

POLICY ANALYSIS BRIEF

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Strengthening Just Transition Policies in International Climate Governance

Summary

Following the emission reductions pathway agreed to in the 2015 Paris Climate Agreement¹ implies major transformations in societies as we know them and, logically, in the worlds of work, employment, and working families. Understanding those impacts and, most importantly, anticipating situations of hardship are critical for building people's support for climate action.

The concept of just transition—as a strategy aimed at protecting those whose jobs, income, and livelihoods are at risk as a consequence of climate policies, or more broadly as the world pursues more sustainable pathways—presents the advantage of engaging with those workers and communities most affected, giving them an active role in rethinking their future.

This policy analysis brief provides some context and history to the concept of just transition, elaborates on its key policies, and examines how it could be further incorporated into international climate change policy. It also aims at providing a stepping-stone for broader engagement by the climate community on this issue.

The brief starts by setting the scene for a discussion on just transition. The context for this conversation is one where growth and employment are erroneously pitted against ambitious climate policies and where irresponsible politicians create the false opposition between short- and long-term priorities. It is a context where environmental protection is framed as a luxury, and working people are asked to endorse environmentalism as an elitist concept. However, it is also a context where a growing number of civil society actors and trade unions are working together to develop an alternative strategy, with the concept of just transition at heart.

The second section screens the main recommendations of the Stanley Foundation's report on 1.5° C through the lens of just transition strategies,² identifying the areas where more work is needed to protect workers and communities from the potential impacts of climate policies, as well as to develop a different economic model in regions still dependant on the fossil-fuel economy. It discusses the potential impacts of a fossil-free electric



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grid, massive changes in transportation, the deployment of the circular economy, and changes in agriculture and food systems. Each of these transformations will have different impacts on jobs and communities. Understanding people's needs and supporting an informed dialogue with those impacted is critical for moving forward with strong public support.

The third section introduces the concept of just transition as one of the tools for responding to the challenges described in section two. It explains its emergence from the North American trade union movement and its development over the past decade into a landmark demand of the global labor movement. It also introduces the more recent adoption of the just transition concept by nongovernmental organizations (NGOs) working on climate change, such as the World Wildlife Fund (WWF), Greenpeace, and Friends of the Earth (FoE). The section shows the dynamism of the concept and its capacity to bring diverse communities to the same table, calling on common demands in support of more-ambitious climate action.

The fourth section introduces key policies that are part of the just transition strategy and provides examples of their implementation in the climate and energy transition, as well as past experiences that could inspire and inform the transition to zero-carbon societies. Understanding these policies and, most importantly, the need to deploy them as a package as soon as possible is fundamental to winning the trust of communities that have long been ignored by policymakers or that are struggling to even conceive of a world without their main source of income. It also helps to illustrate how international decisions could be translated on the ground.

Section five introduces the history of the just transition concept in international forums, notably the United Nations Framework Convention on Climate Change (UNFCCC) and the International Labour Organization (ILO), which, since the adoption of the Paris Agreement for the former and the guidelines on just transition for the latter, already provide a good basis for national work. Building on these two instruments should help in further deploying the concept internationally and strengthen a positive, pro-people vision of the international climate regime.

The last section explores potential venues and outcomes at the international level that could provide further momentum to the concept of just transition, with the ultimate objective of allowing further ambition through a stronger social commitment by governments. It suggests further incorporating the concept into UNFCCC nationally determined contributions (NDCs), supporting the development of a standard at the ILO, calling for the G-20 to start sharing experiences on the ways the transition is

being implemented, and making the case for just transition to become a link between the realization of Sustainable Development Goal (SDG) 8 on decent work for all and SDG 13 on climate action, among other recommendations.

A Social Case for Climate Action

Although progress has been made to address climate change at the international level, several barriers must still be removed to ensure the achievement of the Paris Agreement's goals. This includes the use of the "jobs-versus-environment" narrative by irresponsible leaders, which has served to undermine ambition, despite the many examples of environmental policies that have led to development and job creation. This section discusses the need for stakeholders to develop plans to address, in a synergistic manner, the multiple challenges faced by working people and communities across the globe, including inequality, precarious or unsafe work conditions, and environmental degradation. The idea of just transition is then presented as a bridge between these issues and as a way to bring workers on as constituents for climate action.

Never has the international community seemed so convinced about the urgent need for climate action as it did when the Paris Agreement was signed on December 12, 2015, yet never has the same community seemed so in need of demonstrating conviction about the pathway to follow less than two years later. The need for deploying all possible efforts to keep temperature rise below 1.5° C compared with preindustrial levels has never been clearer. Every day brings news of increasingly severe climate-related disasters, which will only increase and worsen unless drastic actions are taken to cut emissions to zero. The good news is that at least as often, a report comes out highlighting the opportunities for improved health, jobs, and overall prosperity that come with the transition to a zero-carbon economy.

In addition to the 1.5° C goal, the international community incorporated in the Paris Agreement a commitment to secure a just transition that creates decent work and quality jobs for workers. Also in 2015, the *Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All* was unanimously adopted in the ILO—the UN agency mandated to work on employment and other social policies. The guidelines' adoption in the ILO implies their acceptance not only by governments but also by the two other parties that govern the organization: employers and trade unions. The international climate regime got stronger with the incorporation of these social principles.

Nonetheless, the gap between these international decisions and domestic ambitions keeps widening. Many leaders—either because they don't see the need to be ambitious

“right now” or because they are afraid of the potential impacts on polls that may accompany implementing a climate transition—are not acting fast enough. And the risk of job loss is often the wall behind which they hide to justify lack of action.

For a long time—at least since the 1997 Kyoto Protocol until the beginning of the economic crisis in 2008—the employment dimension of climate policy was largely ignored. The crisis and the (later abandoned) prospects of an environmentally sound recovery in the form of a Green New Deal helped connect climate and jobs, highlighting the opportunities for job creation. And indeed, millions of jobs today can be attributed to environmental protection policies and investments. Unfortunately, those have not necessarily appeared where the fears for job loss are the highest.

The absence of a plan for handling the social transition from fossil-fuel dependence is without doubt one of the barriers to raising ambition: Rather than developing a solid response to social justice concerns, politicians tend to opt out when the risk of job loss is raised.

This could be attributed to the difficulties implementing long-term policy and strategies within short-term political timeframes, or simply short-sighted leadership. Unfortunately, the urgency the world faces does not allow time for delay, as waiting will only aggravate social injustices.

Most importantly, civil society organizations and trade unions are increasingly connecting the dots between these challenges and realize that they need to find common language to advance joint proposals and strengthen each other’s demands. Succeeding in this task will be critical in bringing new constituencies to the climate movement, in particular working people, that have so far stayed relatively removed from mobilization for climate action.

It is therefore time to build on this positive trend of cooperation to further develop the concept and scope of the just transition plan—a plan that should provide a response to the interconnected challenges of inequality, unemployment, and environmental degradation. A plan that requires the climate community to become more educated on labor and social policies (a similar effort to the one this community undertook to call for changes in finance or tax policy). A plan that should help societies transition into a prosperous, climate-sound world.

In the next section, we will see why those convinced about the need for climate action and the implementation of the Paris Agreement should further assess their potential social implications and define the targets and scope of the just transition policies needed to build a stronger case for change.

A Just Transition to 1.5° C: Understanding the Social Challenges Ahead

This section screens the main recommendations of the Stanley Foundation’s 2016 report *Setting Climate Action Objectives for Pursuing the 1.5° C Target* through the lens of just transition strategies, identifying the areas where more work is needed to protect workers and communities from the potential impacts of climate policies, as well as to develop a different economic model in regions still dependant on the fossil-fuel economy. It discusses the potential impacts of a fossil-fuel-free electric grid, massive changes in transportation, and the deployment of the circular economy, as well as changes in agricultural and food systems. Understanding employment and other social impacts of these trends will contribute to building trust and an informed dialogue between those promoting ambitious climate action and those among workers and communities that have not yet joined that group.

It is important to say at the outset that the goal is not to prevent action by highlighting potentially negative impacts, but rather to anticipate change and therefore plan for putting in place the right accompanying framework. Taking no action on climate change would of course lead to catastrophic impacts, including on jobs and livelihoods, and thus a climate-sound trajectory is the only positive pathway to take. With this in mind, the objective is to build a strong constituency for climate action, demonstrating the compelling case for social justice behind climate ambition and thus the need to deploy efforts to win the hearts and minds of, in this case, working people and communities affected by change. In these communities lie the seeds of a strong climate change constituency whose interests are strongly aligned with taking proactive climate action but that will take root only when fully included in the conversation.

The 2016 Stanley Foundation report on pursuing the 1.5° C target outlined eight policy interventions or strategies that could help societies develop 1.5° C trajectories:

- Decarbonize the power sector, with the goal of doubling the share of renewable energy by 2020 from 2015.
- Scale up circular economy strategies.
- Expand the coverage of carbon pricing.
- Phase out fossil-fuel subsidies.
- Transform biological land use from a carbon source to a carbon sink.
- Support research and development to identify medium- and long-term solutions for challenging sectors, particularly steel, cement, aviation, and agriculture.

- Transition to a low-carbon transport sector, with the goal of eliminating manufacturing of vehicles with internal combustion engines by 2030.
- Modernize existing building stock and ensure the sustainable construction of new structures.³

At the same time, the report identifies several crosscutting themes, including the need to “[b]uild a just and equitable transition to a 1.5° C world.” It states, “Efforts to transition away from fossil fuels and to deploy sustainable infrastructure should be socially inclusive. Climate action strategies should support the populations most vulnerable to both the impacts of climate change and the effects of the transition to a decarbonized society.”⁴

These policies make sense for the climate community, but much work still needs to be done to understand the changes implied for labor markets, employment, and many communities dependent on the fossil-fuel economy. Lack of sound knowledge about these impacts gives additional power to those who support the status quo, as they can use the legitimate concerns of workers and communities to their advantage. The next step will therefore be to assess, from a just transition perspective, the diverse potential impacts and policy responses related to the achievement of interventions that put societies on a 1.5° C pathway.

Understanding Labor Market Dynamics Underpinning a 1.5° C Trajectory

The diversity of impacts of all of the interventions mentioned in the Stanley Foundation report makes it difficult to make a comprehensive assessment of employment, livelihoods, and just transition responses in this short policy analysis brief. Therefore, we will concentrate on a few of the policies, hoping this exercise will be pursued in the future to cover other areas. It will be fundamental to keep in mind that an honest assessment of these dynamics and a commitment to support those impacted will help build trust and allow for the creation of an alternative economic development strategy for and by these workers and communities.

The Stanley Foundation report calls for **decarbonizing the power sector**, with one short-term objective, doubling renewable energies between 2015 and 2030, along with other implicit medium-term goals, such as phasing out coal-based utilities and power-related extraction activities (coal, gas). The effects of doubling renewable energy and phasing out coal and gas are evaluated below, from a just transition perspective.

Doubling renewable energy capacity. Numerous reports, including global and country-level assessments, have shown the labor intensity of renewable energy development, notably in the installation phase, and its positive impact on

job creation.⁵ Doubling renewable energy capacity should in principle have a similarly positive impact. That said, from a just transition perspective, attention should be paid to the quality of the jobs created, as well as to the capacity of the industry to develop shorter supply chains, therefore supporting local economies and industrial dynamics. The employment of women in the renewable energy sector seems low, similar to the traditional fossil-fuel sector. It would be important to ensure that increased renewable energy capacity goes hand in hand with efforts to improve women’s participation in the sector.

Phasing out coal-based utilities. The Stanley Foundation report does not suggest an end date for coal-based utilities, but it would not be unreasonable to think that in order to stick to 1.5° C, policymakers would consider phasing them out in the next 15 years at the latest in countries of the Organisation for Economic Co-operation and Development (OECD).⁶ This is an extremely challenging timeline for organizing the retrenching and reskilling of workers and the diversification of the small and medium-sized cities where coal-based utilities are the biggest employer. Interesting examples of conversions are starting to emerge (Hazelwood in Australia, Widows Creek in the United States; the former will be explored in a case below), but these negotiations concerned closing only one site. A more extensive phaseout would require stronger federal or national government engagement and funding so that the rights of workers in this sector are as homogenous as possible. It is important to keep in mind that workers in the utilities sector tend to be medium or highly skilled, and that jobs in renewable-energy-powered sites and/or the grid offer opportunities that align well with their career pathways, provided the right skills development and support are in place.

Phasing out coal and gas extraction. Often considered as one and the same, the transition of coal miners presents a different dynamic than the transition of utility workers. Their skills profile, the relative distance between their workplaces and other employment alternatives, and in many places a long history of discrimination, precarious work conditions, and exploitation make coal miners reluctant to engage in a discussion about their future. Previous coal phaseouts—based mainly on economic decisions—left coal-mining communities in territories with degrading public services, growing unemployment, and a lack of opportunities for young people. The climate transition has to factor in these historical facts to build a powerful case for protecting these communities. When it comes to gas, again, the profile of workers is different. Capital-intensive gas extraction—in particular shale gas—employs many in the preextraction phase (e.g., construction workers) and quite-skilled workers in the operations phase. Alternatives for these different profiles need to be developed, assuming

those in operations would likely be reemployed within the same companies.

The Stanley Foundation report also calls for **transitioning to low-carbon transport** and for phasing out combustion engines by 2030, thus anticipating a surge in the use of electric vehicles. In the long run, a massive transformation of mobility systems awaits us. A just transition assessment of these trends would highlight the high risks for some labor-intensive work sites in the automobile industry, which tends to be organized around models; plants without electric-vehicle models could soon be targeted for restructuring. It should be noted that some of the leading automobile companies have chosen to put their electric-vehicle facilities in countries with the lowest labor costs, intentionally building on the jobs-versus-environment narrative in places that have traditionally been manufacturing centers.

In the long run, the opportunities for job creation in a different mobility setting remain largely unexplored. It is well known that public transit and rail are good-quality job providers, and their growth is needed in order to deploy low-carbon mobility. Nonetheless, this sector has to develop further, connecting different mobility demands (commuting, freight, leisure) and matching them with low-carbon alternatives. The extent to which sectors like aviation and shipping will adapt to this new scenario is still to be confirmed, as these industries have for the moment only made marginal efficiency gains and forecast growth rates that would not be in line with climate targets.

The report introduces a concept relevant to just transition, the importance of organizing **transformation toward circular economies**, which implies changes in heavy industries, agriculture, and other material-intensive sectors. As opposed to the field of energy, the challenge for just transition here is less related to a phaseout than to a transformation, which requires important investments in research and development, deployment, and the reskilling of workers already engaged in these sectors. That said, these industries—in particular heavy industries such as steel, cement, and aluminium—have yet to prove that they can deliver on a zero-carbon supply chain, increase the amount of reused materials, or transform the production processes. Rather, they have been at the forefront of blocking policies that could support their transformation, often rallying workers with them. The strong cultural and territorial link of these work sites with their communities makes it even more important to look at the industrial sector beyond a competitiveness angle and consider the ways a just transition framework can bring these communities on as climate advocates.

In the **agriculture** sector, some people advocate for technological solutions to lower emissions and increase productivity, which could potentially hurt the livelihoods

of vulnerable farmers and laborers; others advocate for techniques that lower or eliminate chemical, greenhouse-gas-intensive inputs, requiring increased labor intensity. While it is possible that what is needed is a combination of approaches that vary from region to region, labor issues and rights should be factored in as part of the debate about reducing agricultural emissions. It is important to keep in mind that agriculture remains the most dangerous economic sector in terms of occupational deaths and injuries. While techniques like organic farming may keep agriculture workers away from pesticides that can harm their health, these systems do not always perform better in terms of wages or other occupational hazards than their industrial equivalents. Conversely, industrial systems not only put workers in contact with pesticides but make small-holder farmers dependent on or highly vulnerable to the large agribusinesses that produce seed, chemical, and other technological inputs. A proactive approach aimed at making agriculture a better contributor to the prosperity of communities, while also climate compatible, is greatly needed.

This section has shown the diverse impacts of the transition to a zero-carbon economy, and though they should not be underestimated, addressing these issues is achievable with sound policy and strategy. Solutions exist and experience proves that if anticipated and properly planned and funded, this transformation can bring workers and communities to a better place than where they are, and that is certainly better than dealing with these issues alongside the adverse effects of climate change further down the road.

In the next section, we will explore how the just transition concept came to fill the gap between the challenge of climate change and the policy response needed to provide security and hope to working people. Understanding how it has developed will, hopefully, encourage those wanting more climate action to build bridges with working people and communities. These communities, which have long viewed climate policies as a threat, have the potential to become climate allies, so long as investments are made in their future livelihoods and well-being.

Emergence of the Concept of Just Transition and Link to Climate Discussions

This section introduces the concept of just transition as one of the tools for responding to the challenges described in section two. It explains how it emerged in the North American trade union movement as well as its development over the past decade as a landmark demand of the global labor movement. It also introduces the more recent adoption of the just transition concept by international and national civil society networks. This section shows the dynamism of the concept and its capacity to bring diverse communities to

the same table and align these stakeholders behind common demands in support of increased climate ambition.

The first references to the concept of just transition appear in the North American trade union movement. In the United States, it is often connected to the work of Tony Mazzocchi in his attempt to make a bridge between the peace movement and trade unions through the creation of a superfund—which would later be called “just transition fund”—to support workers whose jobs might disappear if disarmament was implemented.⁷ As Mazzocchi put it in 1993, “Those who work with toxic materials on a daily basis, who face the ever-present threat of death from explosions and fires, in order to provide the world with the energy and the materials it needs, deserve a helping hand to make a new start in life.”⁸

Brian Kohler, a Canadian union activist, used the term *just transition* in 1998 as “an attempt to reconcile the union movement’s efforts to provide workers with decent jobs and the need to protect the environment. As Kohler had clearly stated previously, ‘The real choice is not jobs or environment. It is both or neither.’”⁹

In 20 years, the union movement perception of environmental challenges has evolved and with it the definition, boundaries, and scope of the just transition needed. Today, just transition can be understood as a conceptual framework that captures the complexities of the transition toward a zero-carbon society, while examining the opportunities for public policy interventions and solutions that are, most importantly, inclusive of the concerns of workers. Others in the climate movement have started to develop their own definitions and approaches to the just transition concept, including NGOs (the WWF’s just energy transition, Greenpeace’s just transition demands for fossil-fuel workers, and the Just Transition Alliance in the United States), philanthropic foundations, and think tanks.

The integration of the concept of just transition with these NGO policies does not only mark a departure from old confrontations between labor and environmentalists, it also gives an indication of the willingness of both groups to build a common language to help structure demands and, hopefully, mobilizations. This cooperation undoubtedly helped achieve progress in the intergovernmental front.

At the international level, at least three phases can be identified in regard to incorporating employment or just transition aspects into climate debates:

The first phase spanned approximately from the beginning of the UNFCCC in 1992 and the negotiation of the Kyoto Protocol in 1997, to the Poznan Conference of the Parties (COP) in 2008—which coincided with the beginning of

the global economic crisis—when international climate negotiations dealt only marginally with social and economic issues. It was acknowledged that emission reductions implied changes in several economic sectors. However, the small emission reduction target agreed on in Kyoto did not generate major changes in any of those sectors. The nonratification of the Kyoto Protocol by the United States was based on concerns about the treaty’s impacts on the American economy. Those supposed impacts were not countered at that time by any other research.

A second phase can be identified from 2008 to 2014, when the growing involvement of trade unions and a better understanding of the need to counter the jobs-versus-environment narrative led to research on the potential job opportunities of a climate-sound agenda,¹⁰ including many national reports. Some were gross estimates, and others net assessments. All identified positive outcomes. For the first time, the issue of employment appeared in the UNFCCC negotiating text that would be discussed at COP15 in Copenhagen in 2009. The concept of green jobs was very much at the heart of this approach, which, despite all its shortcomings, helped make a strong connection between the two worlds of employment and the environment.

We have now entered a third phase, as a growing understanding emerges across negotiators and civil society organizations, led by trade unions: The constituency for climate action was not solid enough, and often workers’ legitimate job concerns were used to stop or weaken legislation. Governments needed to show a commitment to securing the lives, livelihoods, and jobs of those who depend on the fossil-based economy. Equally, the worker-led push in the ILO for putting climate change on the organization’s agenda (first in 2013, leading to a decision to hold a meeting of experts in 2015) helped reassure negotiators on the tactics, as many expressed concerns on a tentacular climate agreement—showing again that some were not ready to connect the dots. Intense advocacy calling for just transition language in the Paris Agreement, as well as negotiation toward the ILO guidelines on just transition, marked a high point in the international scene on this issue.

As with many other elements in the Paris Agreement, the challenge is to further develop this work beyond that recognition. In addition to unions, many other constituents are trying to build on this just transition commitment to advance the climate agenda, although their understanding of just transition might vary. Therefore, with discussions on just transition being held in multiple forums, it is important to take stock of the different aspects of the concept and explore how those can help build a narrative of social justice for climate advocates.

What Just Transition Means and Examples of It in Practice

This section introduces key policies that are part of the just transition strategy and provides examples of their implementation in the climate/energy transition, or in past experiences that could inspire the transition to zero-carbon societies. Understanding these policies and, most important, the need to deploy them as a package as soon as possible is fundamental for winning the trust of communities that have long been ignored by policymakers or that are struggling to even conceive of a world without their main source of income. It also helps to illustrate how international decisions could be translated on the ground.

If just transition strategies aim at being broad and all-encompassing, the diversity of the world of work and the challenges faced by countries and regions in the transition could render difficult the task of defining a single approach. The initial policies identified by unions¹¹ and broadened in the context of the ILO *Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All* set a bar for what is needed from the international community to achieve results that are even better than past transitions.

A clustering of the recommendations based on the ILO guidelines would lead us to focus on the following aspects: macroeconomic, sectoral, and enterprise policies; rights and occupational safety and health; social protection; skills development; active labor market policies; and social dialogue and tripartism. Following are examples of how those policies might look in the context of the climate transition.

Macroeconomic, Sectoral, and Enterprise Policies

The transition to a zero-carbon economy—and of utmost importance, the first decade of that transformation—requires a massive, coherent, and proactive approach to investments, economic policy, and enterprise-level transformation. New jobs must be created in sectors where growth is needed under the new model, both in new companies, which could belong to cooperatives or models related to the so-called social economy, and within old ones. Sectoral policies setting long-term targets on emissions and social progress, including but not limited to the energy sector, need to be developed around the world. Investments could be driven, in the initial phase, by public sector policies, including procurement, sustainable infrastructure projects, and public regulations. This is fundamental for fighting the jobs-versus-environment narrative and for deploying job alternatives in regions that will face job declines before sustainable jobs arise, so people see the alternatives as something concrete and accessible to them.

Denmark's Wind Sector¹²

Starting in the 1970s, Danish social dialogue produced a strong industrial and climate policy aimed first at energy independence and later at transitioning the power sector from coal to wind. Over time, Denmark became a net energy exporter, decreased coal use by 50 percent, and increased the share of wind in its power sector to 40 to 50 percent. It also produced a globally competitive wind industry that includes publicly traded Vestas, the world's second largest wind turbine manufacturer, and Dong Energy, which is majority state owned and develops and operates wind and other energy projects. In 2015, Denmark's wind industry employed 31,251 people, and wind power delivered 42 percent of Denmark's electricity.

If most discussions on just transition focus on phasing out a sector, closing a plant, or restructuring, it is critical to focus on generating new jobs and creating new sectors, as has been done in Denmark. The experience of Danish workers with green policies has been positive and thus created a new constituency of enthusiastic supporters of climate action.

Rights and Occupational Safety and Health

The quality of the jobs created and the perceived gaps in terms of working conditions between fossil-fuel-based jobs and new ones must be addressed. Efforts must be taken to ensure green sectors are appealing and provide decent incomes and secure, safe working conditions. Particular importance must be given to working conditions in the renewable energy supply chain, as well as to the multiple service-led jobs created to support a zero-carbon economy. Making the jobs in the zero-carbon economy appealing is important to building support for these jobs among working people, as the connection between workers and their jobs goes beyond wages to incorporate the sense of belonging to a broader economic project where they are respected and valued.

Quality of Employment in Renewable Energies: What Do We Know?¹³

Scarce information is available on employment quality in the renewables sector. Neither employers nor international bodies have deployed research capacity on this issue. Despite this lack of information, the following is known:

—The quality of employment differs significantly within the renewable energy sector, yet conditions are usually in line with national sectoral conditions for manufacturing, construction, or maintenance.

—Some unions have undertaken research: Through its Union Institute of Work, Environment and Health (ISTAS), the Spanish trade union, Comisiones Obreras (CCOO), found that renewable energy jobs are more skilled and better paid than the average job in the energy sector. IG Metall found that salaries in renewable energy were 20 to 30 percent below average salaries for metal workers in Germany.

—Sometimes big energy companies branch out into renewable energy. Depending on legislation, working conditions from the parent company are carried over to renewable energy workers, or they are at least covered by the same sectoral collective agreement. However, sometimes these divisions are allowed to have different contracting systems, and they apply weaker standards.

Social Protection

If people feel vulnerable, they might be reluctant to support change. Social protection schemes, which could take the shape of social security systems and/or feature social insurance and public employment guarantee schemes, are key to ensuring justice during transition. A certain number of policies will need to be promoted to avert or minimize job losses, to provide income support, and to improve the employability of workers in sensitive sectors.

Social protection also needs to address the consequences of climate change and extreme weather events on the poorest and the most vulnerable. Unfortunately, insufficient attention has been given in the social protection sphere to the long-term risks posed by climate change. However, social protection approaches could inform disaster risk reduction and climate change adaptation based on established implementation frameworks for vulnerability.

The Challenge of Sustaining Coal Workers' Pensions¹⁴

US union miners are among the 10.4 million Americans with retirements tied to multiemployer pension plans, large investment pools considered low risk because they do not rely on a single company for financing. Two recessions, industry consolidation, and an aging work force have multiemployer funds facing a \$400 billion shortfall. Dozens have already failed, affecting 94,000 participants.

The US miners' pension fund, operated by the United Mine Workers of America and the mining companies' Bituminous Coal Operators Association Inc., relies on contributions from employers for about 20 percent of its income, with investment gains making up the rest. Fewer

miners means lower contributions. If the coal industry was to close entirely, there would be no contributions to the pension fund and its collapse only a matter of time.

In the words of former coal miner and current AFL-CIO President Richard Trumka, "we need a comprehensive approach to climate change mitigation and adaptation across our economy.... It has to begin with dialogue and negotiation with those whose lives and communities, healthcare, and pensions are bound up with carbon-based fuels."

Active Labor Market Policies

Active labor market policies include those helping enterprises and workers anticipating changes by facilitating access to jobs and strengthening employability. They focus on unemployed workers and workers at risk of unemployment, delivering employment services and providing information, guidance, and matching services. Along with skills training policies, active labor market policies are the operational arm for accompanying workers into the new economy.

Structural Change in the Ruhr Region¹⁵

The transformation of the Ruhr region in Germany (North-Rhine Westphalia) from a coal and steel stronghold into a much more diversified economy was a complex and long process, and a result of market forces, not policy choices. Nonetheless, 15 years of resolute decisions by all the partners involved transformed the region and provide several insights for thinking about the just transition needed for supporting climate action.

Transition in the Ruhr valley took place during a time when the work force in coal and steel shrank from 390,000 in 1960 to 39,000 in 2001. In the first two decades, the transformation showed little capacity to diversify due to several "lock-ins"¹⁶; a more dynamic approach to structural change started in the mid-1980s.

Among the many aspects of this strategy—which included a strong focus on industrial policy and support for sunrise technologies, following a bottom-up approach, and the critical role of codetermination with equal voices for workers and employers at the table—four key policies were developed:

- Wage subsidies for the reintegration of the unemployed and those at risk of unemployment.
- Labor market policy support for enterprise development.
- Combined promotion of employment and infrastructure.
- Integrated development of problematic urban areas.

Two key aspects are to be highlighted: the provisions aimed at supporting early retirement with a wage-safeguard scheme and, for those who were far from retirement age, a proactive plan through personnel development centers to accompany them into new jobs. The highest possible level of protection of working conditions was coupled with flexibility by the workers, who have to accept training and eventually geographical shifts. This was only possible thanks to the commitment of the negotiating trade union (IG BCE) and responsible employer behavior. An indicator of the success of active labor market policies shows that vocational training centers in the Ruhr reached a placement rate of 80 percent.

Skills Development

Supporting workers in their efforts to gain skills that allow them to obtain better and more sustainable jobs is key to building a constituency for climate action. Ensuring the adequacy of skills development portfolios, which in many countries are outdated or do not match labor market opportunities, is fundamental. Strengthening this in developing countries, where many working in fossil-fuel-related infrastructure have often had limited access to education, is critical for avoiding widening inequalities during transitions.

Upskilling Construction Workers in Argentina¹⁷

The Union of Construction Workers of Argentina (UOCRA) promotes training for workers in the field of renewable energies, providing workers with certified skills for biogas production installation, solar water heaters, and solar and wind power installation. This has an immediate impact on the deployment of these technologies in Argentina and on workers' income, as there is a wage premium for this knowledge. Current plans by the Argentine government to multiply renewable energy capacity in the next few years should lead to extra support for these training activities.

Social Dialogue and Tripartism

Social dialogue is the term used for describing institutional processes of discussion between trade unions, employers, and governments, as well as communities and all other relevant community groups.

Building an institutional setting where those affected by the transition can discuss, decide on, and be provided with resources to design responses to the challenges of the transition is a fundamental tool for strengthening democracies and building more social support for change.

Successful social dialogue structures and processes have the potential to resolve important economic and social issues, to encourage good governance, to advance social and industrial peace and stability, and to boost economic progress.¹⁸

Studies confirm the value of tripartite social dialogue in the context of climate change. "Tripartite social dialogue [is] a valid instrument in the analysis of the effects on competitiveness, employment and social cohesion in policies related to climate change."¹⁹ Examples such as the Ruhr valley above also show the value of bringing workers to the table at all stages of the planning and diversification process.

Efforts must be made so that social dialogue incorporates communities that are affected by economic transitions, such as rural communities or informal workers.

Community Renewal/Economic Diversification

Cities and territories have dynamic connections to companies in the fossil-fuel-based economy: The latter do not only provide direct jobs and generate indirect ones, they also contribute to public budgets and, depending on the country's system, they might be key funders (through taxes and/or philanthropy) of education, health, and infrastructure. Just transition policies need to help anticipate losses in revenue and economic activity in communities that are highly dependent on fossil-fuel-related work sites. They must also empower these communities so that investments are oriented toward options supported by the community. History tells us that even in the cases where workers affected by closures were protected, the economic life of the community did not survive the change, leading to further inequalities and injustice.

The Coal Phaseout Fund in China²⁰

Coal mining in China faces several challenges, including overcapacity, rising environmental impacts, historically unsafe and even deadly working conditions, falling prices, and the Chinese government's attempt to restructure the sector. The government has announced a goal of closing 4,300 mines and cutting annual production capacity by over 700 million tons by 2019.

With growing social discontent, in particular in the northeast, China has decided to allocate 30 billion yuan (\$4.56 billion) over the next three years to support the closure of small and inefficient coal mines and redeploy around 1 million workers. While this amount might look substantial, analysts estimate that the funds required to tackle overcapacity in the coal and steel sectors could reach 200 billion yuan, 70 percent of which would be needed for coal.

That said, this fund could represent an opportunity for thousands of coal miners who find themselves with no option other than returning to farming jobs, where income hardly meets survival levels. The extent to which the benefits of the fund would reach them, and their capacity to shape their use, are still far from clear.

The Just Transition Fund in the US Appalachian Region²¹

Conscious that many coal-dependent communities were not able to reap the benefits of even existing federal support for their transition, the Rockefeller Family Fund and the Appalachia Funders Network put in place an initiative aimed at supporting local networks, including grassroots groups, trade unions, and small businesses, in designing alternative economic projects for their community and presenting them for funding at relevant agencies. Projects that were granted include initiatives for strengthening the tourism sector, incubating social enterprises, and undertaking feasibility studies for developing local capacity for solar panel manufacturing.

This example represents a good experience of grassroots-led transition supported by top-down funds based on a broader transition policy.

them to transfer to other power generators. Under the agreement, early retirement packages will help create vacancies for workers displaced by the closure of Hazelwood. The scheme will contribute funds to participating employers to support these packages and facilitate the redeployment of Hazelwood workers.

The worker transfer scheme is part of the Labor government's \$266 million package for the Latrobe valley, which includes the \$50 million Economic Growth Zone to support business growth and the establishment of the Latrobe Valley Authority. The authority's worker transition service is also providing tailored support to employees and families to give them the skills, training, information, and personal support they need to make a fresh start.

Building a Just Transition in Different National Contexts

With a policy package having been defined internationally, what room is there for locally suitable solutions? The policies contained in the just transition concept seem so connected to the social and economic policies of a given country that they could easily be dismissed as impossible to fund (in the poorest countries) or too generic and already in existence (in the industrialized world). With this in mind, it is critical to start developing more-accurate descriptions of what is needed in different countries and sectors. This needs to be done as close to the affected regions as possible.

An initial set of proposals on how to translate the policy package in three clusters of countries (industrialized nations, emerging economies, and least-developed countries) was presented in a 2015 paper that recognized the limits of such a categorization.²³ In the case of fossil-fuel-dependant least-developed countries, which are not sufficiently covered in this report, the need for developing a strong tax base to support the launch of a social protection floor and generate savings to anticipate diversification investments is of major importance.

In addition to the progress made in the labor community, many civil society organizations started developing their own thinking about just transition—sometimes through dialogue with trade unions, (the route taken by the WWF, Greenpeace, and FoE), sometimes through bottom-up dynamics (the case with the Just Transition Alliance in the United States).

The WWF is one of the organizations that has undertaken work to define what a just transition would mean, bringing to its discussions the past work of trade unions but also incorporating other areas that it views as important. In a background document to a series of meetings on this topic,²⁴ it introduced the idea of principles on which a just transition

The Biggest Challenge: Comprehensiveness

All of these policies have been tested and are recognized to be useful in the context of social change. What has yet to be attempted is an ambitious, policy-driven implementation of these strategies simultaneously, as a package, to address the challenges of a transition. The example below, even if too recent to be evaluated, and too local to be reproduced, shows that there is progress on comprehensive strategies, giving hope for the capacity of citizens to drive strong demand for a just transition.

Just Transition for Hazelwood Workers and the Latrobe Valley (Australia)²²

The Hazelwood Power Station is Australia's most-polluting coal-fueled thermal power station. On November 3, 2016, the owner, Engie, announced the closure of the plant by the end of March 2017, giving the workers and local communities only five months' notice. An agreement negotiated between the government of the state of Victoria, trade unions, and the company has launched a scheme costing AUS \$20 million (US \$15.3 million) to help around 150 retrenched Hazelwood workers remain in the industry by allowing

would be based: a common-good-consensus vision; integral policy reform, including integrated employment, training, and education policies; adequate social safety nets; and enhancing social and environmental resilience.

FoE adopted a different approach, promoting the concept of just transition but letting different country organizations develop (or not) their own approach to it. FoE Scotland launched a “just transition dialogue initiative” involving workers and communities currently dependent on jobs in oil, gas, and other high-carbon sectors.²⁵ At the same time, FoE UK used the concept of just transitions as a title for a landmark report on climate scenarios but did not refer to workers or jobs in its content.²⁶

These differentiated national approaches within international networks can also be seen in Greenpeace, which incorporated this into its demand for just transition as part of its climate asks from 2014, where it started asking for a “a just transition to 100 percent renewable energy for all by 2050,” calling on governments to ensure that the transition to clean, sustainable energy is fair to workers and communities, and that more opportunities are created than lost.²⁷ In Canada for example, Greenpeace incorporated elements related to indigenous peoples’ demands into the just transition concept.²⁸

Less internationally known networks have also developed work on just transition independent from the dynamics detailed above. This is the case with the Just Transition Alliance in the United States, for example, which has been working to bring together local communities and local union chapters around the need to organize a bottom-up strategy for the transition. Other environmental organizations such as the Sierra Club and climate think tanks like E3G are also developing work on this issue.

All these policies provide a basis for discussion to those actors willing to build a stronger case for a socially fair transition. They help open a dialogue channel with workers and communities that might be scared about the impacts of climate policies on their jobs and livelihoods. They are also flexible enough to allow different social and cultural environments, and most important, they enable a longer-term, more-systemic transformation of societies by giving the most vulnerable populations a sense of security and belonging to the new model.

In the next section we will see how the international community has appraised this issue and the positive impact it can make in fostering the idea that climate multilateralism is not just a technical discussion but one in which the future of working people is taken care of.

International Governance of a Just Transition: Progress at the UNFCCC and the ILO

As we have seen, the rationale for bringing employment and workers’ rights to the UNFCCC is related to the need to address several impacts on the world of work arising from climate disruption, or actions to stop it, and to build stronger support from workers as advocates for climate action. The transition to a climate-sound society implies seeing some jobs disappear, others emerge, and others transformed; experience shows that uncertainty in the way those impacts will be dealt with leads important parts of society to resist the necessary change.

From early references to just transition in international trade union conferences, such as the Trade Union Assembly on Labour and the Environment hosted by the United Nations Environment Programme, the concept managed to attract support from a variety of negotiating coalitions, including the G-77 and China, which represents developing countries in the UNFCCC. Argentina and the United States, in particular, were instrumental in supporting the insertion of this language in COP16,²⁹ as well as in the process that led to the adoption of the Paris Agreement. Equally, other actors in civil society and businesses joined trade unions in support of the concept.

That said, most of the just transition advocacy effort in the UNFCCC process came from the international labor movement, led by the International Trade Union Confederation. The confederation was at the origin of several communications stressing the need for language on just transition and decent work to be incorporated into the operational part of the Paris Agreement. Neglecting these issues in the agreement would have been seen as a signal that the cost for the transition to a low-carbon society will be unfairly borne by working men and women.

This multiactor, multilevel advocacy led to the adoption of just transition language in the Paris Agreement: “Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.”³⁰

Outside the UNFCCC process, milestones included the reference in the 2012 Rio+20 outcome document, *The Future We Want*, to the need for ensuring that workers are protected on the path to building more-sustainable societies through just transition strategies: “We recognize the importance of a just transition, including programmes to help workers to adjust to changing labour market conditions.”³¹

At the ILO, the first discussion of just transition took place in 2013 at the International Labour Conference on the issue

of climate change and its linkages to the world of work, “Sustainable Development, Decent Work and Green Jobs.” Among the conclusions of this discussion, where trade unions attempted to convince their counterparts of the need to negotiate a standard on just transition, was the decision to launch a process to develop just transition guidelines. Subsequently, *Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All* was unanimously adopted in 2015, a month before the Paris Agreement, aligning for the first time the issue in both the UNFCCC and the ILO.

Far from being the end of international policymaking on this issue, these guidelines are rather a starter for a better consolidation of the issue at the implementation phase and provide a tool for better coherence between intergovernmental organizations.

In the next section we will explore where the just transition concept can be advanced in the international climate space as a way to show unity in action and commitment to working people, as well as to provide better guidance to those willing to implement the Paris Agreement commitments.

Recommendations for International Action

This last section explores potential venues and outcomes at the international level that could provide further momentum to the concept of just transition, with the ultimate objective of allowing further ambition through a stronger social commitment by governments. It suggests further incorporating the concept into NDCs, supporting the development of a standard at the ILO, calling for the G-20 to start sharing experiences on the ways the transition is being implemented, and making the case for just transition to become a link between the realization of SDG 8 on decent work for all and SDG 13 on climate action, among other recommendations.

The fact that just transition strategies should be planned and implemented just make it at the national and often local levels does not imply that there is no space for international action to promote and strengthen them. The inclusion of the concept in the Paris Agreement and the adoption by the ILO of its guidelines on just transition have provided visibility and legitimacy to a demand that was for too long taken up only by trade unions and other supporting civil society actors.

Nonetheless, this is a time when the next steps need to be identified so that the strengthening, coherence, and support for just transition processes do not become empty promises.

We therefore now explore potential avenues for international action to move the just transition agenda forward. These

should not be seen as comprehensive; many things need to be done at the civil society level in terms of alliances, as well as at the national and local levels when it comes to participatory design and implementation of policies.

The UNFCCC and the Paris Agreement

The UNFCCC and the Paris Agreement must:

- Incorporate just transition commitments into the NDCs.
- Maintain just transition for workers as a permanent theme within the forum on response measures under the Paris Agreement.
- Allow the funding of just transition projects under the Green Climate Fund.
- Include just transition in the 2018 Facilitative Dialogue.

The commitment from governments to secure a just transition for workers appears in the Preamble of the Paris Agreement, along with other references to the need to protect human rights and achieve gender equality. It could be argued that as a crosscutting issue, just transition and the policies taken to protect workers and communities in a time of change should feature as a permanent item in the government agendas—an item on which they should report progress. The incorporation of just transition in NDCs, where governments could explain how they have assessed the employment impacts of their decisions, and most important, the measures they will take to support workers, seems like a key way forward. Some governments, such as South Africa’s, have already incorporated this in their first NDC.

Another stream relates to the future work program on response measures under the Paris Agreement, which could build on previous efforts pursued under the subsidiary bodies, where just transition featured for two years as a key part of the Forum on Response Measures. Having a dedicated, technical space, where good practice or challenging situations could be presented and debated, would contribute to further educating climate negotiators on these issues and build a bridge with progress happening on the ground.

Within the climate governance space, progress could also be made at the Green Climate Fund, where projects aimed at supporting communities and workers in their diversification efforts should be funded. This would be equivalent to the idea of a Just Transition Fund, which has been promoted in Europe by trade unions and civil society allies, for developing countries.

International Labour Organization

The ILO needs to play a much more ambitious role in supporting the transition toward a zero-carbon world. Until

now, it has focused on supporting governments in green job creation. However, a more forward-looking approach is needed, one where the ILO develops its own standard for managing the just transition, supports its constituencies (governments, employers, and trade unions) in facing transition challenges, and undertakes a testing of the impacts of its own economic and social recommendations on the environment, which tend to legitimize investments in unsustainable infrastructures.

An ILO Standard on Just Transition: If the Paris Agreement provides an internationally recognized standard for climate action, there is no equivalent yet giving governments binding guidance on the way the transition to a zero-carbon economy can be done in a socially fair manner. In the same way the ILO has developed standards on a variety of the world of work's challenges (child labor, health and safety, the transition from informal to formal economy, employment, industrial policy, etc.), the organization and its tripartite constituencies have the legitimacy and capacity to develop a standard on just transition that will provide a level playing field for the way societies build new economies in a fair and participatory manner. After two attempts (one in 2013, which led to the adoption of the guidelines on just transition, and one in 2016) the next possible moment for negotiating a standard is 2021. It should not be missed.

Implementation of the Guidelines on Just Transition: In 2013, the International Labour Conference discussed formally for the first time the links between the world of work and the environment, and the need to define, internationally, the just transition concept. A negotiation followed in 2015 that led to the adoption of the ILO guidelines. These guidelines must now be implemented on the ground, and a piloting phase in a sufficient number of countries should be organized to test the comprehensiveness of the tool and guide the process of standard development.

The "Green" Strategy and World Employment and Social Outlook – Trends 2018: The ILO will be celebrating its centenary in 2019, and it has decided to launch a certain number of initiatives that would shape the organization's work in the next century. One of them has been called "Green," and it relates to the organization's intention to mainstream environmental challenges in its work. One element of that strategy is the inclusion, in the ILO's flagship annual report, *World Employment and Social Outlook – Trends 2018*, of an assessment of the employment impacts of climate change and other environmental challenges, as well as their policy responses. The release of this report in 2018 should influence the UNFCCC Facilitative Dialogue and further encourage the inclusion of employment and just transition aspects in the NDCs.

The G-20 and OECD

Until now, the G-20 has not played a leadership role on climate governance, and even on issues closely related to its initial mandate—steering the global economy at a time of change in the power balance—the multiplication of technical groupings and meetings has not led to a stronger coordinated response. But with the focus around climate policies now turning to the implementation phase, a space could be seen for the G-20 to play a more active role in coordinating the policy responses to climate change, in particular those associated with just transition.

In a report to be released around the 2017 Petersberg Dialogue, the OECD, which officiates as one of the ad-hoc G-20 secretariats, makes clear recommendations on how the just transition concept could be brought into the scope of future G-20 work, including the call for G-20 countries to share policy experience in planning economic diversification and sectoral restructuring, including the transition of workers and communities.

SDGs and Agenda 2030

The SDGs represent a unique opportunity for building coherence across development plans and supporting a long-term policy alignment on critical challenges for societies at the country level. Just transition sits at the juncture between SDG 8 on decent work for all and SDG 13 on climate action. It is the untold goal. If the immaterial nature of the processes underpinning the just transition makes it difficult to list it among the indicators being negotiated for these two goals, it will be critical to ensure there is a strong connect at the national level between these two goals. The extent to which this will happen depends on civil society organizations, including trade unions, maintaining pressure on the linkages.

More broadly, the SDGs also provide an additional avenue for measuring progress on prosperity in countries that have expressed high ambitions on the climate front and might need support on other social aspects.

All these processes are examples of the multiple avenues in which progress is needed when it comes to strengthening the international governance of climate change through a just transition lens. This is even more critical at a time when working people are being told the UN space is one for serving the elites—often for opportunistic electoral reasons, sometimes based on the sad fact that the spaces for citizen interventions in the United Nations have been shrinking. The multilateral system's capacity to deliver on social justice would certainly counter this trend and contribute to a stronger sense of citizen ownership vis à vis these institutions.

Cities' Summits

Several processes are emerging with cities and regions at the heart of a multistakeholder response to the climate challenge. The importance of the territorial dimension for the success of a just transition makes us believe that further work should be done to connect this community with the concept and that the potential for developing just transition strategies at their level should be further explored.

Conclusion

Throughout this policy analysis brief, we have attempted to make the case for just transition policies as a bridge between climate ambition and social fairness. This connection has the potential to bring climate advocates to the same table with workers and communities that might be adversely affected by certain climate policies or climate impacts.

We have explored the labor roots of the concept and how others in the climate community are starting to own and promote the just transition concept. We also explored how advocacy by these groups led to the inclusion of the just transition concept in the multilateral system, including in the Paris Agreement

However, we cannot ignore that there is growing disengagement and mistrust of the multilateral system by

working people, who increasingly see it as defending the elites. Just transition offers the climate community a chance to give workers a space in the climate discussion where they can own and engage policies and strategies affecting the future of their jobs and livelihoods.

At a time when irresponsible leaders are capitalizing on anxieties and using inequality, and insecurity about climate transitions, against the interest of working people, we in the climate community must start showing how we can build a fairer, prosperous society for everyone, including future generations.

The only way to deliver this is to couple sound policymaking at the international and national levels with concrete developments and community involvement on the ground. This requires coordination and cooperation between NGO and grassroots groups, unions, like-minded governments, and employers, among others, so that just transition policies can be deployed as a package and plant the seeds for the long-term, deep transformation of societies.

There is a lot of work to be done to fully grasp the challenges and identify the solutions for achieving a just transition, but never before has the climate community demonstrated the level of intention it has now to do what it is needed to make it happen. It is time to translate this enthusiasm into action. There is no time to lose.

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high growth and sustainable development, based on innovative technologies and more sustainable production and consumption and lifestyles, while ensuring a just transition of the workforce that creates decent work and quality jobs.”

The preamble to Section III.E, “Economic and Social Consequences of Response Measures,” recognizes “the importance of avoiding or minimizing negative impacts of response measures on social and economic sectors, promoting a just transition of the workforce, the creation of decent work and quality jobs in accordance

with nationally defined development priorities and strategies, and contributing to building new capacity for both production and service-related jobs in all sectors, promoting economic growth and sustainable development.”

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