

JUST TRANSITION PLANNING TOOLBOX





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Atteridge, A., A. De Leo, H. Searight, M. Davis, L. Radwan, R. Madhusudanan. 2023. Just Transition Planning Toolbox. Climate Investment Funds, Washington D.C.

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About the Toolbox

What is a Just Transition?

All around the world, major changes are underway – or coming – in crucial sectors of our society: how we produce and consume energy, goods, and even food; how we move around; how we manage water and waste; how we manage and protect our natural resources and landscapes; and how we produce the goods and services that our economies depend on. Change is being driven by the need to tackle climate change, and to address the many other environmental and social externalities of our current production and consumption practices, but also by the adoption of new technologies, changing markets, or changing consumer preferences.

Major socioeconomic changes, whether at a local or national scale, are likely to be disruptive. A greener economy and more sustainable production processes will produce net benefits for society, but the process of transition may create new costs or risks for some people. There could be localized job losses and negative impacts on local economic activity, for instance, even if the transition results in higher net employment or net economic activity overall.

If not carefully managed, those disruptions could have real human impacts, particularly among people and communities whose livelihoods are affected, or who were already vulnerable to begin with. That, in turn, will also create local resistance to the transitions.

The concept of just transitions encourages planners and other stakeholders to:

- Actively promote **socially inclusive processes** when planning and implementing a transition (sometimes referred to as ensuring "procedural justice").
- Mitigate the costs or other negative impacts of the transition where they fall unfairly on certain groups or result in hardship, and design the new economy so that its benefits are distributed widely across society (ensuring "distributional justice").
- Look for opportunities to use the transition to also reform existing social or
 economic structures that currently create injustices and/or vulnerabilities
 (promoting "restorative justice"). Well-designed transitions may be used to bring
 about many positive changes for communities and regions.

Many social, economic and environmental issues need to be considered and addressed as part of managing the change process. These include impacts on workers who are affected by the phasing down of certain industries, as well as other economic or social impacts that could affect local communities, small businesses, and local governments. In some sectors, a major related concern is how to deal with the environmental legacies of today's economy – such as degraded forests, contaminated lands, or mining voids.

The planning process also needs to explicitly recognize how intersecting forms of discrimination and marginalization – on the basis of gender, race or ethnicity, age, and other factors – may affect the distribution of costs and benefits. It must devise strategies to ensure that inequality is reduced, not increased, by the transition to new practices and industries.

Just transition planning can be a bridge between climate action and the promotion of other sustainable development goals, because it will touch upon many different aspects of social, economic, and environmental policy. To achieve this, strategies designed to promote just transition should be aligned with other policies and plans that have the same goals. At the same time, some policies, plans, and fiscal settings may need to be adjusted – or even significantly reformed – to align with the vision of a just transition.

Finding stakeholder agreement on how to define the goals of a just transition in any specific context, and the principles that should guide planning, is an important early activity in planning (see **Module 2.3**).

What is the Toolbox?

It provides a practical guide to planning climate and/or sustainability transitions that are equitable and inclusive. The Toolbox explains key concepts and lays out the different elements needed to achieve a just transition: from the initial dialogues and analysis, to the preparation of a holistic transition plan.

The materials are designed to be useful in a wide range of contexts, and include real-world examples and links to external "how to" resources.

Who is the Toolbox for?

It can be used by many different kinds of stakeholders involved in planning, funding, and/or supporting a transition, including:

- Government agencies at the national or subnational level particularly those tasked with initiating or coordinating the transition;
- Development finance institutions, bilateral development partners, international agencies, and others providing finance and technical assistance;
- Civil society organizations, labor unions, and other stakeholders seeking to ensure a just transition.

How is the Toolbox organized?

It includes five interconnected modules:

- Mobilizing stakeholders
- Developing vision and objectives
- Analyzing impacts and opportunities
- Devising strategies
- Resources and partnerships.

Each module includes an overview of key activities and relevant tools and methodologies, followed by a series of real-world examples and links to resources.

Where should I begin?

The Toolbox describes many, diverse activities that go into preparing for, and implementing, a transition. It can be difficult to know where to begin such a complex planning process. And there may be daunting challenges: for instance, a political economy that resists change or does not actively engage in dialogue about transition planning, data gaps that constrain analysis or decision making, financial limitations, or coordination challenges between actors or different types of expertise.

So how do we proceed in these circumstances? Which actions might be most important in the near term?

To help to position yourself and to understand what the immediate needs are in your context, a set of **orientation questions** might be helpful as a starting point. Working through these is one way of sketching out what is happening or has been done in the context where you are working.

Orientation questions

- Which sector(s) are you interested in?
- What scale of planning is your interest local, provincial, national?
- Is there already some ongoing debate about just transition? (If not, see **Module 1.1**) If yes: which stakeholders are actively speaking about the transition? Is there recognition among different parts of the community that a transition is underway or is coming? Are stakeholders who may be affected (e.g. workers, farmers, small business owners) aware and engaged in debate?
- Is there an organization coordinating stakeholders in dialogue about transition planning, either within or outside government? (If not, see **Module 1.2**)
- Is there any government commitment to support a just transition? What parts of government are engaged with transition debate or planning?
- What information exists publicly about the likely changes affecting the sector(s) of
 interest? Is available information perceived as reliable by different stakeholders? Is
 it accessible to different stakeholders, including groups who are not commonly
 involved in public planning processes? (If not, see Module 2.2)
- Has there been analysis of how the transition will affect different stakeholder groups, e.g. workers? (If not, see **Module 3**)
- Are you aware of any specific measures that have been introduced to mitigate some of the negative impacts of transition? If so, who is targeted for support (who are the likely beneficiaries)? (If not, or if these are quite limited, see **Module 4**)

How to proceed where there is limited or poor data available?

A lot of knowledge and data, of different kinds, will ideally be drawn upon for transition planning. However, in any real-world context there may be significant data gaps that undermine our ability to inform decisions. Data may be missing altogether, not publicly accessible, not available at the right scale (e.g. national or local), or may not be disaggregated in ways that help to properly assess inequality and distributional impacts (for example, by gender).

Some activities can proceed even without extensive data. For example, early dialogue with stakeholders can already begin to develop a picture of many of the general risks, opportunities and strategies.

Filling data gaps will also become an important activity, and different actors might contribute to this – different government departments, research and education organizations, civil society organizations, and industry. Improving statistics on key issues, for instance relating to the labour market, may require coordination across several entities, data collection systems, and scales (local, provincial, national and even international) – so establishing connections and exploring options together is likely to be a productive first step.

Even where there may be some data, it can still be challenging to ensure it is accurate and unbiased. Using multiple analytical methods or data sources together can be a helpful way of enhancing the coverage and/or reliability of analysis.

How was the Toolbox prepared?

The toolbox builds on the knowledge and experience developed by CIF and its partners over the past several years, supplemented by in-depth research to identify the approaches and tools being used in just transition planning around the world.

Ideas and examples were also gathered from interviews with representatives from governments, development finance institutions, the International Labour Organization (ILO) and other international organizations, civil society or grassroots organizations, and different industry sectors.

The examples in the modules do not necessarily represent "best practices." They have not been screened for impact, and most may be flawed in some way when measured against the goal of a "perfect" just transition. They are included to illustrate different models or approaches, that have been tried, and to offer inspiration when thinking about how to undertake activities in other contexts.

Recommended citation

Atteridge, A., A. De Leo, H. Searight, M. Davis, L. Radwan, R. Madhusudanan. 2023. Just Transition Planning Toolbox. Climate Investment Funds, Washington D.C.

Contact Us

We always welcome your feedback on the Just Transition Planning Toolbox. If there are other resources or examples that you feel could be included in any of the modules, please let us know. If you feel a particular example or resource is not accurately represented in the toolbox, or is problematic from the perspective of promoting a just transition, please let us know.

Contact us by email at:

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Acknowledgements and references

This toolbox draws directly upon insights from very many experts and publications. Individual citations are not included throughout to avoid cluttering the content of the online platform for users. However, we are indebted to the accumulated knowledge and expertise from a wide range of literature and experts working in this field.

We are grateful to many people for sharing their expertise and time, and providing input, during development of the Just Transition Planning Toolbox. This includes: Kidanua Abera Gizaw (African Development Bank), Mariana Alfonso (Inter-American Development Bank), Laura Becerra (Neyen Consulting), Leonardo Beltran (Advisory Board Member of the CIF Just Transition Initiative), Eva Bernard (European Bank for Reconstruction and Development), Margherita Calderone (European Bank for Reconstruction and Development), Pietro Calice (World Bank), Ezgi Canpolat (World Bank), Andrea Carega (CIF), Sherwin Cotta (United Kingdom Department for Business, Energy and Industrial Strategy), Marion Davis (freelance editor), Mafalda Dutarte (CIF), Kate Hughes (Asian Development Bank), Jairus Josol (Asian Development Bank), Nina Kolybashkina (CIF), Anne Lillis (CIF), Brittney Melloy (CIF), Flavia Milano (Inter-American Development Bank), Nithi Nesadurai (Climate Action Network Southeast Asia), Andrew Norton (CIF), Ines Novais (European Bank for Reconstruction and Development), Sandeep Pai (Centre for Strategic and International Studies), Miguel Rescalvo (Neyen Consulting), Camilla Roman

(International Labour Organization), Neha Sharma (CIF), Anna Vasylyeva (European Bank for Reconstruction and Development), and Mike Ward (CIF).

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Module 1. Mobilizing stakeholders

Creating and maintaining a socially inclusive planning process is crucial for a just transition. This leads to better outcomes and significantly reduces the risk of social conflict and resistance to change.

Stakeholders, including marginalized groups, should be given the chance to influence how risks and opportunities are defined, the vision for transition, the principles that guide planning, and the strategies prioritized for promoting future livelihoods.

1.1 Creating dialogue about transition

Transition planning is not something that begins spontaneously. It is important to create dialogue among stakeholders in order to initiate the process. This is particularly true when key stakeholders are reluctant to engage. Governments and industry leaders often fear political backlash if they acknowledge structural changes that will impact local economies and communities. As a result, those most impacted are left uninformed or feeling vulnerable. In both cases, in the absence of a clear process that supports their livelihood and addresses their concerns, they are more likely to resist change and less likely to engage in dialogue.

Early dialogue among stakeholders can provide the momentum for more detailed transition planning. You don't have to be certain of the scope or exact start date. What matters is that, early in the process, you engage different stakeholders in dialogue about potential changes and how the impacts can be managed.

Key Aims

The following are the key aims of this early dialogue:

- Build awareness about possible transition pathways that communities and governments face and the impacts these might have.
- Invite different perspectives about these transition pathways and impacts.
- Build a coalition of stakeholders who are willing to deal with the challenges ahead. They will help promote broader stakeholder engagement and lay the ground for proactive planning.

Getting Started

To foster open, effective dialogue, consider the following guidance and actions:

When choosing which stakeholders to approach first, consider the context.

Both bottom-up and top-down dialogues can be helpful. What's important is that you create space for multiple perspectives and do not seek to define or control the agenda from the outset.

Additional guidance on choosing which stakeholders to approach, is provided in Module 2. For political economy analysis, see **Module 2.2.1**. For stakeholder mapping, see **Module 2.2.2**. For gender analysis, see **Module 2.2.4**.

- The way you invite and frame this dialogue is key. Focus on people's livelihoods and visions for local development and prosperity. Address specific economic, social, or environmental concerns. Ask what solutions stakeholders think are needed to tackle the challenges they face.
- Trust is an essential ingredient. It is important to acknowledge perceptions of injustice or inequality and to address the cause of those perceptions.

- Diagnose the status of debate about transition. Use stakeholder mapping to identify how different stakeholders feel about transition (for example, whether they recognize that change is happening or likely). For information about stakeholder mapping, see **Module 2.2.2**.
- Build stakeholders' knowledge. Create resources and platforms to share
 information that helps people better understand the drivers of change in specific
 sectors or regions, and its possible impacts. For stakeholder capacity-building
 approaches, see Module 1.3.3.
- Create a process for listening to individuals and communities who may be affected. While many stakeholders have knowledge or insights needed to understand the possible impacts of transition, they may not see the full picture. To build engagement and shared ownership of the planning process, involve different stakeholders in the co-creation of knowledge resources. This also enables communities to shape the dialogue and define their own visions and needs for support. For people-centered methods for engaging stakeholders, see Module 1.3.2. For stakeholder capacity-building approaches, see Module 1.3.3. For scenario exercises, see Module 2.1.1.
- Provide finance for stakeholder forums and other forms of consultation. National
 governments (or external funders, in countries that receive development
 assistance or climate finance, for instance) might allocate funds, locally and
 nationally, to conduct a useful background analysis or bring stakeholders together.
- Include just transition objectives and activities in key policy and planning
 documents. Including just transition objectives and activities in documents such
 as national development plans, relevant sectoral plans, and nationally determined
 contributions (NDCs) under the Paris Agreement, creates legitimacy for the topic.
 This can create more space for dialogue, implies some commitment to funding
 transition dialogue and planning, and encourages different line ministries to
 examine how their work relates to just transition planning.

EXAMPLES

- City of London listening campaign, United Kingdom
- Integration of Just Transition approaches into Indonesia's national policy
- Just Transition Listening Project
- Just Transition Platform, European Union
- Survey of stakeholder perceptions about climate transition risks, Kenya
- Task force for community dialogue, Canada

RESOURCES

Energy Sector Reform Assessment Framework (ESRAF) Good Practice Note 10: Designing Communication Campaigns for Energy Subsidy Reform (World Bank Energy Sector Management Assistance Program, 2018) – This note is intended to assist governments in communicating with citizens proactively about energy subsidy reform. It guides practitioners through some of the important elements of an evidence-based and effective communication campaign, including timing, stakeholder consultation, opinion research, messages, messengers, media, and evaluation.

Stakeholder Engagement & the 2030 Agenda: A Practical Guide (United Nations Department of Economic and Social Affairs and the United Nations Institute for Training and Research, 2020) – This publication adapts, updates, and expands the content of an open access e-learning course created by UNDESA and UNITAR. Chapter 2 provides in depth guidance on principles, concepts, constituents and methods for designing stakeholder participation in planning. See in particular: section 2.4 for general guiding principles on stakeholder engagement, 2.5 for engagement of marginalized peoples, 2.6 for practical challenges to be aware of, 2.8 for an overview of stakeholder groups that may be relevant, and Chapter 3 on approaches and tools for engagement.

The Dialogic Change Model (Collective Leadership Institute, 2022) – The Dialogic Change Model is a guiding structure of four phases that are intended to activate and guide stakeholder collaboration. Phase 1 is specifically focused on raising the energy for the envisaged change and getting stakeholders interested in collaboration. The resource explains approaches that can be used at this stage, as well as at later stages of the engagement and collaboration processes.

1.2 Establishing a coordination mechanism

When planning a just transition, coordination is essential. Without it, many of the dialogues, analyses, and other planning tasks may be incoherent or not happen at all.

An entity with the mandate and resources to coordinate should help bring the different stakeholders together, develop some initial knowledge resources that can build their capacity to engage in dialogue, and potentially mobilize funding for some of these early tasks.

Creating or appointing an entity to coordinate the stakeholder engagement – and the planning process more broadly – can help to maximize synergies and ensure consistent communication with the public and the stakeholders that may be impacted. Coordination within government is also needed, since many portfolios and different levels of government will need to take responsibility and work together.

Roles and Responsibilities

The role of the coordinating entity is to maintain an overview of what is going on and identify ways of threading everything together into a coherent and just transition plan. The

coordinating entity is not responsible for deciding how transition risks and solutions are defined and prioritized. Nor is it responsible for all the actions needed to support just transition planning. As a single entity is not likely to have the expertise or resources to manage the breadth of issues involved, different stakeholders contribute to, and are responsible for, each activity.

Coordination Models

There is no single coordination model that works best – it depends on the context. The coordination role itself can be organized locally or at a higher level, for example, provincial or national government. However, historical transition experiences suggest that bottom-up, locally led community development planning is beneficial. It tends to generate positive, sustainable outcomes. Therefore, the coordinating institution should work closely with local stakeholders. In many cases, new institutions have been set up specifically to play this role.

Transparency

To create trust in the coordination process, it's important to ensure transparency about the requirements for membership of the coordination body, its composition, and how it works. It is also important to state clearly how stakeholder views and consultation inputs will be used and integrated into the final plans.

EXAMPLES

- Coordination of just transition planning in South Africa
- Hunter Jobs Alliance, Australia
- Jharkand's Task Force on Sustainable Just Transition, India
- New Zealand's Just Transition Unit
- Scotland's Just Transition Commission
- Special purpose agency established to coordinate coal region in transition, Australia

RESOURCES

<u>Climate Change Institutional Assessment (World Bank, 2021)</u> – This resource helps to identify strengths and weaknesses of the institutional framework for addressing climate change governance challenges in different contexts. It is aimed particularly at government agencies responsible for policy, planning, and finance, and those with leading roles in climate change policy, as well as inter-ministerial climate change bodies.

Governance of Transitions Toolkit - Design of governance structures and stakeholder engagement processes for coal regions in transition (European Commission, 2020) – This toolkit provides insights into key governance issues for regions tackling the decarbonization and diversification of their economies. These include: building effective governance models; designing and implementing stakeholder engagement and social dialogue processes; and enhancing the role of civil society in the transition. The sections on governance models (pp. 7–9 and 21–24) are particularly relevant, and include real world examples from Australia, Germany, Greece, the Netherlands, and Ukraine.

1.3 Engagement strategies and methods

To reflect the wide range of potential impacts of transition, many stakeholders should be invited to take part in transition planning. This also helps gather the different expertise needed to manage the various challenges and build trust in – and ownership of – the process.

For some tools and methods to help identify relevant stakeholders, see **Module 1.3.1**.

The way stakeholders are engaged is just as important as who is engaged. This includes the selection of representatives, the methods or spaces for engagement, the information that participants have available, and the frequency of engagement.

- To create an effective engagement strategy, consider the following guidance and actions: To enable participation, ensure that the information provided meets the needs of all individuals and groups.
- Before detailed engagement about transition planning, build relationships with and among stakeholders. Early preparation can promote trust among stakeholders, which will make dialogue processes more effective. This phase also helps anticipate sources of conflict that could negatively impact the broader stakeholder engagement process.
- Identify how the interests and values of different stakeholders are being acknowledged during the process.
- Ensure that cultural, institutional, or other historical power imbalances do not bias the level of recognition given to different individuals, communities, and social groups.

- Tailor the selection of participation methods and spaces to the diverse skillsets, ways of communicating, availability, and levels of literacy of stakeholders. Participation methods and spaces should also address power dynamics or social norms that might otherwise constrain their participation.
- To ensure equal participation and address power dynamics and social norms, tailor the selection of participation methods and spaces to the diverse skillsets, ways of communicating, availability, and levels of literacy of stakeholders.

A strategy for engaging stakeholders can be organized into a Stakeholder Engagement Plan (SEP). The SEP should include the following details:

- Overall approach;
- Stakeholders involved;
- Roles and responsibilities;
- Methods and formats for engaging different groups;
- Timing or schedule for engagement.

1.3.1 Identifying and engaging relevant stakeholders

The stakeholders who are relevant and should be engaged are diverse and will depend on the context. Key categories are likely to be:

- Government agencies at the national and subnational levels;
- The private sector in affected regions, including employers, industry representatives and business associations, small and mid-sized enterprises (SMEs), as well as the finance sector;
- Worker representatives, including trade unions, and making sure to also engage informal workers where they are present:
- Land and asset owners (e.g. farmers); Indigenous communities;
- Environmental groups, civil society groups, and other local community representatives; and
- Researchers and educational institutions.

Deliberate efforts should be made to engage with groups who are often not included in policy and planning processes, such as women, migrants, and the landless.

Many actors have the opportunity to engage different stakeholders in dialogue about transition, not only governments. Civil society organizations, corporations, business associations, and the finance sector all have networks – and public speaking opportunities – that can be activated. Thus, it can be helpful to think about how different actors might be mobilized so that they, in turn, actively engage other groups, and thus broaden the momentum for transition planning.

Methods for identifying relevant stakeholders include:

• Stakeholder mapping (see Module 2.2.1), can be used to identify the different groups with a stake in the outcome of a transition, or otherwise have the expertise or interest to contribute to transition planning. Mapping can be targeted to understand the key roles or activities of each stakeholder, as well as where (and at what level) they are engaged. It might use the broad categories of impacts detailed in Module 3 (employment, social, economic, environmental) to identify government agencies and other stakeholder groups with the mandate and/or

- resources to implement solutions, as well as those with a role in promoting a broader agenda of social equality.
- **Social impact analysis** (see <u>Module 3.3.1</u>), can be used to identify the specific groups that may be particularly affected by transition.

Regardless of what type of organization takes a lead on engagement, strategies will need tailoring to different stakeholder groups:

- **Government:** Different levels of government across multiple portfolios may need to be involved, given the broad spectrum of potential transition impacts and required policy and fiscal tools to address them. There may be different levels of readiness to engage between different parts of government, or between national and local governments. Engagement strategies should be sensitive to the political challenges that both elected officials and bureaucrats may face, as those challenges may make them reluctant to participate. Some governments may also lack the funding, staff, or skills needed for transition planning.
- Workers: Various strategies may be needed to promote exchanges between workers' representatives (e.g. labor unions), employers, and government. In some places there may be formal dialogue mechanisms in place that can be utilized, but it is important that engagement specifically includes non-union workers, and informal (and even illegal) workers where these are a significant part of the local workforce. Engagement processes should facilitate consensus building and ensure workers' have genuine influence over decisions about their futures. Different workers groups may be represented by different unions, so who legitimately speak for different groups of workers is an important question. Transparency and open communication are crucial, and workers and their representatives must be able to speak freely, without fear.
- **Private sector:** Effective engagement with the private sector is essential for a just transition. This is a highly heterogeneous group, including incumbent industries that may be facing restructure or closure; other businesses, including SMEs, that are exposed to transition risks and/or possess the skills and supply chains to play a role in future economic diversification; and financial institutions who shape transitions through, for instance, their allocation of capital. Not all private sector actors will be aware of these risks and roles, nor automatically inclined to bring a just transition focus to a broader planning process. Strategies should engage a diverse range of private sector interests, and be mindful of potentially conflicting interests (and in some cases active resistance to change) within the private sector. Once engaged, representatives of the private sector can be encouraged to reach out to their industry peers and to share best practices, or to look for collaboration opportunities that might support the growth of new industries locally.
- Marginalized or particularly vulnerable groups: Finding and amplifying the voices of women, the elderly, youth, Indigenous Peoples, people with disabilities, and other disadvantaged or other marginalized groups in the planning process is central to a just transition. The populations who are marginalized or vulnerable will vary by context and across sectors. Strategies to engage them should be designed with consideration of their specific needs and constraints. For example, meetings scheduled during the day may be difficult to attend for women who are busy with household responsibilities or for farmers and farm laborers. When engaging Indigenous communities, simply translating documents into local languages may be insufficient, because some groups have purely oral traditions for communication, so culturally experienced translators are required. Furthermore, observing protocols ensuring Free, Previous and Informed Consent is a requirement when engaging Indigenous Peoples.

In all cases, the process should provide people with the knowledge and resources they need to participate and have influence. For all stakeholder groups, capacity building may be needed to ensure they can effectively engage with the topic of just transition planning, e.g. to bridge the gap between national green economy or just transition policies and plans and issues at the local or company level.

EXAMPLES

General:

- Guidance on stakeholder engagement as Territorial Just Transition Plans are prepared
- Stakeholder engagement around transition planning in shale oil regions, Estonia
- Stakeholder engagement in preparation of Green Cities Action Plans

Marginalized or vulnerable groups:

- A Youth Climate Assembly in Ida-Viru, Estonia
- Cultural Mediators Program, Costa Rica
- Gender responsive stakeholder engagement by the Forest Investment Program's Direct Grant Mechanism (DGM) in Ghana
- Global survey of young people's perspectives on employment challenges and opportunities in the energy transition
- Indigenous engagement process on modernized land use planning, Canada
- Islamic Development Bank and ILO's "Youth Green Skills Accelerator Challenge Call"
- Women's workshop on the role women should play in the coal transition, Poland
- Youth workshops organized as part of developing Taranaki 2050 Roadmap, New Zealand

Labor:

- Building on existing relationships for social dialogue: Workforce support during closure of steelworks plant, Australia
- Labour union involvement in Taranaki just transition planning, New Zealand

Private sector:

- Engaging industry in transition roadmapping, South Africa
- Powering Past Coal Alliance's Just Transition Taskforce

RESOURCES

General:

Creating a Seat at the Table: Stakeholder Engagement for the 2030 Agenda (United Nations Economic and Social Commission for Asia and the Pacific and International Association for Public Participation) – This fact sheet describes a high-level framework, or set of guiding ideas, for planning and assessing the quality of stakeholder engagement. The framework draws on inputs from civil society, governments, and other experts, who together defined minimum acceptable standards of engagement, as well as what could be considered "best practice" for different aspects of engagement. Also includes a "public

participation spectrum" describing tools or methods that may be useful at different phases along the spectrum.

Guidelines for equitable participation in water decision-making (Stockholm Environment Institute, 2023) – This document is designed to foster collaboration between researchers, practitioners and stakeholders who manage and allocate water. The guidelines address how to make multi- stakeholder participation and decision-making in water planning more equitable. Applications of knowledge co-production and participatory action research (PAR) are described in real-world case studies. We present a pathways approach, used in the case studies to encourage and facilitate equitable participation as well as to identify and overcome barriers to engagement. The content of the document should empower researchers and stakeholders to find entry points, end-goals, and pathways for engagement and ownership in water decision-making.

How to Engage Stakeholders in Just Transition Dialogues: Lessons learned from the South-to-South Just Transitions Network (Climate Strategies, 2023) – This article describes tactics for engaging stakeholders in just transition conversations, drawing on the experiences of partners in the South-to-South Just Transitions network.

Industry transition roadmap planner: A step-by-step guide for developing industry transition roadmaps (Leadership Group for Industry Transition) – This interactive tool supports decision-makers to design, develop, and implement industry decarbonization roadmaps for various sectors. It covers different phases, from set-up, through design, to monitoring and evaluation.

Meaningful Stakeholder Engagement: A Joint Publication of the MFI Working Group on Environmental and Social Standards (Inter-American Development Bank, 2019) – This publication describes key objectives, principles, and practices for integrating stakeholder engagement into project design and implementation. It is based on lessons learned and evolving international standards, and is aimed at practitioners tasked with organizing consultations and stakeholder engagement as part of preparing and implementing projects.

<u>Public Consultations with Civil Society: Guidelines for Public and Private Executing Agencies (Inter-American Development Bank, 2016)</u> – This publication aims to support both the public and private Sector in delivering better public consultations with civil society specifically, in Latin American and the Caribbean. It provides information about good practices and how to draw up public consultation plans, as well as an overview of the legal frameworks applicable in 26 countries of Latin America and the Caribbean.

<u>Public Consultations: Step by Step: 300 Regulatory and Legal Frameworks Applicable in Latin America and the Caribbean (Inter-American Development Bank, 2020)</u> – This publication provides guidance on how to conduct public consultations. It also brings together more than 300 regulatory frameworks in Latin America and the Caribbean on the conduct of public consultations in the sectors of mining, fisheries, forestry, infrastructure, energy, and environmental impact assessment system.

Stakeholder Engagement & the 2030 Agenda: A Practical Guide (United Nations Department of Economic and Social Affairs and the United Nations Institute for Training and Research, 2020) – This publication adapts, updates, and expands the content of an open access e-learning course created by UNDESA and UNITAR. Chapter 2 provides in depth guidance on principles, concepts, constituents and methods for designing stakeholder participation in planning. See in particular: section 2.4 for general guiding principles on stakeholder engagement, 2.5 for engagement of marginalized peoples, 2.6 for practical challenges to be aware of, 2.8 for an overview of stakeholder groups that may be relevant, and Chapter 3 on approaches and tools for engagement.

Labor:

National Tripartite Social Dialogue: An ILO guide for improved governance (International Labour Organization, 2013) – This publication provides comprehensive guidance on the role of social dialogue and how it can be implemented. It draws on international labor standards and on the lessons learned and experience gained by the ILO in promoting social dialogue and providing advice and capacity building to tripartite constituents around the world. It includes sections on how social dialogue can be facilitated with marginalized groups, including people in the informal economy and women.

<u>Social Dialogue - Finding a Common Voice (International Labour Organization, 2020)</u> – This short brochure elaborates on the basic concepts of a social dialogue providing guidance on what social dialogue means, its different forms, the enabling conditions, and how the ILO can support it.

<u>Social Dialogue Handbook: Step-by-step Guidance (Amfori, 2020)</u> – This publication provides guidance on the implementation of social dialogue in a way that empowers women and improves gender equality. While focused on the ready-made garment sector in Bangladesh, much of the guideline is more broadly applicable in other sectors and contexts.

Marginalized or vulnerable groups:

Centring older people in regional transformations: A toolkit for just transition regions (European Commission, 2023) – This toolkit provides a general outline of why older people should be central to planning for the just transition and introduces key action areas relevant to older people. It proposes strategies ranging from increased engagement with older people during planning, to specific interventions in sectors like health, infrastructure and the labour market.

Youth for a just transition - A toolkit for youth participation in the just transition fund (European Commission, 2021) - This toolkit provides support and guidance on how to ensure meaningful participation of young people in transition planning. It includes a set of principles, methods and concrete tips of how to maximize youth participation in the programming, implementation, and monitoring and evaluation. It also describes examples of how particular engagement techniques have been successfully used. While prepared to guide engagement with the European Commission's Just Transition Fund, the toolkit is also applicable to other contexts.

Private sector:

Climate change and the Just Transition - A guide for investor action (LSE Grantham Research Institution on Climate Change and the Environment and Harvard Initiative for Responsible Investment, 2018) – This guide explores how investors and companies may engage with regional processes to identify the needs of workers and communities and to identify ways to support just transition programs at a sub-national level. It also describes how these institutions might take on leadership to engage other stakeholders (see pp. 16–20).

<u>Just Transition Framework for Company Action (Council for Inclusive Captalism)</u> – This guide - intended for governments, companies and civic organizations - includes a focus on evolving the energy workforce to support a low and zero carbon energy future, and on fostering collaboration and transparency throughout the process. It includes examples and case studies of implementation.

Just Transition Indicator in the Net Zero Company Benchmark Disclosure Framework (Climate Action 100+) – The Net Zero Company Benchmark assessment tool can be used to assess companies against ten Disclosure Framework Indicators relating to decarbonization, which draw on public and self-disclosed data from companies. More details on Indicator 9 on "Just Transition" can be found on p24 of the <u>Disclosure Framework Assessment Methodology</u>.

<u>Just Transition Resource Platform (We Mean Business Coalition)</u> – This Platform outlines some key steps companies can take to approach to advance the just transition across their climate ambition, action, advocacy and accountability, and links to some useful resources for each step.

Methodology for the 2021 Just Transition Assessment (World Benchmarking Alliance) – The Just Transition Approach Report sets out a methodology for assessing companies in high-emitting sectors on what they are doing to respect the rights of workers, communities and the most vulnerable as they work towards low-carbon goals. This includes how stakeholders will be invited to participate in the development of assessment indicators themselves.

The Just Transition Planning Process for Business: A Toolkit to Drive Social Dialogue and Stakeholder Engagement Toward a Just, Equitable and Inclusive Transition (Business for Social Responsibility) – This guidance describes a process for companies to begin thinking about and developing their engagement with just transition efforts within their company and value chains, at a corporate level. It is tailored toward the energy and utilities sectors, although learnings could apply to other sectors and company types.

1.3.2 People-centred design approach

People-centered design approaches put people – and the social, cultural, economic, and environmental contexts in which they live and work – at the heart of a design or planning process. They are ways of working to define problems or opportunities, and to develop solutions or strategies, that are based on the knowledge and perspectives of people living or working in the context.

The theory of people-centered design is that, in order to design systems that meet different users' or stakeholders' needs and expectations, those people must be deeply involved in the design and planning process. Some knowledge, and some perceived needs, may be tacit rather than articulated explicitly. And stakeholders usually have a hierarchy of needs and desires, some of which may be "rational" and some "emotional." Hence, methods of people's involvement should be able to share or distil each of these components.

A wide range of methods may be useful in eliciting input from stakeholders as part of a people-centered design process, such as:

- Card sorting: A method in which users organize topics or thematic elements into groups. It can help to explore relationships between different ideas, for deciding hierarchies or structures between different elements.
- Contextual inquiry: Using semi-structured interviews and observations together, in the contexts where people live or work.
- Design sprints: Usually a multi-day process to identify problems, sketch out possible solutions, design and prototype the best ideas, and test ideas with stakeholders to get feedback.
- Ethnographic research: Using a combination of observations and interviews can be useful to distil people's tacit knowledge (revealed in what people do, not what they say).

These can complement more "traditional" methods, such as interviews, surveys, and public consultations.

EXAMPLES

• Climate Citizen Assemblies in Europe

- Co-development of the Taranaki 2050 Roadmap, New Zealand
- Design sprint to strategize the new hydrogen economy in former lignite mining region, Germany
- Establishment of stakeholder bodies with direct input to climate policy, Costa Rica
- Hackathons used as a co-design method for urban planning in Latin America
- Inter-American Development Bank's Cities Laboratory
- Slovakia's bottom-up working groups
- Thematic working groups support development of an Environmental Strategy and Action Plan, Bosnia and Herzegovina

RESOURCES

<u>Co-Design Toolkit (Western Australia Council of Social Services)</u> – This toolkit provides guidance, particularly for governments, on how to prepare co-design processes that are inclusive and comprehensive and lead to better programs and services. It provides advice about how to plan for and implement any kind of co-design process, using a series of descriptive "tools" or modules.

European network for sharing best practice on the design and implementation of Climate Assemblies (Knowledge Network on Climate Assemblies) – A resource hub about using the method of climate assemblies as a platform for stakeholder engagement. Includes guidance material on different aspects of their commissioning, design, implementation, impact, and evaluation.

Human Centred Design Playbook (Victorian Government of Australia, 2020) – This guidebook provides an introduction to HCD, design plans that can be used as a starting point for planning and scoping design-based activities, and explanations of many stakeholder engagement and co-design methods, such as common approaches, time frames, and budgets for HCD projects. In addition to the Playbook, the website includes an overview presentation of human-centered design in public policy, extensive information about various people-centered design methods, descriptions of case study examples, and other references that can help determine what type of human-centered approach is best for working in a specific context.

Roadmap to Informed Communities - Guide to co-design (Sunlight Foundation) – This guide relates to the use of open data in planning. It shows how to use the "Tactical Data Engagement Framework" developed by the Sunlight Foundation to help government staff and other community data providers to catalyze the use of open data for meaningful problem-solving, by going beyond publishing open data policies and portals. This framework helps with testing out principles of human- centered open data and demonstrating value through citizen-centered stories of impact. The resource provides methodological guidance and also some practical examples from case studies of various U.S. cities.

<u>Service Design Tools (Oblo and Poli.design)</u> – This website, created by academics, designers and teachers, is an information hub focused on service design tools and techniques. It enables users to filter for their context or stage of work, and provides descriptions and "how to" guides for using tools that may be most relevant or helpful.

The coac Design Sprint: An Overview (EIT Climate-Knowledge and Innovation Community) – This handbook describes how to implement a "design sprint" approach, which is a workshop concept involving methods that are dedicated to creating a prototype for a new product within a short time.

<u>Visual toolbox for system innovation (EIT Climate-Knowledge and Innovation Community)</u> – This resource book outlines various creative tools and methods that can be used to

support systems thinking and guide transition processes. It is organized around four steps as part of an innovation process: mapping of challenges and options, facilitation of stakeholder engagement, visioning and back-casting, and niche management. The various tools can be used individually or as a sequence.

1.3.3 Capacity development of stakeholders

For meaningful participation, stakeholders must have sufficient knowledge and skills to participate. Capacity development, or knowledge sharing, can support this.

Some stakeholders may not be cognizant of the nature or timing of changes, or of the risks and opportunities a transition could bring. Capacity development may focus on deepening the understanding that different actors have of the challenges and opportunities ahead, and on sharing knowledge about lessons learned and best practices from past cases of transition.

Capacity building might take different forms. Knowledge exchanges involving participants from different transition regions can provide practical insight into real transitions and allow learning through interactions between stakeholders. Expertly facilitated workshops with diverse participants can help stakeholders hear and understand other people's perspectives. Knowledge exchanges between different regions, reports or descriptive briefs that synthesize knowledge from across different contexts, and regular electronic communications (through websites, phone messages, enewsletters) are all potentially useful modes for building stakeholder knowledge.

To devise a capacity development strategy, an assessment of "capacity gaps" can be useful to identify what capacity needs to be strengthened, and by whom. It should be recognized that stakeholders at different scales or levels (subnational, national, sectoral, regional) may need capacity building, and their needs may be different. Further, any assessment of capacity gaps should itself be inclusive, meaning different stakeholders should be invited to identify their own perceived capacities and needs. An inclusive process can itself help build both capacity and interest in further engagement.

EXAMPLES

- Assessing capacity gaps to undertake climate action, Malawi
- Experimental workshops: 'Post Coal Future Labs' supporting problem solving by stakeholders, Europe
- Knowledge exchange programs between coal regions, Europe
- Nationally focused Just Transition knowledge portal, South Africa and India
- Online knowledge platform: Keeping citizens informed about urban design challenges, Chile
- Podcasts on coal sector transition
- South-to-South just transition research collaboration

RESOURCES

Knowledge resources about just transition:

<u>A Just Transition (Stockholm Environment Institute, 2020)</u> – This source contains various publications drawing lessons from historical transitions. The resources cover several sectors/themes: energy, mining, gender, and Indigenous people.

Best Practice Platform for the Transition in Coal-Intensive Regions (EU Tracer Transition in coal intensive regions) – A hub of information and learning about various coal region transition cases, mainly from Europe but also other contexts. An interactive map enables users to explore information about real world cases. Reports on lessons learned cover various themes: technologies and industry roadmaps, labor market and social issues, environmental remediation, and financing.

<u>Coal Transitions Research Hub (Coal Transitions)</u> – A knowledge hub of mainly academic resources about different aspects of coal transitions, but with relevant insights for other sectors as well. Under "tools," it compiles an inventory of the coping strategies that people, organizations, and institutions are using to respond to pressures introduced by global decarbonization efforts, which is in a browsable and searchable format (categorized by actor, type of strategy, and a number of other parameters), and can be downloaded in full.

Coal Transitions: Research and Dialogue on the Future of Coal (Institute for Sustainable Development and International Relations) – A hub of resources based on insights from the Coal Transitions project (2016–2019), where national experts in China, India, South Africa, Poland, Australia, and Germany explored options for their countries to implement economically feasible and socially acceptable coal transition strategies. Includes national reports from each country, and synthesis of insights.

Good practice examples of regional and sub-regional strategies in coal regions in transition (EU Secretariat Technical Assistance to Regions in Transition (START) Team, 2021) – This report collates examples of regional and subregional transition strategies. It includes 19 "good practice" examples from transition regions, mainly in Europe, which are either descriptions of broad approaches of industrial transition or of more processoriented aspects of transition strategy development.

<u>Just Transition and Equitable Climate Action Resource Centre (World Resources Institute)</u> – This resource highlights the initiatives by governments, communities, and companies that provide lessons for how workers and communities can benefit from the transition to a zero-carbon economy. The initiatives include policies, programs, and projects from across multiple sectors from all over the world, mostly targeting equitable and just transitions for workers and communities.

<u>Just Transition Platform (JTP) - Knowledge Repository (European Commission)</u> – A hub of information relating to Europe's transition to a climate-neutral economy. It includes information about relevant policy approaches and projects from across Europe. Intended as a portal of resources that can aid European countries in planning and implementing transitions, much of the knowledge compiled by the hub will be relevant in other contexts, too.

<u>Just Transition Resource Library (Climate Investment Funds)</u> – A knowledge hub compiling reports, briefs, podcasts, and commentaries on just transitions, from both a conceptual and practical perspective.

Just Transition Toolbox for coal regions (Wuppertal Institute for Climate, Environment, Energy, 2022) – The toolbox provides an overview of key practical learning and concepts for implementing measures to diversify local economies while supporting workers and communities. It focuses on five main themes: strategy, governance, energy, industry, and employment, and is designed explicitly for practitioners working in coal regions.

Just Transitions: A Comparative Perspective (Government of Scotland, 2020) – This report provides an overview of the just transition concept, compares transition approaches in five different countries, as well as various other cases of structural socioeconomic change. Based on the lessons learned from these cases, it provides recommendations for how best to support just transitions through planning and investment, stakeholder engagement, and policy development.

Methods for capacity development:

Paris Committee on Capacity Building (PCCB) Toolkit to assess capacity building gaps and needs to implement the Paris Agreement (United Nations Framework Convention on Climate Change, 2022) – This toolkit was created to help officials in developing countries and their implementing partners working on climate change to assess capacity needs and gaps. It identifies key steps involved in the assessment process, from design to evaluation, which should be adjusted to suit the country context. It includes examples of approaches to capacity development that have been successfully adopted and links to tools developed by countries, development agencies, and other implementing partners.

Steps for Designing a Results-Focused Capacity Development Strategy - A Primer for Development Practitioners Based on the Capacity Development and Results Framework (World Bank Institute, 2011) – A primer for development practitioners based on the Capacity Development and Results Framework, which describes operational steps in designing a capacity development strategy. It presents a systematic process, from identifying problems and designing strategy, to implementing plans and monitoring and evaluating change. The six operational steps identified are flexible for collaborative learning and work among stakeholders and can be customized for different levels and settings.

Module 2. Developing objectives and vision

Planning is best facilitated when there is a shared understanding among stakeholders of the transition. At the outset, not all stakeholders may know the full context or anticipate changes in the same way. Developing and sharing different transition narratives can help arrive at a shared understanding.

It is also crucial to understand the wider socioeconomic context in which a transition is taking place. This influences who may be affected by change and how, who has the power to act, the interests and norms that might guide different groups, as well as the policy and institutional context. Understanding context also means understanding why particular groups may be more vulnerable to change than others, so that interventions can be designed to reduce inequality and empower these groups.

Overall, the transition planning effort needs to be guided by an agreed set of equity-based principles and objectives for the region(s) and/or sectors.

2.1 Defining the nature and scope of transition

Many different stakeholders may be affected by the transition. However, experience shows that they will not all share the same level of awareness about what may change and when, or about the impacts this could create. Stakeholders may also have a different – or incomplete – understanding of potential opportunities that might be pursued during transition planning.

To provide the problem context, you can develop and share clear storylines about the expected transition. These transition narratives should include the following details:

- The main features that are expected to change;
- The drivers of change, for example, policy, market, technology, and consumer preferences;
- Where the changes are expected to occur;
- The anticipated timeline.

Transition narratives might also consider the following aspects:

- How workers may be impacted;
- The possibility of wider economic effects, social impacts, and environmental challenges that need to be managed;
- How existing inequalities or vulnerabilities might create additional challenges for some people.

Some of these changes may be difficult to predict, so transition narratives can be used to describe different pathways. For each pathway, narratives can explore how different regions and groups may be affected (for example, due to changing labor markets).

Further analysis, as outlined in **Module 3**, can help define the nature and scope of transition and deepen the knowledge base around the potential impacts.

The process of creating transition narratives may be just as valuable as the transition narratives themselves. Mapping and sharing transition narratives – even hypothetical ones – can build interest and awareness across a broad cross-section of stakeholders. As dialogue among stakeholders deepens, different groups can describe their own transition narratives. Bringing these perspectives together and supporting exchange between different groups can help build momentum and buy-in for transition planning.

Transition narratives can help start a dialogue about a transition (see <u>Module 1.1</u>), assess impacts and opportunities (see <u>Module 3</u>), and feed directly into the preparation of a just transition plan (see <u>Module 4</u>).

2.1.1 Scenario exercises

Scenario planning is a method that can help different stakeholders to explore how a transition is likely to play out, what aspects might pose the biggest threats or challenges, and how different response strategies might help.

Scenario planning helps planners to think through uncertainties and design plans that can be effective in different possible futures. In essence, it asks, "what if?" and then explores the different possible outcomes and impacts.

Potential framing questions for an early-stage scoping of transition pathways might focus on:

- What are the declining sectors (i.e. the activities expected to cease or significantly scale down), and over what time frame?
- What are the likely impacts, at different scales? How do impacts change if the phasing out of certain activities happens faster than expected?
- Where may we expect job losses, what might the needs be for reskilling and requalification of workers who lose their jobs?
- How will key groups be affected differently by the transition, and what is their agency in current decision-making processes?
- What are the economic diversification potential and development opportunities in regions that may experience socioeconomic transition?

EXAMPLES

- Engaging stakeholders with exploratory scenarios, Costa Rica
- Scenarios used to analyze workforce impacts in energy and transport sector transitions, Antigua and Barbuda
- Using Scenario Analysis to Assess Climate Transition Risk, Canada
- Using scenarios to explore the impacts of renewable energy development on energy poverty, Chile

RESOURCES

How to Use Exploratory Scenario Planning (XSP): Navigating an Uncertain Future (Lincoln Institute of Land Policy, 2020) – This manual provides conceptual background on scenario planning, detailed practical guidance on designing and facilitating a scenario planning process, and various case studies.

<u>Sustainability Issue "Policy Pathways for Sustainability" (Sustainability Journal, 2019)</u> – This set of academic articles each describe the use of policy pathways analysis, in different contexts, to demonstrate how this method can support decision-making in the face of uncertainties.

What is Exploratory Scenario Planning (Sonoran Institute) – This video explains what exploratory scenario planning is and how to put it into practice.

X-CURVE booklet. A sensemaking tool to foster collective narratives on system change (EIT Climate-Knowledge and Innovation Community, 2022) – This guide explains the X-curve, a methodology for preparing change narratives, and how to use it to map transition dynamics.

2.1.2 Regional and sectoral profiles

Descriptive regional or sectoral profiles may be an effective way of communicating some of the transition dynamics with different stakeholder groups, as a basis for further dialogue.

Regional profiles can provide helpful background information on socioeconomic context of the region(s) likely to be affected by a transition. They can also describe the character of expected changes, including possible adverse impacts that need to be addressed. Regional profiles could bring together much of the work undertaken in other modules of this toolbox and summarize it for a broad audience.

Similarly, sectoral profiles might be used to describe possible transition trajectories for a specific sector, including the changes expected, the time period over which they may happen, and where these might occur in a country or region (or globally).

EXAMPLES

- District level assessment of planning needs for a just transition away from coal, India
- Profiles of "at-risk value chains and sectors", South Africa
- Regional profile for Karlovy Vary region, Czech Republic
- Transition to Net Zero: Steel

2.2 Understanding the socioeconomic context

For just transition planning to be successful, it is important to understand the broad socioeconomic context. This impacts the way transition happens, the speed of the transition, and how risks and opportunities emerge.

To create a rich understanding of the transition context, use a combination of the methods described in this section. These methods include political economy analysis, mapping of stakeholders and the policy landscape, and approaches to explore social equality and coping capacity, such as analyses of gender inequalities, multidimensional poverty, and social protection systems.

2.2.1 Political economy analysis

Political economy as a research field looks at the way different material interests, institutions, and norms shape the behavior of social and economic systems. Political economy analysis contributes a nuanced understanding of the unique features and conditions of individual countries or subregions within countries, including interactions between social, cultural, political, and economic forces. It should also help to position the transition in a historical context, by describing how and why regions and sectors look as they do today.

Understanding the political economy can help to anticipate the likely trajectory of a transition. It also helps in identifying who may resist change (i.e. stakeholders who benefit from the status quo, norms and institutions that maintain and reinforce today's economic

patterns, and the financial or other economic incentives that might create lock-in) and where support and/or resources may come from (i.e. groups who see potential benefits). It should also identify how power is distributed – and the way this affects material outcomes for different groups.

Political economy analysis can inform subsequent assessments of risks and opportunities, as well as the design of stakeholder engagement activities. It can also inform the selection of strategies seen as most feasible or effective in promoting the transition and in managing its impacts. For instance, it should highlight how existing norms and institutions, including legal structures, might affect the potential to achieve transition or to ensure just outcomes for different groups.

As an analytical method, it involves looking at how structures (e.g. financial incentives), institutions (e.g. laws, mandates, norms, or ideas) and actors (stakeholders) interact dynamically and influence decisions. It can be undertaken at a macro, local, or sectoral level. The questions explored by a political economy analysis can be tailored to the specific needs of planners and decision-makers.

Some elements of a typical political economy analysis might be conducted as a standalone activity (and so are described in this module separately), including stakeholder mapping (see **Module 2.2.2**) or policy and institutional mapping (see **Module 2.2.3**).

EXAMPLES

• Contextual analysis of coal mining district, India

RESOURCES

Energy Sector Reform Assessment Framework (ESRAF) Good Practice Note 9: Assessing the Political Economy of Energy Subsidies to Support Policy Reform Operations (World Bank Energy Sector Management Assistance Program, 2018) – This note describes a framework to collect information that can help explain the history and possible future developments of the political economy of subsidy reform.

<u>Guidance Note: Use of Political Economy Analysis for ADB Operations (Asian Development Bank, 2013)</u> – This guide to political economy analysis explains how it can be used to inform the design and implementation of sustainable development work. It is tailored to the Asian Development specifically, but is also more broadly applicable.

Mind the gaps: What's missing in political economy analysis and why it matters (Organization for Economic Cooperation and Development, 2015) – This report provides a critical perspective on political economy analysis, describing some of the limitations or challenges that are often faced when it is applied in practice, so that practitioners may be aware of these and overcome them.

<u>Problem-Driven Governance and Political Economy Analysis - Good Practice Framework</u> (<u>World Bank, 2009</u>) – This framework summarizes relevant analytical tools of a problem-driven approach to governance and political economy. It is tailored, but not limited, to the context of World Bank operations and strategy development.

Strengthening Sector Policies for Better Food Security and Nutrition Results: Political Economy Analysis. Policy Guidance Note 8 (Food and Agriculture Organization, 2017) – This note demonstrates how political economy analysis can add value to policy support work, giving examples of key political economy challenges in food security and nutrition, and sharing information on the existing frameworks and analysis tools.

The Beginner's Guide to Political Economy Analysis (PEA) (National School of Government International and UKaid, 2017) – This guide focuses on the essentials of political economy analysis, emphasizing questions, prompts, and ideas to help thinking and practice: Why do we do this type of analysis, and what is it? What kinds of issues and ingredients are

typically included? How do we make sense of different approaches? What tools are out there to help us?

2.2.2 Stakeholder mapping

Stakeholder mapping (or "stakeholder analysis") is a useful early step in bringing together a variety of perspectives on problems and solutions. It can help to formulate engagement strategies for different stakeholder groups, to pinpoint representative groups/associations who may act as conduits for wider community engagement, and to inform wider political economy analysis.

Stakeholder mapping aims to identify relevant stakeholders (and, ideally, anticipate how each group might be affected by a transition), to illuminate how stakeholders are connected to one another, and to note who is most visible in transition discussions, and who is absent. It should also identify different groups' perspectives on key transition issues, their strategic interests, as well as the knowledge, values, and influence they might have that is relevant for transition planning.

A stakeholder mapping exercise should look beyond the triad of government, employers, and worker representatives, and also look beyond sectoral boundaries, because achieving a just transition requires a wide range of knowledge and expertise. In the case of workers who may be affected by transition, the mapping should identify informal (and sometimes illegal) workers who are operating in an economy and who may not be represented by labor unions.

Particular attention should be paid to marginalized stakeholders who may not feature in current debates. Even within a single group, there can be wide inequalities and power imbalances. For instance, a group representing farmers may not represent the views and needs of all farmers – and the farmers are likely to have different perspectives than farm workers (including seasonal, non-unionized, and migrant workers), businesses and employees along the value chain, the wider community that depends on agriculture, and young people.

Mapping approaches can be relatively simple or quite sophisticated. As results are collected, there different methods can be used for visualizing stakeholder maps: for example, graphs that show networks of connected actors, or graphs that position different groups according to their influence or strategic interests.

EXAMPLES

- Analysing stakeholders in the organic farming sector, Indonesia
- Ghana green jobs stakeholder mapping
- Mapping of stakeholders in agri-food production and processing, Tajikistan and Uzbekistan
- Sequenced mapping of stakeholders in Colombia

RESOURCES

The Actor and Policy Mapping Tool and associated Guidance (New Climate Institute, 2020)

- This tool can be used to map actors, policies, and policy planning processes in a structured and transparent manner. It includes features to track linkages between actors and policies, and to visually display policy planning processes.

2.2.3 Policy and institutional mapping

For a just transition to succeed, the broader policy ecosystem – both domestic policies and international commitments (e.g. in nationally determined contributions, or NDCs) – needs to be well aligned with just transition objectives. The institutional environment also needs to be oriented towards supporting a just transition, and not impeding or disincentivizing any of the key strategies.

Policy mapping helps to explore how existing policies and commitments either support, or constrain, the promotion of a just transition, and can indicate how existing policies (or gaps in policy) may need to be reformed to support the objectives of a just transition. This activity can help avoid the problem of individual "transition plans" (e.g. at a local level) heading in different directions or being incoherent with other (e.g. national) policies.

The scope of policy mapping is broader than climate or green economy policies, since many different areas of social, economic, environmental, and climate policy will shape transition outcomes. Depending on the nature (and sector) of transition – and the context – policy mapping might also include regional/territorial socioeconomic development plans, sectoral development plans, as well as policies and regulations related to agricultural production, energy supply and energy markets, land tenure, women's empowerment, social protection, finance and taxes, the labor market, and the mining sector, among others.

Similarly, institutional and governance assessment can shed light on whether there are suitable institutions in place to support transition planning and implementation. It should also highlight where there may be conflicts or discrepancies and propose solutions, which may require aligning different institutions with just transition objectives. Again, the institutional assessment needs to look well beyond an individual sector, since many of the barriers to just transitions – and the levers for change or support – exist in other parts of government.

These activities should help with the framing of early stakeholder engagement (**Modules 1.1** and **1.3**), with stakeholder mapping (**Module 2.2.1**), and also with the development of a just transition vision and set of principles (**Module 2.3**).

EXAMPLES

- Assessing policy coherence in labor migration, employment, education and training policies, West Africa
- Legal assessment for a just transition of coal power plants in India
- Legal assessment of coal mine transition, India

RESOURCES

The Actor and Policy Mapping Tool and associated Guidance (New Climate Institute, 2020)

- This tool can be used to map actors, policies, and policy planning processes in a structured and transparent manner. It includes features to track linkages between actors and policies, and to visually display policy planning processes.

2.2.4 Gender analysis

Gender disparities – and gender-based differences in how people are likely to experience a transition – are a key aspect of the socioeconomic context that needs to be understood in order to ensure just outcomes and design a just and inclusive process. Many of the tools used in gender analysis also take an intersectional approach, recognizing that each

person's multiple, overlapping identities – gender, race or ethnicity, age, (dis)abilities, etc. – all affect their relative advantages or vulnerabilities.

A gender analysis will start by exploring how transition risks and opportunities are distributed. The workforce exposed to job losses in some high carbon sectors, such as energy and mining, is often male-dominated, but if men lose their jobs, that may transfer greater burdens onto women. This, in turn, can reduce the time women have for education, for engaging in business, or even to access health services when needed. Rising unemployment is sometimes associated with higher rates of gender- based violence. Gender disparities may also affect women's relative capacity to adapt to new conditions. Women often make up a significant portion of farmers and farm laborers, for instance, but are far less likely than men to have land tenure, which makes them more vulnerable to systemic changes.

A gender analysis can also identify opportunities to redress some of the existing inequalities – based on gender or on multiple factors – by designing measures that target the root causes of those inequalities (see **Module 4.2**).

It is important to conduct robust, context-specific and intersectional gender analyses that illuminates the types and causes of gender inequality, and how it affects how transition impacts may be experienced.

Studies of background gender inequality and vulnerability should consider indicators such as local labor market participation, and access to education, health services, finance and social protection systems (see **Module 2.2.6**). These should also be disaggregated by other social variables, such as age.

Background studies should be complemented by analysis of gender specifically in relation to the transition(s). This is done by integrating a gender lens into the various analyses that are undertaken when preparing just transition strategies (see **Module 3**) – such as assessments of labor market dynamics, economic impacts and diversification options, environmental risks and cleanup priorities, and other social impacts.

A lack of gender-disaggregated data, especially at the local/municipality level of affected territories, can constrain the depth of gender analysis. Conversely, making a point to strengthen data collection and analysis mechanisms to increase the availability of disaggregated data can not only support better transition planning, but also future monitoring and evaluation.

EXAMPLES

- Analysis of gender disparities in endowments, access to economic opportunities and agency, Bosnia and Herzegovina
- Inclusion and characterization of women and gender equality in National Biodiversity Strategies and Action Plans (NBSAPs)
- Pakistan country gender assessment
- Situation analysis of gender equality and women's rights, Myanmar

RESOURCES

Aide-Mémoire on Gender Mainstreaming Projects (Organization for Security and Cooperation in Europe, 2007) – This guide outlines some crucial steps to implement gender mainstreaming in project management cycles, from planning and formulation to monitoring and evaluation.

<u>Gender Analysis Toolkit for Coastal Management Practitioners (Mangroves for the Future, Stockholm Environment Institute and the Southeast Asian Fisheries Development Center, Control of the Coastal Management Practitioners (Mangroves for the Future, Stockholm Environment Institute and the Southeast Asian Fisheries Development Center, Coastal Management Practitioners (Mangroves for the Future, Stockholm Environment Institute and the Southeast Asian Fisheries Development Center, Coastal Management Practitioners (Mangroves for the Future, Stockholm Environment Institute and the Southeast Asian Fisheries Development Center, Coastal Management Practitioners (Mangroves for the Future, Stockholm Environment Institute and the Southeast Asian Fisheries Development Center, Coastal Management Practitioners (Mangroves for the Future, Stockholm Environment Institute and the Southeast Asian Fisheries Development Center, Coastal Management Practitioners (Mangroves for the Future, Mangroves for the Future, </u>

<u>2018</u>) – The toolkit is a practical compendium about how gender can affect coastal ecosystems resource use and management and coastal resilience. It helps practitioners develop baseline knowledge around gender dimensions related to coastal and natural resources use, livelihoods development and ecosystems management. It includes guidance on how to scope gender analysis, and on where it can be applied, as well as methods and data analysis.

Gender and Environment: Support Kit for UN Environment Staff (United Nations Environment Program, 2017) – This support kit provides a starting point for exploring ways to include gender considerations within UNEP projects. It describes the relevance of gender analysis – and some important entry points for integrating gender in project planning and implementation – for work in different areas of climate change, disaster risk reduction, and environmental management.

Gender checklists for specific sectors (Asian Development Bank) – This website provides a range of sector-specific toolkits and guidance, including for working towards gender equality in: Agriculture and Natural Resources; Education; Energy; Gender Equality Results and Indicators; Health; Law and Policy; Micro, Small, and Medium-Sized Enterprise Finance and Development; Public Sector Management; Resettlement; Transport; Urban Development and Housing; Water Supply and Sanitation. Some of these resources are available in Bangla, Indonesian, Nepali, Vietnamese, and Russian.

<u>Gender Sensitive Access to Market - A training handbook (Action Aid, 2015)</u> – This handbook introduces a range of participatory tools that can be used to explore how women and local communities can identify the challenges to and potential of market access.

<u>Gender Toolbox (Swedish International Development Agency)</u> – This Toolbox provides knowledge, tools, and ideas foron how to operationalize gender equality in many different areas of development cooperation, and is also useful more broadly. It contains tools, briefs and thematic overviews that are meant to facilitate the practical implementation of gender equality.

<u>Good Practices Framework - Gender Analysis (CARE International Gender Network)</u> – This guidance note discusses basic concepts of gender and introduces key areas of inquiry to consider when undertaking a gender analysis. It provides examples of questions that a gender analysis may want to explore.

<u>Guidelines for Mainstreaming Gender into National Biodiversity Strategies and Actions Plans, and associated training module (Convention on Biological Diversity and the International Union for Conservation of Nature, 2010)</u> – This guideline and training module assists with promoting gender equality through the development of National Biodiversity Strategies and Action Plans (NBSAPs), though much of the content is useful to other planning processes too.

<u>Rapid Gender Analysis (CARE UK)</u> – This resource provides guidance on conducting a rapid gender analysis, including finding and collecting data, analyzing results, and using these to inform practical decisions.

The Pacific Gender and Climate Change Toolkit (Secretariat of the Pacific Community, United Nations Development Program, UN Women, German Agency for International Cooperation (GIZ), Secretariat of the Pacific Regional Environment Programme, 2015) – This toolkit describes the links between gender and climate change in four main sectors: food security, water, energy and disaster risk reduction. It is designed to support climate change practitioners in the Pacific islands region to integrate gender into their programs and projects, but also offers useful guidance in other contexts.

2.2.5 Multidimensional poverty analysis

The concept of multidimensional poverty (MDP) reflects that many factors beyond financial constraints shape people's experience of poverty, reflecting differences in living standards and in access to key resources and services. It is important to understand the various sources of hardship experienced by people in communities affected by a transition, so as to design strategies that avoid exacerbating poverty and hardship, and instead help to improve conditions.

Multidimensional poverty analysis identifies key "deprivations" that people may suffer – such as poor nutrition, inadequate housing, or lack of basic services such as electricity and sanitation – and how these are distributed across different populations. It reveals who is most vulnerable and how, and highlights where people are experiencing overlapping deprivations.

MDP analysis helps to identify policies and programs that might address key socioeconomic deficits and reduce poverty. It can guide the design of transition support measures specifically, particularly so that policy measures or programs – including reforms to social protection systems – can be targeted to groups or communities where poverty is particularly acute (or where there is high risk because of the transition).

For some countries and regions there may already be existing indices of MDP which can be a useful starting point for on-site analysis of MDP. Depending on data availability, indices may look at traditional monetary poverty measures alongside data about education, health, living standards, employment, and safety, for instance.

National-scale data alone are unlikely to provide a sufficiently deep understanding of how specific communities, or groups within communities, may be affected by socioeconomic changes. Thus, some form of disaggregated MDP analysis – at the regional, local, and even household level – can help to fill in these knowledge gaps. However, MDP-related data disaggregated by region may be difficult to find.

EXAMPLES

- Assessment of a Multidimensional Poverty Index, Seychelles
- Defining a national MDP measure, Timor Leste
- Use of MDP analysis for designing policies and programs in Burkina Faso, Jordan, Angola, Mexico

RESOURCES

2022 Global Multidimensional Poverty Index (MPI) (United Nations Development Programme and Oxford Poverty and Human Development Institute, 2022) – This report summarizes results of a global study of national-level MDP data (with some subnational examples, e.g. in India). It may be useful for those wanting to learn more about what MDP analysis looks like, the types of insights it can reveal, and how these might be used to target interventions.

A review of the use of multidimensional poverty measures (United Nations International Children's Emergency Fund, 2021) – This review aims to understand whether multidimensional poverty measures and analyzes can impact national policies and programs. While focused on the goal of reducing child poverty, it includes guidance and examples that could be useful when working towards other development goals.

How to build a Multidimensional Poverty Index (MPI) (United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI), 2019) – This handbook explains how to build a national MPI from start to finish, and

describes potential uses to guide and monitor policy and some examples based on countries' experiences.

<u>Multidimensional Poverty Measure (World Bank)</u> – This resource provides a conceptual guidance to Multidimensional Poverty Measure (MPM) and data on MPM for 149 countries. It is composed of six indicators: consumption or income, educational attainment, educational enrolment, drinking water, sanitation, and electricity. These are mapped into three dimensions of well- being: monetary, education, and basic infrastructure services.

The Multidimensional Poverty Assessment Tool (MPAT) (International Fund for Agricultural Development, 2014) – This tool helps users to understand different dimensions of poverty and its underlying causes. It integrates analysis of human needs, asset endowment, risk exposure, and social equality into a practical tool that may help to implement an assessment of multidimensional poverty. Some of the tools and knowledge components are also available in French, Hindi, Swahili, and Chinese.

2.2.6 Social protection system analysis

Social protection systems (sometimes referred to as safety nets, social welfare, or social assistance programs) are measures that provide poor and vulnerable people with regular support, monetary or otherwise. The goal is to reduce their exposure to risks, buffer them against income loss or volatility, and sometimes to enhance their access to labor markets.

Social protection programs are often delivered by governments, but some may also be delivered by other actors, such as civil society organizations. They might include social assistance programs that provide a level of income and/or access to basic services (e.g. cash transfers, social pensions, or childcare services); social insurance programs that provide income support under certain circumstances (e.g. social security schemes, health insurance, business insurance, or agricultural insurance); and labor market programs that help to reskill or retrain prospective workers and/or facilitate employment (e.g. through supply-demand matching, employment-generating public works schemes, or ensuring minimum labor standards and working conditions).

Preparing a country-specific social protection profile can illuminate the coverage, benefit incidence, adequacy, poverty impact, and expenditures of various existing social protection programs, and to identify gaps. This should also assess whether existing measures are gender-responsive (i.e. target men and women equally and do not inadvertently increase gender inequality), and whether they materially benefit the poor. By looking at the types of protections currently in place, and who the beneficiaries are, social protection system analysis can help planners to identify opportunities for current measures to be scaled up, or refined (e.g. through policy reform), and where gaps need to be addressed, in order to support particular groups affected by transition. It should help to avoid the perverse outcome of transitions increasing inequality, which might occur if benefits compensate wealthier people or corporations, for instance, rather than assist vulnerable and poor groups.

EXAMPLES

- Analysis of social protection programs, Vanuatu
- Social protection public expenditure review, Angola
- Social protection system review, Cambodia

RESOURCES

ASPIRE: The Atlas of Social Protection Indicators of Resilience and Equity (World Bank) – ASPIRE is a compilation of indicators to analyze the scope and performance of social protection programs. It provides indicators for 139 countries on social assistance, social insurance and labor market programs based on program-level administrative data and national household survey data.

Assessing the Readiness of Social Safety Nets to Mitigate the Impact of Reform – ESRAF Good Practice Note 5 (World Bank Energy Sector Management Assistance Program, 2018) – This guidance note provides insights on using social safety nets to mitigate the welfare impacts of energy subsidy reforms on the poor. It introduces a three-stage analytical approach for providing protection against the negative consequences of price shocks.

<u>Social protection for a just transition (International Labour Organization, 2023)</u> – This brief provides an overview of how social protection can help prevent or address potential adverse effects of climate change and contribute to a just transition, as part of a coherent set of supportive policies.

Social Protection System Review - A Toolkit (Organization for Economic Cooperation and Development, 2018) - The SPSR methodology provides a diagnostic of the main challenges for a country's social protection system, and identifies potential avenues for its extension and reform. The toolkit can be implemented in any country, at any income level, by any institution, and is intended to generate actionable policy recommendations. Resource also available in French.

<u>Statistics on Social Protection (International Labour Organization)</u> – The World Social Protection Data Dashboards provide in-depth country-level statistics on various dimensions of social protection systems, including key indicators of great interest to national policy-makers, officials of international organizations and researchers, including for the monitoring of the SDGs.

The Revised Social Protection Index: Methodology and Handbook (Asian Development Bank, 2011) – This handbook provides guidance on preparing social protection country assessments. The SPI is a practical aid to assessing the nature of countries' social protection programs and to identifying their impact on the poor and vulnerable. The Revised Social Protection Index (SPI) was developed as a repository of country-level data on government-financed social protection programs. The source contains a link to the SPI database for Asia and the Pacific.

2.3 Clarifying principles for just transition

It is important to define a set of just transition principles at the outset. These principles frame the issues to be considered in planning and help identify the resulting risks and opportunities. Clear principles also help guide choices made and actions taken.

For example, take a general principle such as "Workers who lose their jobs as a result of transition should be supported". When applying this principle to many contexts in the global South, you must consider that many of those affected may work informally or even illegally. This means that transition planning should find ways to engage workers who are not represented by formal labor unions, and design support programs targeting their specific needs.

Various sets of just transition principles have been published. Some are narrow, issue-based sets; others take a wider, more comprehensive perspective on equity issues related to transition. They may serve as a useful starting point when defining your set of principles (see Resources).

Bear in mind that the process of developing a broad vision and defining principles for just transition should involve many different stakeholders. For stakeholder engagement strategy and methods, see **Module 1.3**.

EXAMPLES

- Defining what a just transition means, Wales
- National just transition outcomes, Scotland
- Principles in South Africa's Just Transition Framework
- Setting objectives and goals in the Jiu Valley, Romania

RESOURCES

Guidelines for a just transition towards environmentally sustainable economies and societies for all (International Labour Organization, 2015) – This guideline offers suggestions on how to formulate, implement, and monitor a nationally appropriate policy framework for a just transition. It includes guiding principles and some practical tools for specific policy areas (macroeconomic, sectoral, and enterprise policies; rights and occupational safety and health; social protection; skills development; active labor market policies; social dialogue and tripartism). Resource also available in French, Spanish and Czech.

<u>Indigenous Principles of Just Transition (Indigenous Environmental Network)</u> – This resource comprises a list of Just Transition Principles prepared from the perspective of Indigenous communities in the North American context.

<u>Just Transition Principles (Climate Justice Alliance)</u> – This brief outlines some principles for just transition.

<u>Principles for a Just Transition in Agriculture (Action Aid, 2019)</u> – This report explores and defines just transition concepts in relation to the agriculture sector.

<u>Principles for Just Food System Transitions: Envisioning a more equitable and sustainable future – and an inclusive path to achieving it (Just Rural Transition, 2023)</u> – This report summarises ten principles that should guide just food system transitions, and discusses the complexities of applying them in different contexts.

Seven principles to realize a just transition to a low-carbon economy (Stockholm Environment Institute, 2020) – This brief proposes a set of just transition principles, based on a synthesis of literature on the concept. It also draws on historical transition experiences to suggest ways to integrate these principles into policy and practice.

Module 3. Analyzing impacts and opportunities

Various types of analysis are needed to inform planning and strategies. The potential risks and opportunities arising from a transition need to be understood and, where possible, quantified. These include the possible impacts on employment, social conditions, economic conditions, land management, and the natural environment.

It is particularly important to understand how risks and opportunities will be distributed. Some people will experience greater loss or hardship than others, or will have less capacity to cope with changes because of their gender, age, ethnicity, employment status, disability, or other factors. This can be informed by an analysis of the wider socioeconomic context (see **Module 2.2**).

The specific analyses needed – and the most appropriate tools and methods – will depend on the context, the type of impacts anticipated, and the just transition principles defined (see **Module 2.3**). Data availability will also be an issue; if high-quality data is not available, you may need to collect and prepare new data.

3.1 Employment impacts and opportunities

Labor market disruption is an inevitable part of any economic transition. Transitions will create new jobs, eliminate some, and transform others. In the energy sector, for example, many jobs in fossil fuel production and related sectors (such as manufacturing conventional automobiles) are likely to become redundant. The growth in renewable energy and energy efficiency will create many new direct and indirect jobs, including for occupations such as plumbers, electricians, and carpenters. They will have opportunities to shift their skills and businesses toward these emerging sectors.

To plan a just transition, you should understand how a transition might affect workers, and how different transition strategies can impact employment outcomes.

Consider performing the following types of analysis:

- An **employment impact assessment.** In the context of the closure or phasing down of a company or industry, use this to help anticipate job losses and related outcomes, such as changes in the quality of employment.
- A green jobs analysis. Use this to help identify emerging employment opportunities, in line with proposed economic diversification strategies, for example.
- Broader labor market analyses and labor mobility analyses. Use this to help identify job supply or education gaps; monitor the changing character of employment conditions; and understand the mobility of workers in different regions and sectors.

The assessment of impacts and opportunities should include the outcomes for direct, indirect, and induced employment (categories defined by the <u>International Labor Organization</u> [ILO]).

3.1.1 Employment impact assessment

Employment impact assessment is an umbrella term for methods that quantify the potential changes in employment and/or analyze the effects on the types and quality of jobs that will be available as a result of public policy decisions or investments. Employment impact assessment can vary from project-level assessments to an economywide analysis.

Various approaches and methodologies may be used for the analysis, depending on the nature of the changes being assessed. Input-output tables and social accounting matrices can be useful for macroeconomic multiplier analyses and assessments of economy-wide impacts (including indirect and induced effects), in combination with labor force survey data.

Conducting a robust employment impact assessment can be challenging. Data tables for a country are not always available, up to date, or sufficiently detailed to support a reliable analysis. Updating these is a significant undertaking and will require collaboration with statistical agencies. The ILO recommends building custom assessment models that are tailored to local contexts, to better incorporate mechanisms of adjustment that reflect the actual functioning of the local economy (instead of applying models developed for other contexts). However, that is a significant task that would require involving economists who understand the local economy's main adjustment mechanisms.

EXAMPLES

- Assessing employment impacts of transition away from coal in Western Macedonia, Greece
- Direct employment impacts assessment of transport sector investments, Jordan and Lebanon
- Measuring the employment impacts of mine closures, Australia

RESOURCES

A systematic framework for measuring aggregate employment impacts of development cooperation (German Agency for International Cooperation (GIZ), 2014) – This paper summarizes the key features of a systematic framework for assessing the aggregate employment impacts of a portfolio of development cooperation interventions, using a bottom-up methodology.

Employment Impact Assessments (EmplA): Analysing the employment impacts of investments in infrastructure (International Labour Organization, 2021) – This report describes an approach to assessing the employment impacts of infrastructure projects. The approach aims to quantify the employment potential and impact of infrastructure investments, particularly in sub-sectors where the use of employment-intensive methods of construction and maintenance are technically feasible and cost-effective. Resource also available in French.

Employment impact assessments in Africa: Application and suitability of local multiplier analysis (International Labour Organization, 2022) – This note reviews the application and suitability of using the "local multiplier" method specifically in the context of sub-Saharan Africa, as a way of estimating the long-term effects of changes in manufacturing employment in other sectors.

<u>Employment impacts assessment: A review of methodologies (International Labour Organization, 2017)</u> – This paper provides some initial tools for evaluating the employment impact of major projects, considering both the quantity and quality of employment.

<u>Guide for monitoring employment and conducting Employment Impact Assessments</u> (<u>EmplA</u>) of infrastructure investments (<u>International Labour Organization, 2020</u>) – This guide describes tools and methods for determining the effects of infrastructure investments on employment. It is based on learning from ILO technical cooperation projects and studies in Lebanon, Morocco, Tunisia, Egypt, South Africa, Indonesia, Rwanda and Ghana, among other countries.

<u>Methodologies for assessing green jobs (International Labour Organization, 2013)</u> – This brief describes different methodologies for assessing the employment potential of "green" policies.

3.1.2 Green jobs analysis

Green jobs analysis can help decision-makers to understand the potential for new sectors and industries to create employment. Comprehensive green jobs analysis can point to gaps in education and training opportunities, which will need to be met with new education and skills policies, both within the formal education sector and in private enterprise. When combined with gender analysis, it can be used to target marginalized groups with education, training, and other kinds of support to help them participate in new work opportunities.

An analysis of employment opportunities in "green" sectors needs first to define what counts as a "green job." Relevant categories to consider might include:

- Green new and emerging: New occupations with unique tasks and worker requirements, with all-"green" responsibilities (e.g. wind energy engineers or solar photovoltaic installers).
- Green enhanced skills: Occupations for which the transition significantly alters the
 tasks, skills, and knowledge requirements (e.g. an operations manager who is
 required to take on new green tasks relating to managing the sustainability of
 operations, or construction workers who will need to modify their practices to
 reduce energy loss from buildings).
- Green increased demand: Occupations for which the transition to a sustainable economy creates higher demand, but does not result in significant changes to their tasks or worker requirements. These support green economic activity, but do not themselves involve any "green" tasks (e.g. chemists, materials scientists, industrial production managers).

Analysts also need to consider what type of employment effects are to be measured (e.g. direct, indirect, and/or induced jobs), and the time frame to be considered (e.g. immediate job creation versus over the longer term). The assessment may also explore related issues, such as skills needs or income distribution. It is important to specifically consider the likely distribution of jobs – across different regions and demographic groups, including by gender – as part of a green jobs analysis.

The availability of data and/or modeling capacity relating to these different aspects will influence the scope of any analysis. Depending on the data available and the objectives, assessments of green jobs typically combine various methodologies, including surveys, inventories, input-output analysis, social accounting matrices, and computable general equilibrium (CGE) models (see **Module 3.5**).

EXAMPLES

- Analysis of current green jobs in the United Kingdom
- Estimating green jobs in Bangladesh
- Green jobs assessment, Nigeria
- Green jobs assessment, Zimbabwe

RESOURCES

Are "green" jobs good jobs? How lessons from the experience to-date can inform labour market transitions of the future (Centre for Climate Change Economics and Policy, Centre for Economic Performance, Programme on Innovation and Diffusion, and LSE Grantham Research Institute Climate and the Environment, 2021) – This paper analyzes the specific and general characteristics of green jobs, and of the people that tend to hold them. These insights can help in the design of future interventions and programmes.

Assessing green jobs potential in developing countries: A practitioner's guide (International Labour Organization, 2011) – This manual provides guidance on how to estimate the actual and potential level of economic activity and number of jobs related to the environment in a developing country context. The methodology is tailored to the needs of developing nations interested in green jobs assessments.

<u>Green Jobs Assessment Model (GJAM) (International Labour Organization and The Green Jobs Programme)</u> – This note provides a brief introduction to the GJAM, a macroeconomic modeling framework based on Input-Output Tables (IOT) or Social Accounting Matrices (SAM) to assess job gains and losses.

<u>Green jobs assessment reports (International Labour Organization, 2022)</u> – These reports provide insights on the employment impact of green policies in specific real world cases, using the standardized GAIN methodology.

<u>The Green jobs Assessment Institutions Network (GAIN) (International Labour Organization)</u> – This network provides resources and tools relating to assessing the effects of green policies on employment. The resource includes the <u>GAIN Training Guidebook</u>.

<u>Ways to gender-smart climate finance: Green jobs (2X Climate Finance Taskforce)</u> – This note offers guidance to development finance institutions, fund managers, and other financial institutions on identifying gender-smart climate finance investments. It focuses on how to promote gender-smart green jobs in practice.

3.1.3 Labor market assessment

Labor Market Assessment (LMA) includes different kinds of analysis that can help to understand some of the characteristics of the broader labor market itself – not specifically related to the impacts of transition.

LMA might be used to help identify future trends in the job market and skills gaps compared with the needs of employers. This type of analysis can be used to guide the design of job creation programs that are demand-driven, in line with the needs of the labor market. It can also inform the development of new education and skilling programs.

LMA might also analyze data about the kinds of jobs available, and working conditions. From the perspective of just transition, the creation of "decent" jobs is a key objective, so LMA can help to track progress against this objective over time. The ILO has defined a series of indicators for decent work that can be useful for this kind of analysis, covering rights at work indicators, employment indicators, social protection indicators and social dialogue indicators (see ILO 2008 in resource list).

Approaches to LMA vary. It may provide a holistic analysis of the entire labor market, or focus on specific aspects (e.g. ease of doing business for employers, sector-based employment potential or skills gaps, or employment barriers for target groups). Different types of information are needed for each, so the feasibility of a specific kind of LMA may depend on data availability.

Where labor markets have high levels of informality and in other contexts in which relevant data are either not available or of low quality, conducting LMA may be challenging. In such cases, "rapid assessments" of the labor market may be useful (e.g. a review of secondary literature and/or short field trips, with limited original data collection

and analysis). In such situations, caution should be exercised in extrapolating any results, as they may not be truly representative of broader labor market dynamics.

EXAMPLES

- Labor market assessment on the role of women in Kazakhstan's energy sector
- Labor market assessment, Laos PDR

RESOURCES

Decent work indicators for Asia and the Pacific: A guidebook for policy-makers and researcher (International Labour Organization, 2008) – This guidebook presents a detailed overview of indicators that can be used to measure and follow trends in the four dimensions of decent work: rights at work, employment, social protection and social dialogue.

<u>Labour market analysis guidance - For food security analysis and decision-making (World Food Program, 2013)</u> – This guide outlines how labor market analysis can be integrated into an analysis of food security.

<u>Methodology for conducting youth labour market analysis (International Labour Organization, 2017)</u> – The publication provides guidelines on youth labor market analysis (how to analyse). It can also be used together with the ILO's <u>Toolkit for conducting voluntary peer reviews on youth employment</u>. Each section contains practical examples, checklists, tips and references to additional resources that may be use to enrich analysis.

STEP Skills Measurement Surveys: Innovative Tools for Assessing Skills (Social Protection and Labour, World Bank, 2014) – This note describes the survey methodology developed by the STEP initiative to collect data on skills in low- and middle-income country contexts. It covers survey instrument design, the constructs that are measured, and the technical standards and implementation protocols that have been designed and applied to ensure comparability of data. It provides background to readers who may want to implement such surveys in their own countries and to users of the datasets that have been collected with these surveys.

VET Toolbox - Labour market programming and analysis (German Agency for International Cooperation (GIZ) and German Government, 2017) – This toolbox includes a section dedicated to labor market programming and analysis, which contains several additional links including to (i) a guide to developing and implementing qualifications that meet industry needs, and (ii) a compendium of tools for labor market assessment.

3.1.4 Labor mobility analysis

The ability of workers to move – across regions and across industries – will affect the scale and types of impacts associated with job losses due to a transition. Labor mobility is influenced by factors such as age, information about job opportunities, level of education and/or technical skills, moving costs, and family circumstances.

Labor mobility analysis can provide information on how easily different kinds of workers who lose their jobs in the transition may be able to find employment elsewhere in their country or region.

The data used to estimate labor mobility may come from census and other aggregated national statistics, household or labor force surveys, and social media data. Information relating to labor mobility may not always be available in local labor market statistics, so using multiple methods or data sources together might help to overcome some data gaps, and enhance the coverage and/or reliability of the analysis.

EXAMPLES

- Baseline study of labor mobility and labor market data in APEC economies, Asia Pacific
- Measuring international labor mobility cases from Israel, Italy, Mexico and Norway
- Using 'big data' to improve analysis of labor mobility in the EU

RESOURCES

Manual on participatory assessment of policy coherence (International Labour Organization, 2021) – The manual is a continuation of the ILO work on promoting policy coherence in the context of labour migration and aims to reinforce the assessment methodologies by including all relevant stakeholders through a structured participatory approach. In this way, the data collection and analysis will be more effective and the proposals for the adjustments of the policy coherence consistent with the identified challenges. Using a participatory approach and increasing the awareness of all partners will also ensure better and more active participation in the implementation process, and in the recovery efforts as countries emerge from the COVID-19 pandemic.

Measuring international labour mobility (United Nations Economic Commission for Europe, 2018) – This publication provides an overview of the ways international labor mobility is measured. It highlights best practices and proposes areas for future development. Four case studies from Israel, Italy, Mexico and Norway provide more detail on labor mobility in specific national contexts.

3.2 Social impacts

Low-carbon and climate resilience transitions can create a range of social impacts that go beyond changes in employment.

Those can impact individuals and households in terms of financial security and livelihoods, personal or property rights, the safety of household members (for instance, if it leads to a greater risk of domestic violence), or mental health and well-being. New practices that are introduced as part of the transition, such as wider conservation of forests, might impact households' access to natural resources that they rely on for food, fuel, or medicine. Some stakeholders may even be forced to relocate.

At the community level, a transition could create conflicts that disrupt social cohesion. It also may have demographic impacts, for example, if significant job losses trigger migration flows from a region.

For these reasons, social impact assessment is an important element of just transition planning.

3.2.1 Social impact assessment

Social impact assessment is a process for analyzing and monitoring the positive and negative social consequences of reforms or other changes (e.g. policies, programs, plans, projects). Both direct and indirect effects are assessed, including how changes are likely to affect the well-being of different population groups, and particularly the poor, marginalized, and most vulnerable. Methodologically, the analysis might link with the assessment of impacts on economy, resource access, culture, physical and mental health, gender, Indigenous rights, and poverty.

Multidisciplinary approaches to social impact assessment are useful, so that findings from one method are refined through the use of complementary tools. Since the analysis

should ideally account for the way people respond to reforms or changes, valuable information can be obtained from qualitative techniques applied at the community level. Common options include key informant interviews, focus groups, semi-structured questionnaires, and surveys. Modeling of behavior changes using quantitative methods can also be a component of the analysis.

The process of social impact analysis should draw on local knowledge and be prepared through a participatory process that is respectful of local cultural values. Different types of stakeholders should be involved in assessing impacts, evaluating alternatives, and monitoring changes.

EXAMPLES

- Analysis of the impact of food and energy subsidy reforms on households, Libya
- Assessing the mental health impacts of climate change
- Assessing the social impacts of mining for nearby communities

RESOURCES

Energy Subsidy Reform Assessment Framework (ESRAF) Good Practice Note 3: Analyzing the incidence of consumer price subsidies and the impact of reform on households - Quantitative analysis (World Bank Energy Sector Management Assistance Program, 2019) - This guidance note focuses on how to assess the distributional implications of energy subsidy reform (ESR) at the household level using quantitative methods.

Energy Subsidy Reform Assessment Framework (ESRAF) Good Practice Note 4: Incidence of price subsidies on households and distributional impact of reform - Qualitative methods (World Bank Energy Sector Management Assistance Program, 2019) – This guidance note focuses on how to use qualitative research tools, such as focus groups discussions and in-depth interviews, to understand the distributional impacts of higher prices on households.

Environmental and social impact assessments. Responsible Agricultural Investment (RAI) Knowledge into Action Note no. 14. (United Nations Conference on Trade and Development and World Bank, 2018) – This note provides guidance on conducting environmental and social impact assessments (ESIAs), targeted particularly at investors and governments. It draws lessons from past experiences, and describes some key requirements for environmental and social management plans in agriculture-related contexts.

<u>Poverty and social impact analysis: Lessons and examples from implementation (World Bank, 2007)</u> – This report summarizes analytical and operational lessons and examples from implementing Poverty and Social Impact Analysis (PSIA).

3.3 Economic impacts and diversification options

While there is much evidence to suggest that, overall, the transition to a low-carbon economy will be net positive for the economy, the distribution of these benefits – and the economic costs of transition – will not be evenly spread locally or nationally.

Economic impacts include aggregated effects on different variables: gross domestic product (GDP), employment, production, consumption, and household income (wages). These effects differ at the national versus regional and local scale, or public versus private income and expenditure.

An analysis of economic impacts needs to cover a broad spectrum of effects. It should also recognize that economic effects may stretch farther than the areas undergoing a transition.

Local Level

At a local level, reduced employment and declining income can lead to reduced spending in the local economy. This in turn impacts small businesses in the retail and service sectors in the region.

Small firms tied in with local production may experience significant business losses for which they are unprepared. Municipal public revenue might decline, impacting local governments' service delivery and ability to invest in new infrastructure, for example, which may be needed to support economic diversification.

National Level

At the national level, a transition might lower production in economically important sectors or in foreign export earnings that have contributed significantly through taxes and royalties. The loss of these revenues could affect a government's fiscal position and ability to fund social programs and municipal governments, or its ability to borrow.

Diversification

Transition planning requires analysis of potential opportunities for economic diversification or scaling up other sectors, or both. This is particularly important in regions most affected by the closure or phasing down of an industry.

Smart specialization and asset repurposing assessments can be used to explore new economic activities.

3.3.1 Economic impact assessment

Economic impact assessment can be used to project the effects of a policy change – or of a larger transition – on various economic indicators.

A comprehensive assessment of specific real or hypothetical changes usually requires modeling the many adjustments that will flow through the economy as a result of these changes. It will assess how these changes affect the local, regional and national economy, for instance through impacts on spending, on employment, on taxation revenues, and how factors like housing, labor costs and other services might be affected. The way these impacts are distributed should be assessed.

Modeling approaches typically use some combination of input–output (I-O) models, partial equilibrium analysis, and/or computable general equilibrium (CGE) models. In addition, qualitative analysis can help to identify and describe certain impacts, or to target the quantitative analysis at specific features of the local context (e.g. seasonal changes in the behavior of affected populations, which points to the need to use data from across the year), especially where there is limited quantitative information available.

Regardless of the combination of methods used, the analysis should aim to understand effects on the local, regional, and national economy, including not only gross stimulus effects, but also how a transition affects variables such as direct and indirect labor (see **Module 3.1**) and other aspects of the local economy, such as housing and services. The time frames for impacts, and how they are distributed within society, are important parameters to assess.

Cost-benefit analysis (see <u>Module 3.5</u>) is a useful complementary method to determine how the costs of a specific change or intervention compare with the expected benefits – particularly if large expenditures need to be justified to gain approval from policy makers. It can also be used to compare different options. A key aspect of such analyses, which can sometimes be challenging or controversial, is that it requires estimating the economic

value of different social, economic, and environmental outcomes, such as good health or clean air.

EXAMPLES

- Analysing countries' macroeconomic risks arising from the low-carbon transition
- Assessment of economic impacts of Covid-19, Viet Nam
- Economic impact assessment of World Food Program expenditures, East Africa

RESOURCES

<u>Climate and disaster risk screening tools (World Bank)</u> – This information hub provides access to an array of rapid assessment and in-depth screening tools that can be used for assessing climate risks in different sectors, including agriculture, energy, health, finance industry, natural resources, transport, water, urban development, etc. This can be useful information in designing interventions and programmes in these sectors.

<u>Economic impact assessment: An overview (Adept Economic, 2019)</u> – This brief provides a high-level overview of common methodologies used in economic impact assessment.

3.3.2 Economic diversification assessment

Smart specialization is an assessment approach and policy framework developed in the European Union. As a policy framework, its central tenet is that strategies for enhancing the scale and effectiveness of entrepreneurial processes should build upon a region's existing strengths in terms of businesses, natural and human capital, and infrastructure.

A smart specialization assessment can be most helpful in quite advanced economies with open markets, where it can help to identify the economic strengths and comparative advantages of a particular region. Methodologically, it centers on a systematic method of "entrepreneurial discovery" to identify emerging priorities for knowledge support through research and development, among other things. The results can be used to tailor policies and support programs in areas such as industry, education, and innovation toward the economic growth opportunities that seem most promising. The assessment can be applied at different scales, from national to local.

EXAMPLES

- Identifying smart specialization opportunities in the food and fibre sector, Australia
- Mapping of economic potential and participatory Entrepreneurial Discovery Process in Imereti, Georgia

RESOURCES

Enhancing the Quality of Industrial Policies (EQUIP) Toolbox (United Nations Industrial Development Organization and German Agency for International Cooperation (GIZ), 2017) – This toolbox focuses on how to best design strategies and subsequent policies which can promote a process of inclusive and sustainable industrial development, particularly in developing countries. It includes diagnostic tools, and information about policy packages and institutional set ups that can support these objectives.

<u>Green Transition Navigator (London School of Economics)</u> – This online tool provides a platform for exploring a country's strengths in relation to the green economy.

Guide to research and innovation strategies for smart specialization (RIS3) (European Commission) along with the Smart Specialization Platform and S3 Implementation Handbook – This guide introduces the Smart Specialisation concept and provides advice on how to develop Research and Innovation Strategies for Smart Specialization. The guide is accompanied by an Implementation Handbook which describes experience to date and presents current state of the art in its conceptual development and practical implementation. The Smart Specialization Platform provides further resources that may be useful.

3.3.3 Asset repurposing assessment

Some physical assets used by industries or other businesses that face closure might be saved and repurposed or upgraded as part of an economic diversification strategy. This may be relevant for specialized equipment or infrastructure, or for industrial premises that can be reconfigured to meet the needs of new businesses or sectors.

Within a community, the buildings vacated by businesses that close – due to the transition itself, or as a result of reduced local economic activity – can be repurposed for new businesses or for various activities that support people's needs: cultural or educational programming, gathering places, even for housing.

The viability of repurposing buildings or other economic infrastructure will vary, depending on the local context. An assessment of repurposing options can therefore inform regional economic development strategy in transition regions. (For land remediation and repurposing, see **Module 3.4**).

EXAMPLES

- Assessing repurposing options for oil and gas infrastructure, Europe
- Using multi-criteria decision analysis to investigate repurposing options for coal power stations and mines in Mpumalanga, South Africa

RESOURCES

Coal plant repurposing for ageing coal fleets in developing countries: Technical report (World Bank Energy Sector Management Assistance Program, 2021) – This report presents the concepts and components of a cost-benefit analysis needed for examining the value proposition of repurposing over decommissioning for coal plants. It covers three repurposing options: solar energy generation, battery storage and synchronous condenser. It includes an illustrative case study for India showing the economic rationale for repurposing.

ReACT: A Simplified Guide to Repurpose Coal Assets (Climate Investment Funds) – This guide looks at the retirement and repurposing of existing coal mines and power plants. It examines how to identify suitable coal power plants for repurposing, based on a broad range of technical, commercial, regulatory and socio-economic considerations (E.g., age of plant, cost of electricity, power purchase agreements, impact on jobs and local economies, among others). It also looks into repurposing assets with climate-smart alternatives across sectors such as clean energy generation, energy storage, green hydrogen production and other non-energy solutions. It also describes financing solutions involving public and private sector players.

Repurposing and re-use screening matrix (North Sea Transition Authority) – This screening tool aims to identify infrastructure that may have value in being repurposed and to highlight potential barriers or constraints to realising the repurposing potential.

<u>Technology options toolkit: Transforming industries in coal regions for a climateneutral economy (European Commission, 2021)</u> – This toolkit provides decision-makers in coal regions with an overview of what technology options exist, or are likely in the future, for making productive use of existing coal-related infrastructure.

Transformation Options Framework: Guidance for identification and assessment of options for the transformation of former mining and industrial sites (START technical assistance facility of the EU Coal Regions in Transition (CRIT) Initiative). – This guidance describes a methodology for the identification, consideration, and selection of transformation options for brownfield sites in an inclusive way. It considers the economic and commercial return on investment aspects of brownfield site transformation as well as any wider socio-economic benefits. The methodology is scalable and thus can be tailored to the site specific opportunity and challenge, as well as local and regional capacity and resources.

3.4 Environmental impacts and land rehabilitation

In some contexts, past environmental degradation can undermine the equity of a transition. This legacy could include lingering land or water pollution that poses health risks to local communities; the loss of productive land that cannot be used for local economic activities; or the creation of dangerous areas (like mining voids) if they are not secured and well maintained.

Land repurposing can be an important strategic element of planning for regional economic transition, since land is an asset for redevelopment and can also be used as collateral to raise finance. The potential to repurpose land and assets links closely with other transition objectives, including the creation of jobs and new economic activities.

The types of environmental problems – and the options available to address them –vary depending on the topographic, hydrographic, geological, geotechnical, environmental, and socioeconomic context. The same is true of the potential for repurposing rehabilitated sites.

The "polluter pays" principle is an important element of any just transition. This means that those who are responsible for, or have benefited from, environmental degradation should bear the costs of remediation to the greatest extent possible (see **Module 5.2**).

3.4.1 Contamination assessment and land repurposing assessment

Contamination assessments are frequently combined with land repurposing assessments.

Practices that may lead to contaminated lands or waters include mining, non-organic waste disposal, illegal waste dumping, leaks from chemical or fuel storage tanks, and chemical application in agriculture. A **contamination assessment** identifies what remediation is required, if any, to ensure that a site poses no ongoing health risks to surrounding ecosystems or local communities. The level of remediation required will depend on the proposed new uses of the site, and on contamination pathways into surrounding areas (e.g. through interactions with surface and ground waters).

A **land repurposing assessment** is useful for determining how a parcel or area might be used after mining or industrial activities there have ceased. It can help planners go beyond mere compliance with environmental regulations that require the landscape to be restored to a condition that is safe. A more beneficial outcome would be to identify

scenarios for rehabilitating the land in a manner that allows for a wide range of future economic, recreational, or other community land uses.

A land repurposing assessment can generate insights about what land uses may be most feasible and valuable for a site, based on its physical characteristics, regulatory context (e.g. permitted or suitable land use types), and socioeconomic factors. It is most useful when conducted in combination with other spatial planning exercises as part of transition planning.

EXAMPLES

• Land repurposing assessment for mining site in Western Macedonia, Greece

RESOURCES

Environmental rehabilitation and repurposing - Guidance on the governance of the environmental rehabilitation and repurposing in coal regions in transition (European Commission, 2020) – This toolkit provides guidance on the governance of environmental rehabilitation and repurposing of former mining assets, including some concrete examples.

International experience of implementing revitalisation projects on former mining and industrial sites (EU Secretariat Technical Assistance to Regions in Transition (START) Team. 2021) – This report shares insights from the repurposing of former industrial sites in Belgium, Czechia, Ireland, Latvia, the United Kingdom, and Poland.

Land and asset repurposing and sustainable post closure use of mine lands in the context of Just Transition, and more detailed presentation on Land reclamation and repurposing of assets (World Bank) – This resource describes the World Bank's Land Repurposing Methodology (LRM) tool, which is used for evaluating post mining land use scenarios. Further information can be found in a more detailed presentation on Land reclamation and repurposing of assets.

3.5 General methods for analyzing impacts and potential strategies

You can use both qualitative and quantitative methodologies to inform transition planning; often the methods are complementary.

- Qualitative methodologies use data from sources such as interviews, group discussions, literature reviews, and surveys.
- Quantitative methods often use input-output models, computerized general equilibrium (CGE) models, macroeconomic models, or integrated assessment models.

General methodologies for analysis include the following:

- Multi-criteria analysis (MCA). This method usually combines various types of impacts (costs or benefits) from a policy or project into a single, systematic assessment framework. It tends not to rely solely on monetary valuations. Instead, the assessment of impacts often combines some criteria that are valued in monetary terms and others that may be quantified, but not so easily valued in monetary terms. It may incorporate the results from cost-benefit analysis or other financial-based analysis.
- Various types of financial and economic cost-benefit analysis. These methods help to compare the financial or economic costs and benefits of a proposed project or reform.

- Simple cost-benefit analysis approaches identify and quantify all the expected costs and benefits of a project or reform, and then compare total costs with total benefits over a given period. They can help to clarify the "business case" in financial terms and provide a financial comparison between different projects or programs.
- Assessments of net present values (applying discount rates to future benefits) and internal rates of return (to identify the break-even point) help assess the financial merits of more complex or expensive projects or reforms.
- o Cost-effectiveness analysis and economic cost-benefit analysis (like accounting for CO2 emissions and local air pollutant savings via shadow prices) are other approaches to support decision-making.

Sometimes, methods for comparing costs and benefits have limited reliability by themselves, as it is difficult to accurately estimate revenue (or benefits). That is especially true for benefits that are intangible or not monetized (like access to nature), which are subjective and can be perceived very differently by different stakeholders.

• **Distributional analysis.** A distributional analysis is used to calculate how the various costs and benefits of reforms can be distributed across different segments of the population – which is essential to understand as part of just transition planning. It assesses how impacts can vary for different people or groups depending on gender, age, income level, disability, geographic location, size of business, and cultural background, including indigeneity.

EXAMPLES

Multi-criteria analysis:

- Multi-criteria analysis of clean energy investment opportunities in Bangladesh
- Multi-criteria analysis of electricity sector transition, Korea

Cost-benefit analysis:

- Cost-benefit analysis of coal plant repurposing, India
- Enhanced cost benefit analysis of wastewater treatment projects including environmental impacts, Guyana, Trinidad and Tobago, Paraguay, and Uruguay

Distributional impact analysis:

- Assessing the distributional impacts of transport improvements in São Paulo, Brazil
- Distributional impact analysis of electricity price reforms, Senegal
- Distributional impact analysis of energy price reform, Turkey

RESOURCES

General:

Enhancing the capacity and understanding of Parties, through collaboration and input from stakeholders, on the assessment and analysis of the impacts of the implementation of response measures to facilitate the undertaking of economic diversification and transformation and just transition (UNFCCC Katowice Committee of Experts, 2022) – This paper provides information on ways of assessing and analysing the impacts of measures

to tackle climate change, and identifies possible actions to enhance the relevant capacities of stakeholders.

Facilitating development, enhancement, customization and use of tools and methodologies for modelling and assessing the impacts of implementation of response measures, including identifying and reviewing existing tools and approaches in data-poor environments, in consultation with technical experts, practitioners and other relevant stakeholders (UNFCCC Katowice Committee of Experts on Impact of Implementation of Responses Measures, 2022) – This technical paper and the accompanying database provide detailed information about various quantitative and qualitative tools available to be developed, enhanced, customized and used for modelling and assessing the impacts of measures introduced to tackle climate change.

Multi-criteria analysis:

Multi-criteria analysis: A manual (UK Department for Communities and Local Government, 2009) – This manual provides practical guidance on how to undertake and make the best use of multi-criteria analysis (MCA), both for specialist and non-specialist audiences.

Cost-benefit analysis:

A cost-benefit framework for analyzing forest landscape restoration decisions (International Union for Conservation of Nature, 2015) – This report presents a cost-benefit framework for accounting for the ecosystem services and economic impacts of forest landscape restoration activities. The results are structured in a way that allows to inform multiple types of restoration decision-making and understand the trade-offs of different restoration scenarios.

<u>Cost-benefit analysis (Australian Government, Department of the Prime Minister and Cabinet, 2020)</u> – This note provides guidance on the use of cost-benefit analysis in policy proposals. Although written for an Australian context, the guidance is applicable more generally.

<u>Cost-benefit analysis (Inter-American Development Bank)</u> – This site provides guidance on how to choose the right cost-benefit analysis method. It includes links to several relevant methodological guides, and provides guidance on methods by sector (e.g. energy, infrastructure, water and wastewater, natural disaster risk management, education policy, and health).

Cost-benefit analysis for development: A practical guide (Asian Development Bank, 2013) – This book provides an overview of recent methodological developments in cost-benefit analysis as well as suggested improvements in the economic analysis of projects in selected sectors through case studies (in water supply and sanitation, transport, power generation and transmission).

<u>Cost-benefit analysis of transport infrastructure projects (United Nations Economic Commission for Europe, 2003)</u> – This resource summarizes guidelines for socio-economic cost-benefit analysis of transport infrastructure projects. It aims to bring together the cost-benefit analysis and broader environmental and policy indicators in a coherent way.

<u>Guidelines for the economic analysis of projects (Asian Development Bank, 2017)</u> – These guidelines contain principles and tools for conducting project economic analysis. Although drafted for ADB operations, the guidance is more generally informative.

Methodology for the economic assessment of EBRD projects with high greenhouse gas emissions (European Bank for Reconstruction and Development, 2019) – This report outlines an economic assessment methodology for projects with high GHG emissions. Although written with a focus on EBRD's activities, the guidance on economic assessment approaches and choices is also useful for other contexts.

Distributional impact analysis:

Assessing the distributional impacts of economic regulation (ofgem, 2020) – This report describes a framework of qualitative and quantitative components that can be used to assess the distributional impacts arising from energy sector price changes. It aims to help understand the impact of policies on specific groups of consumers who may be in vulnerable situations, and aggregate the impacts of policies over time. Although focused on the energy sector, it may offer useful guidance on assessing the distributional impacts of policies in other sectors.

<u>Distributional impact analysis: Toolkit and illustrations of impacts beyond the average treatment effect (IZA Institute of Labor Economics, 2018)</u> – This paper reviews methods for evaluating the distributional impacts of programs and policies, focusing on their application in randomized control trials. It provides an overview of the questions these methods can address and the main approaches that have been developed to answer them, along with their assumptions and other practical issues in their implementation.

Energy Subsidy Reform Assessment Framework (ESRAF) Good Practice Note 3: Analyzing the incidence of consumer price subsidies and the impact of reform on households - Quantitative analysis (World Bank Energy Sector Management Assistance Program, 2019) - This guidance note focuses on how to assess the distributional implications of energy subsidy reform (ESR) at the household level using quantitative methods.

Energy Subsidy Reform Assessment Framework (ESRAF) Good Practice Note 4: Incidence of price subsidies on households and distributional impact of reform - Qualitative methods (World Bank Energy Sector Management Assistance Program, 2019) – This guidance note focuses on how to use qualitative research tools, such as focus groups discussions and in-depth interviews, to understand the distributional impacts of higher prices on households.

4. Devising strategies

Strategies to address the employment, social, economic, and environmental impacts of a transition are a key output of just transition planning. These strategies draw on the diverse analysis described in **Module 2** and **Module 3**.

To be transformational, these strategies should also look for opportunities to address some of the wider socioeconomic inequalities that exist in the places in which transition is taking place.

Different levers – controlled by different actors – may be available to promote just transition. They may include policy and fiscal reform, dedicated support programs, and strategic investments in affected regions.

The purpose of just transition planning, therefore, is to bring different interventions together in a way that ensures a coherent approach to regional and sectoral change.

4.1 Devising strategies to address transition impacts

The goal of just transition planning is to identify how different measures might, together, help to address key challenges. It requires an holistic approach to planning, which will ensure that just transition objectives are integrated into the work of different sectors. It will also identify interventions that can address different challenges that may arise at once.

Strategies are likely to use several different types of instruments or levers:

Policy and fiscal reforms

These may help stimulate economic diversification and the emergence of new industries in affected regions; address specific environmental legacies, such as land degradation; provide for a smooth workforce transition as industries scale down; and/or provide social protection to the people who are most affected or vulnerable, such as people who lose their jobs and struggle to find new ones.

The scope of reforms depends on the vision and principles defined by stakeholders (see **Module 2.3**). For example, if the goal is to tackle larger social and economic inequalities, this will require a wider array of policy interventions compared to strategies focused on narrower objectives like mitigating job losses.

Ideally, you should mainstream just transition objectives across different legislation, regulations, and plans. This is true even if the transition is region-specific because much of the work involved in transition support is driven by measures incorporated into existing initiatives – or more significant reforms – in relevant sectoral portfolios.

• Dedicated social and economic support programs

These can help stakeholders absorb the near-term impacts of a transition and reorient themselves toward the new economy. For example, these programs can provide reskilling and re-employment assistance for workers and other community members. They can also build networks between local businesses to encourage innovation and new enterprises.

• Strategic projects

Strategic projects in infrastructure and regional facilities can generate short-term jobs that help offset other job losses. At the same time, they can create economic assets or improve connectivity that help regions attract investment to support economic rejuvenation and growth in the medium and longer term.

They may also address other impacts of the low-carbon transition, for example by investing in renewable energy generation to offset the loss of electricity from fossil fuel plants.

Well-designed projects can achieve more than one objective at once.

• Financial sector reforms

This type of reform may help align private financial flows with the just transition objectives. The financial services sector is important in creating financial stability, financial access, and inclusion. It also helps to develop capital markets that can be used for regional investments.

Increasingly, central banks are integrating climate risks in their investment frameworks, but they may need more direction to also integrate the social dimensions of transition. Central banks can also strengthen disclosure requirements for financial institutions (by asking banks and financial institutions to say in which sectors and locations they are investing). This can help transition planners better understand how finance is helping (or hindering) just transition objectives in a specific context.

In addition, the financial sector can support just transition planning by creating mechanisms that improve local access to finance in transition regions, including for small businesses or for women entrepreneurs.

4.1.1 Employment impacts

People whose jobs or livelihoods are affected by a transition need support to prepare for – and access – the jobs of the future, or in otherwise managing changes in their employment status and income. This also includes workers who are employed informally, who can make up a large portion of the affected workforce in some sectors and places.

Transition strategies should ensure that any workers affected directly or indirectly by the transition are prepared for new jobs, and that they have adequate social safety nets available if new, decent jobs cannot be found. Barriers to re-employment may include their age, level of education, a misalignment between their skills and employer needs, and/or the inability to move to work in a different location. There may also be a time lag before new jobs come online.

Initiatives to support workers through a transition should be introduced early, ideally before layoffs occur, to ensure the workforce has sufficient time to adjust and the process is smooth. Strategies that are proactive about workforce support are likely to produce better outcomes for workers and can also reduce the costs of labor divestiture.

Strategies might include:

- Reskilling and retraining of workers and other job seekers, particularly targeted toward sectors or activities where there is potential for local employment.
- Job search assistance for job seekers, such as career guidance and counseling, and the assessment and validation of their expertise and prior learning.
- Income support for retrenched workers who may not immediately be able to reenter the job market, and for those who enter retirement.
- Programs to help more workers move from the informal sector to formal employment.
- Identification and reform of regulations that obstruct a smooth labor divestiture process both in terms of the regulations themselves, and in their implementation.

- Labor mobility schemes, to enable people living in transition regions to move to
 other areas to seek new jobs, including via mobility grants. Barriers to internal or
 external migration, or to remittance flows, may need to be tackled, since these are
 potentially important strategies for workers and households to manage the
 impacts of job losses.
- Tailoring of the education curriculum toward the knowledge and skills that will be demanded in future (see **Module 5.1**).

EXAMPLES

- Compiling lessons on skills development needs and approaches, Wales
- Identifying redeployment, reskilling opportunities, and labor market initiatives, North Macedonia
- Online Vacancy Analysis Tool for Europe (Skills-OVATE)
- Personal pathways program for steel plant employees, Australia
- Program to promote employment and green jobs, Ecuador
- Promoting green jobs, Ghana
- Training, health and well-being support for coal workers and their families,
- Training, work-based learning and support service for dislocated workers, United States

RESOURCES

<u>Enabling Fairness for Energy Workers and Communities in Transition (Resources for the Future, 2021)</u> – This report provides insights from over 100 policies that can support fossil fuel workers and communities in the shift to a low-carbon economy.

General practical guidance on promoting coherence among employment, education/training and labour migration policies (International Labour Organization, 2017) – This guidance note promotes coherence among policies relating to employment, education and training, and labour migration, and provides eight principles against which coherence can be measured, as well as specific step-by-step guidelines on how an assessment should be made. A supplementary Manual on participatory assessment of policy coherence provides guidance on including relevant stakeholders in data collection and analysis for such an assessment.

<u>Sustainable employment and welfare support toolkit (European Commission, 2020)</u> – This toolkit provides insights on how to accompany the labor market transition in coal and carbon-intensive regions, focusing on providing short-term support for workers affected by changes in the labour market and providing medium- and longer-term actions that support employment and job- creation through regional diversification.

4.1.2 Social impacts

Strategies to address the different types of social impacts that may be experienced by individuals, households and communities during a transition (see **Module 3.2**) will likely involve a wide range of thematic areas. These may include, for instance:

- Mental health support and counseling programs for workers, families, business owners, and the wider community;
- Social infrastructure investment, i.e. in services, facilities, and networks that nurture community well-being, including in areas such as health, recreation, child care, and elderly care. It is also important to renovate and enhance public spaces that can serve as social connection points for local communities.
- Strengthening and/or widening of social protection systems (see **Module 2.2.6** on analysis of social protection systems).

EXAMPLES

- Investment in sport and recreation facilities to revitalize communities in transition, Australia
- Tax relief for households to mitigate the costs of carbon pricing, Canada
- Using conditional cash transfers to support vulnerable households, Jamaica

RESOURCES

Centring older people in regional transformations: A toolkit for just transition regions (European Commission, 2023) – This toolkit provides a general outline of why older people should be central to planning for the just transition and introduces key action areas relevant to older people. It proposes strategies ranging from increased engagement with older people during planning, to specific interventions in sectors like health, infrastructure and the labour market.

Considering gender in regional transformations: A toolkit for just transition regions (European Commission, 2023) – This toolkit provides guidance on identifying and managing the gendered impacts of local and regional level low-carbon transitions, focusing on the different challenges women, girls, men, and boys might face.

Mental health in rural communities toolkit (Rural Health Information Hub, 2019) – This toolkit compiles evidence-based and promising models and resources to support organizations implementing mental health programs in rural communities, with a focus on the United States context and on adult mental health.

The mental health gap action program (mhGAP) community toolkit: Field test version (World Health Organization, 2019) – This toolkit provides guidance on how to identify local mental health needs and tailor community services to match these needs. It offers practical information and tools for community providers to promote mental health, prevent mental health conditions and expand access to mental health services.

<u>Toolkit: Conditional cash transfer programs (Inter-American Development Bank)</u> – This toolkit is aimed at those who design and operate conditional cash transfer (CCT) programs. It provides a country-level analysis of the existing CCT programs in Latin America and the Caribbean.

4.1.3 Economic impacts

To ameliorate the economic impacts of a transition, and to take advantage of new economic opportunities, strategies will need to extend beyond job substitution and retraining (**Module 4.1.1**). They need to consider, for example, ways to promote the diversification of the local economy, through incentives for new enterprises and industries, or by growing existing industries. Sectors or businesses that have strong job creation potential can help to mitigate employment impacts; more broadly, it is important to support activities that can create new revenue flows in the local economy.

Strategies may promote the development of new small and medium-sized businesses (SMEs), including microenterprises and start-ups, particularly those with a focus on the green economy. They should also look at the support needs of SMEs that depend heavily on industries or activities which will phase down during transition. They will need help to reorient toward new opportunities. Support programs might include business incubators, or the creation of new business networks. Urban renewal programs that invest in upgrading town centers or city precincts can be useful strategies for attracting new firms and new residents.

Public services can also be affected by an economic downturn, as a decline in significant sectors of the local or regional economy will affect government revenues. Different levels of government may need to develop revenue substitution strategies. Fiscal reform at the national level might ensure, for instance, that local governments continue to have enough funds to deliver important services. Strategies that fund improvements in access to public transportation, and to other public services, or (where there are currently gaps) expand access to electricity, clean water and sanitation, and waste management services, might help stakeholders to better manage the impacts of transition. They also help to address underlying sources of inequality or vulnerability in a community.

As part of a just transition, it is important not to support the creation – or deepening – of dependencies on unsustainable industries. This means avoiding investment in new sources of carbon lock-in (for example, introducing or increasing fossil fuel subsidies to offset the economic impact of the transition on households or businesses, or reorienting SMEs – or public revenue – from one unsustainable sector to another).

EXAMPLES

- Diversification support as part of the just transition plan for the Ida-Virumaa shale oil region, Estonia
- Repurposing former mining site for large scale solar power plant, North Macedonia
- Supporting economic diversification alongside coal phase out, Australia

RESOURCES

Effective policy instruments for green cities (European Bank for Reconstruction and Development, 2020) – This platform showcases over 50 policy instruments to promote a more sustainable future for cities and their residents, and describes examples from more than 60 case studies across the world.

<u>Technology options toolkit: Transforming industries in coal regions for a climate-neutral economy (European Commission, 2021)</u> – This toolkit provides decision-makers in coal regions with an overview of what technology options exist, or are likely in the future, for making productive use of existing coal-related infrastructure.

Implementation of just transition and economic diversification strategies: a compilation of best practices from different countries (UNFCCC Katowice Committee of Experts on Impact of Implementation of Response Measures, 2023)

4.1.4 Environmental legacies

Where current unsustainable practices have caused environmental degradation, it is important to address it as part of a just transition – particularly if it poses ongoing threats to public health, economic activities, and/or ecosystems. The right interventions may also help to revitalize the local economy, such as where mining lands can be safely rehabilitated for other purposes and thus play a positive role in addressing the social

and/or economic impacts of transition. (see **Module 3.4** for assessment of environmental legacies and repurposing analysis).

For example, the restored land may be used for agriculture, green industrial development, or other economic activities, such as tourism or carbon sequestration. Restoring natural ecosystems is also a worthy goal that can have broader benefits (for example, if by reforesting land, the community can achieve better water quality or greater biodiversity).

Whatever the outcome, the remediation projects themselves can be valuable sources of jobs and can thus help address some of the employment impacts of a transition. Governments have an important role in re-zoning and repermitting of land, where needed, in a way that will support economic diversification.

Remediation strategies should have clear public and environmental health objectives, and may also support economic strategies. There should be clear responsibility for ongoing monitoring and maintenance of any sites where contamination remains.

A key principle to guide strategies for environmental remediation is "polluter pays." Requiring those who caused the harm to cover the cost of repairing it – to the extent feasible – will minimize the risk that the public will be saddled with the cost instead, which would be an unjust outcome. This may sometimes be difficult, however. For instance, a site may have been abandoned, or the polluter may be long out of business, or those responsible for the damage may be small landholders or informal (or illegal) workers who are highly vulnerable themselves. Even in places where companies are required by law to restore land and waters they have degraded, it is not uncommon for remediation to be slow or never to occur, either because those companies responsible declare bankruptcy, or because of poor enforcement of regulations. Public investment will therefore likely be needed for some cleanups, and the state may retain an ongoing role in site management, at least until new private investors take on ownership if this happens as part of redevelopment (see **Module 5.2** for example(s) of approaches to financing environmental remediation).

EXAMPLES

• Guidelines for sustainable rehabilitation of coal mines, Mongolia

RESOURCES

Environmental rehabilitation and repurposing - Guidance on the governance of the environmental rehabilitation and repurposing in coal regions in transition (European Commission, 2020) – This toolkit provides guidance on the governance of environmental rehabilitation and repurposing of former mining assets, including some concrete examples.

Land and asset repurposing and sustainable post closure use of mine lands in the context of Just Transition, and more detailed presentation on Land reclamation and repurposing of assets (World Bank) – This resource describes the World Bank's Land Repurposing Methodology (LRM) tool, which is used for evaluating post mining land use scenarios. Further information can be found in a more detailed presentation on Land reclamation and repurposing of assets.

Land reuse and redevelopment toolkit: A community champion's guide to creating healthfields (U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry) – This resource provides information on the procedures and resources needed to identify, clean-up, and redevelop contaminated sites that are slated for redevelopment.

4.2 Tackling inequalities as part of transition

Analyzing inequalities (see <u>Module 2</u>) helps to identify the underlying factors that create – or perpetuate – different forms of inequality and vulnerability in communities facing a transition. A transformational approach to just transition planning looks for ways to address those factors through the investments and activities that are set up to support the transition.

There are different possible strategies for reducing income inequality. For example, if the transition is specifically about the agriculture sector, you can ensure new initiatives in this sector promote the wide sharing of the benefits through ownership models or employment opportunities geared toward marginalized stakeholders.

To understand how a transformational approach might differ from short-term measures to facilitate a transition, consider the implications for gender inequality. Efforts to address gender disparities have evolved considerably. They recognize now that it is not enough to make activities equally accessible to men and women; it is important to tackle the reasons why women might not participate or might not benefit equally. These reasons might include lower literacy levels, far-lower land ownership rates, and social norms that constrain their ability to pursue an education or job opportunities.

- Short-term measures might offer job training and placement to everyone who could be affected by the closure of a coal mine.
- A transformational approach might also include the following:
 - o Targeted reskilling programs for women;
 - o Support for female entrepreneurs and women's cooperatives;
 - o Investments in infrastructure and public services that specifically address women's needs and priorities;
 - Actions that specifically deal with the barriers that women face in accessing finance, resources, jobs, and markets;
 - Legal reforms and new programs to enhance women's education, provide high-quality and affordable childcare, ensure access to reproductive health services, or tackle domestic violence;
 - o The introduction of gender-responsive budgeting by governments.

This approach encourages the use of public resources that transparently targets the empowerment of women and improvements in gender equality.

EXAMPLES

- Funding for disadvantaged communities around power plant in Illinois, United States
- Supporting women entrepreneurs to access energy efficiency improvements, Uganda
- Using an affordable housing program to tackle gender inequality, Bhutan

RESOURCES

Gender and climate climate finance toolkit (2X Global) - This toolkit enables investors to identify opportunities and mitigate risks in gender and climate finance. It provides a gender-smart climate finance overview, a guidance note for integrating gender in the investments processes, thematic notes on how to implement gender-smart climate

finance across different themes, case studies, and impact measurement tools to monitor and evaluate the progress of these gender-smart climate finance investments.

Gender checklists for specific sectors (Asian Development Bank) – This website provides a range of sector-specific toolkits and guidance, including for working towards gender equality in: Agriculture and Natural Resources; Education; Energy; Gender Equality Results and Indicators; Health; Law and Policy; Micro, Small, and Medium-Sized Enterprise Finance and Development; Public Sector Management; Resettlement; Transport; Urban Development and Housing; Water Supply and Sanitation.

Some of these resources are available in Bangla, Indonesian, Nepali, Vietnamese, and Russian.

Inclusive digital economies and gender playbook and associated e-learning course (Asian Development Bank, 2022) – This is a e-Learning course focused on building gender-inclusive digital economies and recovery in developing markets by empowering women through digital literacy. It describes common constraints faced by women in developing markets, how technology use can promote gender-inclusive digital economies, and practical solutions for achieving breakthroughs.

Montevideo strategy for implementation of the regional gender agenda within the sustainable development framework by 2030 (United Nations Economic Commission for Latin America and the Caribbean, 2017) – This report highlights various structural challenges that must be targeted in a transition process in order for it to be transformative for gender inequality. It provides guidance on overcoming these challenges, including specific measures.

<u>Preparing a project gender action plan and examples of Gender Action Plans (GAPs) for specific projects and programs (Asian Development Bank)</u> – This resource offers guidance on gender mainstreaming in development interventions, and provides examples of <u>Gender Action Plans</u> for specific projects and programs.

4.3 Preparing a Just Transition Plan

An overarching Just Transition Plan helps consolidate the activities described in these modules into one coherent strategy:

- Bring together the visioning and assessment processes (see <u>Module 2</u> and <u>Module 3</u>);
- Describe the key strategies to be prioritized (see **Module 4**);
- Elaborate on issues relating to implementation (see <u>Module 5</u>);
- Clearly describe how different stakeholders were involved in developing the plan, and how they will be involved in its implementation (see **Module 1**);
- Bring together the different social, economic, and environmental goals of the transition and of future regional development;
- Integrate equity and justice in all aspects of the plan.

By bringing together often disparate efforts to support a transition, the Just Transition Plan improves the coherence between different activities and helps to identify synergies between the actions of different stakeholders. A socially inclusive planning process should also be able to identify the systemic issues that might constrain the transition itself or the pursuit of just outcomes, and suggest how to handle them.

While the structure of a Just Transition Plan depends on the context, it might include the following elements:

- Describe and explain major economic or production-related changes, the socioeconomic context in which they are or will take place, and potential transition pathways and impacts (see <u>Module 2</u>);
- Clarify the vision and set of just principles that will guide planning (see <u>Module 2</u>) and how different stakeholders can help shape them during the planning process (see <u>Module 1</u>);
- Elaborate on the strategies that will address the goals of a just transition, and how they link to the transition principles, such as a desire to tackle socioeconomic inequality (see **Module 4**);
- Explore the financing options available to implement these strategies (see <u>Module</u> <u>5.2</u>);
- Detail a monitoring and evaluation framework that will be used to track progress and refine objectives and strategies (see <u>Module 5.3</u>);
- Clarify the bodies and stakeholders responsible for implementing and monitoring each element of the plan. Specify how they will coordinate and work together, and what accountability mechanisms there are to track the implementation and success of a just transition.

Planning and implementing such major socioeconomic change is an iterative process that takes considerable time. Therefore, an initial Just Transition Plan may not detail the entire blueprint for regional or sectoral transition, but should at least describe the ongoing process of adaptive management that will be followed to identify further actions and investments over time.

The economic development components of a Just Transition Plan need to take account of future climate risks, and ensure prioritization of climate-resilient development pathways.

EXAMPLES

- Just Transition Development Plan for a coal mining region, Greece
- Midlands just transition pathway, Ireland
- Taranaki 2050 Roadmap, New Zealand
- Template for Territorial Just Transition Plans, Europe

RESOURCES

<u>A Territorial Just Transition Plan for health protection - Health assessment tool (Health and Environmental Alliance)</u> – This tool focuses on the health aspects of the territorial just transition plans. Its six principles are based on the <u>Toolkit for assessing effective Territorial Just Transition Plans</u>. It helps those interested in the health aspects of Just Transition to assess how public health protection and the well-being of populations are included in a given territorial or national Just Transition plan.

<u>Climate and disaster risk screening tools (World Bank)</u> – This information hub provides access to an array of rapid assessment and in-depth screening tools that can be used for assessing climate risks in different sectors, including agriculture, energy, health, finance industry, natural resources, transport, water, urban development, etc. This can be useful information in designing interventions and programmes in these sectors.

<u>Industry transition roadmap planner: A step-by-step guide for developing industry transition roadmaps (Leadership Group for Industry Transition)</u> – This interactive tool supports decision-makers to design, develop, and implement industry decarbonization

roadmaps for various sectors. It covers different phases, from set-up, through design, to monitoring and evaluation.

The Just Transition Planning Process for Business: A Toolkit to Drive Social Dialogue and Stakeholder Engagement Toward a Just, Equitable and Inclusive Transition (Business for Social Responsibility) – This guidance describes a process for companies to begin thinking about and developing their engagement with just transition efforts within their company and value chains, at a corporate level. It is tailored toward the energy and utilities sectors, although learnings could apply to other sectors and company types.

Toolkit for assessing effective Territorial Just Transition Plans, and associated Territorial Just Transition Plan assessment tool (World Wild Fund Europe, 2021) – This toolkit is aimed at stakeholders involved in developing Territorial Just Transition Plans, and provides information about what makes a good plan. A related <u>Territorial Just Transition Plan assessment tool</u> provides 31 questions and indicators linked to different just transition principles.

What makes a transition plan credible? Considerations for financial institutions (Climate Policy Initiative, 2022) – This report, targeted to financial institutions, proposes some key elements to consider when evaluating the credibility of organizational transition plans. It outlines how financial institutions can engage with transition plans, and with the broader enabling environment. It complements the <u>Framework for Sustainable Finance Integrity</u>.

Module 5. Resources and partnerships

The success of a transition planning process and its implementation depends on various factors. These include a research and education sector strategy aligned with the goals of regional or sectoral transition; the mobilization of new funding and effort to better align existing funding with the objectives of the Just Transition Plan; and a well-designed monitoring, evaluation, and learning strategy.

5.1 Research, innovation, and education strategy

Universities and other research organizations and institutions of higher learning can play crucial roles in transition planning.

- Act as key partners in the analyses needed for transition planning (see **Module 3**) and in near-term reskilling and retraining;
- Address guestions and knowledge gaps that arise during the transition;
- Tailor curricula and ensure that the emerging workforce has the skills needed in the new economy;
- Ensure that training and education opportunities target the needs of the changing economy.

Cooperation between governments, industry representatives, and academic institutions will likely be needed to align the education and research sectors with the needs of a just transition. Tailoring the education system to support the transition may require both supply- and demand-side interventions.

- On the supply side, this may entail improving the alignment of curricula in schools, universities, or professional training with the needs of sectors where jobs are expected to grow. This may include creating partnerships with the business sector.
- On the demand side, it may require raising students' awareness of the nature of emerging job opportunities.

As noted, research institutions across multiple areas of social, economic, and environmental policy can be key partners in the analyses needed by decision-makers. They can contribute technical expertise (for example, in economic modeling) and help design effective participatory processes. This is especially relevant when working with stakeholders who are typically not represented in public planning processes (see **Module 1**). Research institutions may also have specialized knowledge of region-specific impacts and opportunities (see **Module 3**), which is important when designing policy and fiscal reforms to maximize their contribution to improving equity (see **Module 4**).

With different interventions for a just transition occurring over time, research may also be needed over the medium and longer term. To facilitate this, governments can target public research funding towards policy- or action-oriented research, such as on socioeconomic changes in transition regions over time (this links to the information on monitoring, evaluation, and learning in <u>Module 5.3</u>), or towards the preparation of a regional Innovation Strategy, which might be a part of economic diversification planning (see <u>Module 4.3</u>).

A research and innovation strategy for a transition region may include the following elements:

- The vision, goals, and guiding principles;
- A theory of change for how research and innovation will support sustainable socioeconomic development, thereby helping to implement a just transition;
- Areas or sectors of strategic importance to focus on;

- Gaps that research and technological (or other) innovation should fill;
- A description of how the plan will be implemented, including issues such as resourcing and collaborative partnerships.

EXAMPLES

- Aligning skills with regional economic development plans, Wales
- Climate Emergency Skills Action Plan, Scotland
- Climate Science Youth Program, Philippines
- Curriculum development for the renewable energy sector, Belize
- Future Skills Center, Canada
- Proposal for a New Industries Training Centre for the Hunter Valley, Australia
- The Next Tourism Generation (NGT) Alliance, Europe

RESOURCES

Better Skills, Better Jobs, Better Lives: A strategic approach to skills policies (Organization for Economic Cooperation and Development, 2012) – This book helps countries to identify the strengths and weaknesses of their national skills systems, benchmark them internationally, and develop policies that can transform better skills into better jobs, economic growth and social inclusion.

Resource also available in German, Spanish, Korean, French and Portuguese.

Guide to research and innovation strategies for smart specialization (RIS3) (European Commission) along with the Smart Specialization Platform and S3 Implementation Handbook – This guide introduces the Smart Specialisation concept and provides advice on how to develop Research and Innovation Strategies for Smart Specialization. The guide is accompanied by an Implementation Handbook which describes experience to date and presents current state of the art in its conceptual development and practical implementation. The Smart Specialization Platform provides further resources that may be useful.

<u>Perspectives on policy and practice: Tapping into the potential of big data for skills</u> (<u>European Centre for the Development of Vocational Training, 2021</u>) – This publication aims to support those who wish to engage in discussions on the potential of web-based big data for skills policy. It outlines how such data can be used to mitigate labour market challenges, reduce skills mismatches and strengthen the links between the labour market and education and training.

Supporting innovation in all types of regions, chapter 4 in Broad-based innovation policy for all regions and cities (Organization for Economic Cooperation and Development, 2020) – Chapter 4 of Broad-based innovation policy for all regions and cities highlights the need to go beyond a research- and patentingoriented approach to innovation policy in regions that do not have broad-based capacity for frontier research. It provides guidance on a sequential approach to upgrading regional capacity, building and developing existing strengths.

<u>VET Toolbox (German Agency for International Cooperation (GIZ), European Union, and German Government, 2017)</u> – This toolbox aims at supporting countries in the design of national Vocational Education and Training (VET) and Employment strategies and at enhancing their VET service delivery systems.

5.2 Mobilizing financial resources

A just transition is likely to require substantial resources. It needs major investment to build momentum in the underlying technical and market transitions (for example, to promote the shift to cleaner energy, electrified transport, and more). It also requires finance to address the equity dimensions of the transition through strategies targeting employment, social, economic, and environmental issues.

Finance is needed not only at the national level, but also for municipal governments, small and medium enterprises (SMEs), and local communities.

Funds may be needed for the following activities:

- Provide temporary income support and retraining schemes for displaced workers, particularly if transition planning takes place at the critical moment of industrial closure (as opposed to proactive planning).
- Expand social safety nets, such as retirement support for older workers who would rather retire than retrain for new roles.
- Cover the cost of transition planning itself, including the research, analysis, coordination, stakeholder engagement, and monitoring and evaluation.
 Stakeholder engagement includes dialogue and other activities, visioning exercises, knowledge sharing products, and processes.
- In some cases, offset potential revenue losses. For example, by governments, small businesses, or workers or the costs of early retirement of economic assets, such as coal-fired power plants or restructuring of state enterprises and their liabilities.
- Address other negative transition impacts for specific stakeholders. For example, to offset higher energy or transport costs for poor households, reduce the costs of new technology uptake by smallholder farmers or local businesses, make available labor market programs, or remediate environmental damage.
- Invest in social and economic infrastructure in regions affected by transition, including the cost of asset repurposing where that is a part of a strategy for economic development.
- Clean up lands or waters that have been degraded by past mining or industrial activities.

Financing Strategy

A just transition financing strategy is a crucial addition to the Just Transition Plan and can serve as a roadmap to support the flow of finance and target its use.

Preparation of a financing strategy should consider the following elements:

- The scale and types of finance needed, based on the strategies identified. It might be difficult to cost the various strategies to promote just transition objectives. Estimates will change over time, as new projects and strategies are brought forward.
- How the financial costs of transition are distributed among different stakeholders. This should examine the potential costs to governments, which may lose revenue, for example, from taxes, royalties, and fees paid by industries that are phased out. It is an important part of planning even as the government faces increased demand for social support programs and the need to invest in infrastructure to attract new industries. Some governments, particularly at the local level, may be poorly prepared for the financial and economic voids created by the transition. At the community and household level, the strategy should also address how those most affected (or least able to cope) might be properly supported. In some contexts, the transition might increase the cost of meeting basic needs, such as

- energy or water. Higher costs for basic services tend to fall disproportionately on poor households, who have little or no financial buffer.
- Options for sourcing new (additional) finance and better use of existing finance.
 For example, using fiscal reform to align tax rules and expenditure with the
 objectives of the transition, or integrating just transition objectives more widely
 across government policies and plans, so that delivery is through existing
 mechanisms. Depending on the context, sources of new finance may include
 domestic public finance, international public finance (including via climate funds
 and development banks), the private sector (including via public-private
 partnerships or other blended finance instruments), and in some cases
 philanthropic organizations. Funding from scientific research councils may be
 available to support some of the various analyses to inform planning decisions
 over time.

Mobilizing Finance

Actions to mobilize finance include the following:

- Align just transition planning with other policy agendas. This helps ensure that
 existing finance (like sectoral budgets) works towards broader just transition
 objectives.
- Allocate more finance from national budgets. It is important for governments to allocate more finance for strategic infrastructure investment in affected regions and to ensure that municipalities can continue delivering basic services to their communities.
- Implement fiscal reform (changes in taxation or government expenditure). These reforms help poorer households or vulnerable businesses to cope with cost increases related to the transition, for instance. Fiscal reform can also redirect financial resources away from unproductive or harmful activities (like fossil fuel subsidies) and towards productive investment in the new economy, or in social safety nets. Reform opportunities depend on a government's access to new finance at a reasonable cost and/or its ability to change existing expenditures. Fiscal reform itself can create risks for different social groups, so its design should ensure that the financial burden is not carried by poor and vulnerable people.
- Implement debt restructuring for national governments and/or local municipalities. This helps to lower the cost of existing debt burdens and offset any revenue loss that may occur because of transition.
- Strengthen public financial management (PFM) systems, where needed. This helps improve the government's capacity to manage public resources. To cover the cost of transition programs and reforms, some governments may feel pressure to take on more debt. This could be problematic if, for instance, public debt levels are already high. Strong PFM systems provide a foundation for properly assessing the costs and benefits of taking on more debt.
- Undertake a public institutional and expenditure review through the lens of just transition objectives. Different countries have used the methodology of Climate Public Institutional and Expenditure Reviews (CPIERs) to look at climate spending generally. These reviews use qualitative and quantitative analysis to look at the following:
 - The way climate objectives are integrated across the policy landscape (at the national and subnational level)
 - o The institutional architecture supporting the delivery of climate objectives, including cross-government coordination and forms of decentralization
 - The scale and distribution of public expenditure relevant to climate objectives

A similar methodology for just transition objectives could reveal the main financing challenges and illuminate how public resources are already being spent in support of just transition objectives.

- Strengthen mechanisms to ensure that environmental damage is not left unaddressed. This is particularly important when industries such as mining or manufacturing close. It also helps ensure that environmental remediation costs are not transferred from the private sector to the public purse (that is, enforcing the polluter pays principle, where possible). For instance, this might require mining companies to provide bonds to governments to cover future remediation costs and to enforce clean-up regulations.
- Consider the role of different mechanisms to mobilize private finance.
 Mechanisms such as public-private partnerships (PPPs), or risk-sharing
 mechanisms such as guarantees, may incentivize private finance in some contexts
 and some sectors. The World Bank's <u>Private Participation in Infrastructure (PPI)</u>
 <u>Database</u> indicates that PPPs have been mobilized in the energy and transport
 sectors, though there seems to be growing interest in information and
 communications technology.

It is important that finance is mobilized not only to support efforts at a national level, but also to enable local governments and local communities to prepare and implement local transition plans, while also continuing to provide basic services.

EXAMPLES

- Capitalizing a Green Fund to support regions in transition, Greece
- Community grants to integrate justice issues in climate actions, United States
- Finance to help farmers participate in the transition to sustainable agriculture,
 Netherlands
- Fiscal reform savings used to offset the impacts of transition, Indonesia and Ghana
- Just Transition Fund for coal communities, United States
- Market Opportunity Briefs highlight regional investment opportunities in the green economy, South Africa
- Special Fund for coal and steel industry layoffs, China
- Various special purpose funds for Just Transition, Europe

RESOURCES

<u>Climate-resilient infrastructure officer handbook (Global Center on Adaptation, 2021)</u> – This handbook aims to build the upstream capacity of practitioners to integrate climate resilience into infrastructure Public Private Partnerships (PPPs). It identifies the key entry points across the PPP project cycle to integrate resilience and provide the necessary tools and knowledge for practitioners.

<u>Green cities policy tool - Finance (European Bank for Reconstruction and Development)</u> – This resource explores different policy initiatives that seek to promote better access to financing and sustainable funding in order to enable decentralised investment decisions. It is designed for city governments to strengthen their financial credentials so that they can finance the necessary projects to become a green and sustainable city.

<u>Just transition finance tool for banking and investing activities (International Labour Organization and London School of Economics Grantham Institute for Climate Change and the Environment, 2022)</u> – This tool describes the concept of a Just Transition and

provides practical guidance to financial institutions on integrating Just Transition considerations in their strategies and operations.

<u>PPPs by topic: Climate-smart PPPs (World Bank)</u> – This resource contains a number of World Bank publications related to PPPs. Publications can be sorted by sectors or topics and type of tools or resources. Additional information can be found in the Bank's <u>Climate Toolkits for infrastructure PPEs</u>.

PPPs in Infrastructure Toolkit (Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, Islamic Development Bank, PPIAF Enabling Infrastructure Investment, Multilateral Investment Fund Member of the IDB Group, and World Bank, 2016) – This toolkit presents a set of tools to enable the most appropriate decisions around infrastructure delivery and PPPs. These tools aims to enhance PPP performance globally, especially in emerging markets and developing economies while building a unified capacity in their respective public sectors for planning, preparing, and delivering PPPs.

The Energy Subsidy Reform Assessment Framework (ESRAF) - Good Practice Notes:
Toward evidence-based energy subsidy reform (World Bank Energy Sector Management Assistance Program) - This is an Overview of the Energy Sector Reform Assessment Framework (ESRAF). ESRAF consists of 10 good practice notes, which provide a guide to analyzing energy subsidies, assessing the impacts of subsidy reform and understanding the political context for subsidy reform in developing countries.

<u>Transition financing toolkit (European Commission, 2021)</u> – This toolkit provides guidance on the effective mobilization of different sources of funding for transition-related projects in coal regions. It specifically focuses on EU funds but also addresses other relevant funding sources. It shares some guiding principles and inspiring examples that can support practitioners as they design their funding strategies. *Resource also available in German, Czech, Polish and Romanian*.

Using financial assurance to reduce the risk of mine non-remediation: Considerations for British Columbia and Indigenous Governments (British Columbia First Nations Energy and Mining Council, 2019) – This paper shows how stronger financial assurance requirements can better protect communities and taxpayers from the risks of mine non-remediation. The report focuses on the Canadian province of British Columbia but may also be of interest in other contexts considering financial assurance mechanisms.

5.3 Monitoring, evaluation, and learning

Monitoring is the periodic, systematic collection of information. Monitoring helps track outputs, outcomes, and impacts from programs and/or projects.

Evaluation is the systematic and rigorous assessment of programs and/or projects. Evaluation is required for learning, accountability, and/or decision-making.

Learning is the acquisition of knowledge or skills through experience, studies, or teaching. We consider that learning works when new knowledge is used to shape behaviors, as manifested in decisions or actions.

A monitoring, evaluation, and learning (MEL) strategy should help guide and strengthen just transitions through results management, accountability, and learning across programs and projects. When MEL approaches are implemented in complementary ways, they can build on one another. This supports continuous improvement and innovation and enables activities to "shift gears" if they are not achieving the desired outcomes, or if conditions change.

There are unique challenges in developing a MEL strategy for a just transition. This is because the objectives here are much broader than, for instance, ensuring a job for any displaced worker. If the transition strategy takes a transformational approach, it will seek

to tackle systemic problems. This means that the MEL strategy will need to look beyond specific project boundaries. Looking at wider justice implications requires integrated, whole-system perspectives and longer time horizons.

The following tools support the development of a MEL strategy for a just transition:

- Develop a just transition program and/or project theory of change and/or log frame to think through the various pathways of change. A theory of change explains how an intervention is expected to create results producing the intended impacts. In developing a just transition theory of change, it is important to consider external factors or impacts beyond specific projects that may have an impact on social, economic, and environmental justice.
- Various <u>approaches to monitoring and evaluation</u> can help track and assess
 whether or not the developed theory is occurring in practice. These approaches
 are relevant in the design, implementation, and review phases of a program
 and/or project. Developing contextually relevant indicators or signals of change as
 part of these approaches will offer a way to define and describe the expected
 change and set goals that can then be tracked.
- <u>Emergent learning principles and practices</u> can help learn and adapt to address complex just transition challenges through practical tools (such as after and before action reviews and learning logs).

EXAMPLES

• Learning from initial transition efforts, New Zealand

RESOURCES

<u>Better evaluation website</u> (Global Evaluation Initiative) – This knowledge website focuses on how to better plan, manage, conduct and use evaluation. It contains information and guidance on more than 300 methods and processes used in evaluation, and includes blogs from evaluation experts, as well as guides and tools such as the Manager's guide to evaluation and the GeneraTOR Terms of Reference generator.

Gender checklists for specific sectors (Asian Development Bank) – This website provides a range of sector-specific toolkits and guidance, including for working towards gender equality in: Agriculture and Natural Resources; Education; Energy; Gender Equality Results and Indicators; Health; Law and Policy; Micro, Small, and Medium-Sized Enterprise Finance and Development; Public Sector Management; Resettlement; Transport; Urban Development and Housing; Water Supply and Sanitation.

Some of these resources are available in Bangla, Indonesian, Nepali, Vietnamese, and Russian.

Monitoring the transition to a low carbon economy: A strategic approach to local development (Organization for Economic Cooperation and Development, 2015) – This working paper explores key indicators of area-based transition to a low-carbon economy. The objective of the project was to provide defined measurable indicators at the regional/local level that could inform local governments and other institutions with monitoring guidelines, centred on the development of a local green growth indicator framework.

Ten steps to a results-based monitoring and evaluation System: A handbook for development practitioners (World Bank, 2004) – This handbook provides a comprehensive ten-step model that can help practitioners through the process of designing and building a results-based monitoring and evaluation system. These steps begin with a 'readiness assessment' and take the practitioner through the design, management, and the sustainability of such systems.

<u>Territorial Just Transition Plans: Guidelines for a comparative evaluation framework</u> (<u>Centre for the Study of Democracy, 2021</u>) – These guidelines help develop the Territorial Just Transition Plans (TJTP), in Europe, within a wider energy transition strategy and under the three pillars of stakeholder engagement, decarbonization ambition, and green transformation potential. See section on 'method' specifically.

<u>Transformational change learning partnership (Climate Investment Funds)</u> – These guidelines help develop the Territorial Just Transition Plans (TJTP), in Europe, within a wider energy transition strategy and under the three pillars of stakeholder engagement, decarbonization ambition, and green transformation potential. See section on 'method' specifically.

What is emergent learning? (Emergent Learning) – This website shares the Emergent Learning principles and practices that help people across a system think, learn and adapt together in order to overcome complex challenges and achieve important social change goals.