a critical reflection to examine the underlying assumptions and develop more useful views of opposites. These responses are alternative to defensive views of policy actors in the face of paradoxes (Lannon & Walsh, 2020). To cope with the paradoxes, policy actors need to acknowledge expectations of non-hierarchical relationships in case of collaborations to increase the legitimacy and recognize the expertise of external partners in policy formulation and implementation (Lindqvist, 2019).

Critical findings towards the policy objective to leave no one behind reveal a general paradox linked to it. Stanley et al. (2017) show that there is a gap between the rhetoric, surrounding this global policy objective, and the reality regarding the leaving of no one behind. This gap could be explained through an observation that the objective to reach the furthest behind first is always not connected to the concrete attempts to leave no one behind. Fleurbaey (2019) argues that the best policies, prioritizing to reach furthest behind first, do not necessarily involve the most intuitive anti-poverty targeted measures. Weber (2017) argues that the commitment to “leave no one behind” is a discourse strategically deployed as a global project, privileging commercial interests over policy commitments to provide universal entitlements. The paradox to leave no one behind builds on the observation that, if everyone is equal, and no one is special, the powerful will prevail and those in weak positions will remain marginalised. As highlighted in the framework (Fig. 2), governance can secure societal rights of the weak, only if it is explicitly aiming to take affirmative actions regarding those at a margin, in terms of the geography, socio-economic status, and/or vulnerability to shocks.

To consider this in detail, we identify specific topics discussed during the formulation of the JTF Regulation (Sect. 3); unravel the paradox of objective to leave no one behind and identify promising ways to manage it for socially equitable, green transition targeted by the European Green Deal and the linked JTF.

2.5 The topics targeted

Our analysis started with identification of the topics associated with the JTF, and the categories depicted in the framework (Fig. 1). The topics (presented in Table 2) were identified as prevalent in the discussions taking place during the JTF formulation phase. In-depth insights into these topics were gained through the cross-fertilization of the insights

received from the sources specified in Table 1. Special attention was given to the topics associated with the policy objective to leave no one behind.

While we performed a standard content analysis of the topics, we developed a genealogy of how the topics evolved through time (from the time when the proposals were made until the date when the JTF Regulation came into force). The timelines across the topics were constructed based on the publication dates of the corresponding documents. We constructed the timelines on six topics. An exception was topic 1 (due to its linkages to the other topics). For it, we provided a general description, while the insights into it were addressed indirectly (under the other related topics, with their corresponding timelines).

3 Results: European Just Transition Fund and its objective to leave no one behind

This research provided the following contribution to an improved understanding of the evolution of the JTF Regulation to leave no one behind (across the topics listed in Table 2). The results are supported by Annex 3, which presents a synthesis timeline on topics 2 & 3. Annex 4 reflects on topics 4–7, including proposals, amendments and critiques put forward by various actors during the formulation of the JTF.

3.1 Findings on the seven examined topics

Topic (1) concerns TJTPs by regions to unlock access to the JTF support. National authorities are to submit their TJTPs to the EC within the framework of the European Semester,¹ so that the Commission can approve their overall ambition and the specific content, as well as certify their conformity with the "National Energy-Climate Plans" for 2030. The analysis provided evidence that this procedure would be too restrictive and remote, and quite undemocratic to ensure the necessary involvement of social partners. This finding is in line with the arguments by Marty (2020) and the Bankwatch Network (2021). Moreover, national governments may impede the access to funding by lower-level governments in the regions targeted, as this is also shown by Keating (2020).

There is a need for adequate flexibility linked to the creation and implementation of TJTPs. Mendez and Fonseca (2021) point to risks involved in the high level of programming details required in the plans and bureaucratic procedures to modify these. For example, submission of a TJTP for several programmes could be administratively practical, but compromising the flexibility for future amendments, because changes will affect simultaneously several programmes. Stormbo (2020) notes that TJTPs lack provisions to monitor their impacts on vulnerable groups and argues that moving a decision authority to the local/ municipal level (and strengthening the capacities of subnational actors) is a key for successful transition (c.f., Moodie et al., 2021). The results of our analysis also provided evidence that a European rule may challenge the flexibility to account for local conditions, leading to the risk of leaving some actors behind. The challenges concerning

¹ The European Semester of the European Union was established in 2010 as an annual cycle of economic and fiscal policy coordination. It provides a central framework of processes within the EU socio-economic governance. During the European Semester, Member States are supposed to align their budgetary and economic policies with the objectives and rules agreed at the EU level. It also offers a space for discussions and interactions between the European institutions and Member States.

TJTPs identified in this research link to policy and practice, as JTF resources are granted to develop specific activities in the territories based on the TJTPs. The other six topics are focused on policy formulation at the European level.

Topic (2) is on the budget planned to be used within the JTF. It was altered many times and simultaneously with the widening of the scope of those targeted. This evoked worries that the workers employed in fossil fuel or carbon-intensive industries would not receive enough of support (Cameron et al., 2020; World Resources Institute, 2020), and resources may not be adequate to reach the ambitious EU objectives. The largest beneficiaries of the JTF will be Germany, Poland, and Romania, while Estonia, Bulgaria, and the Czech Republic will have the highest aid intensity per capita (Mendez & Fonseca, 2021). Critical perspectives were exemplified by Theisen (2020) who argued that the JTF is *a tool for the EC to gain political buy-in from Eastern member states for the Climate Law and 2050 carbon neutrality*, and that being *light on funds, vague in scope and somewhat redundant, it is not a winning formula*. Thus, when resources are limited, everyone cannot be included, and prioritizations need to be made often among the contradictory interests and diverse socio-economic situations.

Topic (3) considers principles for defining the activities that are eligible for support. The EC planned to use the European Taxonomy² on green activities to frame the activities included in the JTF (EC, 2021a; EC, 14 Jan 2020b). However, discussions were polarized between NGOs, requesting exclusions from support, and industries aiming to protect their vested interests (Sabato & Fronteddu, 2020). Sixty-two NGOs sent an open letter to all MEPs urging to vote against the inclusion of gas in JTF. Greenpeace (2020) warned for industry overtaking the JTF. On the other hand, eight East European countries urged the EU to include natural gas projects in future funding (EURACTIV, 6 July 2020). The agreed text of the JTF Regulation does not include natural gas among eligible activities (Widuto, 2021). The original proposal (EC, 14 Jan 2020a) also did not have a clear view on excluded activities. However, the Article “Exclusion from the scope of support” of the final Regulation (EC, 24 June 2021) explicitly mentions the decommissioning investment related to the production, processing, transport, distribution, storage or combustion of fossil fuels. Thus, the results of our analysis indicate that a green transition in its background creates the rationale for prioritization, with the remaining questions of whether the reskilling efforts, support and compensation are enough to bring back on board of those who are at risk of being left behind.

Topic (4) is on eligibility. An initial proposal of the JTF recognized that growing disparities between regions are inconsistent with the objectives of social, economic, and territorial cohesion (EC, 14 Jan 2020a). The final version stresses that Member States shall take account of the situation of islands and outermost regions facing serious socio-economic challenges deriving from the transition towards a climate-neutral economy (EC, 24 June 2021). The results of our analysis show that the final formulation of the JTF accounts for geographical and socio-economic starting points, along with a focus on vulnerability and seeking to direct its affirmative actions towards the actors potentially experiencing hardships.

² The EU taxonomy is a classification system, establishing a list of environmentally sustainable economic activities. It could play an important role helping the EU scale up sustainable investment and implement the European green deal. (https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en).

Topic (5) considers social rights. The phrase “to leave no one behind” was introduced during the formulation process, likewise a reference to the European Pillar on Social Rights (i.e., an initiative launched by the EC with the aim to bring back the social dimension of the Union, rebalance economic policies with social considerations, reconnect the policies with citizens, while addressing key issues related to changes in the world more generally, and promoting higher social standards (EPR, 2017). This position identified by us highlights the efforts to cope with social impacts of the transition by connecting these efforts to other initiatives to reduce social disparities. The JTF Regulation (EC, 24 June 2021) states that “*All support in those areas should require appropriate justification in the TJTPs and should follow the objectives of the European Pillar of Social Rights*”. Amendments adopted by the EP (17 Sept 2020a, b) on establishing of the JTF proposed to explicitly mention the European Pillar of Social Rights in the Regulation. This seemed to be a response to the critique, according to which the JTF includes a risk that employability-related policies replace policy discussions on universal social rights (Sabato & Fronteddu, 2020). The explicit mentioning of the European Pillar of Social Rights in the JTF Regulation is a sign that this Regulation is seeking to ensure that it does not compromise existing social rights in its efforts to target the support for those, specifically vulnerable to the green transition.

Topic (6) is on links between the JTF Regulation and the cohesion policy under which the Fund will be implemented (Widuto & Jourde, 2021). Critiques emerged against the initial plan to re-allocate a significant share of European Regional Development Fund (ERDF) and European Social Fund + (ESF+) resources to support “climate” projects (Marty, 2020). There was a risk that employability-related policies would replace the supporting of universal social rights (Sabato & Fronteddu, 2020). The coupling would have meant that up to 20% of the states’ ERDF and ESF+ allocations would address the objectives of the JTF rather than the cohesion policy (Vander Auwera, 2020). Cameron et al. (2020) proposed the removing of mandatory transfers. The decision was that resources could be transferred from other cohesion funds to the JTF on a voluntary basis (European Parliament News, 2020). However, our analysis indicates that the option to complement the JTF with the ERDF and ESF+ and associated national co-financing may still lead to constraints in other programmes and reduced allocations to non-eligible regions. This is also shown by Mendez and Fonseca (2021) highlighting the risk that moving of social support from some actors to the others could lead to leaving behind the people who were previously covered by supportive policies.

Topic (7) concerns a pre-allocation key that was proposed for identification of the territories most affected. The initial idea of pre-allocation of JTF grants for vulnerable regions was based on a small set of criteria (EC, 28 May 2020). The idea was that the JTF uses a pre-allocation key at the country level based on their identification of carbon-intensive NUTS 2 regions (weighting 49%), employment rate in mining of coal and lignite (weighting 25%), employment in industry (in NUTS2 regions) identified as highly carbon intensive (weighting 25%), production of peat (weighting 0.95%), and production of oil shale (weighting 0.05%). However, Cameron et al. (2020) pointed out that the pre-allocation of funds by using this formula might not accurately reflect the needs (Marty, 2020). They noted, for example, that it might happen that some highly carbon-intensive NUTS3 regions would not be recognized by the formula (e.g. in case they were located within a larger, but not highly carbon intensive, NUTS2 region) and that the NUTS2 allocation key was not connected to the territories that received funds from the JTF. Consequently, the pre-allocation of funds based on NUTS 2 was altered by putting more emphasis on TJTPs (Council of the EU, 2021). The results of

the analysis indicate that this will provide more of flexibility and room for regions to identify their needs.

3.2 Paradoxical characteristics of the policy objective to leave no one behind

The analysis of debates on the seven topics of JTF policy formulation enabled us to reveal that achieving the policy objective to leave no one behind is challenged by paradoxical characteristics of the objective itself. We identified the following four paradoxes based on the JTF case. We expect that these paradoxes can be relevant also for other policies aiming to leave no one behind (see Sect. 4). The two first paradoxes relate more to challenges of reaching those furthest behind first. The two latter paradoxes relate more to challenges to ensure that a policy will leave no one behind.

Firstly, we discovered that connecting the JTF to social policies by explicitly mentioning the equity objectives and social rights in the policy texts (topic 5) is associated with the *paradox of equity illusion*. The policy objective to leave no one behind is not an equity term necessarily. Associated social complexities need to be accounted for. To focus on those vulnerable to the climate change mitigation measures put in place may be sufficient from the perspective of the European Green Deal. However, this approach alone risks neglecting of other drivers and the conditions of marginalization. The JTF Regulation in its final document mentioned explicitly the European Pillar of Social Rights. This brings to light the importance of connecting the JTF to other policies for social protection to decrease the possibility of forgetting the concerns and problems of those who are already furthest behind. In this context, the findings also demonstrate that the pervasive European policy of a green transition should take account of other development challenges and especially at the local level.

Secondly, we found that ways to identify eligible regions and actors for JTF support were contested (topics of 4 & 7). The *paradox of eligibility criteria* links to the critical question of how to decide on who are the actors to be included under support by a policy (topic 4). Obviously, the eligibility criteria will affect on who is included, and whether those furthest behind are reached at all. Furthermore, defining eligible regions by quantifications is likely to neglect the concerns of people living in these regions (topic 7). This explains why GHG emission-based quantification of the regions eligible for JTF support was changed towards identification (via TJTPs) of the actors and regions targeted (topic 7). This also explains why, in addition to the vulnerability to climate change mitigation (as an eligibility criterion, topic 4), geographical hardships and to some extent socio-economic statuses of individuals were finally included into the JTF Regulation in order to reach those furthest behind.

Thirdly, our results imply that the budgetary planning (topic 2), and the inclusion/exclusion of activities (topic 3) and the links between the JTF and the cohesion policy (topic 6) pose the need to balance the aim to leave no one behind with the realism as to who and what activities are to be identified for support. We call this *paradox of offsetting exclusion*. In its extreme form, the resources are taken from the disadvantaged ones and moved to those targeted by this policy (e.g. moving the cohesion funds to more narrow climate action activities). Yet, some exclusion needs to be made to enable affirmative measures, and the question of fairness relates to ‘whom the resources for affirmative measures are to be taken from’. Thus, it is possible that policies seeking to enhance fairness may actually leave some actors behind.

Fourthly, the ability of TJTF (topic 1) to leave no one behind is challenged by the requirement to fully recognize the unique concerns of regions and people living in those regions, while to simultaneously address the need of making decisions at the European level. We call this phenomenon as the *paradox of a governance scale*, defined as the necessity for EU level prerogative decisions to leave the flexibility for regions to fully recognize the unique local concerns and aspirations to leave no one behind.

Table 3 summarizes key challenges identified across the topics examined, the paradoxes explained, and links to the strategies to embrace the paradoxes. Table 3 is based on our results, presented in detail in Sect. 3.1 and in Annexes 3 & 4, on the ways how the final JTF Regulation addresses the challenges that occurred during JTF formulation.

4 Discussion

We identified four paradoxes (Sect. 3.2) that emerge from tension between the policy objectives to leave no one behind, and to reach those furthest behind first. As this is illustrated in our framework (Fig. 2) and the examined cases, a set of governance arrangements can be developed to operationalize the policy objective to leave no one behind, but unless the governance arrangements are not explicitly seeking to create affirmative actions and if they do not specifically address the regional characteristics, existing socio-economic statuses, and vulnerabilities to shocks in question, they are likely to fail in reaching the furthest behind first. Furthermore, new governance arrangements, for example the arrangements, developed to operationalize the JTF, need to balance between targeting of actors under the scope of the policy, and thinking of actors who are already in a marginal position. The European Green Deal may marginalize fossil dependent regions, and the JTF needs not only to support the actors marginalized by the European Green Deal, but also to consider and somehow to address the existing regional characteristics and socio-economic statuses. Otherwise, it is likely that those already furthest behind will be marginalized even further.

The tension between the all-inclusive objective to leave no one behind, and selective affirmative actions, seeking to reach the furthest behind first has been reported earlier, for example, by Weber (2017); Stanley et al. (2017) and Fleurbaey (2019) who critically scrutinized the objective to leave no one behind. The paradoxes identified in this paper exemplify that in order to leave no one behind, the policy actors need to understand and embrace the complexities and ambiguities by recognizing that even a policy that is profoundly built to leave no one behind (e.g. the JTF Regulation) may turn out to be socially unjust. Strategies to manage the paradoxes are introduced in Table 3.

In practical terms, the final formulation of the JTF was accepted by the European Parliament (615 votes for, 35 against, 46 abstentions) (EP, 18 May 2021). The wide consensus likely means that constructive strategies to cope with challenges of the green transition are associated with the embracing of the paradox to leave no one behind, rather than seeking to ignore or reduce it. Political acceptance here is interpreted to be dependent on the ways how the arising challenges were handled in the final version of JTF Regulation, that is, the ways to embrace the identified paradoxes. This is in line with Jarzabkowski et al. (2013) Lindqvist (2019), and Lannon and Walsh (2020), who pinpoint that iterative negotiations and continuous evaluations are more constructive ways to manage policy paradoxes, than policy efforts to ignore or hide them. Next, we contribute to the policy paradox literature by identifying and discussing four strategies distilled from the analysis of the JTF case to embrace the paradoxes.

Table 3 Paradoxes associated with the policy objectives to reach the furthest behind and to leave no one behind, and strategies designed to embrace them

Paradoxes	Topics grounding the paradox	Key challenges identified	Strategies to embrace the paradoxes
Paradox of equity illusion	Topic (5): Connection to social rights and policies	How to ensure that an inclusive policy may not reach the furthest behind?	“Putting marginal at the centre” (Sect. 4.1.1)
Paradox of eligibility criteria	Topic (4): Regional, socio-economic, and vulnerability -based support	What criteria to use to identify the most vulnerable actors eligible for support?	“Employing volatile eligibility” (Sect. 4.1.2)
	Topic (7): A pre-allocation key defining the most vulnerable regions	How to identify (by calculating) the territories most vulnerable to the transition, while being able to recognize the needs of people on the ground?	
Paradox of offsetting exclusion	Topic (2): Budget allocation	How to balance a limited budget with the scope of the policy to leave no one behind?	“Restricting activities but not by discriminating actors” (Sect. 4.2.1)
	Topic (3): Inclusion and exclusion of activities	How to decide what activities are included and excluded from the support?	How to ensure that a policy will leave no one behind?
Paradox of governance scale	Topic (6): Links to/with the cohesion policy (EFS + ; ERDF)	How to avoid moving resources and discrimination to somewhere else?	
	Topic (1): TJTP processes and multi-level governance	How to simultaneously capitalize unique capacities from the local, national, and European scales?	“Open closure” (Sect. 4.2.2)

4.1 How to ensure that a policy reaches those furthest behind?

4.1.1 Putting marginal at the centre

The paradox of equity illusion can be embraced by putting ‘marginal’ at the centre. Topic 5 is about recognizing those already ‘at the margin’ and explicitly connecting the JTF to social rights policies for making sure that the disadvantaged actors and places are considered. However, Sommer and Asal (2019) argued that affirmative action policies could be designed to benefit policy makers and their constituents. There are arguments that the European Green Deal and JTM are more about preserving existing interests than of societal transformation, and that they may represent a ‘colossal greenwashing’ and serve industrial vested interests downplaying a just transition (Storm, 2020; Varoufakis & Adler, 2020). Moodie et al (2021) have examined the TJTP process in Sweden and showed that, especially in the beginning, the views of industry were highlighted, resulting in the risks of leaving the already marginalized actors behind, and overriding the social objectives by technical aspects of the green transition. Our results show that there was a danger for the JTF to be compensating the industry for climate change mitigation yet overlooking other societal problems. In the beginning of the JTF drafting process, the European Pillar of Social Rights was not acknowledged and the phrase “to leave no one behind” was not used. These points were explicitly mentioned later during formulation of the JTF Regulation (Annex 4), and this is considered by us as a necessary shift towards the leaving of no one behind and reaching those furthest behind first. In its final form, the JTF was connected to the European Pillar of Social Rights to ensure that the social rights are respected in a way that is not only able to leave no one behind, but also reach the furthest behind first.

Alexandris Polomarkakis (2020) reviewed the policies introduced by the European Pillar of Social Rights and its accompanying initiatives in the light of their contribution to EU's social sustainability. Alexandris Polomarkakis (2020) found out that social aspects have often been subdued by market-based objectives, and that especially after the 2008 crisis, a resurgence of interest in establishing a socially sustainable Union, crystallized in the European Pillar of Social Rights and its accompanying initiatives. Garben (2019) argued that the significance of the European Pillar of Social Rights should be assessed not just in relation to its proclamation of twenty social rights and principles, but by conceptualizing it as a broader social action plan that can significantly improve the level of social protection of many European citizens. Furthermore, Garben (2019) connects the strengths of the European Pillar of Social Rights to its ambiguity, which is not something to be resolved either academically or in practice, but instead to be understood as an intrinsic part of a fluid, constantly evolving initiative, with uncertain and shifting content and boundaries, providing leeway, especially to the Commission to act as a policy entrepreneur for social rights. This highlights constructive ways to embrace the policy paradoxes.

4.1.2 Employing volatile eligibility

The paradox of eligibility criteria can be tackled by maintaining the eligibility for support to be more flexible, instead of strictly pre-defined. The relevant topics considered are 4 & 7. Regarding topic 7, the initial idea of using NUTS 2 regions to define most vulnerable territories would have led to their top-down technical identification by complex calculations, likely resulting in neglecting of the needs of people at various and diverse localities

(Cameron et al., 2020). Regarding topic 4, there was a lack of clarity on whether to stress: (1) regional disadvantages, (2) socio-economic statuses of people or (3) vulnerability of companies and sectors to shocks arising from the green transition (e.g. especially in fossil fuel dependent and carbon-intensive industries). These are flagged as important criteria for designing of policies to leave no one behind (UNDP, 2018; UNSDG, 2019). The final JTF Regulation recognizes that geographical hardships (Article 6), job losses, and social and economic statuses of people are to be addressed in TJTPs (Article 11). Therefore, technical and top-down identification of the territories targeted and of the needs of multiple actors would fade, enabling a certain flexibility of TJTPs. Collaborative dialogues among relevant actors at multiple governance levels would be encouraged, and in such a way, the ‘real’ needs of citizens, companies, sectors, member states and regions recognized to reach those furthest behind first.

4.2 How to ensure that a policy will leave no one behind?

4.2.1 Restricting activities but not by discriminating actors

The paradox of inclusion by exclusion means that a certain degree of exclusion needs to take place to advance the objective to leave no one behind, and that positive discrimination should target those furthest behind first (c.f., Prys-Hansen, 2020; Sommer & Asal, 2019; Stuart & Samman, 2017). However, the exclusion should be directed towards activities that do not fit into the scope and priorities of environmental agreements (e.g. the European Green Deal), but not towards their actors. This relates to topics 2, 3 and 6 (Table 3). The JTF Regulation, with its plans to consume resources from the ESF+ and ERDF, was at risk of leading to discrimination of disadvantaged actors. Eventually (Annex 4), the moving of resources from the cohesion funds to climate action was changed from obligatory to voluntary. Activities to be included in/excluded from the support were also debated, and finally identified and agreed upon. Furthermore, the JTF Regulation has introduced the climate action-based conditionality for gaining funds and a green rewarding mechanism to provide incentives for excluding brown activities and encouraging an ambitious climate action (EC, 24 June 2021). These decisions (positively) discriminate certain activities (not actors), while the JTF seeks to support the beneficiaries of restricted activities (e.g. by reskilling courses, new employment opportunities). However, the ability to leave no one behind is subject to budget constraints and influenced by the wideness of the scope of actors targeted for positive discrimination.

4.2.2 Open closure

European policy making includes a rather open phase of agenda-setting followed by robust and closed decisions by the EU (Daviter, 2007). The paradox of governance scale is that decisions at the European level need to be made, but simultaneously they need to leave enough of flexibility for local operationalization. Threats as to retaining of flexibility concerning the JTF were identified regarding the topic (1) on operationalization of TJTPs by novel processes, combining EU, member state and local level considerations. This paradox can be tackled by an “open closure” (c.f., Montana, 2017; Stirling, 2010) (i.e. by leveraging

of scale-dependent capacities within a multi-level governance and enabling a certain flexibility while accounting for local problems and challenges, c.f., Epstein et al., 2015). The JTF Regulation largely implies a consensual closure, but details of its territorial implementation remain open to be sharpened in the TJTPs, contributing to flexibility of accounting for local conditions and specific problems (given that the multi-level governance of the JTF embraces the EU—member state—territory relationships).

5 Conclusions

We have proposed a framework to analyse the policy objective to leave no one behind. We applied it to examine the Just Transition Mechanism, and specifically the Just Transition Fund, designed to complement the European Green Deal by ensuring that no region, sector, or actor is left behind, and to reach those furthest behind first. The framework helped us to identify the key topics, related challenges, and the strategies by which the EU, during its policy formulation period, addressed the challenges identified (Table 3). We have uncovered that the enactment of the UN 2030 Agenda for Sustainable Development incorporates four paradoxes exemplified in the European Green Deal (EC, 11 Dec 2019) and especially in the JTF, during operationalization of the just transition to leave no one behind (EC, 24 June 2021). Based on the results, we discussed the strategies to embrace these paradoxes. We show that the attempts to: (i) prioritize those that/who are most vulnerable and at risk (e.g. carbon-intensive industry as the biggest loser); (ii) fund policy realization from the resources dedicated to those already furthest behind; (iii) identify the target regions via calculation; and (iv) make the decisions closed seem to be counterproductive for meeting of the policy objective to leave no one behind. We demonstrate that substantial changes on many topics took place between the proposed JTF and the produce of its final version. We explain that the strategies to manage the challenges arising from a green transition represent the movement away from the efforts to “rationalize” the solutions suggested. The main conclusion made is that a paradoxical policy problem cannot be reduced, quantified or stripped away from its internal contradictions and even illogical characteristics. The way forward lies in the embracing of the paradox itself: the paradox, embedded in the tension between the all-inclusive policy objective to leave no one behind, and selective affirmative actions, seeking to reach the furthest behind first. Our general suggestion for policy makers and other actors seeking to advance the UN Agenda for Sustainable Development is the requirement to incorporate the objective to reach the furthest behind first explicitly into the agendas and practices for advancing fair green transitions, because otherwise the attempts to leave no one behind will marginalize the weak even further.

Appendix

Appendix 1

See Table 4.

Table 4 The three funding instruments under the Just transition Mechanism and their targets

JTM funding instrument	Amount of funding	The targets of funding
Just Transition Fund	17.5 billion €	The JTF will support economic diversification and reconversion of the territories concerned. This means backing productive investments in SMEs, creation of new firms, research and innovation, environmental rehabilitation, clean energy, up- and reskilling of workers, job-search assistance and active inclusion of jobseekers in programmes, as well as the transformation of existing carbon-intensive installations when these investments lead to substantial emission cuts and job protection
InvestEU	expected to mobilise €10–15 billion in mostly private sector investments	InvestEU will not only support investment in projects in just transition territories (regions having approved transition plans under the JTF rules), but also in other regions, provided that they benefit the just transition territories InvestEU will support investments in a wider range of projects compared to the JTF, such as projects for energy and transport infrastructure, including gas infrastructure and district heating, also decarbonisation projects, economic diversification and social infrastructure The final use of InvestEU will remain demand-driven and depend on the project pipeline and the capacity of the regions concerned These loans would provide public sector entities with resources to implement measures to facilitate transition to climate neutrality. Supported investments will range from energy and transport infrastructure, district heating networks and energy efficiency measures, including renovation of buildings, as well as social infrastructure
Public sector loan facility	will combine €1.5 billion of grants financed from the EU budget with €10 billion of loans from the European Investment Bank, to mobilise between €25 and €30 billion of public investment	

Source: EC (2021c) & EC (2020, January 14)

Appendix 2

See Table 5.

Table 5 Five aspects to consider when analysing whether someone is at risk of being left behind

Aspects	UNDP (2018) definition
Governance	Where do people face disadvantage due to ineffective, unjust, unaccountable or unresponsive global, national and/or subnational institutions? Who is affected by inequitable, inadequate or unjust laws, policies, processes or budgets? Who is less or unable to gain influence or participate meaningfully in the decisions that impact them?
Discrimination	“What biases, exclusion or mistreatment do people face based on one or more aspects of their identity (ascribed or assumed), including prominently their gender as well as ethnicity, age, class, disability, sexual orientation, religion, nationality, indigenous, migratory status etc”.
Geography	“Who endures isolation, vulnerability, missing or inferior public services, transportation, internet or other infrastructure gaps due to their place of residence?”
Socio-economic status	“Who faces deprivation or disadvantages in terms of income, life expectancy and educational attainment? Who has less chances to stay healthy, be nourished and educated? Who has less chances to compete in the labour market? Who has less chances to acquire wealth and/or benefit from quality health care, clean water, sanitation, energy, social protection and financial services?”
Shocks and fragility	“Who is more exposed and/or vulnerable to setbacks due to the impacts of climate change, natural hazards, violence, conflict, displacement, health emergencies, economic downturns, price or other shocks?”

Appendix 3

See Table 6.

Table 6 Timeline of funding decisions (Topic 2) and activities included/excluded from the JTF support (Topic 3)

Actor and timeline	Funding	Included activities	Excluded activities
14 January 2020 the EC published a legislative proposal on the JTF (EC, 14 Jan 2020a, b)	The initially proposed JTF's budget amounted to €7.5 billion	To ensure that the funded activities are sustainable the Commission will prepare the climate taxonomy in 2020 and a taxonomy for all other environmental objectives by the end of 2021 It explicitly mentions investment in SMEs, start-ups, new firms, research and innovation, advanced technologies; deployment of technology and infrastructures, digitalisation; regeneration and decontamination of sites, and circular economy	Not particularly mentioned
Amendment of the JTF proposal (28 May, 2020) to support recovery from the covid pandemic (Cameron et al., 2020)	EC proposed increasing the proposed JTF budget from €7.5 to €40 billion (in 2018 prices). The new amount included €10 billion under the 2021–2027 MFF, and €30 billion under Next Generation EU (2021–2024). (Widuto, 2021)		Given its small size, the JTF will not be able to tackle all the objectives. Should the scope of its eligible activities be narrowed to focus on social support and retraining? (Cameron et al., 2020)

Table 6 (continued)

Actor and timeline	Funding	Included activities	Excluded activities
The EP Committee report tabled for plenary, 1st reading/ single reading (EP 15 July 2020)	At the European Council meeting on 17–21 July 2020, EU leaders agreed on the recovery package and 2021–2027 budget. The European Council conclusions reduced the total JTF resources to €17.5 billion (€7.5 billion under the MFF and €10 billion under Next Generation EU, in 2018 prices (Widuto & Jourde, 2021)	<p>-To include sustainable investment in:</p> <ul style="list-style-type: none"> (i) microenterprises and sustainable tourism; (ii) social infrastructure; (iii) smart and sustainable mobility and transport infrastructure; (iv) research and innovation, including in universities and public research institutions; (v) projects fighting energy poverty; (vi) green infrastructure <p>-The Green Rewarding Mechanism. 18% of the JTF shall be allocated in accordance with the speed with which the Member States reduce their GHG emissions</p>	<ul style="list-style-type: none"> - Investment in enterprises other than SMEs - Operations in a NUTS 2 region where an mine or a peat extraction field or reopening of a new coal, lignite or oil shale mine or a peat extraction field or reopening of a temporarily decommissioned coal, lignite or oil shale mine or a peat extraction field is scheduled during the duration of the programme -Members proposed a derogation for investment in activities related to natural gas unless they qualify as “environmentally sustainable” in accordance with the Taxonomy Regulation
May–December 2020	EU Budget negotiations between May and December (EC, 2020b)	8 East European countries urged the EU to include natural gas projects in future funding, which they said they would need to shift away from coal power (EURACTIV, 6 July 2020)	62 NGOs sent an open letter to all MEPs urging them to vote against including gas in the JTF WWF (2 July 2020). Greenpeace (European Unit 6 July 2020) warned for industry’s overtaking the JTF

Table 6 (continued)

Actor and timeline	Funding	Included activities	Excluded activities
Amendments adopted by the EP on 17 September 2020 on the proposal for the JTF Regulation (EP, 17 September 2020a) Text adopted by the Parliament, partial vote: 417 votes to 141, with 138 abstentions (EP, 17 September 2020b)	During its plenary session on 17 September 2020, the EP adopted its amendments to the Commission proposal, including recommending an increase in the MFF part of JTF to over €25 billion, in 2018 prices (Widuto & Jourde, 2021)	The amendments also extend the scope of support to include culture, education and community building, investment in social infrastructures, job creation activities, energy storage technologies, low-emission district heating, training of workers and jobseekers, active ageing support and income support for workers in transition between jobs (EP, 17 September 2020a) The Commission may approve investment in activities related to natural gas, if they qualify as environmentally sustainable (EP, 17 September 2020a.)	It is recommended that access to JTF should be conditional on adopting a national objective of achieving climate neutrality by 2050 (EP, 17 Sept 2020b)
Provisional political agreement on the JTF Regulation was reached in dialogue on 9 December 2020	The final agreement between the Parliament and the Council reached in December 2020 confirmed the JTF budget (Widuto, 2021)		Excluded from the financing will be: (i) decommissioning or construction of nuclear power plants; (ii) activities related to tobacco products, (iii) investment related to fossil fuels, and (iv) companies in difficulty, unless authorised under temporary state aid rules established to address exceptional circumstances (Council of the EU, 25 Feb 2021)

Table 6 (continued)

Actor and timeline	Funding	Included activities	Excluded activities
March 2021		Joint Research Council report: “The analyses did not reveal any science-based evidence that nuclear energy does more harm to human health or to the environment than other electricity production technologies already included in the Taxonomy as activities supporting climate change mitigation” (Abousahl et al., 2021: 3)	
The EP (18 May 2021) adopted the agreed text of the regulation in its vote at the plenary session (615 for, 35 against, 46 abstentions) June 2021	€17.5 billion (EC, 24 June 2021. REGULATION (EU) 2021/1056	Article 8 (EC, 24 June 2021. REGULATION (EU) 2021/1056)	Article 9 (EC, 24 June 2021. REGULATION (EU) 2021/1056 European Greens: In addition to the industries listed in the JTF Regulation, agriculture, trade, transportation and fashion pose a threat, worsening global warming and endangering life (European Green Party Climate Campaigner, 24 June 2021)

Appendix 4

See Table 7.

Table 7 A synthesis summary of discussions on the JTF Regulation regarding topics 4–7

Principal Actor and timeline	Focus on marginalization	Recognizing social rights	Cohesion funds (ERDF and ESF +)	Pre-allocation key
EC legislative proposal on the JTF (EC, 14 Jan 2020a)	Growing disparities between regions, detrimental to the objectives of social, economic, and territorial cohesion	The JTM should mitigate the adverse social and economic effects of the green transition The JTF should cover the upskilling and reskilling of the workers affected	Member States will complement their JTF allocation from their resources under the ERDF and the ESF +. These resources will help to achieve the overall target of 25% of the Union budget expenditures on climate objectives	The allocation method will consider the scale of the transition challenge of the highest GHG-intensive regions (through the corresponding industrial CO2 emissions), the social challenges in the light of potential job losses in industry, coal and lignite mining and the production of peat and oil shale
JTF proposal amended (EC, 28.5.2020)				By using NUTS2: regions where the carbon intensity is defined by the regional ratio of GHG emissions of industrial facilities as reported by Member States
EP (15 July 2020) Committee report tabled for plenary, 1st reading/single reading	Attention to least developed regions, outermost regions, mountainous, islands, sparsely populated, rural, remote and geographically disadvantaged areas	The most vulnerable communities within each region	Access to the JTF shall not be conditional upon transfers from other EU funds. The resources transferred from the ERDF and ESF + shall maintain their original objectives	

Table 7 (continued)

Principal Actor and timeline	Focus on marginalization	Recognizing social rights	Cohesion funds (ERDF and ESF +)	Pre-allocation key
Jan–July 2020 Critiques from scholars		JTM includes a risk that employability-related policies replace discussions on universal social rights (Sabato & Fronteddu, 2020)	<p>Social objectives of the Cohesion Policy may suffer from re-allocating funds to climate projects (Marty, 2020; Vander Auwera, 2020)</p> <p>Cameron et al. (2020) proposed removing of mandatory transfers from ERDF and ESF +</p>	The JTF's pre-allocation key relying on NUTS 2 is based on a small set of criteria with volatile data, which do not account for the complexity of the transition to come, and the formula may not reflect the needs of regions and countries. Moving the responsibility to identify the allocation of funds to JTTPs would create positive incentives for the transition strategies (Cameron et al., 2020)
Amendments adopted by the EP (17 Sept 2020a, b) on establishing the JTF	JTF is designed for the most vulnerable communities within each region	<p>To ensure that no one is left behind</p> <p>European Pillar of Social Rights should be recognized</p> <p>Compensate the adverse effects of the climate/green transition</p> <p>Active inclusion of jobseekers, particularly women, disabled persons and vulnerable groups</p> <p>The promotion of social cohesion should be a guiding principle for providing support under the JTF</p>	<p>Transfers from ERDF and ESF + should be voluntary and target 30% of the Union budget expenditure contributing to climate objectives in addition to the JTF</p> <p>The establishment of the JTF should not lead to cuts to, or compulsory transfers from, the other cohesion funds</p>	

Table 7 (continued)

Principal Actor and timeline	Focus on marginalization	Recognizing social rights	Cohesion funds (ERDF and ESF +)	Pre-allocation key
The EP (18 May 2021) adopted the agreed text of the Regulation in its vote at the plenary session (615 for, 35 against, 46 abstentions)	When preparing their TJTPs in accordance with Article 11(1), Member States shall take account of the situation in islands and outermost regions facing serious socio-economic challenges deriving from the transition process	Support for activities in education and social inclusion should be allowed, as well as support for social infrastructure for the purposes of childcare and elderly-care facilities and training centres. These require appropriate justification in the territorial just transition plans		

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Declarations

Conflict of interest The authors have no competing interests to declare that are relevant to the content of this article.

Ethics approval Authors have followed ethical practice regarding the paper.

Consent, Data and materials The paper does not include interview data but is based on analysing policy documents. Hence, there is no issue of consent.

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