



International  
Labour  
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# ► G20 Sustainable Finance Working Group Input Paper

## Finance for a Just Transition and the Role of Transition Finance

Input paper prepared for the G20 Sustainable Finance Working Group under the Indonesian Presidency

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## Executive Summary

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Achieving climate goals requires a far-reaching economic transformation that entails extensive employment and socio-economic implications. Ensuring a just transition is a crucial enabler of ambitious climate action and an engine of sustainable development. Delivering a just transition means maximising positive employment and socio-economic outcomes and avoiding and mitigating any negative impacts. Financial systems and their actors have a key role to play in a just transition. They complement conducive policy measures, and in turn these policy measures facilitate the efforts of financial systems and their actors towards a just transition.

While market participants increasingly commit to climate action, the level of integration of social and employment dimensions of the climate transition in financing activities is currently lagging behind. The recognition of the need to address socio-economic impacts as an integral part of the decarbonisation process is only nascent. Progress is hampered by a lack of consensus around definitions of social risks and impacts and limitations in their representation in financial markets infrastructure (including standardization of social metrics and availability of processes and mechanisms focusing on social considerations). Although currently tailored largely to environmental goals, the sustainable finance market infrastructure does offer several entry points to simultaneously target positive climate and social outcomes of the transition. A comprehensive approach that embeds social considerations within practices of the whole ecosystem of actors involved in climate financing can improve the interoperability of practices, bringing about operational synergies and increasing the overall availability of capital.

This paper presents several social and employment-related elements to be factored into financial decision making to align it with the objectives of a just transition; it highlights some building blocks of the financial market infrastructure that could be enhanced by including social aspects so as to deliver systematic positive contributions to sustainable development goals; and it connects these building blocks with elements of emerging transition finance frameworks, for further research and discussion by the G20 Sustainable Finance Working Group and other relevant platforms.

# 1. Introduction

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The present paper is produced as a contribution to the development of a Transition Finance Framework by the G20 Sustainable Finance Working Group, as well as to support other workstreams in reflecting social and employment considerations towards a just transition.

Ambitious action is needed to achieve carbon neutrality and climate resilience. The climate transition presents opportunities to diversify economies, create productive employment, and promote the expansion of sustainable enterprises. But it also involves challenges: job losses in certain industries, extensive restructuring, economic uncertainty for regions heavily dependent on fossil fuel extraction and power generation. In addition, climate change and environmental degradation themselves are driving employment losses, declines in productivity and threats to economic growth and poverty eradication.

A just transition maximises positive economic, social and decent work gains and minimises and mitigates negative impacts. It ensures change processes and outcomes are inclusive and fair. It is a necessary condition for delivering sustainable development in its three dimensions. It is also a critical factor for achieving ambitious climate action because it fosters broad-based support and strengthens coherent approaches.

Aligning financing with a just transition approach optimises positive contributions and prevents and addresses negative consequences. It is thereby instrumental in supporting the Sustainable Development Goals in an integrated manner.

Commitments around a just transition have been increasing among governments, enterprises, and the financial sector itself. A growing number of countries are making pledges for a just transition and have included objectives on decent work, green jobs and just transition in their Nationally Determined Contributions. Among financial actors, Multilateral Development Banks and private sector players are showing an increasing interest in just transition considerations.

Nevertheless, there are still significant gaps in systematically aligning financial flows with just transition objectives. First, challenges persist in identifying and tackling the social and employment components of the just transition agenda from a finance perspective because of a lack of consensus around definitions, limited standardisation of social metrics, difficulties in obtaining decision-useful data, emerging but still limited market recognition of the need to address socio-economic impacts of the decarbonisation process, immaturity of available processes and mechanisms focused on social parameters and the fact that social spending is often seen as a cost rather than an investment. Second, supporting a just transition goes beyond addressing business and financial risks. It involves managing change and restructuring in emission-intensive industries in a manner that avoids leaving workers, communities and local economies behind. It also implies a proactive approach to leveraging the social and employment dividends of the transition. Finally, it requires solid social dialogue between governments', workers', and employers' representatives as well as effective stakeholder engagement processes. These challenges apply to sectors undergoing decarbonisation, which fall under the primary scope of transition finance, as well as to net-zero aligned and enabling activities that benefit from green financial flows.

Given the complexity and breadth of a just transition, it is essential to have a common understanding of the concept. This will enable all relevant actors to address the social and employment impacts of the climate transition and it will support the credibility of the measures they take. The ILO Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All (henceforth 'ILO's Just Transition Guidelines'), agreed by governments, workers' and employers' representatives provide a clear definition of the concept, key principles and a menu of policy options that can guide financing for a just transition and inform the work of the G20 Sustainable Finance Working Group (thereafter 'SFWG').

The paper is structured as follows: section 2 outlines the social and employment impacts of the climate transition. Section 3 presents the concept of just transition and the ILO's Just Transition Guidelines. Sections 4 and 5 address the Just Transition Financing ecosystem, identify building blocks for supporting alignment of financial flows and highlight selected potential entry points relevant for the design of transition finance frameworks. The elements put forward in sections 4 and 5 aim to provide initial considerations, based on a review of literature and existing practice

and drawing upon ILO's expertise, which ought to be further explored and could inform future developments on just transition financing in the context of the G20 SFWG and other relevant platforms.

## 2. The Social and Employment Impacts of the Climate Transition

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Climate change is causing widespread losses and damage across world regions and its adverse impacts on economies and societies are increasing, including on water security and food production, health and well-being (IPCC, 2022). Economic losses span across climate-exposed sectors, including agriculture, forestry, fishery, energy, and tourism. Globally 1.2 billion jobs depend on healthy ecosystems and a stable environment. If the current global warming trends continue, 2.2 per cent of total working hours will be lost due to heat stress by 2030 (ILO, 2019b). This represents a loss of productivity equivalent to 80 million full-time jobs.

As a matter of urgency, the underlying causes of climate change need to be addressed, while societies need to adapt to the current and foreseeable climate change impacts.

The climate transition<sup>1</sup> presents opportunities as well as challenges. It offers the potential for large-scale employment creation and upgrading, cost savings and the opening of new markets and investment avenues for enterprises, as well as access to clean energy. Green building, electric vehicles, improved management of water resources, renewable energy, and waste management in cities in emerging markets hold a \$29.4 trillion climate investment opportunity (IFC, 2018). A net gain of 18 million jobs can be achieved globally by 2030 through energy-related measures alone (ILO, 2018).

At the same time, the climate transition comprises a number of risks. Deep restructuring could leave workers and communities behind in certain sectors or localities. SMEs could face challenges to shift rapidly to new technologies and business models. Low-income consumers may be hit by increases in energy and commodity prices unless remediation measures are in place.

In terms of impacts on labour markets, there will be several dynamics at play in addition to job creation and job displacement. They include, among others, changes in labour market composition, skills needs, wages and labour incomes, gender, and occupational health and safety.<sup>2</sup>

Benefits and costs associated with the transition will not necessarily be equitably distributed and certain groups may stand at a disadvantage. Occupational gender gaps are likely to stay, and women will only gain a fraction of the jobs created, unless adequate measures are taken to enhance female participation in the labour market and in green occupations in particular (ILO, 2018; IRENA, 2021). Workers and communities heavily dependent on fossil-fuel industries and whose economies present limited diversification and gaps in terms of social protection risk to be strongly affected.

There are multiple possible pathways to reach net zero emissions and achieve the climate transition (IPCC, 2021), with national goals, policies and processes depending on the specific economic and social priorities, vulnerabilities, capacities, and composition of the economy. Policy choices and the allocation of financial resources will influence to the extent and nature of employment and socio-economic impacts. Therefore, it is crucially important to involve those who will be impacted – workers, employers, communities – in the decisions to be made.

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<sup>1</sup> Responding to climate change involves both mitigation and adaptation measures. Both will have large-scale social and employment impacts that have to be addressed to deliver a just transition. However, given the context of the paper, the general focus of transition finance on decarbonisation, and the specific impacts of adaptation, which would require a separate discussion, the report will focus on the mitigation dimension of the climate transition.

<sup>2</sup> In the restructuring of economies and labour markets, the following misalignments may occur: “Temporal misalignments, which occur when job losses precedes job gains on a large scale”; “Spatial misalignments, which occur when new jobs are emerging in other communities or regions and are a challenge for people who lost their jobs and might have the right qualifications but have ties to the region where they live”; “Education misalignments, which occur when the skills levels or the occupation required by the transition have not been developed or needed under the previous system”; “Sectoral misalignments, which occur because of changing value and supply chains under the transition” (IRENA, ILO, 2021, p.62).

## Assessing employment and social impacts at global, national and subnational level

The ILO has set up the Green Jobs Assessment Institutions Network (GAIN) which is an international network of individual researchers, research institutions and international organisations that aims at developing tools to better understand the effects of green policies on employment and therefore contribute to promoting the just transition to the green economy. To do so, GAIN developed a specific methodology that uses Input-Output Analysis and provides the possible effects of “what-if” scenarios on emissions and labour demand by industries. The results are assessed relative to a baseline scenario and indicate the direction and possible size of the effects (ILO, 2017).

The GAIN assessments aim to support policymakers, employers’, workers’ organisations, and other stakeholders to make informed decisions based on empirical methods and evidence-based research. While sharing a common methodological framework, the assessments vary in scope, context, and specific objectives, depending on country needs and capacities.

## Sectoral perspectives

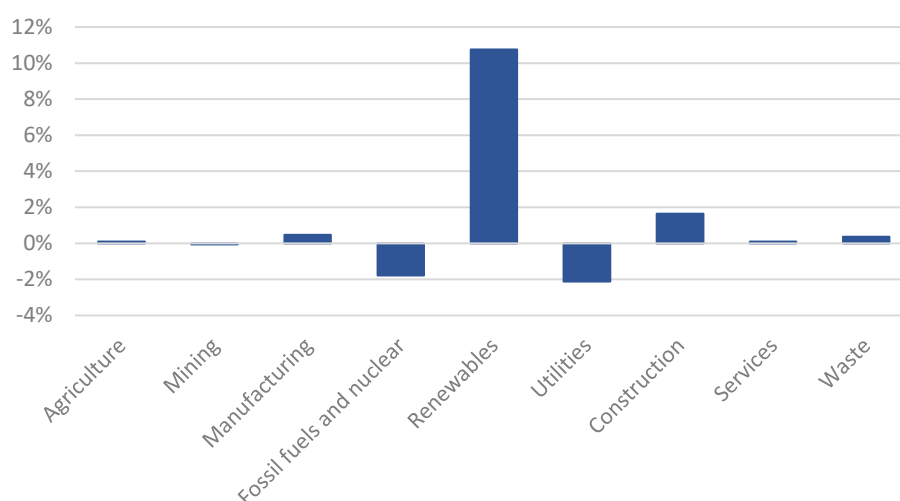
Sectoral dynamics will have specific employment and social impacts. This section presents a non-exhaustive illustration of impacts in a few sectors. The impacts of the transition will be felt across economies, including in sectors such as heavy industry, agriculture, and tourism.

### Impacts of the transition in the energy sector

The energy sector is critical to the transition. Together, electricity and heat production, transport, and buildings account for around 73 per cent of global GHG emissions<sup>3</sup>. The energy transition presents considerable potential in terms of employment generation and other social and economic benefits, but also brings disruptive effects that need to be addressed.

Nearly 24 million jobs will be created through energy-related policies and investments, notably with net employment growth in the renewable energy sector, in manufacturing and construction. The latest study by IRENA conducted in collaboration with the ILO shows that similar trends are likely to continue until 2050: “the energy sector as a whole will grow to 122 million [jobs] in 2050 under the 1.5°C pathway, compared with 114 million under current policies and pledges. As is the case today, solar will make up the largest share of renewable energy jobs in 2050, with 19.9 million jobs, followed by bioenergy (13.7 million), wind (5.5 million) and hydropower (3.7 million)” (IRENA, ILO, 2021). However, 6 million jobs are expected to be lost globally through the energy transition by 2030, mainly in fossil-fuel-related sectors (e.g. mining and coal extraction, petroleum and natural gas, fossil-fuel based automotive industry).

Figure 1. Energy sustainability and employment by sector in 2030 (percentage difference)<sup>4</sup>



Many of the jobs lost can be reallocated. We estimate that 5 million workers who will lose their jobs due to contraction in specific industries will be able to find jobs in the same occupation in another industry within the same country. Yet, irrespective of efforts towards the reallocation, between 1 and 2 million jobs will be lost without equivalent vacancies arising in other industries.

<sup>3</sup> [World Greenhouse Gas Emissions in 2018](#) data provided by the World Research Institute

<sup>4</sup> Notes: Percentage difference in employment outcomes between the IEA 2°C and 6°C scenarios by 2030 (ILO, 2018)

Furthermore, the transition from fossil fuel power generation to renewable energies will imply changes in value and supply chains. For example, phasing out fossil fuels and moving towards renewables such as solar energy will imply inter alia a shift of inputs from fuel extraction to semi-conductor materials. If both inputs are domestic, the shift will take place from one industry to another, and employment creation will depend on labour productivity. If a new solar panel value chain heavily depends on imports, employment creation will move to the country that supplies the intermediary inputs (IRENA, ILO, 2021).

Lastly, socio-economic impacts will be felt most strongly at the subnational level. With structural dependencies on the coal-producing industry and coal consuming sectors (power, cement, etc.), coal regions are facing specific challenges related to the changes of the local economy.

#### Companies and the energy transition: emerging efforts in tackling employment and social impacts

While coherent public policy is a driving force for Just Transition, it also needs to be operationalised at company level. Initiatives that seek to address employment and social implications of decarbonisation measures are emerging.

**Ørsted**, a Danish energy company may serve as an illustration. Once one of the most coal-intensive energy companies in Europe, Ørsted has set the ambition to become CO<sub>2</sub> neutral by 2025. In 2020, Ørsted signed an agreement with North America's Building Trades Unions (NABTU) to move construction workers into the offshore energy industry. According to NABTU, labour unions have been wary of a rapid transition to renewable energy over concerns it will lead to a net loss of middle-class, career-sustaining jobs. However, NABTU and Ørsted have jointly agreed on a plan to transition the workers into the new jobs ensuring decent pay and social protection. NABTU represents more than three million tradespeople from 14 companies. Ørsted and NABTU collaborate to help train workers and expand career pathways in the offshore renewable energy.

Another example may be found in "**Enel**, an Italian multinational in the electricity sector, employing 62,080 people, [which] has set a science-based CO<sub>2</sub> emissions target and has committed to decarbonize its energy mix by no later than 2050. As part of its decarbonisation plan, Enel planned to close 13 GW of thermal power stations in Italy while expanding renewable energy, demand management and other measures. It worked with local government, business, and communities where the thermal plants are located to develop plans for new economic development post-closure. Enel also agreed a Global Framework Agreement with its sector global unions and a just transition agreement with its Italian unions" which covers issues related to recruitment plans, training and skilling, early pension or professional mobility (Just Transition Center, the B Team, IP2018).

## Impacts of the transition in waste management and the circular economy

While the circular economy is an issue distinct from the climate transition, there are important ways in which the shift to circularity can support climate goals, especially through waste management, efficiency gains and waste-to-energy options. Waste accounts for 3.2 per cent of total global carbon dioxide (CO<sub>2</sub>) emissions with wastewater contributing 1.3 per cent and landfills 1.9 per cent<sup>5</sup>.

Through measures towards a circular economy, a net global gain of more than 7 million jobs will be generated by 2030. But while nearly 78 million jobs will be created, almost 71 million will be lost. A large proportion of those – nearly 49 million – can be reallocated, but nearly 22 million will be displaced without vacancies in the same occupation opening up in other industries (ILO, 2018). At the sectoral level, employment gains will be led by growth in services and waste management while losses are expected in mining and manufacturing. This can be largely explained by the replacement of the extraction of primary resources and the production of metals, plastics, glass, and pulp by the recycling and reprocessing of secondary metals, plastics, glass, and pulp.

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