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Mobilizing Finance for the Just Energy Transition in the European Union

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WORLD BANK GROUP

Contents

Acknowledgments

This policy note was prepared by a team, led by Pietro Calice (EECF1), that was composed of Stefano Battiston, Dimitri G. Demekas, Victor Duggan, and Irene Monasterolo (consultants, EECF1). The team is grateful to Lalita Moorty (EECDR), Ilias Skamnelos (EECFI), and Gallina Andronova Vincelette (ECCEU) for their guidance. The team also gratefully acknowledges comments and input received by Katarzyna Szwarc (Ministry of Finance, Poland) as well as Reena Badiani-Magnusson (EECDR); Julie Biau and Steven Jouy (ECCEU); Pablo Salas Bravo (CELCE); Rome Chavapricha and Philip Lam (IPGFG); François Lesage and Martijn Regelink (EFNFS); Aaron Levine and Fiona Stewart (EFNLT); Rachel Mok (EAEF1); Rachel Perks and Michael Stanley (IEEXI); and Marc Sadler (SCADR). Hanna Chang (EFIOS) and Barbara Rice (consultant) provided editorial support while Martha Sofia Mora Alvarez (ECAVM) provided administrative support.

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Abbreviations

APLMA	Asia Pacific Loan Market Association
CDSB	Climate Disclosure Standards Board
CMU	Capital Markets Union (EU)
COP	Conference of the Parties (UN)
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CSDD	Corporate Sustainability Due Diligence (EU)
CSRD	Corporate Sustainability Reporting Diligence
EBA	European Banking Authority
ECB	European Central Bank
EFAMA	European Fund and Asset Management Association
EFI	Equitable Growth, Finance, and Institutions
ESG	environmental, social, and governance
EU	European Union
GHG	greenhouse gas
JTF	Just Transition Fund (EU)
JTM	Just Transition Mechanism (EU)
IFRS	International Financial Reporting Standards
ILO	International Labour Organization
ISSB	International Sustainability Standards Board
KPIs	key performance indicators
LMA	Loan Market Association
LSTA	Loan Syndications and Trading Association

MDB	multilateral development bank
MNE	multinational enterprises
NFRD	Non-Financial Reporting Directive (EU)
NGFS	Network for Greening the Financial System
OAM	Ostrum Asset Management
OECD	Organisation for Economic Co-operation and Development
ORC	operational risk capital
PSF	Platform on Sustainable Finance
RBC	responsible business conduct
SASB	Sustainability Accounting Standards Board (IFRS Foundation)
SBPs	Social Bond Principles
SDGs	Sustainable Development Goals
SLBPs	Sustainability-Linked Bond Principles
SLLPs	Sustainability-Linked Loan Principles (LMA, LSTA, and APLMA)
SLPs	Social Loan Principles (LMA, LSTA, and APLMA)
SMEs	small and medium enterprises
SREP	Supervisory Review and Evaluation Process
SSSL	Social, Sustainability, and Sustainability-Linked
TCFD	Task Force on Financial Disclosures
TJTPs	Territorial Just Transition Plans
UN	United Nations
UNGPs	UN Guiding Principles on Business and Human Rights
WBG	World Bank Group

Executive Summary

Minimizing the adverse social and economic consequences of the energy transition is an important social aspiration. It is the essence of the “just transition,” the connective tissue that binds together climate goals with social outcomes centered around jobs. As with the energy transition itself, this requires mobilizing financial resources at a scale far exceeding the capacity of the public sector. Private finance is therefore key for achieving that goal. Several private sector initiatives and financial innovations originally developed for climate finance could provide templates and pathways for just transition finance.

However, just transition finance faces unique conceptual and operational challenges. Since the just transition reflects social values of fairness, it is hard to define a just transition project or financial product and to measure its impact. The latter also depends on the choice of the target group for the remediation effort and on the time horizon, which is likely to be longer than that for most financial decisions. Therefore, market mechanisms alone cannot fully incorporate just transition considerations in finance. An overarching policy framework that provides guidance and aligns incentives is needed.

This policy note proposes the first iteration of a just transition policy framework built around three interrelated and mutually reinforcing pillars. These include: (i) a system for determining a hierarchy of priorities for activities, sectors, or groups that are to be compensated for the negative impacts they suffer from the transition to a low-carbon economy or supported because they contribute directly to a more equitable sharing of the costs and opportunities from the transition; (ii) a fiscal transfer mechanism to allocate public funds consistent with these priorities; and (iii) financial flows enablers, a set of instruments or policy interventions to facilitate private financial flows to activities or projects that are deemed to contribute to a more just transition.

The framework is applied to the European Union (EU) to preliminarily gauge any residual barriers that can hinder private capital mobilization at scale for the just transition. The EU is more advanced than other major jurisdictions in putting a just transition policy framework in place, representing an interesting case study to test the validity and applicability of the proposed framework. The emerging EU framework incorporates key components of all three pillars: a set of rules for determining just transition priorities delegated, within certain parameters, to member states; a pool of grants to support the regions most affected by the transition; and several initiatives that promote better disclosure, improved risk management, and capital mobilization to crowd in private investment for the just transition. However, some gaps remain.

The assessment provides seven key takeaways for consideration by competent authorities to strengthen further the EU just transition policy framework going forward. These are: (i) narrowing the scope of the framework by focusing on social support and/or land restoration, while encouraging private sector funding for economic revitalization projects; (ii) enhancing data collection on social impact assessment to better understand the negative effects of climate transition initiatives and prevent “social washing”; (iii) embedding just transition considerations in sustainability regulations by including relevant indicators and metrics; (iv) providing guidance on assessing just transition-related risks for financial firms in prioritized regions and sectors; (v) clarifying supervisory expectations for financial firms regarding just transition-related litigation and liability risk; (vi) encouraging the development of financial instruments for the just transition; and (vii) maximizing the role of multilateral development banks in de-risking just transition projects, especially in member countries with limited resources and capacity.


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Introduction

There is increasing recognition that the successful transition to a net-zero economy will be contingent on addressing its social and economic consequences. In this context, the “just energy transition” has become the main concept and strategy tool for managing the transformation toward a net-zero economy in a way that is fair and leaves no one behind. Ensuring that the transition to a low-carbon economy corresponds to social norms of fairness is both a moral imperative and a political imperative to win support for climate action and address possible opposition.[1] The concept of just transition does not apply only to the energy transition. It also refers to mitigating the distributional impact of any transition to a new technological or economic paradigm. Concerns about the impact of digitalization and artificial intelligence, for example, have also generated calls to ensure a just transition (Stocker 2021, 4:03; Buhovskaya 2017; TUAC 2019).

A labor-driven concept of the just energy transition aligned with its original meaning is needed in order to operationalize it. Although jobs remain an important element, the just energy transition concept is today considerably broader, encompassing wider issues of justice and equity raised by the prospect of the energy transition (for example, poverty eradication, social inclusion, and inequality). As a result, just energy transition is increasingly understood and used in many different ways, with the danger of being hollowed out and overstretched. This complicates the operationalization of the just energy transition, calling for a pragmatic interpretation that builds on the original meaning. This is essentially based on the idea that workers and communities whose livelihoods will be lost because of an intentional shift away from high carbon activities and sectors should receive support from the state.

From this narrower perspective, the just energy transition requires that the transition out of carbon-intensive sectors and activities be accompanied by measures to minimize the impact on workers and communities in the regions that are negatively affected. Despite the broader environmental benefits, the transition to a low-carbon economy will inevitably cause stranded assets, lost jobs, and sizable shifts in income and wealth across regions and economic sectors. When a coal mine closes or a car plant shifts to electric vehicles, for example, carbon emissions are reduced, but employees and their families lose wages and benefits, the local

1 Evidence suggests that perceived fairness is one of the strongest predictors of both support for climate action and behavior change. See, for example, Drews and van den Bergh (2016).

economy suffers from lower spending, and local governments lose tax revenue.[2] In this context, the just energy transition would essentially involve developing new sources of employment and growth to prevent or mitigate the localized dislocations resulting from declining industries (for example, coal and lignite mining and crude petroleum and natural gas extraction) or transforming industries (for example, basic materials and automotive). This includes active regional restructuring practices with industrial policy and regional development initiatives.

As with the energy transition itself, a key challenge for the just energy transition is mobilizing sufficient financial resources. To be sure, both tasks require efforts across a wide range of human activities, including science, technology, economic investment, social mobilization, and political action. But both also involve a massive reallocation of financial flows as well as the mobilization of additional financial resources at a scale far exceeding the capacity of the public sector. Private finance is therefore key for achieving both goals. However, just transition finance is distinct from climate finance for it is focused on societal and developmental goals for those negatively impacted by climate action. In other words, while climate finance relates to funding the decarbonization of the economy, just transition finance is about financing the "*management of the socioeconomic consequences*" of decarbonizing activities (Lowitt 2021).

Mobilizing private finance for the just energy transition requires an enabling policy framework. The distinct feature of private capital mobilization for the just energy transition is a place-based investment approach aiming to support the economic diversification and reconversion of the territories impacted. Examples include the backing of productive investments in small and medium enterprises (SMEs), the creation of new firms, and research and innovation. The nature of the just energy transition and the conceptual and measurement obstacles it faces mean that market forces alone are not sufficient to generate the required resources in the necessary scale. An overarching policy framework to provide clarity and a sense of social priorities, as well as adequate public funding and the right set of incentives, is needed.

Drawing on three background papers, this policy note first attempts to conceptualize a just transition policy framework for mobilizing private capital.[3] In the absence of relevant literature and experience, the result is necessarily suggestive and based on simplifying assumptions. While just energy transition finance shares many features with sustainable finance, important operational differences reflect the unique purposes and goals of the just energy transition project. These have to do with the political choices required to identify the target groups eligible for remediation and the need to integrate private capital with public resources to fund noncommercially viable activities (for example, income compensation and land restoration). Narrowly focusing on finance only without considering these essential elements is an enterprise doomed to fail. Nonetheless, the experience and knowledge of enabling frameworks for climate (and sustainable) finance offer important insights to the process of developing a policy framework for facilitating the funding of just energy transition activities. From this perspective, this policy note assumes that mobilizing private capital for the just energy transition can be achieved in the context of evolving environment, social, and governance (ESG) approaches.

This policy note then critically evaluates the conceptual framework for mobilizing just transition finance using the EU as a case study. The EU is more advanced than other jurisdictions in putting in place a comprehensive just transition policy framework, representing a natural candidate for evaluating the proposed framework's validity and applicability. The just energy transition is a defining principle of the European Green Deal, the EU's growth strategy to net zero. This emphasizes that the transition to a climate neutral and circular economy must be just and inclusive, where *no person is left behind*. One of the key instruments for delivering the just energy transition in the EU is the Just Transition Mechanism (JTM), set up as part of the European Green Deal Investment Plan—the investment pillar of the European Green Deal.

The assessment provides key takeaways for strengthening further the EU policy framework with the specific focus on measures to mobilize private capital in support of the just energy transition. The proposed measures are focused

2 These effects can be very long-lasting. For example, 40 years after the abrupt decline of the coal mining industry in the United Kingdom, regions that were once economic powerhouses still bear the scars of the upheaval that comes with rapid structural change (Beatty, Fothergill, and Gore 2019).

3 The three background papers prepared for this policy note cover the following topics: just transition issues for financial regulators; challenges and opportunities for just transition finance in the European Union; and potential just transition risks in bank portfolios in Poland (Battiston, Calice, and Monasterolo, forthcoming; Demekas and Calice, forthcoming; Duggan, forthcoming).

on enhancing the mobilization of finance for the just energy transition, not for broader social or environmental goals. More specifically, the measures are intended to facilitate the mobilization of finance in support of regional development initiatives and industrial transitions, not of compensation and employment measures for affected workers or land restoration.[4] While the focus of this policy note is on the EU, it also highlights preliminary lessons learned for other regions and countries that wish to operationalize the just energy transition agenda.

This policy note complements and extends ongoing efforts by the World Bank Group (WBG) to support EU member countries transitioning away from coal. Based on lessons learned from decades of transition experience, the WBG has built an approach that supports national, regional, and local authorities worldwide developing clear roadmaps focusing on governance structures, the welfare of people and communities, and the remediation and repurposing of former mining lands and coal-fired power plants (Stanley et al. 2018). Several EU member countries, such as Bulgaria, Greece, and Poland, have benefited from this support.[5] This policy note highlights the relevance of declining and transforming industries impacted by the energy transition other than the coal sector and discusses options for financing place-based economic diversification and industrial restructuring beyond social protection and land and plant repurposing.

Following this introduction, the paper is organized in four sections. Section II presents key concepts and provides an overview of the challenges that the financial industry faces in developing just transition finance markets and instruments. Section III introduces the key elements of a policy framework for mobilizing private capital in support of the just transition. Section IV assesses the framework in the context of the EU just transition policy framework. Section V concludes with key takeaways for strengthening further the EU framework, with a focus on measures that can help mobilize private capital. For simplicity, in the remainder of this policy note the term "just transition" will refer to the just energy transition as narrowly defined herein.

4 For a review of emerging financial mechanisms that aim to leverage private finance for compensation and coal plan retirement, see Calhoun et al. 2021.
5 For more information, see the World Bank's website at https://www.worldbank.org/en/topic/extractiveindustries/justtransition.

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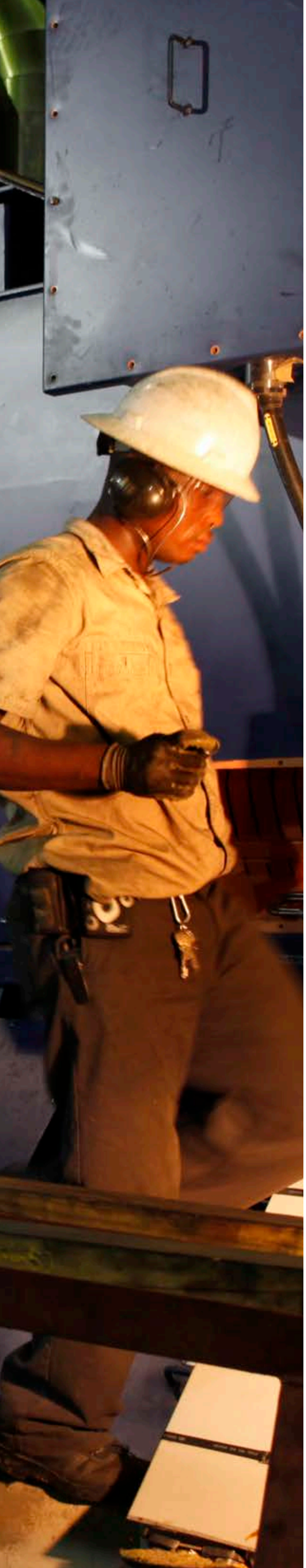

Key Concepts and Challenges for the Financial Industry

Originated in the North American labor movement in the 1990s, the concept of just transition was formally articulated by the International Labour Organization (ILO) and has gained political momentum since then. Just transition was an early trade union demand for managing the transformation toward a net-zero carbon economy and this approach has now become a mainstream policy tool referred to by international institutions and treaties.

- The ILO defined a just transition as "greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities, and leaving no one behind" and published guidelines in 2015 (ILO 2015).[6]
- The concept of the just transition was formally incorporated in the Paris Agreement in 2015, where it is stated that governments should take into account "the imperatives of a just transition in the workforce and the creation of decent work and quality jobs in accordance with nationally defined priorities."[7]
- It was reinforced in 2018 at the 24th Conference of the Parties of the Climate Change Convention (COP24) through the Solidarity and Just Transition Silesia Declaration; at COP25 in 2019 through the initiative Climate Action for Jobs; at COP26 in 2021 through the Declaration on Supporting the Conditions for a Just Transition Internationally, signed by the governments of 17 countries plus the EU; and most recently, at COP27 in 2022 through the Sharm el-Sheikh Implementation Plan, which put the imperative of a just transition at the core of the global climate agenda.

From the original meaning, the concept of just transition has developed in too broad and general terms, requiring a pragmatic interpretation to operationalize it. To discuss it meaningfully, and crucially to operationalize the concept, it is important to return to the original interpretations of what just transition means in practice, clarifying upfront intended outcomes ("what") and process ("how") (Galgóczi 2019). The outcomes, as articulated in international treaties, should be to minimize employment disruptions in the regions most affected by the energy transition. The process should be based on a managed transition that deals with the

6 For more information, see the website of the ILO at https://www.ilo.org/global/topics/green-jobs/WCMS_824102/lang--en/index.htm.

7 For more information, see p. 1 of "Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104."

social impact of climate policies, for example, how the energy transition affects different income groups and what forms of compensation should apply. It should also deal with managing the economic impact. This aspect implies focusing not only on employees whose jobs are being lost or fundamentally transformed during the energy transition, but also on all those stakeholders whose livelihood depends on those activities (for example, households, SMEs, and local authorities).

An operational focus on jobs implies identifying sectors and territories for which the energy transition has the most negative social and economic impacts. From a sectoral perspective, there will be winners and losers in the energy transition. Mining of coal and lignite and the extraction of crude petroleum and natural gas are the sectors that will experience the largest contraction in jobs ("declining sectors"), while steel, cement, chemicals, and car manufacturing sectors will have to be heavily transformed to be a part of low-carbon economy ("transforming sectors").[8] A key issue is that these declining or transforming sectors tend to be geographically concentrated within countries. Regions that are heavily reliant on these sectors for economic growth and employment will be disproportionately negatively affected by the transition. They will suffer heavier job losses and lose key drivers of their economic growth as well as industries that might be an important part of their regional cultural identity. Therefore, the just transition has a strong sectoral and geographical connotation.

As the nature and magnitude of the challenge differ across sectors, different policy responses are required. The social impact of the transition to climate neutrality is primarily linked to job losses, the need for reskilling or upskilling workers, and workers' mobility. This will have direct consequences for the livelihoods of households and families as well as social exclusion and important gender implications. This calls for active labor market and social protection policies, primarily funded by the fiscal purse. The economic impact of the transition will play out differently between declining and transforming sectors. The latter is associated with closure of mines and extraction sites, loss of assets, and decommissioning of fossil fuel-fired power plants, with structural changes in related value chains. The former is mostly related to deep greenhouse gas (GHG) emissions reduction, which will require changes in production patterns and the deployment of new technologies. In both cases, regional development initiatives aimed at diversifying the economy and creating new job opportunities will be needed, requiring significant investment to avoid lock-ins and stranded assets.

With public finance insufficient, mobilizing private capital at scale will be key to deliver the just transition. Like with the energy transition itself, it is generally accepted that the scale of the just transition financing challenges will be greater than what the public sector alone can fund. Therefore, any public sector contribution will need to be supported in significantly higher amounts by the private financial sector.

Financial firms are coming under pressure from different directions to take into account just transition considerations in their business practices. These include:

- High-level political declarations or commitments, such as the Paris Agreement and the United Nations (UN) Sustainable Development Goals (SDGs), in particular SDG 8 (decent work and economic growth), SDG 10 (reduced inequalities), and SDG 7 (affordable and clean energy), are closely related to the concept of just transition. The UN Guiding Principles (UNGPs) on Business and Human Rights[9] and the *OECD Guidelines for Multinational Enterprises on Responsible Business Conduct,*[10] which in its most recent version explicitly refers to the just transition, provide a set of high-level norms for conducting business and creating societal expectations that financial firms—especially global ones—should consider in light of the broader social and human impact of their business decisions.

- Pressures to take into account just transition considerations in business decisions may also arise internally in financial firms from activist shareholders and investors. During the last two decades or so, there has been a gradual increase in investor and shareholder interest in ESG issues. While the focus has so far been on climate issues, the just transition may attract increasing attention in the future.

- Concern about emerging "social risk" may also be adding to the pressure on financial firms to incorporate just transition considerations in their risk management. Social risk is the risk of a negative financial impact on a financial firm if the latter does not take into account the employment

8 For example, see Griffin et al. 2019.
9 The UNGPs are based on the concept of do no harm that stresses the states' "responsibility to protect" and the corporate "responsibility to respect" human rights (United Nations 2011).
10 The guidelines of the Organisation for Economic Co-operation and Development (OECD) provide standards of "responsible conduct" for multinational firms that include observance of the UNGPs. The most recent update of the guidelines, approved in June 2023, make explicit reference to the need to "to assess and address social impacts in the context of their environmental management and due diligence activities and to take action to prevent and mitigate such adverse impacts both in their transition away from environmentally harmful practices, as well as towards greener industries or practices" (OECD 2023, 36).

or social impacts of its business decisions; for example, withdrawing bank financing from coal mining or fossil fuel-based energy generation without considering the loss of jobs and incomes in the local communities.

- Finally, in emerging markets and developing economies, where multilateral development banks (MDBs) are major sources of funding, domestic financial institutions may be pushed to internalize just transition considerations in their business practices. This dynamic is already evident in relation to climate-related commitments.

However, responding to these pressures and incorporating just transition considerations into financial decisions run against unique conceptual and measurement challenges.

- The most fundamental challenge is defining what constitutes a just transition project and selecting a target population or locality for the remediation effort. Even when adopting an original interpretation of what just transition means in practice, that is, one focused on jobs, the concept still remains framed in very broad and vague terms (for example, "decent work" and "quality jobs"). Given that all economic activities have socially beneficial effects, such as job creation, almost anything could be considered a just transition project. Moreover, the magnitude of the impact would depend on the time horizon over which one expects the effects to materialize.

- A related challenge is the absence of tested indicators to quantify and measure the effects of the energy transition, especially since some are qualitative and reflect abstract social norms of justice. This becomes a major hindrance when there are trade-offs between conflicting objectives (or between objectives applying to different time frames) that require balancing one against another and arriving at an estimate of net impact. The dearth of reliable indicators of impact creates scope for social washing—the practice of making misleading or exaggerated statements about the positive social impact of certain economic activities—which could undermine the credibility of just transition initiatives (Marsh 2020).

- Associated with the measurement challenge is the issue of disclosures that may be needed to enable investors, market participants, and potentially regulators to assess the contribution of individual projects or investments to the just transition.

- The focus on the impact of climate transition projects on local economies and communities is another challenge. Financial transactions typically involve the supplier(s) of a financial service (such as funding, risk coverage, or maturity transformation) and a single client (such as an individual or corporate borrower, a client purchasing insurance, or an entity issuing equity or debt). Depending on the chosen target group, taking into account just transition considerations potentially expands the set of stakeholders whose interests might need to be taken into account beyond the parties directly involved in the transaction.

These challenges hamper the spontaneous bottom-up growth of just transition finance in the private sector calling for an enabling framework. Private financial markets have an essential role to play in reallocating capital in support of the just transition. However, their primary role is to reflect the underlying conditions of the real economy. Thus, it would be unrealistic to expect them to induce a just transition in the absence of adequate environmental and social policy making in the real economy (Claessens, Tarashev, and Borio 2022). While this principle is valid for the energy transition in general, it is all the more important for the *just* energy transition. This is because mobilizing private finance for the energy transition requires addressing market failures, whereas leveraging private investment for the just transition essentially involves finding ways to multiply the limited fiscal resources for a public policy objective. Both climate finance and just transition finance need an enabling framework, but the goals and tools for each are very different. Therefore, the government has a pivotal role to play in signaling to the private sector the desired action and outcomes related to funding the just transition. An overarching policy framework that provides clarity and a sense of social priorities as well as adequate public funding and the right set of incentives, is needed.

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Toward an Enabling Framework for Just Transition Finance

With the exception of the EU, no policy makers in any major jurisdiction have made a systematic attempt to develop an enabling environment for just transition finance. Most national policy initiatives have so far been narrowly targeted to coal mining or fossil fuel-based energy generation and used mainly fiscal instruments to rectify the impacts.[11] They do not include any policy dimension specific to the financial sector and do not involve financial policy or regulation. As such, although they provide a signal of government intentions and priorities, they are not directly relevant to just transition finance. In truth, research and experience on interventions to mobilize and deploy just transition finance remain nascent and highly embryonic. No body of evidence exists to inform policy choices or assess the effectiveness of different approaches to support such finance flows. Any attempt to design a policy framework should be seen as an experimental iterative process.

The knowledge and experience of building an enabling environment for climate finance could provide templates and pathways for just transition finance. To facilitate just transition finance flows, an enabling environment must be created in the same way as it has been and continues to be for climate finance. This entails, among others, defining what constitutes a just transition project, which metrics to be used and how to measure them, what information to disclose and report, as well as taxonomies, labeling, and standards. In particular, first iterations of developing a conducive policy framework for just transition finance can be situated within current understandings of ESG approaches.

However, it would be a mistake to see just transition finance simply as an extension of climate finance (table 1). There is a fundamental difference between the energy transition and the *just* energy transition. The former is science-based. The extent to which an investment or activity contributes to decarbonization can, in principle, be assessed on the basis of objective, measurable criteria, notably the reduction in GHG emissions (although in practice this assessment can be complicated due to methodological or data issues). Assessing the extent to which an investment or an activity contributes to a just energy transition, on the other hand, is a subjective undertaking, involving fundamental choices of the target group for the remediation effort and on the time horizon—which is likely to be longer than that for most financial decisions. No objective yardsticks exist for making these judgments. Therefore, any enabling environment for just transition finance should be part of a broader, internally consistent just transition policy framework.

11 For a review of country studies, see Briggs and Mey 2020; OECD 2021; European Commission 2021; Presidential Climate Commission 2022; and The Presidency of South Africa 2022.

Since it reflects social norms of fairness or justice, the just transition is fundamentally a political project, not one that can—or should—be delegated to regulatory agencies. These norms include procedural justice to ensure a transparent and inclusive decision-making process for energy transition policies; distributive justice to share fairly the costs and opportunities of the transition; and restorative justice to ensure that past, present, and future negative impacts of the transition are properly rectified. These norms are context-dependent and vary across countries and over time (McCauley and Heffron 2018). The transition to a low-carbon economy is a long process of technological, economic, and social change that will involve costs and trade-offs. Ensuring the consequences of the transition are consistent with social norms of fairness should be mediated through the political process. Establishing a just transition policy framework is, therefore, the responsibility of governments.

TABLE 1 - Differences between climate finance and just transition finance

	CLIMATE FINANCE	JUST TRANSITION FINANCE
Definition	Global taxonomies in place that help identify qualifying investments.	No agreed definition and no taxonomy.
Goal	Transition to a low-carbon or net-zero economy.	Management of social and economic implications of climate transition actions.
Measurement	Mandatory and voluntary environment, social, and governance disclosures; globally converging principles and toolkits.	No consensus on indicators, measurement, or disclosure requirements.
Project characteristics	Typically, big infrastructure projects, with high replicability; new value chain development.	Often local or regional projects, community-level infrastructure, and smaller ticket prices.
Parties to the transaction	Well-established, formal, often listed companies, medium and large enterprises with solid commercial and technology track records.	Often nontraditional participants with limited or no commercial or technology track records and limited financial literacy.
Project skills	High level of skills; limited (if any) need for technical assistance.	Highly constrained skills base, high technical assistance requirement, and input early in project process.
Business models	Traditional.	Novel.

Source: Adapted from Lowitt (2021).

As a first iteration, a just transition finance policy framework should have three interrelated and mutually reinforcing pillars.

1. **Hierarchy of priorities.** A system for determining a broadly accepted and relatively stable hierarchy of economic activities, sectors, and target groups that is prioritized for (i) compensation for the negative impacts they suffer from the transition to a low-carbon economy, reflecting restorative justice considerations; and (ii) financial support because they contribute directly to a more equitable sharing of the costs and opportunities from the transition, reflecting distributive justice.

2. **Fiscal transfer.** A mechanism to allocate public funds in a time-consistent manner in line with the economic and social priorities. As the experience with just transition policy initiatives thus far shows, their time horizon extends well beyond the budget cycle and even the electoral cycle. To be effective and credible, a just transition finance policy framework would need to incorporate safeguards to ensure that the necessary public resources would be available for the duration of the just transition programs.

3. **Financial flows enablers.** A set of instruments or policy interventions to facilitate private financial flows to activities or projects that are deemed to contribute to a more just transition, which would also ideally incorporate procedural justice considerations. Since different jurisdictions have different needs, degrees of financial development, institutional arrangements, and political and regulatory traditions, there is no general formula. The policy interventions should be tailored to the characteristics of each individual jurisdiction.

Interventions under the third pillar fall into three broad categories reflecting the channels through which financial markets can deliver on the just transition.[12]

- **Reporting.** This encompasses initiatives and policies that classify sustainable activities and encourage and facilitate the collection and dissemination of information regarding the employment or social impact of climate transition policies (and, more broadly, economic activities). To be effective, these policies require the availability of data on employment and social impact.

- **Risk management.** This involves identifying and encouraging financial firms to integrate just transition-related risks into their business decisions. However, given the nature of the just transition, these risks are very hard to define and measure.

- **Mobilization.** This includes removing any legal or regulatory obstacles to the development of innovative financial instruments that support the just transition; finding ways to increase the private returns of just transition investments or projects, notably through public-private partnerships—including with MDBs—to de-risk investments; and supporting the development of investable projects by the private sector in the areas negatively affected by the climate transition.

Policy interventions in all three pillars should be coherent and coordinated. Initiatives under the third pillar (financial flows enablers), such as efforts to improve the data and information infrastructure, identify investable projects, establish de-risking mechanisms, or mobilize MDB financing, must focus on the priority sectors or groups identified under the first pillar (hierarchy of priorities) and complement any support measure under the second pillar (fiscal transfer). Uncoordinated initiatives with conflicting priorities across the three pillars are not only likely to be less effective, but also risk undermining the political support for the just transition project. For the same reasons, a policy framework that narrowly focuses on financial enablers only—the third pillar—is doomed to fail.

Policy makers should be aware of the risks and unintended consequences of their actions. This awareness is particularly important for central banks and financial regulators that will face increasing pressure to take on additional responsibilities for ensuring the just transition. However, the tools at their disposal are not necessarily effective for this purpose, and attempting to use them to promote the just transition would pose difficult operational trade-offs with their other policy goals. In addition, since the just transition is not part of their legal mandate, adopting it as a goal risks undermining their independence. Ultimately, the biggest risk is lack of policy coordination. If central banks and financial regulators move ahead on their own to support the just transition—a fundamentally political goal—without a framework and a clear sense of priorities provided by the government, their efforts would not only prove fruitless, but could also trigger a backlash, potentially compromising their ability to achieve their other policy goals.

12 For example, see Carney 2021 and NGFS 2021.

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Case Study: The EU Just Transition Framework

The EU is more advanced than other major jurisdictions in putting in place a policy framework for the just transition. The just transition is a defining principle of the European Green Deal, EU's growth strategy, which emphasizes the transition to a climate neutral and circular economy must be just and inclusive, paying attention to the regions, industries, and workers most affected (European Commission 2019a). Although it is still work in progress, the emerging framework is the most comprehensive to date. It incorporates a system for determining just transition priorities delegated to national governments; a mechanism for funding projects that combines fiscal resources with blended finance instruments; and several initiatives that, directly or indirectly, contribute to better disclosure, improved risk management, and capital mobilization for the just transition.

One of the key instruments for delivering a just transition in the EU is the JTM. It was set up as part of the European Green Deal Investment Plan—the investment pillar of the European Green Deal—to deliver on the ambition of leaving no one behind (European Commission 2019b). It aims to support those regions most affected by the energy transition through financing and technical assistance. Specifically, it seeks to ensure the retraining of workers directly affected by the foreseeable cessation of high-carbon-emitting activities and to enable the economic revitalization of territories impacted. By doing so, the JTM is by design meant to crowd in private capital. It is complemented by policies and initiatives that, while not directly related to the just transition agenda, may in practice be instrumental to achieving its objectives.

Can the emerging EU policy framework effectively contribute to mobilizing private capital for the just transition? While this is fundamentally an empirical question, it may be helpful to assess EU initiatives in relation to the three pillars of the just transition policy framework presented in section III, that is: (i) a system for determining a hierarchy of economic activities, sectors, and target groups that are prioritized; (ii) a mechanism to allocate public funds in a time-consistent manner in line with the economic and social priorities; and (iii) a set of instruments or policy interventions to facilitate private financial flows to activities or projects that are deemed to contribute to a more just transition.

HIERARCHY OF PRIORITIES

The system for determining just transition priorities in the EU is delegated, within certain parameters, to member states through national Territorial Just Transition Plans (TJTPs). A key legal instrument in the EU just transition policy framework is Regulation (EU) 2021/1056 establishing the Just Transition Fund (EU 2021). It identifies both the target group (citizens and companies) and the activities and projects that can be supported (social support, economic revitalization, and land restoration). Crucially, it delegates to member states the identification of the territories most negatively affected by the social and economic effects of the climate transition. This is done through TJTPs, which outline for each of the territories identified the specific actions to be undertaken on the basis of a template to ensure alignment with their national energy and climate plans and with the EU climate neutrality goal.

The current hierarchy of priorities is very ambitious, which might affect the implementation of the just transition agenda. A key challenge includes the very broad scope of activities that can be supported, spanning social support, economic revitalization, and land restoration.[13] It could complicate the prioritization of projects. Another challenge is that not all member states have aligned their climate transition targets with the EU's goal to phase out coal by 2030, including some of the largest potential recipients of support under the JTM. The criteria for determining the most vulnerable regions in each country are largely qualitative. Eligible sectors are loosely defined as declining sectors (those "expected to cease or significantly scale down their activities related to the transition") and transforming sectors (those "expected to undergo a transformation of their activities, processes and outputs"). While the final list of eligible target groups was determined by budget constraints and political negotiations, it will have an impact on which regions and sectors are prioritized over others.

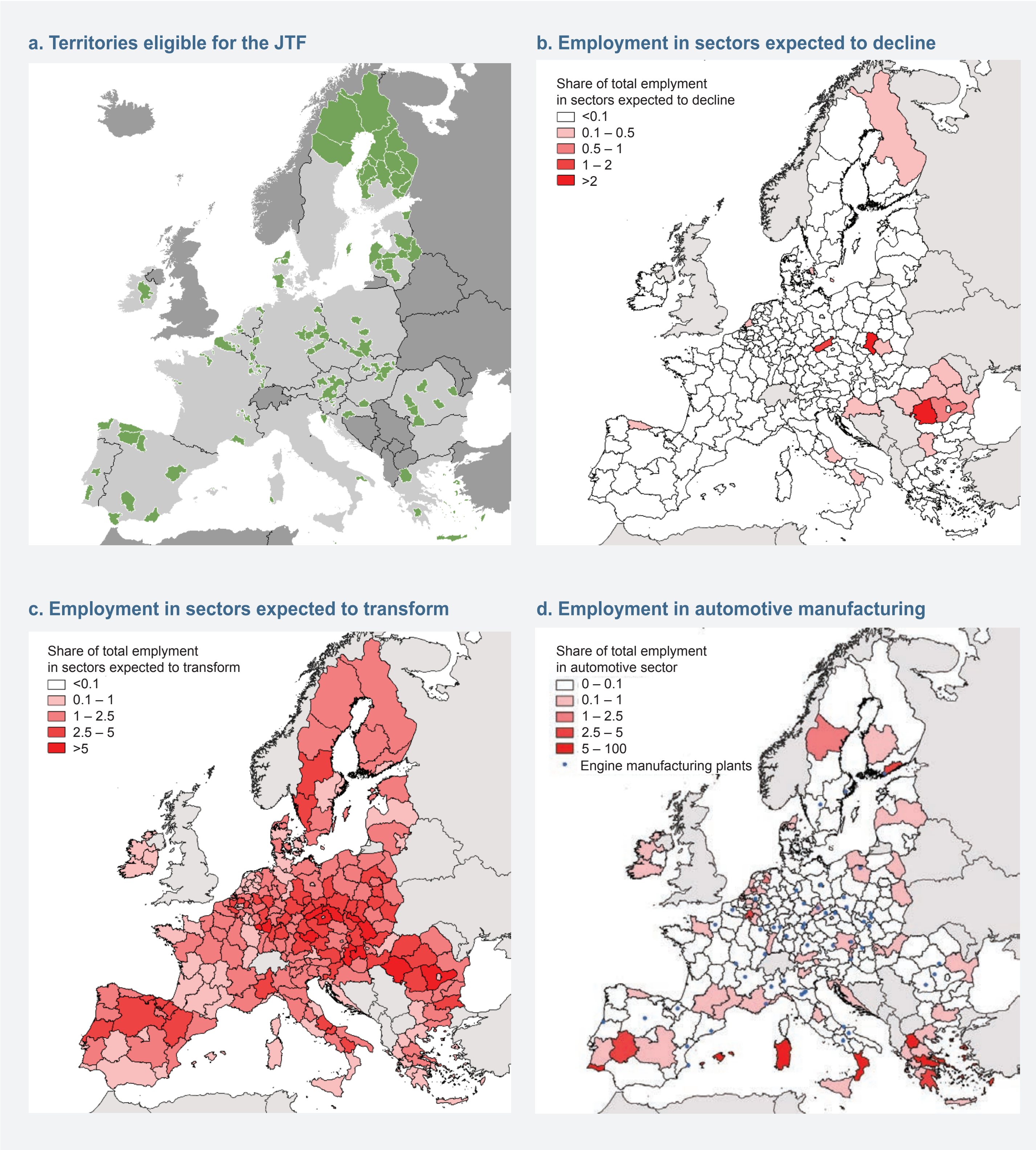
FISCAL TRANSFER

The key fiscal transfer mechanism of the EU just transition policy framework is the Just Transition Fund (JTF). With an overall budget of €19.2 over the period 2021–27, the JTF is the primary budgetary tool to support the just transition in the EU. It aims to provide primarily grants, among other things, to support workers to develop skills and competences for the job market of the future and help SMEs, start-ups, and incubators create new economic opportunities in the regions affected. The JTF is implemented under shared management rules, which implies close cooperation with national, regional, and local authorities. The allocation criteria are based on industrial emissions in regions with high carbon intensities, employment in industry and in coal and lignite mining, production of peat and oil shale, and the level of economic development. Member states that have not yet committed to implementing the objective of achieving climate neutrality by 2050 will only be awarded 50 percent of their planned allocation. They are expected to co-finance projects under the JTF, with a share between 15 percent and 50 percent depending on the region in which the projects are located. Finally, member states can complement their JTF allocation with the resources allocated under the European Regional Development Fund and the European Social Fund Plus.

Fiscal resources may be spread too thinly given the objectives of the just transition agenda. While budget constraints are binding, as is the 7-year horizon of the EU budgetary cycle, there is a sense that the size of the JTF may be too small given its wide scope and ambition. In truth, in the absence of objectively difficult estimates of the funding needs for the just transition, it is hard to substantiate this statement. However, a summary comparative analysis with just transition policies implemented in other jurisdictions shows that providing an adequate amount of social support (for example, retraining workers) to the most affected citizens will already absorb most, if not all, of the funds devoted to the JTF (Cameron et al. 2020). This is all the more evident when one contrasts JTF-eligible territories with other potential regions "at risk" proxied by the relative share of employment in sectors that are expected to decline and in sectors that will have to transform (figure 1). The relatively small size of the JTM strengthens the case for mobilizing private capital at scale.

13 The issue of the broad scope of the JTF had been raised after the European Commission unveiled its proposal for the JTM in January 2020. It was maintained in the final package, though JTF resources were increased from the initial proposal (Cameron et al. 2020).

FIGURE 1 - Regional exposures to declining and transforming industries



Sources: Cameron et al. 2020; EPRS 2021.

REPORTING

Efforts to incorporate social impact considerations *directly* in regulations have so far suffered setbacks.

- In early 2022, the European Commission adopted a proposal for a Corporate Sustainability Due Diligence Directive (CSDD). The aim of the CSDD is to foster sustainable and responsible corporate behavior and to anchor human rights and environmental considerations in company operations and corporate governance (European Commission 2022). The proposed rules, which would apply to large EU-based companies (that is, 500 or more employees or more than €150 million in global turnover), would require businesses to identify and prevent or mitigate activities, such as child labor, worker exploitation, or damage to natural ecosystems, in their supply chains inside or outside Europe. Victims of damage would be empowered to take legal action if abuses were uncovered that had not been reported by businesses. During negotiations at the European Council, however, some member countries objected to financial firms being included in these rules on the grounds that they do not have supply chains in the same sense as companies producing physical goods.[14] This objection was criticized by campaigners who claimed that it would allow large banks and fund managers to continue financing fossil fuel or mining projects without scrutinizing the environmental damage or social issues they might cause. However, a recent position by the European Parliament voted on June 1, 2023, which among others introduced a new requirement for companies to adopt and implement climate transition plans, extends the coverage to financial services providers, such as asset managers and other investors, while the European Council's position left the decision to include these companies up to member states.

- The European Commission asked the Platform on Sustainable Finance (PSF), an advisory body established under the Taxonomy Regulation, to prepare a proposal for a possible social taxonomy. The PSF report laid out three broad objectives: decent work, adequate living standards and well-being for end-users, and inclusive and sustainable communities (PSF 2022). The proposed social taxonomy would classify economic activities based on their "substantial contribution" to each of these objectives while "doing no significant harm" to any other and would identify certain activities as always "socially harmful." The report outlined three different types of substantial contribution: maximizing positive impact, minimizing negative impact, and enabling other activities to provide social benefits. At the same time, the report acknowledged several challenges: (i) distinguishing the substantial contribution of an economic activity to these three objectives from the inherent social benefits generated by *all* economic activities is conceptually hard and context-dependent; (ii) quantifying this contribution is even harder; (iii) some types of "significant contribution" are best assessed at the product or activity level, while others can only be assessed at the entity level; and (iv) to assess impacts, the proposed taxonomy would have to define target populations (such as youth, farmers, and the unemployed) or target geographies, which would introduce an additional layer of complexity and political negotiation. In addition, given the political sensitivities, the proposal shied away from naming socially harmful activities. More broadly, the proposal left unclear how to reconcile national legislation and political traditions (for instance, regarding the role of trade unions) in member states with an EU-wide social taxonomy. Unlike an environmental taxonomy, which is at least partly science-based, a social taxonomy would reflect social norms and political preferences, which vary significantly across member states. Likely reflecting these pitfalls, the European Commission appears to have shelved the PSF proposal for the near future (Ainger and Arons 2022).

However, the combination of the EU's sustainability taxonomy and corporate disclosure requirements could be seen as moving toward a more expansive definition of sustainability that might include just transition considerations. It should be stressed, however, that this is a matter of interpretation not yet tested in practice.

14 The desire to attract financial business from the United Kingdom post-Brexit may have played a role in this decision (Hancock 2022).

- In response to the shortcomings of the multiple and inconsistent voluntary taxonomies developed internationally, the EU to date is one of only two major jurisdictions to have introduced a statutory ESG taxonomy; the other is China. It is the Framework to Facilitate Sustainable Investment—the so-called Taxonomy Regulation, Regulation (EU) 2020/852—that establishes an EU-wide classification system intended to identify which economic activities can be considered environmentally sustainable. Under this regulation, to qualify as environmentally sustainable, an activity must make a substantial contribution to at least one of six environmental objectives while doing "no significant harm" to any other and meeting certain "minimum standards." These standards explicitly include the UNGPs and the guidelines of the Organisation for Economic Co-operation and Development (OECD) for multinational enterprises (MNE) on responsible business conduct (RBC). Although the Taxonomy Regulation does not explicitly mention the just transition, this could arguably provide an entry point for just transition considerations to be taken into account in the classifications.
- In a separate initiative in 2019, the European Commission issued nonbinding guidelines to help EU-based companies comply with the Non-Financial Reporting Directive (NFRD) 2014/95/EU. These guidelines incorporate the principle of "double materiality," which requires companies to disclose through climate transition plans not only how ESG factors impact their economic and financial activities ("outside-in"), but also how their activities impact ESG factors, which could, in turn, become financially material ("inside-out"). This inside-out perspective could be seen as an indirect way to require companies, including financial firms, to start considering the social impact of their climate-related activities.
- Building on these guidelines in 2022, the EU introduced the Corporate Sustainability Reporting Directive (CSRD). The CSRD expands the scope of the NFRD to all listed companies, including SMEs, and introduces mandatory EU sustainability reporting standards for ESG aspects that are being worked out by the European Financial Reporting Advisory Group. The CSRD also further clarifies the obligation to report according to the double materiality perspective. The rules introduced by the NFRD remain in force until companies have to apply the new rules of the CSRD.

These initiatives come on top of international efforts to harmonize sustainability disclosure rules that may eventually include *explicit* just transition considerations. At COP26, the International Financial Reporting Standards (IFRS) Foundation announced the formation of an International Sustainability Standards Board (ISSB). It is meant to build on the work of existing investor-focused reporting initiatives—including the Climate Disclosure Standards Board (CDSB), the Task Force on Financial Disclosures, the IFRS Foundation's Integrated Reporting Framework and Sustainability Accounting Standards Board (SASB) Standards (commonly called SASB Standards), and the World Economic Forum's Stakeholder Capitalism Metrics—to become the global standard-setter for sustainability disclosures for financial markets (IFRS Foundation 2021).

In March 2022, the ISSB launched a public consultation on a set of proposed standards on general sustainability-related disclosure requirements and climate-related disclosure requirements, following which it will finalize and endorse them. Importantly, in December 2022, the ISSB decided to explore incremental enhancements to the Climate-related Disclosures Standard (IFRS S2), including those relating to the just transition. As the Group of 20 has welcomed this initiative, the ISSB looks likely to yield eventually a broadly accepted disclosure standard.

RISK MANAGEMENT

Just transition-related risks can be potentially material for EU financial firms (box 1). However, given the nature of the just transition, these risks are very hard to define and measure. Arguably, just transition-related risks fall under the broader category of social risk, as defined above. Of the three channels through which social risk could translate into losses for financial firms,[15] only reputational risk and operational risk related to litigation and liability risks are potentially relevant, especially in the EU where "soft law" standards such as the UNGPs or the OECD's guidelines for MNEs on RBC are codified into "hard law" (like the Taxonomy Regulation).

It should be noted, however, that the effects of liability and litigation risks are ambiguous. They may incentivize greater compliance with these commitments and norms or, conversely, dissuade financial firms from subscribing to them (Morris, Bryan, and Walker 2022). These challenges related to identification and quantification may help explain why

15 These channels include social inequality, political pressures to delay or dilute the transition, and litigation and liability risks. See discussions in Wood 2016; Cort, Park, and Nascimento 2022; Robins 2020; Monnin and Robins 2022; and Clifford Chance 2021.

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BOX 1 - Potential just transition-related risks in the portfolios of Polish banks

The just transition poses significant challenges for European Union (EU) member states, especially those with economies heavily reliant on fossil fuels and high-carbon activities. Poland serves as an example, as a significant part of its economy is exposed to climate transition risk compared to other EU countries.

Declining sectors in Poland, such as coal mining and fossil fuel-based energy production, need to shrink to align with the national energy transition goals, potentially leading to the realization of carbon stranded assets. On the other hand, transforming activities, like the manufacturing of electric vehicles and low-carbon cement, require technological advancements. The concentration of declining and transforming activities in specific geographical areas introduces economic and financial risks for Polish banks that have invested in these sectors.

The exposure of Polish banks to districts that are beneficiaries of Just Transition Fund (JTF) support represented 11.4 percent of total credit to the economy as of 2022Q3. Less than one-fourth of this, or 2.7 percent of total credit to the economy, was allocated to high-carbon sectors and activities, while outstanding credit to coal mining activities accounted for only 0.1 percent of the total (particularly concentrated in the district of Katowice, Silesia).

At the same time, aggregate exposure of Polish banks to high-carbon sectors and activities in just transition-relevant districts (that is, those where the fraction of credit to high-carbon sector and activities is in the top quartile of the regional distribution) currently not included in the TJTPs, accounted for 13.8 of total credit. Credit to high-carbon sectors and activities located in those districts amounted to 4.7 percent of the total, which is higher than the corresponding figure for districts that are beneficiaries of JTF support. However, credit to activities in coal mining located in these districts was almost absent.

These figures are illustrative only and may overestimate exposure to just transition-related risks, given that they include exposure to high-carbon sectors and activities that may not be relevant in the spatial dimension (that is, in terms of concentration of economic activity and employment at the district level) which is a key attribute of the just transition. In addition, these exposures are aggregated at the level of the banking sector, while the risk of individual banks may differ.

Source: Battiston, Calice, and Monasterolo, forthcoming-a.

EU financial regulatory authorities so far have held off on hardwiring just transition-related risks in regulation and limited themselves to raising awareness among financial firms of the potential employment or social impact of their decisions and issuing guidance to that effect.

The European Central Bank (ECB) may be cautiously moving toward reflecting just transition elements in its supervisory guidance. Like some other major central banks, the ECB has issued supervisory expectations on climate-related and environmental risks for banks (ECB 2020). One of them (expectation 7.5), advises banks to take into account the OECD guidelines for MNEs on RBC in their due diligence assessment of clients in order to reduce reputational as well as litigation and liability risks. While it is far from a "just transition regulation," this step could be seen as an indirect way to introduce just transition considerations in banks' risk management.

Things may change in the future, with the EU setting out binding requirements for how EU financial institutions manage ESG risks. The legislative process around the EU Banking Package is now entering its final stages. While the primary aim of the package is to implement the Basel III framework, the proposals for revisions to the Capital Requirements Directive (CRD) and Capital Requirements Regulation (CRR), known collectively as CRD6/CRR3, include ESG provisions not present in the Basel III text that change the nature of ESG risk management for EU banks, including for social risk. It might also extend to just transition considerations, though this is mostly speculative at this stage.

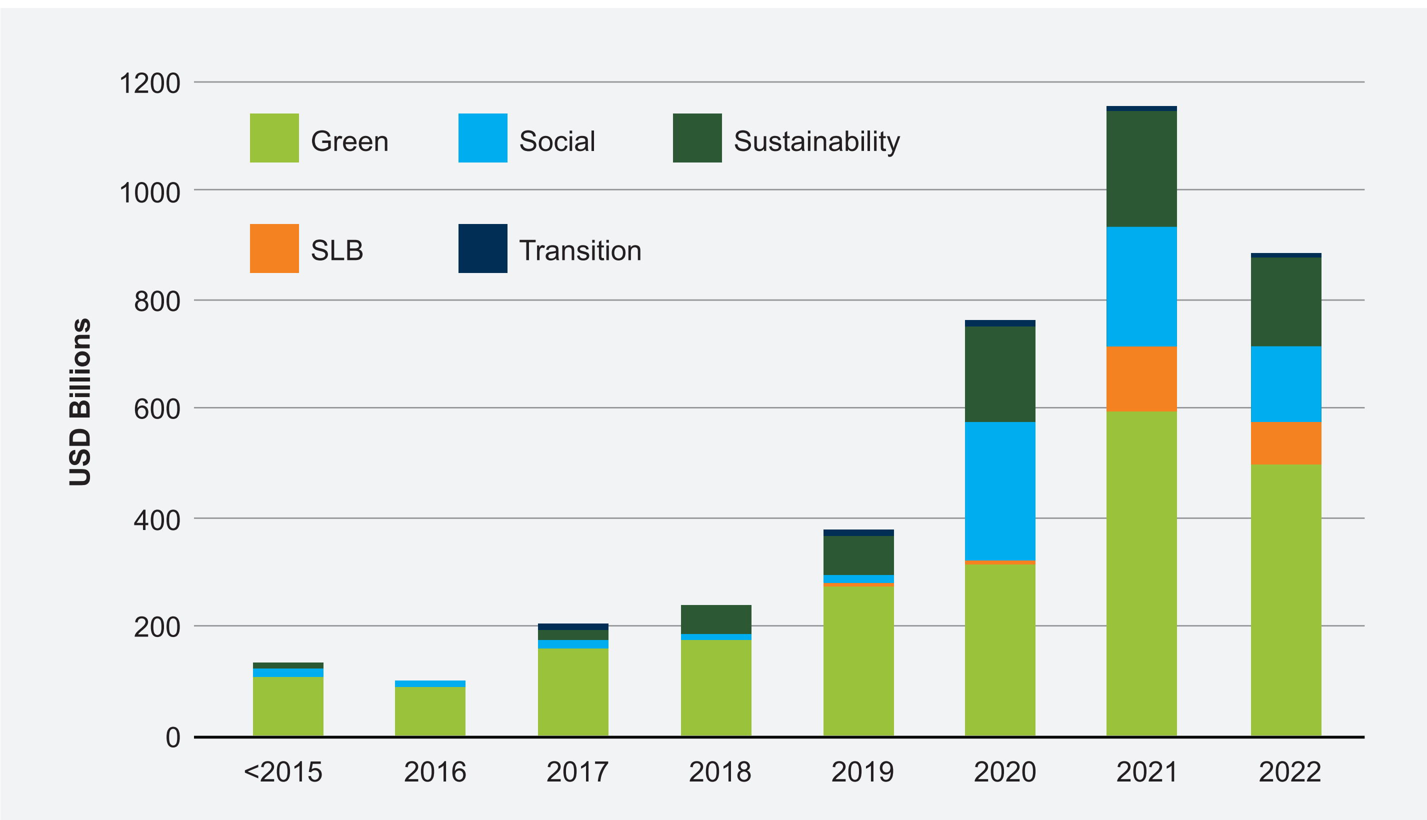
- CRD6 is expected to introduce new mandatory requirements for banks to develop transition plans. These are already embedded in several pieces of EU legislation, namely the CSDD and the CSRD, but are neither mandatory nor enforceable. Under the proposed framework, financial supervisors will receive new powers to assess and monitor the implementation of banks' transition plans as a part of the Supervisory Review and Evaluation Process (SREP).

- CRD6 revisions introduce explicit rules on the management and supervision of ESG risks. While these are broadly in line with recommendations set out by the European Banking Authority (EBA) in a 2021 report (EBA 2021), the details will be included in forthcoming guidelines for risk management, internal stress testing, and the integration of ESG risks into the SREP that the EBA is planning to issue by end-2023. The EBA's guidelines are likely to be broadly consistent with existing ECB guidelines and Basel Committee on Banking Supervision principles. Financial firms may be able to leverage existing processes and capabilities, but they will need to ensure that, as for climate risks, they are developing the internal expertise and data gathering capabilities to include broader ESG risks in their risk identification, measurement, and mitigation processes.

MOBILIZATION

The need for financing climate transition-related—and, more broadly, sustainability-related—projects has spurred the development of several innovative capital market instruments. Most of them are debt instruments, some of which could be adapted for financing just transition projects. While the size of this market is still relatively small, it is growing rapidly. Global issuance of sustainable debt instruments exceeded US$1 trillion in 2021 (compared to global bond issuance in the same year of more than US$9 trillion) before falling slightly to US$0.9 trillion in 2022 reflecting the headwinds facing the global fixed income market (Michetti et al. 2023). The EU accounted for more than 40 percent of the overall market. Over half of these sustainable debt instruments are green bonds (figure 2).

FIGURE 2 - Sustainable debt market



Source: Michetti et al. (2023, 4).

Social, sustainability, and sustainability-linked (SSSL) bonds, where the EU is a dominant player, may be well suited for just transition purposes. However, experience so far has revealed obstacles that limit the scope for scaling these instruments.

- Given the greater flexibility on the use of proceeds compared to traditional green bonds, SSSL bonds can be attractive to issuers. They can also be attractive to investors, as they provide greater choice of sectors than green bonds. At the same time, SSSL bonds require issuers to document the achievement of the desired environmental, sustainability, or social impact through Key Performance Indicators (KPIs). The clarity, verifiability, and robustness of KPIs are thus critical. Given the multitude of different dimensions of impact, KPIs need to be painstakingly designed and negotiated for every deal. This is often the biggest hurdle for issuers of and investors in SSSL bonds. In the case of sustainability-linked bonds, in particular, the penalty for failure to achieve KPIs in terms of stepped-up coupon payments is often too modest relative to the issuer's total cost of borrowing, reducing the incentive to achieve them and, therefore, the potential benefits of the instrument.
- In some cases, KPIs were already achieved (for example, through the selection of backdated indicators by the issuer), and the benefits of issuing SSSL bonds were limited, leading to accusations of social washing.
- Last but not least, their impressive growth notwithstanding, all sustainability-related and social instruments have a short track record. Green bonds—the oldest of the sustainable bond labels—have existed since 2007, and the rest have histories that stretch back little more than 5 years. These instruments are, therefore, children of the post-financial crisis world, in which yields were extremely low. It remains to be seen how they will perform in an environment of persistently higher interest rates.

A different emerging approach to introducing just transition considerations in financial markets is to set up investment vehicles that screen the underlying assets based on their just transition impact. Box 2 outlines two examples. By allowing investors to differentiate between bonds based on their just transition characteristics, this approach—which could in theory also be extended to equity instruments—aims to increase financial flows toward companies that in their

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BOX 2 - Just transition-focused private investment fundss

The Just Transition for Climate fund, launched by Amundi in 2021 with about CHF 425 million of assets under management, is based on the Bloomberg Barclays Euro Aggregate Corporate index, which includes more than 3,100 European corporate bonds. It aims to maintain a carbon footprint that is 20 percent lower than this benchmark. At the same time, bonds should have an environment, social, and governance rating and a just transition rating that are higher than or equal to E, with A being the highest and G the lowest. Amundi's just transition score looks at the different social aspects involved in the transition to a low-carbon economy, such as impact on employees, consumers, and local communities. In addition, the fund has a dedicated engagement policy that involves the managers sending an annual letter to companies to encourage them to produce transition plans.

The Global Sustainable Transition Bond fund, launched by Ostrum Asset Management (OAM) in September 2022, invests in sovereign or corporate fixed-income instruments that finance projects in renewable energy, green buildings, clean mobility, inclusive development (healthcare, education, decent housing), or ecosystem preservation (circular economy, sustainable use of resources, biodiversity). They must meet three criteria: (i) reducing the issuer's carbon footprint, (ii) promoting positive social impact, and (iii) protecting ecosystems and local economies. Adherence to these criteria is assessed by OAM at the level of both the issuer and the individual instrument by a proprietary methodology which, OAM claims, allows for a "better assessment of risks and long-term value for our clients."

Sources: Amundi Asset Management 2021; Kirakosian 2021; Leguilloux 2022; EFAMA 2022.

transition plans are factoring in the employment and social impact of their activities as well as incentivize more issuers to do so. The lack of agreed metrics, however, means that the social impact or just transition rating of each asset or issuer is assessed solely by the companies' in-house analysts on the basis of proprietary methodologies. As with the various ESG ratings, the lack of transparency, verifiability, and auditability are inevitable pitfalls of this approach.

There has been less innovation in banking, where just transition-related initiatives are still largely at the concept stage. These initiatives are voluntary, led mainly by trade associations, international organizations, or non-governmental organizations, and follow in the wake of similar earlier initiatives in climate finance. It is not clear how much traction they have had in actual business practice. Two such initiatives, focused specifically on banking, are characteristic examples.

- The Loan Syndications and Trading Association (LSTA), together with the Loan Markets Association (LMA) and the Asia Pacific Loan Markets Association (APLMA), published a set of voluntary high-level principles for social loans—the Social Loan Principles (SLPs)—and the Sustainability-Linked Loan Principles (SLLPs) for sustainability-linked loans. They build on the International Capital Market Association's Social Bond Principles (SBPs) and Sustainability-Linked Bond Principles (SLBPs), respectively. Like the SBPs and SLBPs, the SLPs and SLLPs provide only a high-level framework for social and sustainability-linked loans (APLMA, LMA, and LSTA 2023a,b). These principles could provide a template for developing a framework for just transition lending, but it is not clear how widely they are used by banks.

- The ILO and the Grantham Research Institute for Climate Change and the Environment, which is part of the London School of Economics and Political Science, developed a Just Transition Finance Tool for banking and investing (ILO and Grantham Research Institute for Climate Change and the Environment 2022). This tool provides generic recommendations to banks and asset managers on how to embed the just transition in broad corporate strategies, internal governance, product design, and client management. At best, it can be seen as an awareness-raising pamphlet rather than an operational guidance document for banks.

These market developments, which have not been connected with the EU's just transition framework, are not sufficient to mobilize capital at the scale needed. Taxonomies, disclosures, and reporting initiatives as well as improved risk management practices can support private capital mobilization for the just transition. However, indirect public finance measures and other forms of support are needed to significantly increase financial flows. The JTM already includes a set of incentives to that end.

- A dedicated just transition scheme under the InvestEU Program is expected to mobilize up to €10 billion to €15 billion of mostly private investments. The scheme provides a budgetary guarantee across the four policy windows of the InvestEU Program, while an InvestEU Advisory Hub acts as a central entry point for advisory support requests. Eligible projects are those located in the territories having an approved TJTP or projects that benefit those regions, provided they are key to the transition of those territories. For instance, infrastructure projects that improve the connectivity of the just transition regions may be covered.

- A public sector loan facility combining €1.5 billion of grants from the EU budget with €10 billion of loans from the European Investment Bank, aims to mobilize €18.5 billion of public investment in energy and transport infrastructure, district heating networks, and energy efficiency measures, including renovation of buildings and social infrastructure. These can function as catalyzers for private investment.

- The Just Transition Platform, which consists of a single access point and help desk, assists member countries and affected regions with the just transition. It provides comprehensive technical and advisory support. Authorities and beneficiaries can access it to find all they need to know about the funds, including opportunities, relevant regulatory updates, and sector-specific initiatives. The platform also actively promotes the exchange of best practices among all stakeholders involved, including through regular physical and virtual gatherings.

MDBs could be more actively leveraged, especially in Central and Eastern Europe. Support for the just transition is an important priority for many MDBs. In 2021, at the margin of COP26, MDBs issued a joint statement outlining their commitment to the just transition based on five high-level principles (Multilateral Development Banks 2021). The principles aim to help guide MDBs' support for a just transition and to ensure consistency, credibility, and transparency in their efforts. Especially in member states with limited resources and capacity, MDBs could provide long-term financing bundled with technical support, helping de-risk private investments. They could also support innovative transactions and kickstart new markets. Finally, MDBs could help support the development of a pipeline of investable projects.

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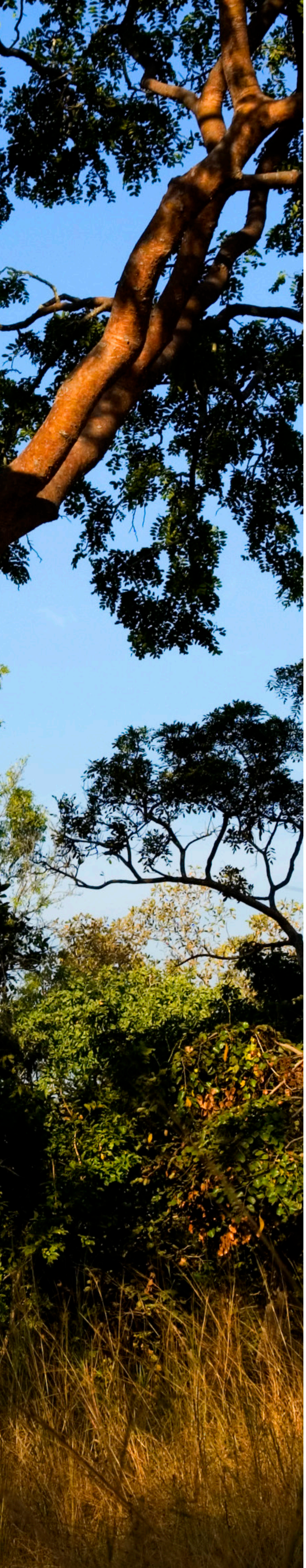

Key Takeaways

An enabling framework is a necessary condition for mobilizing private capital for the just transition. For that to happen, the concept of just transition needs to be interpreted pragmatically in order to operationalize it. This implies a focus on jobs in the regions and industries most affected by the energy transition. Yet it may still be hard to define a just transition project or financial product and to measure its impact. The latter critically depends on the choice of the target group for the remediation effort and on the time horizon. Market mechanisms alone cannot fully incorporate just transition considerations in finance, and an overarching policy framework that provides guidance and aligns incentives is needed. The just transition is essentially a political project. Only sovereign governments have the authority and accountability to put in place a just transition policy framework.

This policy note proposes the first iteration of a just transition policy framework centered around three interrelated and mutually reinforcing pillars.

- **Hierarchy of priorities.** A system for determining a hierarchy of priorities for sectors, territories, and social groups that are to be remedied for the negative impacts they suffer from the transition to a low-carbon economy or supported because they contribute directly to a more equitable sharing of the costs and opportunities from the transition.
- **Fiscal transfer.** A mechanism to allocate public funds in a time-consistent manner in line with these priorities.
- **Financial flows enablers.** A set of instruments or policy interventions that promote better disclosure, improved risk management, and capital mobilization to facilitate private financial flows to activities or projects that are deemed to contribute to a more just transition.

The EU is more advanced than other major jurisdictions in putting a just transition policy framework in place, but some gaps remain. Assessed against the proposed just transition policy framework, the EU framework presents the following features:

- The EU has a clear system to identify territories most negatively affected by the social and economic effects of the climate transition delegated to member states and built around national TJTPs. This allows for tailored actions based on national energy and climate plans. Yet, challenges remain in prioritizing projects because of the broad scope of activities that can be supported and the loose criteria for identifying vulnerable regions and sectors.

- There is a clear fiscal transfer mechanism, the JTF, to fund just transition projects primarily through grants. Allocation criteria based on industrial emissions and employment in specific sectors ensure targeted support. However, the JTF's size may be insufficient given its wide scope and objectives, leaving uncovered many regions at risk of serious socioeconomic disruption.

- The EU has taken steps to incorporate social impact considerations into regulations. Efforts to create a social taxonomy have faced challenges and have been temporarily shelved, but the existing sustainability Taxonomy Regulation as well as the NFRD and the CSRD go some way toward indirectly reflecting the social and human impact of the energy transition in classifications and required disclosures.

- The ECB's supervisory guidance could be seen as requiring banks to incorporate some aspects of the just transition—through the OECD guidelines for MNEs on RBC—in their risk management. Forthcoming legislation, namely the Banking Package, can be a game changer in integrating just transition considerations in financial decision-making.

- The EU framework includes blended finance instruments that can crowd in private investors and a technical assistance program that can help with project preparation. However, especially in member countries with limited resources and capacity, MDBs could play a more active and complementary role to leverage private finance at scale.

The assessment provides key takeaways for consideration by competent authorities to strengthen further the EU just transition policy framework going forward. These focus specifically on measures to enhance the mobilization of finance for the just transition, not for broader environmental or social goals, assuming a binding budget constraint.

- **Narrowing the scope of the JTF for maximum effectiveness.** The JTF's broad scope is deliberate, given the vastly different needs and opportunities for just transition projects across member countries and regions. This, however, combined with its relatively small size, justifies an old criticism that fiscal resources may be spread too thinly to make a difference. Therefore, consideration could be given to narrowing the scope of eligible activities to social support and/or land restoration. This would also signal that economic revitalization projects should be funded by the private sector. Consideration could also be given to defining more objectively regions at risk and classifying eligible economic sectors according to the Statistical Classification of Economic Activities in the European Community, commonly referred to as NACE. It should be noted, however, that a delicate balance is to be struck between narrowing the focus of the JTF to increase its effectiveness on the one hand, and maintaining discretion for national governments in selecting projects for inclusion in their TJTPs on the other hand.

- **Enhancing data collection for social impact assessment.** In contrast to the climate impact of economic activities, which can be quantified by measuring GHG emissions, measuring their social impact faces significant conceptual and analytical difficulties because many of the dimensions of interest are qualitative. Nevertheless, there is room for improvement in the collection and dissemination of data covering at least certain aspects of social impact, notably employment and gender. This could help over time provide greater visibility and a better understanding of the negative social and economic effects of climate transition initiatives and the associated need for remedial action. It could also help minimize the risk of social washing by issuers and asset managers. Although data and information infrastructure is the responsibility of national governments, consistent standards and guidelines could be developed at the EU level.

- **Embedding just transition considerations in sustainability regulations.** In the absence of a social taxonomy—which is neither a necessary nor a sufficient condition for the development of just transition finance—emerging sustainability taxonomies and disclosures and reporting standards can bridge the gap. However, they have a much wider aim than the just transition, that is, to encourage, through the dissemination of better information, the flow of financial resources toward activities that promote (or do no harm to) certain social goods, such as human rights, environmental sustainability, or quality of life. While these social goods may be compatible with the goal of the just transition, they are much broader and not specifically targeted to groups or regions impacted by climate transition policies. Attention could, therefore, be given to introducing just transition considerations in the sustainability standards and anchoring them in relevant indicators and metrics (for example, percentages of net jobs created, workers receiving a living wage, or women in the workforce).

- **Providing guidance on assessing just transition-related risks.** Competent authorities have a role to play in sensitizing financial firms to the longer-term social impact of their business decisions. Even though this may not translate into a quantifiable risk, increased awareness among financial firm managers of these qualitative aspects can minimize reputational risks, potentially leading to greater business resilience. Regulators follow a similar approach in the case of climate-related risks. Even though the scenario-based models used to estimate these risks are not reliable or accurate enough to gauge financial firms' capital adequacy or to set capital requirements, they can still be useful by allowing them to envisage long-term adjustments that may be necessary to their business models. In that regard, consideration could be given to developing methodologies for assessing potential just transition-related risks in financial firms' portfolios in line with prioritized regions and sectors.

- **Clarifying supervisory expectations for financial firms**. Competent authorities could sensitize financial firms to just transition-related litigation and liability risk—which is part of operational risk—and provide guidance for calculating operational risk capital (ORC) requirements. It should be noted, however, that this task is far from straightforward. Unlike other types of litigation and liability risks, where awards to plaintiffs are related to quantifiable economic losses, plaintiffs' claims for violations of social norms of fairness are essentially arbitrary. And if these claims are successful, any court-mandated compensation would be entirely at the discretion of the court. This makes just transition-related litigation and liability risk and the associated ORC requirements extremely hard to estimate, yet efforts could be made toward developing an appropriate assessment methodology. This could also help financial firms prepare for the forthcoming requirements on ESG risk management and supervision that are part of the Banking Package.

- **Encouraging the development of financial instruments for the just transition.** This may involve, for example, assisting in the definition and compilation of data related to social impact; providing training to build skills in the financial industry in the areas of social impact assessment and measurement, client engagement, and so forth; encouraging governance changes in financial firms that help embed a business culture that is more sensitive to the just transition agenda; establishing regulatory sandboxes, if appropriate, for innovative instruments; or disseminating best practices for the design of SSSL bonds. In addition, policy initiatives unrelated to the just transition, notably the Capital Markets Union (CMU) Action Plan, could be leveraged from the perspective of developing financial instruments for the just transition. For example, certain elements of the CMU action plan, such as the European Single Access Point for EU corporates, reforms to the regulatory framework for long-term investment funds, and initiatives to remove tax and other obstacles to cross-country investments, could be reassessed with a view to maximizing their potential contribution to just transition finance.

- **Maximizing the role of MDBs in de-risking just transition projects.** Some just transition projects may yield a positive economic return in addition to having social and environmental benefits, but the risk-return profile may still be insufficiently attractive to private investors. In such cases, MDBs can play a far greater role in de-risking just transition investments, complementing available instruments and mechanisms. MDBs can provide support through the creation of blended financing structures to alter the risk-return profile for the just transition, for example, by agreeing to be first to endure losses in just transition funding vehicles and securitizations. MDBs can provide technical assistance to help develop projects, improve national and local governments' institutional capacity, and build the local currency bond markets (including municipal bond markets) to broaden the set of domestic investors. This type of support is especially relevant in Central and Eastern Europe, where member countries have comparatively fewer resources and less capacity, and financial markets are less developed.

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