Mapping Just Transition(s) to a Low-Carbon World











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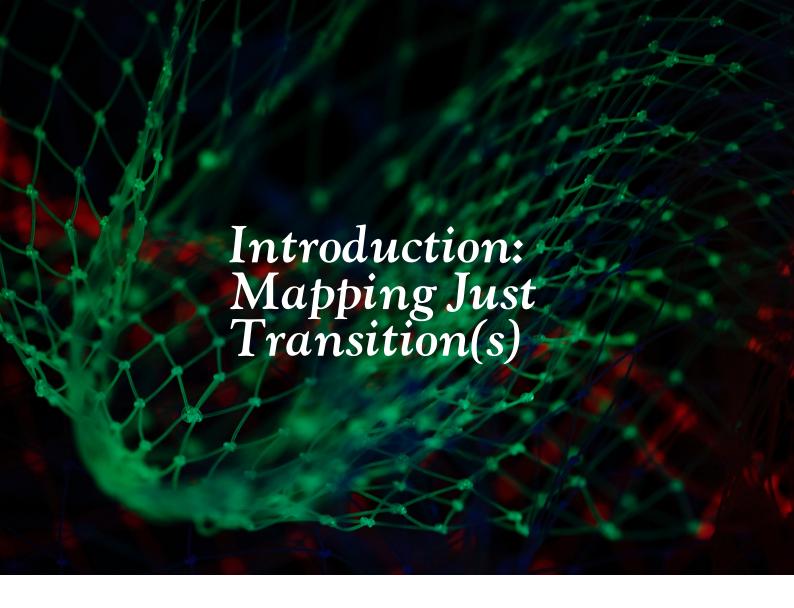
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HREE YEARS after the adoption of the Paris Agreement on climate change, the international climate regime is at another crucial moment: It is time to move from agreement to action and to adopt the Paris "rulebook" that will detail rules and procedures to implement the agreement (which entered into force in November 2016). Negotiating this rulebook has favoured a resurfacing of historic struggles within international climate policy, including those on differentiated responsibilities between developed and developing countries, and commitments to climate finance. A number of high-emitting countries are reluctant to fully commit to reducing their emissions, given the potentially negative impact on growth and jobs. Low-emitting countries, and especially those least developed countries which face the greatest risk from climate change, on the other hand, call for accelerated progress and greater support-through finance and technology transfers—towards their own mitigation and adaptation strategies.

At the heart of these struggles lies the fear that addressing the monumental climate challenge will inevitably require us to choose between either protecting the planet or protecting workers and the economies that sustain people. The idea that environmental protection and employment protection are incompatible, while often fuelled by populist rhetoric, cuts across social, political and geographic divides. With the backing of some governments, a handful of unions and corporations—especially in the fossil fuel sector—argue that efforts to protect the environment should not take precedence over economic growth and job protection and creation. Within the climate camp, some stakeholders believe that the destruction of jobs is the unfortunate price to pay if we are to prevent catastrophic climate change.

This jobs versus environment binary inhibits any debate on a more profound transition that could transform the economic and political structures that reproduce and exarcebate inequalities and power



asymmetries. Such a radical transition requires a redefinition of economic prosperity and social well-being. At its heart will be the creation of employment that promotes labour rights and improves working conditions while also encompassing gender and racial equality, democratic participation and social justice.

Just Transition—the idea that justice and equity must form an integral part of the transition towards a lowcarbon world-is increasingly being mobilized both to counter the jobs versus environment binary and to broaden the debate on low-carbon transitions. While recognizing employment as a source of human security and dignity, Just Transition debates also focus on a broader set of justice-related issues such as the kinds of jobs and societies we envision for the future. As the early proponents of Just Transition recognized, there are many jobs in sectors that destroy people and the places they live and that shed workers even while economic growth takes place. Originating in the 1970s US labour movement, Just Transition has since evolved and spread to other geographies and constituencies, from

environmental justice groups to the international trade union movement, international organizations as well as the private sector and—particularly since its inclusion in the preamble of the Paris Agreement—global, national and subnational policy circles.

Why Focus on Just Transition?

The Just Transition debate is unique in that it brings together a wide range of stakeholders and views related to the equity and justice dimensions of climate change and low-carbon development. For some, Just Transition can be at the heart of a powerful narrative of hope, tolerance and justice; a narrative that is grounded in people's actual lived experiences and aspires to guide collective action while simultaneously giving rise to tangible alternatives.

Not all stakeholders, however, share the same idea of what a Just Transition should look like, or how, for whom and by whom it should be accomplished. While a large number of stakeholders involved in the climate debate have adopted the Just Transition concept and language, they are not always aware of its origins in social and environmental justice. Instead of leading to an alignment of people's views, the term's growing popularity over recent years has actually led to an expansion of the worldviews and drivers of change associated with it. Though most agree that equity and justice must be factored into policy discussions and decisions on low-carbon development, different stakeholders in the debate often have distinct visions of how best to achieve a lust Transition.

This makes it difficult—especially for those who are new to the debate—to clearly identify what Just Transition stands for. It also raises a series of important questions: What kind of transition do we want? In the interests of whom? And to what ends? Answering these questions implies an in-depth discussion of the meaning of justice in the age of climate change.

Why this Report?

The present report's ambition is to contribute to a more informed debate on Just Transition and its potential for fair and ambitious climate action. It is the result of a collective mapping exercise conducted by members of the Just Transition Research Collaborative. The report begins by providing a historical overview of Just Transition and highlighting the increasingly diverse landscape of stakeholders (unionists, community activists, environmentalists, feminists, indigenous activists, philanthropists and business leaders) who mobilize and promote the concept in a wide range of settings and for a wide range of reasons.

An analytical framework is then suggested to help interpret and compare different framings of Just Transition. The analysis differentiates approaches that envision Just Transition as a means to correct gaping and urgent problems from more transformative approaches grounded in social and ecological justice. The report ends with a series of country case studies that provide insights into how Just Transition is—or is not—being mobilized on the ground. More generally, the report seeks to use the Just Transition concept and debate as a way of feeding into ongoing discussions on the role and place of equity and justice in the shift towards a low-carbon world.

This report

- provides a wide audience with a balanced account of Just Transition and the social implications of the fight against climate change;
- helps situate different framings of Just
 Transition and the underlying worldviews
 and theories of change that underpin them;
- calls for a progressive interpretation of Just Transition that can foster transformative change and climate justice for all.



NLIKE VARIOUS other concepts that have spread throughout the global environmental or developmental field (such as "sustainable development" or "green growth"), Just Transition, at least when it emerged, was geographically and socially "grounded". Its origins lie in frontline efforts to defend and improve workers' and communities' health and livelihoods while simultaneously preserving the natural environment.

The idea behind what was eventually called Just Transition was born in the United States, in the 1970s. Most observers agree that it was the brainchild of Tony Mazzocchi, a trade unionist from the Oil, Chemical and Atomic Workers' Union (OCAW), and the product of his determined efforts to reconcile environmental and social concerns. As early as 1973, Mazzocchi successfully enlisted support from environmentalists to help OCAW wage what he presented as "the first environmental strike" over health and safety issues at Shell refineries across

four US states. He was quickly joined by a group of committed union activists and sympathizers from across North America.

Noteworthy collaborators included Mike Merrill and Les Leopold of the Labor Institute; Brian Kohler, a labour leader from the Communications, Energy, and Paperworkers Union of Canada (CEP); and future OCAW president Robert Wages. Rather uncommon at the time, Mazzocchi and his collaborators acknowledged that the industries they worked in were causing environmental and health problems. They were also convinced that addressing these problems did not necessarily mean destroying communities. Rather, they believed that it was possible and necessary to promote, through the mobilization and collaboration of workers and communities, public policies that simultaneously address environmental challenges and secure decent jobs and livelihoods for affected workers. A number of broader issues influenced and guided their efforts.



"Support America's First Environmental Strike". Photo courtesy of Les Leopold.

- As far back as the 1950s, a number of US groups began to promote a "social environmentalist" approach in response to the new challenges and threats posed by industrial capitalism and borne out of the Cold War context—and in particular, the proliferation of nuclear weapons and their testing in the atmosphere.
- The 1960s and 1970s were marked by a significant rise in "occupational safety and health" (OSH) concerns that would infuse the environmentalist movement. Mazzocchi played an important role in the passing of the Occupational Safety and Health Act of 1970.
- repeatedly targeted by CCAW were repeatedly targeted by campaigns and controversies for their adverse effects on the environment and local communities. This partly coincided with the Comprehensive Environmental Response, Compensation, and Liability Act that was passed in late 1980 at the federal level—the creation of the so-called Superfund—to finance the cleanup of sites contaminated with hazardous substances and pollutants. The Act led to the designation of Superfund sites (polluted locations requiring a long-term response to clean up hazardous material contaminations).²

By the early 1990s this network of unionists and activists had developed an explicit programme of action that was called "Superfund for Workers" (Mazzocchi 1993). The Superfund was brought forward in response to the rising jobs versus environment discourse, which was fuelled by the neoconservative right and often took the shape of union and employer-sponsored studies pointing to significant job losses associated with increased environmental regulations (see for example Gollup and Roberts 1983). In 1995, Les Leopold and Brian Kohler introduced the term Just Transition during a presentation to the International Joint Commission on Great Lakes Water Quality (Hampton 2015). Kohler (1996) subsequently emphasized that "the real choice is not jobs or environment. It is both or neither".

The concept progressively spread within the OCAW as well as to other unions and union allies. In 1996, for instance, CEP adopted a Just Transition resolution. The OCAW followed in 1997, and the Canadian Labour Congress adopted its own Just Transition resolution and plan in 1999. A handful of other national unions adopted Just Transition language but did not pass resolutions or develop plans.

1997 also saw the launch of the Just Transition Alliance (JTA), whose purpose was to connect the trade union movement with community-focused environmental justice groups. These groups had been sprouting up throughout the 1980s and 1990s, and mobilized around the designation of Superfund sites. The launch of the JTA marks an important milestone towards the development of a comprehensive, holistic and multistakeholder strategy. In addition to its participation in innovative training initiatives, the JTA was involved in a number of local campaigns that sought to bring together workers and frontline communities in an effort to enhance unionization and persuade both workers and community members that they were subject to the same injustices.

Beyond the JTA, the 1990s saw other efforts to build broader links between labour and environmentalists, especially in a context marked by the signing of the North American Free Trade Agreement (1994) and the World Trade Organization Ministerial Conference in Seattle (1999). Notable examples include the "Blue/Green Working Group", set up by American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) President John Sweeney in 1997, which brought together

the AFL-CIO and large environmental non-governmental organizations (NGOs). The Working Group produced one of the first comprehensive programmes fusing the promise of the new, green economy and a Just Transition under market-based rules (Barrett and Hoerner 2002). In the longer run, participants in the Working Group would go on to form the BlueGreen Alliance in 2006. Whereas Just Transition went into decline in the United States, by the early 2000s it had spread to other national contexts and to the international policy space.

2000-2010: Global Diffusion of Just Transition

By the turn of the millennium, and largely through the efforts of national unions and union federations, the Just Transition was increasingly referred to at the international level as well-especially in relation to the United Nations climate negotiations and discussions on sustainable development. In November 1999, for instance, the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM) adopted a Just Transition resolution at its second world meeting. In the late 1990s and early 2000s, the International Confederation of Free Trade Unions (ICFTU) and Trade Union Advisory Council to the Organisation for Economic Co-operation and Development included Just Transition language in their OSH and environmental activities. ICFTU's position at the climate conference (COP3) in Kyoto (1997), for example, included the declaration that "workers will demand an equitable distribution of costs through 'just transition' policies that include measures for equitable recovery of the economic and social costs of climate change programmes" (ICFTU 1997:1).³

It was not, however, until the second half of the following decade that there would be more active and coordinated efforts to mainstream Just Transition within the international trade union space and to lobby for the inclusion of Just Transition in United Nations processes and agreements. An important moment in this regard was the 2006 merger of the ICFTU and the World Confederation of Labour that gave birth to the International Trade Union Confederation (ITUC). From the outset, the ITUC placed environmental concerns at the heart of its agenda.

The diffusion of Just Transition proceeded via a number of unions in other countries and regions, predominantly in the global North, which had already started to work on the social and health dimensions of environmental change. Comisiones Obreras (CCOO) in Spain, the Trade Union Congress (TUC) in the United Kingdom, and the Australian Council of Trade Unions, in particular, connected OSH to the broader environmental and climate agenda. By the early 2000s, they also regularly used Just Transition wording in their actions.⁵

A key promoter of Just Transition was the Spain-based Sustainlabour Foundation, a green think tank closely linked to the research and educational arm of CCOO and active at the international level. Sustainlabour organized training sessions for union members, published thematic reports, case studies, and policy recommendations, and played a pivotal role in getting workers' voices heard in national and international policy spaces (United Nations Environment Programme (UNEP), International Labour Organization (ILO), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Commission on Sustainable Development). Sustainlabour was also instrumental in organizing the first Trade Union Assembly on Labour and the Environment in January 2006, which produced a landmark resolution (UNEP 2007, Annex 1). A second assembly was organized in 2012, on the occasion of the Rio+20 Conference.

Given its growing importance, the United Nations climate process became a privileged venue for the ITUC to push its Just Transition agenda. Consequently, and within the international climate community, Just Transition was increasingly framed and recognized as the trade union movement's contribution to the international climate debate. In a flyer produced in the lead-up to the 2009 Copenhagen climate conference, the ITUC presented Just Transition as "a tool the trade union movement shares with the international community, aimed at smoothing the shift towards a more sustainable society and providing hope for the capacity of a 'green economy' to sustain decent jobs and livelihoods for all".6

The union movement's growing involvement in the international climate space reflected a growing preoccupation within the trade union movement that social—and in particular employment-related—concerns were neither sufficiently nor appropriately addressed in international climate negotiations. Given the scale and urgency of climate change, there was a growing fear among unions that workers would lose out in terms of job security and job quality as a result of climate policy. This fear was utilized by

the fossil fuel lobby (especially the coal industry) to advance narrow corporate and sectoral interests and undermine the international climate process by bolstering opposition and mistrust.⁷

Trade unions that were engaged in the climate process pushed for the inclusion of Just Transition in successive UNFCCC decisions and agreements to highlight the benefits of decisive climate action for workers and their communities. Just Transition also represented a way of mainstreaming environmental issues within the union movement and building bridges with other-especially environmentalistactors engaged in the international climate debate (Morena 2015). Building on the growing awareness and public concern for climate change and linking it up to the global economic crisis, the ITUCas well as global union federations such as the International Transport Workers' Federation, Public Services International and IndustriALL8made a credible case for greater union engagement in the environmental field.

By shedding light on the social implications of climate change, Just Transition filled an important gap in the international climate debate. Until the early 2000s, equity and justice issues had been almost exclusively framed along a North-South axis. The priority for many climate justice activists involved in and around the UNFCCC had been getting developed countries to recognize their historical responsibilities for climate change and to act upon them-both through more ambitious national mitigation efforts and through higher levels of financial and technological assistance to developing countries (that are much more vulnerable to climate change). When climate justice groups referred to the uneven social impacts of climate change, they tended to focus on geographical differences (Fisher and Galli 2015). Limited attention was paid to the differentiated social implications of both climate change and climate policies on the world of work—in both the global North and South.

According to the ITUC, the aim of the Just Transition is to "strengthen the idea that environmental and social policies are not contradictory but, on the contrary, can reinforce each other" (Rosemberg 2012). Through its efforts, especially in the lead-up to the Paris climate conference (COP21), the international trade union movement got certain UN agencies and programmes to adopt the Just Transition concept and

language, contributing to its further diffusion within the international development and environmental community. Just Transition, for instance, was explicitly referred to in the Green Jobs Initiative (2009–2014), a joint initiative of UNEP, the ILO, the ITUC and the International Organization of Employers.

The initiative's goal was to encourage "governments, employers and workers to collaborate on coherent policies and programmes to realize a sustainable and just transition with green jobs and decent work for all". Through this and similar UN-backed initiatives, Just Transition became increasingly included in other global agendas. It was also gradually associated with other concepts such as "green and decent jobs" (ILO) and "green economy" (UNEP).

During this period of global diffusion, trade unions—especially at the international level—were the main promoters of Just Transition. Through their active involvement in the international climate debate, however, their framing of the Just Transition progressively shifted away from its initial community and occupational safety and health focus to one that centred on trade union responses to climate change. This focus on climate policy disconnected the original promoters of Just Transition from the new global Just Transition community forming around the ITUC and other global union federations.

2010-2018: Globalization and Proliferation of Just Transition

Just Transition language has entered into the mainstream of climate change debates, where it is used by UN organizations, governments, NGOs, indigenous groups, feminist groups, businesses and philanthropists, among others. The term's growing popularity should not, however, overshadow the fact that different groups associate the Just Transition with different things. In the United States, for instance, there is a marked difference between national unions and



grassroots environmental and labour justice groups' approaches and understandings of Just Transition. Nor should we overestimate its importance. Many within the environmentalist and union spaces are doubtful of the concept's usefulness. While the Just Transition has gained traction in the international policy space and the global North, apart from a few notable exceptions—including South Africa—it is rarely referred to in the global South.

The global diffusion of Just Transition, particularly in the context of the international climate negotiations, has led to the adoption of Just Transition language by the most prominent environmental NGOs and networks. Many are now referring to Just Transition in their campaigns and publications. In parallel, Just Transition has also made a significant comeback in the United States. At the grassroots level, communitybased labour and environmental justice organizations and networks are actively campaigning for a Just Transition that does not limit itself to labour issues but also addresses cultural, gender and racial injustices as well. These groups are supported by a small number of more progressive philanthropic foundations and philanthropic networks such as the Chorus Foundation, Edge Funders Alliance, Building Equity and Alignment for Impact, among others.

Other noteworthy and innovative philanthropic initiatives include the Just Transition Fund, launched in April 2015 with support from the Rockefeller Family Fund and Chorus Foundation, whose mission is to support Appalachian coal-dependent communities to transition to a strong, resilient and diversified economy. More mainstream climate funders such as Bloomberg Philanthropies and the European Climate Foundation have also incorporated Just Transition wording into their work—for example the Beyond Coal campaigns in the United States and Europe—as have foundations involved in the recently established F20 Platform. At a recent G20 event in Argentina, the Platform called upon political leaders to take action for a Just Transition. 12

Its growing popularity among non-labour organizations notwithstanding, Just Transition remains firmly rooted in and associated with the union movement, most notably at the international level. This has to do with the large proportion of trade unions that have adopted the idea—at least at the leadership level. The union movement's active presence in the international negotiation space, its sustained efforts to mainstream

environmental and climate concerns within the union community, and its successful lobbying efforts to include Just Transition language in the 2015 Paris Agreement on climate change have also contributed to further anchor the concept within the union movement. The reference to Just Transition in the preamble of the Paris Agreement further legitimized the concept and encouraged a wider range of stakeholders to use it. This was complemented by the concept's compatibility with the agreement's voluntary and bottom-up theory of change and the wider narrative on the combined economic, social and environmental benefits of climate action, especially in the energy field.

The launch, in 2016, of the ITUCaffiliated Just Transition Centre (JTC) signals the beginning of a new phase in its Just Transition-related efforts; one that perhaps reflects a renewed commitment to collaborative industrial relations. The centre is distinct in that it closely collaborates with two global green business groupings—the B Team and We Mean Business—that are actively involved in the international climate arena. This collaboration between business interests and the JTC resulted in the publication of a Just Transition Business Guide (JTC & B Team 2018).

This brief history has shown how the Just Transition concept, while originating within the US labour movement, has over the past two decades spread to the international policy level, to other regions and to a wide range of stakeholders and constituencies. This diffusion has brought with it a diversification of the meanings associated with Just Transition. The next section presents a selection of stakeholder approaches to Just Transition and categorizes them according to their scope and broader ambition.



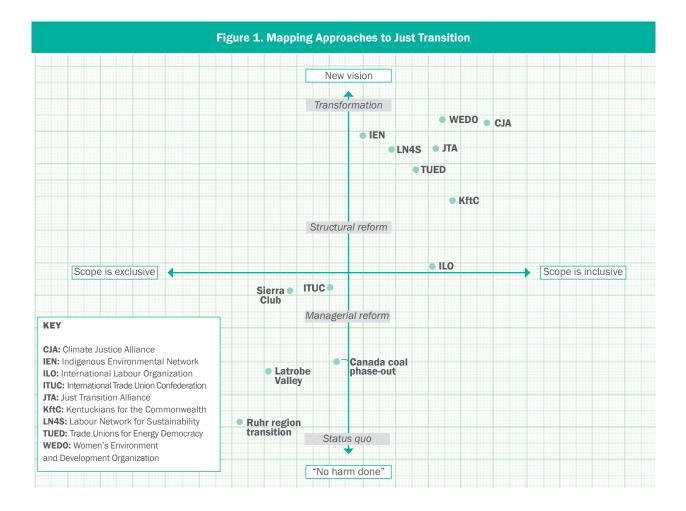


HILE in its broadest accepted usage, Just Transition refers to the fair transition from a fossil-based economy to a low-carbon or decarbonized world, different stakeholders associate the term with a variety of worldviews and strategies. In this section, we categorize the diverse ways in which Just Transition is understood and mobilized by different stakeholders. By doing so, we hope to provide readers with a clearer sense of who promotes what and why, and thus allow them to situate themselves, as well as other actors and initiatives, within the broader Just Transition landscape.

Over the past 15 years, a growing body of academic literature has focused on the theoretical and practical underpinnings of the Just Transition (Räthzel and Uzzell 2012). While a handful of articles focus on national environmental policy and environmental justice frameworks (see Swilling et al. 2015; Farrell 2012), most analyses focus on Just Transition efforts within the trade union movement and the energy sector at the global, regional and national levels.¹³ A more recent body of literature focuses

on the different uses of the Just Transition concept and the key framings that are associated with it. Understandings of Just Transition often vary in terms of how governance structures, institutions and policies should be shaped or established, for whom justice should be intended (humans or/and nature, particular groups or all people), the kind of justice (environmental, climate, energy, social, etc.), and how it should be sought (through distributional, procedural, restorative and/or recognition justice).¹⁴

Different understandings of Just Transition also reflect actors' broader political and ideological beliefs (Goddard and Farrelly 2018; Barca 2015a), which in turn translate into demands that range "from a simple claim for jobs creation in the green economy, to a radical critique of capitalism and refusal of market solutions" (Barca 2015b:392). Most authors situate Just Transition framings within this range. By delving into different stakeholders' approaches to Just Transition, we can further distinguish framings that are "group-" or "constituency-focused" (i.e., that place a particular group at the heart of the transition towards a low-carbon world) and others that are "sector-specific"



(i.e., approaches that associate Just Transition with a specific economic sector rather than the economy as a whole).

Drawing on existing stakeholder and academic classifications (and in particular borrowing from Fraser [1995, 2005], Hopwood et al. [2005], as well as Stevis and Felli [2015]), we identify four ideal-typical approaches to Just Transition. These are not distinct categories, but rather form part of a continuum ranging from those approaches that preserve the existing political economy to those that envision significantly different futures:

- status quo;
- managerial reform;
- structural reform;
- transformative.

Each of these approaches to Just Transition can be further differentiated depending on the more or less inclusive scope of the transition (Figure 1). Assuming that all people eventually benefit from Just Transition initiatives (the purpose of which is to drive the necessary change towards a low-carbon future), scope considers which actors or constituencies are to be directly supported (in the form of some kind of resource allocation), and ranges from exclusive—benefiting a specific group—to inclusive—benefiting society as a whole.

Status Quo Approaches to Just Transition

With rising awareness and recognition of the human origins of global environmental change—and most notably climate change—a growing number of corporations and free market advocates are voicing concerns about the risks of inaction, and stressing the huge business opportunities associated with a green economy. Their calls to action do not involve changing the rules of global capitalism, but rather a greening of capitalism through voluntary, bottomup, corporate and market-driven changes. States or governments are expected to provide an enabling environment for action—through incentives to businesses and consumers, and aspirational objectives such as the 1.5°C temperature goal laid out in the Paris Agreement.

Some of the most ardent supporters of this corporate-driven transition to a low-carbon world also refer to the Just Transition concept.¹⁷ In particular, they recognize the need to compensate and/or provide new job opportunities to workers who will lose out as a result of the shift to a low-carbon economy. The replacement of "old" with "new" jobs is a key feature of this approach to Just Transition, in which job creation is a proxy for justice. Questions of job distribution (in terms of access/opportunity) or negative externalities produced by those jobs (such as degraded land and water in mining communities) do not enter into the equation.

Status quo approaches to Just Transition can take the shape of corporate-run job retraining programmes, pension schemes and other forms of compensation for affected workers. In the energy sector, for instance, job retraining and education programmes for displaced miners, funding to assist miners with relocation, and funding for miner pensions all correct egregious and politically dangerous situations but do not address their root causes. In Germany, the support provided to miners in the Ruhr region can be characterized as a status quo transition. Displaced workers receive decent compensation and help in acquiring new jobs. Miners who have worked for at least 20 years can retire at 49 and then receive a monthly stipend until they qualify for a pension. Young miners are given another energy or mining job, or else are re-trained while still receiving decent pay (Abraham 2017).

Managerial Reform Approaches to Just Transition

A managerial reform approach to Just Transition is one in which greater equity and justice is sought within the existing economic system and without challenging existing hegemony. Certain rules and standards are modified and new ones can be created—on access to employment, occupational safety and health—but the economic model and balance of power do not change.

Advocates of this approach to Just Transition recognize that the existing fossil fuel regime generates rising inequalities within fossil-dependent communities, and that existing labour standards are ill-adapted when it comes to securing workers' health and well-being. In localities that have not produced fossil fuel products, the issue is not the legacy of the fossil fuel

sector, but the lack of energy access and affordability. Under managerial reform, these groups are granted energy access but do not control it. For example, in the Latrobe Valley of Australia, some green jobs as well as access to job training and education have been created for former mine workers, spouses of mine workers and mine contract workers (Snell 2018). Local businesses have also been supported.

The ITUC, for example, pursues managerial reform that is rooted in public policies and investments. Workers and their unions are placed at the centre of their approach and the Just Transition process—as both the beneficiaries of support and as the drivers of the shift towards a low-carbon world. The ITUC's efforts are centred on labour-related and workplace-related issues, but do not involve a more general questioning of the economic model. Particular emphasis is placed on social dialogue and tripartite negotiations between governments, unions and employers as the process through which rights and benefits can be secured.

This approach to Just Transition is shared by a number of national unions¹⁸ as well as large environmental organizations and private sector initiatives. For example, the Sierra Club, which plays an important role in the BlueGreen Alliance and Beyond Coal campaign, has developed a similar understanding of Just Transition. It emphasizes the importance of maximizing both public and private investments in support measures to place "current and future workers into quality careers, [and ensure] assistance for those workers and their communities that may be adversely affected by the transition" (Hubbard and Núñez 2016).

For progressive and environmentally minded businesses and business networks, enterprise-wide planning, as well as social dialogue between unions and employers, are presented as key means to "reduce emissions and increase resource productivity in a way that retains and improves employment, maximizes positive effects for workers and local communities, and allows the company to grasp the commercial opportunities of the low-carbon transition" (JTC & The B Team 2018:2). This worker and workplace-centred approach is also reflected in the ILO's Just Transition Guidelines (2015) that call for skills development, OSH measures, the protection of rights in the workplace, social protection and social dialogue.

Structural Reform Approaches to Just Transition

A structural reform approach to Just Transition is one in which *both* distributive justice *and* procedural justice are secured. Procedural justice entails an inclusive and equitable decision-making process guiding the transition, and collective ownership and management of the new, decarbonized energy system by the different stakeholders—rather than a single interest (see for example McCauley et al. 2013).

Such an approach to Just Transition implies institutional change and structural evolution of the system. Solutions are not solely produced via market forces or traditional forms of science or technology, but emerge from modified governance structures, democratic participation and decision making, and ownership (Healy and Barry 2017). Structural reform entails that the distribution of benefits or compensation is not simply granted by the powers that be, but rather is the result of the agency of workers, communities and other affected groups. This type of transition highlights the fossil fuel energy system's embeddedness in society and the structural inequalities and injustices that it produces (Healy and Barry 2017). The transition not only compensates the unjustly affected but reforms the institutions themselves.

This kind of reform might be found at the local level in a small, worker-owned energy cooperative, or a citizen-owned, non-profit energy cooperative. But it also entails implementation of new forms of governance that span political boundaries and reassessesment of not only the inequitable institutions and structures that govern energy production, but also those that have historically governed global supply chains. The Trade Unions for Energy Democracy initiative, for example, advocates for a "Just Transition politics that somehow addresses the concerns of the here-and-now (worker-focused transitions) in ways that also keep the need for a transition of the entire economy in the forefront (socioeconomic transformation)" (Sweeney and Treat 2018:2). However, it calls for a shift away from a social dialogue approach used by the ITUC and mainstream unions towards a social power approach guided by the belief that current power relations must be challenged and changed, and that this can only be achieved through public/social ownership and democratic control over key sectors (and in particular energy) (Sweeney and Treat 2018). Kentuckians for the Commonwealth is another

example of a group calling for a redistribution of power. They define Just Transition as enabling "an economy powered by the people, for the people, for the prosperity of communities and the sustainability of communities" and as "a progressive economy in which the power and the wealth is distributed in a very broad-based way".¹⁹

Transformative Approaches to Just Transition

A transformative approach to Just Transition implies an overhaul of the existing economic and political system that is seen as responsible for environmental and social crises (Hopwood et al. 2005; Healy and Barry 2017). In addition to changing the rules and modes of governance, proponents of this approach also promote alternative development pathways that undermine the dominant economic system built on continuous growth, and imply profoundly different human-environment relations. The US-based Labor Network for Sustainability, for instance, advocates for a series of short-term measures in support of workers and their communities (job retraining, decent pensions with health care, job-creating community economic development), but also insists on the need to adopt a more systems-critical approach:

"labor folks tend to focus on the immediatethat's a big part of our job. People join unions and pay dues to have their work issues addressed and their jobs protected. So we tend to see JT as a vehicle for fighting for the needs of those losing their jobs today due to economic, ecological and technological transitions. For those of us working on systems change, and fighting to create a better world, we see IT as a vehicle for the creation of new, locally based, economies constructed around principles of equality for all and local control-a more robust democracy where gender, race and class bias fades into the past" (Labor Network for Sustainability and Strategic Practice: Grassroots Policy Project 2016:32).

While workers and work-related issues are an important part of this approach, a transformative Just Transition also involves the dismantling of interlinked systems of oppression—such as racism, patriarchy and classism—that are deeply rooted in contemporary societies. Cooperation Jackson, for instance, sees

Just Transition as fitting within a broader struggle to "end our systemic dependence on the hydro-carbon industry and the capitalist driven need for endless growth on a planet with limited resources, while creating a new, democratic economy that revolves around sustainable methods of production and distribution that are more localized and cooperatively owned and controlled".²⁰

A growing number of Just Transition framings have broadened to include specific, often marginalized, social groups such as women, indigenous peoples, people of colour and lesbian, gay, bisexual, transgender, queer and intersex persons (see Table 1).

The Oregon Just Transition Alliance, for example, states that economic inequality can be addressed in concert with environmental and climate justice, but that the process must be community-led.²¹ Indeed, a core characteristic of transformative framings is their belief in a process that entails grassroots empowerment, everyday resistance and struggle, and the power of movements-rather than elites and policy makers. Groups and networks such as the Climate Justice Alliance, Grassroots Global Justice Alliance and Movement Generation argue that "[c] ore to a Just Transition is deep democracy in which workers and communities have control over the decisions that affect their daily lives" (Movement Generation 2016:3). This means mobilizing a wide range of people and not limiting the struggle to the shop floor. Last, transformative visions often consider culture, tradition and ancestral wisdom as essential elements of the process for bringing about a truly Just Transition.

For many authors and organizations, transformation is the ideal outcome for a Just Transition (for example, Stevis and Felli 2015; Healy and Barry 2017; McCauley and Heffron 2018; Heffron and McCauley 2018), but the process through which it might be achieved remains vague. Transformation and the process required to attain it is context specific and dependent upon the societal baseline, or status quo, from which change emerges. Common to the different interpretations of transformation is the notion of aiming for positive and progressive change that overcomes systems and structures that reproduce and exacerbate environmental problems and social injustice (UNRISD 2016). But there is a less coherent vision of the pathways that can be followed to get there.

Table 1. Examples of Transformative Framings

Constituency

Just Transition Framing

Indigenous Environmental Network (IEN)

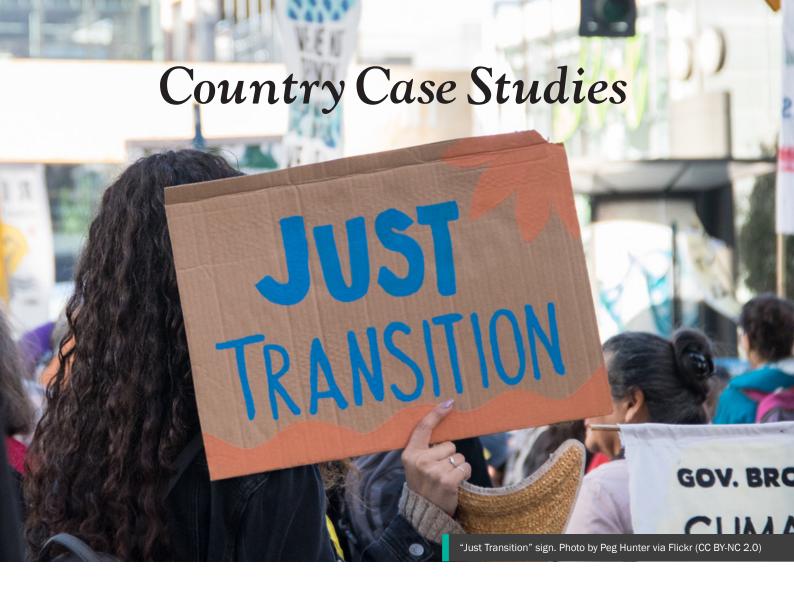
Democratic, decentralized and diversified approaches and an "indigenous-based green economy, native energy justice and democracy" as well as "community-based planning" and "meaningful work and localized community-building jobs" (IEN Just Transition Principles).²²

Just Transition Alliance (JTA)

Inclusion and empowerment of "frontline workers and fenceline communities most affected by pollution, ecological damage and economic restructuring",²³ with a particular focus on working-class people of colour.

Women's Environment and Development Organization (WEDO)

"When we refer to a just transition away from fossil fuels, we must challenge new industries to also transition away from prevailing power structures and a sexually disaggregated labour force". This implies factoring in "intersectional realities, particularly with regards to the intersections of gender, race and class disparities" (Rodriguez Acha 2016). This can be achieved through gender quotas for the renewable energy sector, building capacities of female workers, childcare services, ensuring an income in case of hardship.



HIS SECTION introduces a selection of case studies and explores how Just Transition language, policies and plans have been adopted at different scales. Many countries are now working towards a Just Transition. In New Zealand, for example, the government has committed to a Just Transition "for workers in industries that need to reduce emissions and the creation of jobs in sectors that are carbon-free or carbon sinks, such as forestry". In Scotland, following a joint campaign by environmentalist and labour groups, the government decided to set up a Just Transition commission. And in Spain, the new Socialist government is actively promoting a Just Transition agenda in its recently decided coal phase-out.²⁴ The ILO has further selected three pilot countries-Ghana, the Philippines and Uruguay—for the implementation of its Just Transition Guidelines (ILO 2015). Insights into Just Transitions in Brazil, Canada, Germany, Kenya, South Africa and the United States are offered below.



Brazil

Owing to a comparatively clean energy mix and progress in mitigating deforestation, Brazil has for a long time enjoyed a comfortable position in international climate negotiations. More recently, emissions from land-use changes have surged again, and the discovery and plans for extraction of huge deep-sea oil reserves puts low-carbon development into question.²⁵ While deep-sea oil drilling encompasses mostly environmental and labour safety concerns, gas extraction and dam building in the Amazon have far-reaching social and environmental consequences. Among the most common longtime problems facing the Amazon region include the grabbing of indigenous land for extractivist purposes; the flooding of riverside community territories for building dams; and internal migration fluxes generated by large-scale construction projects.

If transitioning away from fossil fuels means building dams in the Amazon region, the area has to be a focus for community-targeted Just Transition plans and policies. The country's biofuel sector is known not only for causing deforestation and negative environmental impacts, but also for its high degree of mechanization and limited number of jobs created. In addition, violations of labour rights and standards, including forced labour, have been reported in the sugar cane-ethanol sector.²⁶ In both cases, the rights and livelihoods of indigenous communities are at risk from land grabbing and land-use changes.

High levels of inequality mean that the Just Transition debate in Brazil centres around energy sovereignty and public ownership. Despite the efforts and social policies of past Workers' Party administrations, income distribution has remained extremely unequal over the past 15 years, with the top 10% receiving over 55% of total income in 2015, while the share of the bottom 50% was just above 12%. While inequality within the bottom 90% fell, driven by social policies and compression of labour incomes, there was also an increased concentration of capital income at the top of the distribution (Alvaredo et al. 2018). The "neodevelopmentalist" Workers' Party forces that were in power until 2015 pursued both an extractive fossil fuel strategy, as well as international partnerships to build up endogenous capacities for renewable energy production (Schutte 2014) and to promote high-quality job generation.

Thus, energy transition in the context of sustainable development in Brazil means minimizing reliance on clean technology imports (especially considering the growing trend towards intellectual property rights concentration) while expanding the manufacturing base of turbines and hydraulic, wind and steam generators, as well as lenses and solar mirrors, transmission cables, transformers and other components and electrical devices (Pomar 2011).

The Just Transition debate needs to be adjusted to the real-world scenario of finance, trade and investment agreements that restrain state action and policy space in many crucial aspects (Altintzis and Busser 2014; Chang 2002). Just Transition away from oil dependency in the Brazilian context involves, for instance, transformations in its automobile industry to accommodate and promote the use of hybrid and electric cars, and the prioritization of quality urban public transport systems. Such transformations have been pursued by the Brazilian state mainly



through tax exemptions and tariff protectionism, with limited effectiveness. State-funded programmes include compliance mechanisms for companies concerning energy efficiency, investment in research and technology, product labelling and consumer safety. However, if a free trade deal between the South American Common Market (MERCOSUR) and the European Union is signed, these programmes will no longer be needed, as the domestic automobile industry will not be able to compete internationally in an open market. Trade deficits and rising unemployment are the foreseeable consequences of such an agreement, as far as MERCOSUR economies are concerned.

When one looks at civil society organizations in Brazil, the most representative network of NGOs, trade unions and social movements gathered around the energy issue is the Labour and Peasant Water and Energy Platform (Energy Platform 2018). Due to the recent energy sector boom in Brazil, and current struggles against dam building and the privatization of oil and electricity companies, the Platform engages in the energy debate by advocating for energy sovereignty, public control and an end to energy poverty (both high cost and lack of access).

Although there are debates on a future phase-out of oil within Energy Platform, Just Transition and climate change are not to be found in the policy document presented to the 2018 presidential candidates (Energy Platform 2018). Nevertheless, as several of the sovereignty demands are for a non-market-driven energy sector, they add up to an anti-neoliberal agenda that favours the policy space for decent work, social protection and labour rights initiatives that are key to a Just Transition. The recent election of far-right candidate Jair Bolsonaro as president marks a clear departure from the previous Workers' Party's climate and environmental policies. While the impacts remain to be seen, Bolsonaro has already threatened to pull Brazil out of the Paris Agreement, to diminish indigenous peoples' protected territories and to allow increasing deforestation in the Amazon region.

On the labour movement side, Brazilian federations take part in specific Just Transition debates that are mostly carried out by the Trade Union Confederation of the Americas (TUCA) —ITUC's regional branch. At TUCA's Third Regional Conference on Energy, Environment and Work, energy democracy, Just Transition and common goods were the main issues of focus. Building on the work done in their Labour Development Platform for the Americas, TUCA is seeking to explore the regional and local aspects of Just Transition plans in the Americas, as well as how to link this with the broader field of social movements and NGOs.

Despite not being put into practice as fast as would be needed, the Just Transition narrative has been used as a tool for reclaiming public ownership against privatization of energy and natural resources, for rebuilding the role of state-led investment against austerity, and for promoting rights and social protections (Labor Network for Sustainability and Strategic Practice: Grassroots Policy Project 2016).

As with other cases, the challenges facing Just Transition in Brazil are specific to the country's natural, social, economic and political features. The economic crisis and cuts in public spending bring into question how realistic it is to suppose that a Just Transition that is equitable and supported by a strong enabling policy environment will take place. In some aspects, domestic debates will get closer to the specialized discussions of international arenas, while in others it will differ, as there is no "one size fits all" recipe for Just Transition plans. As of today, there is still a long way to go.



Canada

An oil-dependent economy that positions itself politically as an international climate leader, Canada exemplifies many of the tensions of the clean energy transition. The country's government-led efforts to phase out coal while supporting affected workers and communities provides a concrete example of managerial reform with a relatively narrow scope.

The production of fossil fuels accounts for approximately 8% of Canada's GDP and 15% of the country's goods exports (Hughes 2018; Government of Canada 2018a). More than 200,000 people work directly in the oil, gas and coal sectors—about 1% of the total labour force—and hundreds of thousands more work in jobs indirectly tied to those industries (Mertins-Kirkwood 2018:16). In the communities and regions where fossil fuels are produced, the share of jobs and economic activity tied to oil, gas and coal is significantly higher. Nearly every job and the entire economy of Fort McMurray, Alberta, for example, in the heart of the tar sands, is dependent on oil production.

The extraction, processing and transportation of fossil fuels is the single biggest source of greenhouse gas emissions in Canada and a major contributor to global climate change.²⁷ The consumption of fossil fuels, mainly for transportation and electricity generation, is likewise highly emissions-intensive. In order to reduce emissions in line with their international and domestic targets, Canada's federal and provincial governments are starting to take regulatory actions to reduce emissions from coal, oil and gas (Flanagan et al. 2017). Most importantly, the federal government announced in 2015 a national phase-out of coal-fired electricity generation by 2030 (with some exceptions), which builds on similar measures taken previously by individual provinces.

The national coal phase-out is expected to avert 100 megatonnes of greenhouse gas emissions over the coming decades, which is essential if Canada is going to meet its 2030 Paris Agreement target of a 30% reduction in greenhouse gas emissions from 2005 levels (Government of Canada 2018b). However, although the policy is a positive step in terms of climate change mitigation, the coal phase-out is already negatively impacting dozens of communities, mainly in the provinces of Alberta and Saskatchewan, which rely on thermal coal mines and coal-fired power plants for their livelihoods.



Labour unions and social and environmental activists in Canada have been advocating for a Just Transition to a cleaner economy for decades, but the national coal phase-out has provoked a new wave of calls for a Just Transition for affected workers and communities. The Alberta Federation of Labour has been an especially strong voice for coal workers in that province, while the Canadian Labour Congress (CLC), Unifor, the United Steelworkers and others have organized nationally on this issue (see, for example, Alberta Federation of Labour and Coal Transition Coalition 2017).

In part due to this advocacy, and in part due to the political power of Canada's oil regions, governments across Canada have begun to investigate and implement Just Transition policies. Indeed, Canada is one of the few countries explicitly using the language of Just Transition in the context of its climate and labour policies. In late 2017, Canada's federal government announced a Just Transition Task Force—co-chaired by the president of the CLC—to study the coal phase-out and make recommendations for federal transition policies by the end of 2018 (Government of Canada 2018c).

More tangibly, in fall 2017, the Government of Alberta introduced the CAD\$5 million Coal Community Transition Fund (CCTF) and the CAD\$40 million Coal Workforce Transition Program (CWTP), which were designed in consultation with workers, municipal leaders and other stakeholders to ensure they met the needs of affected communities.²⁸ The former fund

helps local governments develop community-level transition strategies, economic diversification plans and otherwise prepare local economies for the closure of coal mines and power plants.²⁹ The latter provides coal workers with income support (through a top-up to the national employment insurance programme), relocation assistance, skills retraining and other resources to help those workers find new jobs.³⁰

Community involvement is essential for true climate justice and energy democracy, so the direct participation of workers in the development of Canada's Just Transition policies is important. In principle, the initiatives outlined above are good examples of a Just Transition strategy. However, their limited scope and ambition are likely to translate into limited impacts in practice.

First, Canada's Just Transition programmes are narrowly targeted at specific workers in highly vulnerable regions. For example, the CWTP includes a CAD\$12,000 tuition voucher that is only available to laid-off coal workers who meet specific criteria, so some coal workers do not qualify. Furthermore, those working in sectors indirectly connected to the coal industry, who are also at risk of losing their jobs when a coal mine or power plant closes, are denied the support these programmes offer. Since women and immigrants are disproportionately represented in jobs supporting fossil fuel workers—such as accommodation and food services—programmes like the CWTP risk exacerbating underlying inequalities in vulnerable regions (Mertins-Kirkwood 2018:19-20).

Second, these programmes are reactive rather than proactive. The CWTP is designed to mitigate harm to coal workers by transitioning them into new jobs or into retirement, but there is not yet a plan to scale up alternative, clean industries in the affected regions. Although the CCTF is a step in this direction, CAD\$5 million for community planning and investment promotion is no substitute for public investment in new industries. A failure to scale up publicly owned alternatives is a missed opportunity to democratize the energy system.

The limited ambition of these Just Transition initiatives reflects the limited ambition of underlying climate policy. The phase-out of coal-fired electricity generation in Canada is a positive and necessary step in the shift to a low-carbon economy, and further steps will be required to reduce the country's emissions to the level agreed to under the Paris Agreement. For Canada to meet its domestic and international targets, it must implement similarly stringent policies addressing the oil and natural gas industries—sectors of the economy that are much larger than coal.

Canada's Just Transition of the coal sector falls into the managerial reform category. The primary goal of the transition is to limit the social and economic harm of certain climate policies for certain workers and for communities through top-down government programmes. If the experiment proves successful, it may serve as a useful model for other sectors and jurisdictions. However, Canada's coal transition should not distract from the ongoing need for an ambitious and comprehensive Just Transition that includes the country's oil and gas sectors as well. An energy transition on that scale may require a different labour policy approach.



Germany

While Germany has been heralded as a climate leader for a long time, criticism is growing with regard to current climate policy and lack of debate on fast transition. The government has announced that it will not meet its own 2020 climate goal³² and there is no clear strategy for a coal exit, although Germany uses more coal to generate electricity than any other European Union country and relies on lignite, which produces the highest CO₂ emissions in Europe.

Without a definitive commitment to moving towards a low-carbon economy, there is little incentive to develop a robust plan for a Just Transition. Yet Germany has a great deal of experience with planning economic change and making transitions from one kind of industrial structure to another, including the shutdown of hard coal mining and related industry in the Ruhr region, building renewable energy while phasing out nuclear energy under the Energiewende, and the re-integration of East and West Germany after 1989. In each of these cases, there were intense negotiations between labour, political parties and employers that resulted in plans of varying adequacy to the particular challenges faced. These transitions were carried out gradually, under heavy market and economic pressures, and the structures



The Zollverein former coal mine complex turned into a cultural industrial landmark and UNESCO World Heritage Site in the heart of the Ruhr area. Photo by Mompl via Flickr (CC BY-NC-ND 2.0)

that emerged have arguably not been broad or deep enough to prevent impoverishment or the emergence of resentments that can be politically exploited.

The shutting down of black coal mining in the Ruhr area is a significant example of how decline in employment was handled in the past, and how labour participated in negotiating the transition plan. The Ruhr area's industrial nexus of coal and steel was built up at the end of the nineteenth century, then reconstructed in the post-war period, only to decline due to competition with cheaper coal and the development of oil and gas and automation. It was market forces rather than government intervention around climate change that produced the dramatic shift in employment-from nearly 400,000 workers in 1960 to just under 40,000 in 2001 (Galgóczi 2014). While many workers lost their jobs, the transition was stretched over a long period of time, with the last hard coal mines closing by the end of 2018.

Ideological stands blocked earlier adaptation to economic changes. Industrialists wanted to protect their investment; unions used their strength and ties to political parties to prolong subsidies for polluting industries like coal, while developing systems to ease the pain of transition for the workers in these sectors. Decades of potential transformation were lost because of regional domination by a few large companies whose interests were defended by a coalition of business, politicians and trade unions intent on preserving existing structures (Hospers 2004). When attempts were made to diversify, there were "lock-ins" and alliances that obstructed growth in new industries.

Labour has a stronger voice in policy making in Germany than in most other countries, having won legal and political standing to have a seat at the table. Trade unions were strongly involved in shaping the social transition away from coal and ensured that social safety nets were in place for the affected workers. Workers agreed to give up wage increases and redistribute work shifts so that lay-offs could be avoided. A critical piece was an agreement for early retirement as part of a "socially responsible downsizing scheme", as well as the employers' commitment to transfer the remaining workers to other jobs.

The state eventually began investing in the knowledgebased and touristic economy that has gradually come to characterize the Ruhr area. Environmental technology and waste management have flourished, building on the specialization of the area, and large-scale public investments in prestigious sociocultural projects have provided a way to decontaminate the land, attract tourism and provide jobs with a sense of continuing regional identity. There is another side to this success story, however, with the Ruhr area, sometimes referred to as Germany's poorhouse, having high unemployment rates and a high risk of child poverty.

This hard coal transition is an example of an exclusive status quo approach to Just Transition. In a narrow economic sense, it has provided working solutions for the affected miners-unemployment rates for mining-related jobs are now at only 3% (IAB 2018). But from a wider perspective, if one considers other politically relevant factors such as identity and self-esteem, results are less positive. This approach has also not provided real alternatives for the local economy. Despite Just Transition provisions, overall unemployment in the Ruhr area is well above the national average (9.5% compared to 5.2% in August 2018). 33 This presents a real challenge going forward in terms of transitioning other sectors, in particular lignite mining, which currently still employs over 20,000 people directly, with an estimated total of 56,000 jobs depending on it (RWI 2018).

With increasing pressure from international, community and environmental leaders to close down hard and lignite coal mines and coal-fired plants, to electrify transportation and to accelerate other low-carbon development, labour unions have partly begun to participate rather than obstruct the transition. But their role remains complicated. There is internal struggle within unions, and among unions, to some extent based on ideology and allegiances, and motivated by the preservation of members' good-paying union jobs. For example, the Mining, Chemical and Energy Industrial Union (IG BCE), is able to mobilize fossil fuel workers' opposition to change as influenced by group identity and joint aims, while the Union of Metalworkers (IG Metall) and United Services Trade Union (ver.di) are more heterogeneous in workforce identity and do not exert influence either for or against climate policies (see Prinz and Pegels 2018:218).

At the level of the German Trade Union Confederation (DGB), leaders only recently expressed labour's support for addressing climate change through structural and industrial policy and the cushioning of social

hardships. At the 2018 Petersburg Climate Dialogue, DGB reiterated the role of workers in contributing knowledge of how their job processes could be more climate friendly, as well as their experiences of job loss due to automation and digitalization.

As pressure grows to phase out lignite, coal continues to be a profoundly tense and symbolic arena in Germany, as it is for many other countries. In an attempt to resolve the conflict between environmentalists, workers and affected industries through social dialogue, the German government created a Special Commission on Growth, Structural Economic Change and Employment (commonly known as the coal commission) that is tasked with producing Just Transition plans for the two lignite mining areas and coming up with a concrete timeline for the coal exit.

The commission brings together stakeholders from industry, ministries, research, environmental organizations, trade unions and the affected regions and represents many different positions on the future of coal. While operating on a tight schedule, the coal commission is presently facing controversy, with one of its co-chairs having reportedly rushed ahead in communicating an exit date of 2038 to members of the government before it was discussed in the commission.³⁴ At the same time, environmental protests have been growing, further dividing the commission, for example, around the eviction of anti-coal activists who are occupying a forest that is due for clearance to give way to the further expansion of strip mining.³⁵

Mere months before the transition strategy is due, the jobs versus environment debate is alive and thriving, indicative of a much needed Just Transition conversation. Unions are rightly concerned about the shock to current workers who lose their jobs, as well as the implications for the next generation, but delaying climate action any longer is not an option. Past transitions have shown the disappointing results of relying on market forces to develop industries that are committed to communities. In a context of high competitiveness, pressure for low wages and precarious working conditions, challenging the hegemony of the market is key to the long-term transition away from carbon-based economies and to a more egalitarian and just world.



Climate change and increasing weather extremes threaten food security and livelihoods in Kenya, and risk undoing much of the progress made towards sustainable development. With a large agricultural sector and high prevalence of poverty, Kenya is very vulnerable to the emerging impacts of climate change. Government policies and plans focus on adaptation strategies and poverty reduction to tackle the problem. At the same time, "slash and burn agriculture, overexploitation of timber, and charcoal production are direct drivers of deforestation and forest degradation" (UNEP 2017a).

The National Climate Change Action Plan launched in March 2013 is the first bundle of policies to address climate change in Kenya at the national level. Within government policies for economic growth and climate change, there is no use of the Just Transition concept or its accompanying vocabulary, including such language as "minimizing hardships for workers and their communities", "secure workers' jobs and livelihoods", "social inclusion", "social dialogue", or "social protection". Policies are, however, strongly intertwined with the United Nations Sustainable Development Goals (SDGs).

The reason for the absence of the Just Transition concept in Kenya is threefold. First, the international actors driving the agenda of Just Transition, including the ITUC, global union federations and the ILO, play a minor role in Kenya. In addition, the ILO Kenya Decent Work Country Programme 2013–2016 does not include issues of Just Transition (ILO 2013).

Second, there are currently no national actors, such as unions, promoting the Just Transition agenda. Kenyan unions are generally not very active in environmental and climate change policies or lobbying activities in this area. Historically, they have not been well connected to the international actors driving the Just Transition approach. One exception is the 2010 project between Prospect, a UK-based trade union for professional engineers, and Kenya Electrical Trades and Allied Workers' Union, which included a workshop on possibilities of lobbying on climate change and Just Transition issues. ³⁸ Yet no further projects or policies came out of this.



Training women farmers on climate smart innovations in Nyando, Kenya. Photo by The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) via Flickr (CC BY 2.0).

Third, there is a strong presence of international development agencies and NGOs that promote the SDGs and consult for the Kenyan government on climate change without including the Just Transition agenda. For example, the German development agency GIZ and the World Wide Fund for Nature (WWF) are authors of the Kenvan government's green economy strategy (Government of Kenya 2016a) and sit on the Kenyan National Steering Committee for Green Economy Strategy and Implementation Plan.

Just Transition concerns climate change mitigation but also climate change adaptation (Felli 2018). There are five entry points to a Just Transition agenda in Kenya. First, climate change in Kenya is affecting production and jobs, especially in the agricultural sector, which is the backbone of Kenya's economy and provides the principal source of livelihood for most communities.

Second, Kenya is currently investing heavily in its energy sector, putting an emphasis on non-fossil fuel sources such as geothermal, hydro and wind power (USAID 2016) and, according to the Climate & Development Knowledge Network, spearheading low-carbon development in Africa (King'uyu 2016).

Third, international actors promoting Just Transition, like the Friedrich-Ebert-Stiftung (FES), are very active and well connected to the Kenyan unions. In 2017,

FES and ITUC Africa jointly launched an initiative to support the efforts of African trade unions to fight climage change (FES 2017), increasing the potential for positive change through their combined efforts.

Fourth, natural reserves and wildlife are affected by drought. This impacts tourism, an important economic sector in Kenya. The Kenyan tourism union KUDHEIHA is currently looking into how to get involved in the climate change debate.

Fifth, the SDGs are another important access point to a Just Transition agenda in Kenya. One of the country's largest businesses, Safaricom, signed a memorandum of understanding with UN Environment to actively participate in SDG implementation in Kenya (UNEP 2017b).

In sum, these policies and actions could serve as entry points to diffuse the concept of Just Transition in climate change adaptation policies in Kenya and contribute to sustainability transitions and just agricultural development.



South Africa

As the South African government commits to reducing carbon emissions, it currently remains one of the most carbon-intensive economies in the world. It is currently planning to open 40 new coal mines (in addition to the 1,600 existing ones), while two large privatized coal-fired power stations are being



built and another 11 smaller ones are currently being considered (Cock 2018).

This increasing fossil fuel use is criticized by various groups and trade unions who are organizing and joining together to address the intricacies of the complicated transition from the brown to the green economy. In South Africa, the Congress of South African Trade Unions has worked with environmental groups since 2010 to educate people on the negative impacts of climate change and the need for a more sustainable energy policy (Cock 2018). Despite these efforts to form an alliance between labour and environmental movements, tensions persist and have recently resurfaced over issues of potential job losses and the closure of coal mines and coal-fired power stations.

Even though trade unions agree that climate change is a threat, they demand that the energy transition not cost any jobs, and that it be bifocal to develop an environment-friendly economy and ensure workers' transition towards equitable and decent green jobs. To date, renewable energy has been introduced through market mechanisms and the private sector via the Renewable Energy Independent Power Producers Procurement Programme (REI4P).

In 2018, the National Union of Mineworkers of South Africa (NUMSA) obtained a court order to block the public electricity utility Eskom from signing renewable energy contracts with 27 independent power producers. Some environmental groups

opposed this action and are calling for a faster transition and closure of coal mines. NUMSA argued that they were not opposed to renewable energy, but rather to privatized renewable energy.³⁹ Additionally, they were concerned that some environmental groups were insensitive to the risks of a rapid market-led transition, in particular the associated job losses that are unacceptable in the context of the high levels of unemployment South Africa is facing (Cock 2018) and rising electricity prices that the working classes would not be able to afford. They called on government to follow the Just Transition guidelines it had agreed to in the Paris Agreement. 40 In a country with enormous inequalities and unemployment levels at 27.7%,41 the key concern is job losses and the danger that privatized renewable energy will perpetuate inequalities rather than alleviate them.

The ongoing reliance of the South African economy on the minerals-energy complex, together with the pressure from the unions not to lose more jobs or increase inequalities, have unfortunately caused quasi-inertia in terms of implementation. The South African government intends to provide employment and social services to all its citizen to correct years of inequality, maintain its economic development through its export of primary resources and preserve what it believes to be a competitive advantage, that is providing cheap energy for its energy-intensive economy while simultaneously committing to reducing greenhouse gas emissions in the international arena. Even though little has been

done in terms of implementation, South Africa is one of the few countries that shows a strong interest in the Just Transition, as reflected in some of its policies. The problem is that there are often contradictory positions reflected in different policies.

On the one hand, South Africa is one of the few countries to use the term Just Transition in communicating its planned climate actions (or Nationally Determined Contribution) to the UNFCCC. In the short term, the country plans to replace its old fleet of inefficient coal-fired power plants with clean and highly efficient technology. Further mitigation options discussed include the private sector-led expansion of renewable energy (REI4P) as well as the introduction of a carbon tax. Positioning itself in the international climate policy arena, focus is put on market-based mechanisms to improve efficiency and decrease the carbon intensity of the economy rather than on achieving an absolute transition away from fossil fuels.

On the other hand, the recently released Integrated Resource Plan 2018, which sets out a plan for electricity demand and supply for the country, commits to further increase coal generating capacity while still limiting renewable energy capacity. Modest steps are enumerated to increase power plants' efficiency and to reduce the carbon intensity of the economy. The urgency of responding to climate change has not yet taken priority, despite South Africa's international commitments to decarbonization and the harmful impacts of coal mines for local communities and the environment. It therefore remains to be seen whether a truly Just Transition and shift to cleaner energies will take place.

The One Million Climate Jobs Campaign, an alliance of labour, social movements and popular organizations in South Africa, calls for a much more radical approach including departure from the market-liberal development pathway and towards a public sector-led transition. This transition would involve a shift in public investment away from fossil fuel projects and towards climate jobs, which could tackle climate change and create employment at the same time. Following the suggested path would strengthen the role of local governments in increasing energy equity and access, and would also create decent jobs. It could also serve to support a democratic transition away from fossil fuel capitalism that is built from the bottom up.



In the United States, Just Transition is re-emerging after its relative decline in the late 1990s and early 2000s. As climate has become more prominent and contested nationally and globally, climate justice has also gained attention, moving Just Transition from the agenda of unions to that of environmental justice activists. The Climate Justice Alliance (CJA), formed in 2013, has played an important role and is closely linked to the environmental justice activists that formed the Just Transition Alliance. The CJA is promoting Just Transition both as a narrative and as a concrete, community-based approach to address specific problems in six priority areas. As part of their campaign, a series of Just Transition Assemblies have been organized in various cities and regions. No conventional union or major environmental organization is a member of the CJA.

The Just Transition concept has also re-emerged locally, as in central Appalachia. Kentuckians for the Commonwealth, for example, have published a Just Transition Framework, 42 the Kentucky Student Environmental Coalition formed a Just Transition steering committee,43 and the Highlander Center in Tennessee initiated the Appalachian Transition Fellowship programme to support young, regional leaders for economic transition.⁴⁴ Progressive funders play a key role through their strategic support of local activities, for example in the Building Equity and Alignment for Impact (BEA) alliance. The alliance supports measures that have a high emissions reduction potential while also creating opportunities for employment, for example in public transportation infrastructure, food sovereignty, zero waste, affordable community housing and community-choice energy systems.

Labour unions, including those that have strong climate and environmental justice agendas, have been hesitant to engage the Just Transition narrative. Nonetheless, both the Labor Network for Sustainability and the Political Economy Research Institute of the University of Massachusetts have promoted the Just Transition and increased its appeal among some labour unions. There have been two important initiatives that can be considered examples of Just Transition in which unions were involved.

One is the plan to decommission the Diablo Canyon nuclear plant in California, in which the International Brotherhood of Electrical Workers Local 1245 was a



key participant. The other was a mobilization that included unions and was in response to the closing of the Huntley coal plant in Tonawanda, New York. More recently some unions have participated in a national effort that includes environmental justice, community justice and progressive funders to raise the profile of Just Transition in the United States. The BlueGreen Alliance, for instance, participated in the late February 2018 summit on Just Transition organized by the BEA alliance, as did representatives from the American Federation of State, County, and Municipal Employees and Service Employees International Union. These same unions, as well as the Communications Workers of America and the Amalgamated Transit Union, have also been involved in the People's Climate Movement initiative that organized a number of events across the United

States on 8 September 2018. National environmental organizations are also participating in this effort.

A significant initiative that does include unions among its various initiators and supporters is Initiative 1631 in Washington state. If successful, this will be the first state-level policy that includes a Just Transition fund that addresses the range of workers and communities affected by the green transition. This initiative is watched by emerging alliances between unions, environmentalists, community activists and others. As it stands, the state of New York has established a Just Transition Task Force, while labour unions and environmentalists in Colorado are discussing Just Transition in preparation for re-submitting ambitious state energy bills with a focus on renewables. The Colorado initiative and approach is clearly influenced by that of Washington state.

Over time, proponents of Just Transition in the United States have changed from unions in the chemicals and toxic substances industries to environmental, climate and community justice activists, environmentalist organizations, alliances at the state and city levels, networks of union activists, some political leaders and, increasingly, some other unions. The core issue since the late 1990s has been that of climate change, but many alliances also have other priorities, including toxic substances and access to water and food. In view of the breadth of participants in these coalitions, Just Transition goes beyond workers in fossil fuels—a trend that was evident by the late 1990s. While the promotion of renewables remains central, there are different views about how energy transition can take place. While there is no transformative Just Transition strategy in place in the United States, many grassroots advocates evoke transformative change. Just Transition goes beyond unions' pressures for immediate labourand workplace-related issues.

All of these efforts, of course, are taking place in the shadow of the economic nationalism and support for fossil fuels of the current administration of President Donald Trump—a strategy that has found roots within parts of the US labour movement and a number of communities. On one hand, this may drive deeper divisions within forces for social justice. On the other, it may provide an incentive to formulate a broader narrative that includes Just Transitions across the whole political economy. The question many are asking is whether state- and local-level initiatives will be enough to provide a strong alternative to the policies of the current federal government.

Conclusion



Native American elders and community members lead the Refinery Corridor Healing Walk for a Just Transition to clean environments and healthy jobs in the Northeast San Francisco Bay. Photo by Peg Hunter via Flickr (CC BY-NC 2.0)

T THE HEART of the Just Transition debate lies the question of how we can protect those who will be affected by the urgently required shift to a low-carbon world, be it workers, frontline communities or marginalized groups. Common to all approaches, including the more transformative ones, is the idea that the transition away from a fossil-fuelled economy is both necessary and that it will have considerable impacts on employment and livelihoods. Where these approaches differ, however, is in their underlying theories of change and worldviews. In other words, differences relate to the scope of change and its implications. Is it just a shift from a dirty to a clean economy without any fundamental shift in the balance of power, or does the shift to a lowcarbon economy necessarily imply a much deeper transformation of society?



Whereas proponents of the status quo and managerial reform approaches believe that free-market capitalism will drive the transition and bring about positive change, supporters of more transformational approaches consider the current economic model as being responsible for the deepening social and ecological crisis. This leads to differing assessments of who should be the main drivers and target audiences of the Just Transition—be it the state, workers and their unions or communities—and how it should be achieved.

This report has highlighted a number of critical questions and issues that need to be addressed when implementing Just Transition policies and plans. Determining who is negatively affected by a climate policy and therefore needs or merits transitional support is a challenging task. For example, in Canada, workers in the fossil fuel sector earn significantly higher incomes than accommodation and food services workers in the same communities. Furthermore, fossil fuel workers are disproportionately white and male compared to other sectors. If and when the fossil

fuel industry is phased out in Canada, workers in a wide range of sectors will be negatively impacted, and yet it is predominantly fossil fuel workers who benefit from government transition programmes as they are currently envisioned. For a truly Just Transition, all workers deserve support commensurate with their needs.

A second issue relates to energy and how it will be controlled and distributed to alleviate poverty and ensure universal access to affordable and sustainable sources. Some groups are demanding public ownership and energy democracy in order to overcome current inequalities in access and affordability.

A third issue relates to the kinds of societies we envision for the future. Will society continue to be based on economic growth valued the same way it is today, or will more value be placed on the work of caring for others, of creativity and free time, and of caring for nature? How will gender and age and disability be considered in terms of employment and access to a Just Transition?

For the time being, Just Transition remains overwhelmingly a concept of the global North that finds little uptake in most developing countries. The narrative of transition finds less resonance in most countries of the global South for a number of reasons, including their right to development, growing energy demands and low share of greenhouse gas emissions. Both climate change and response measures have cross-border impacts that will affect all countries. Can Just Transition be adapted to address developing countries' needs and ensure climate justice?

Finally, the biggest question is whether all the approaches and initiatives for Just Transition are *actually* just. One can argue that maintaining the status quo is unjust because the society that we live in is already one of great injustice. Given the existing political and economic structures that undergird this injustice, managerial reform may also be insufficient (Healy and Barry 2017). Past attempts at managerial reform for low-carbon transitions, such as the implementation of the clean development mechanism, have led to cases of unjust land grabbing and social exclusion (see Newell and Mulvaney 2013).

A truly Just Transition therefore requires that an alternative is recognized as exclusionary, and that effort is then continually made to include all those who were previously left out. It needs a progressive interpretation of climate justice to overcome exclusionary approaches and rectify the many injustices that result from climate change. This does not mean that reform-type approaches should be discouraged. Instead, they can be seen as valuable first steps on the way to the final destination.

The transition must accelerate. If we want to tackle climate change in its magnitude and urgency, we need a rapid shift to a low-carbon world. Large-scale, systemic changes are needed to stay within planetary boundaries and to prevent catastrophic climate change. Just Transition measures can be crucial to support people affected by these changes and to ensure that no one is left behind in the transition. In order to do so, they must tackle the root causes of injustice and unsustainability that are part and parcel of the current political economy. Changes at the margins will not be enough. Only a transition that challenges systems of exclusion and discrimination, and seeks to improve prosperity and well-being for all, can be considered a truly Just Transition.



Endnotes

- ¹ On social environmentalism see White et al. 2016.
- ² https://www.epa.gov/superfund/superfund-history
- ³ Guy Ryder, then General Secretary of the ICFTU, later also include Just Transition in his statement at the 2002 World Summit on Sustainable Development in Johannesburg: https://sustainabledevelopment.un.org/index. php?page=view&type=255&nr=23693.
- ⁴ Lobbying primarily targeted the United Nations Commission on Sustainable Development, United Nations Framework Convention on Climate Change (UNFCCC), International Labour Organization (ILO), and United Nations Environment Programme (UNEP). Important milestones in the concept's international development include the first Trade Union Assembly on Labour and Environment in Nairobi (2006), the recognition of trade unions as a distinct major group at the UNFCCC (2008), the recognition of Just Transition in the "shared vision" document in the run-up to the Copenhagen COP (successive COP decisions systematically included references to the Just Transition), the passing of a historic resolution on the need to combat climate change through sustainable development and Just Transition at the ITUC's second World Congress in Vancouver, and its inclusion in the Cancun Agreements (Decisions adopted by the Conference of the Parties to the UNFCCC in its sixteenth session, 1/CP.16).
- Over the course of 2005-2007, TUC sponsored a research project on Just Transition conducted by the Working Lives Research Institute that resulted in the publication of A Green and Fair Future: For a Just Transition to a Low Carbon Economy in 2008: https://www.tuc.org.uk/sites/default/files/ documents/greenfuture.pdf.
- ⁶ https://www.ituc-csi.org/IMG/pdf/01-Depliant-Transition5.pdf
- 7 See, for example, https://www.theguardian.com/ environment/2015/sep/21/bp-tops-the-list-of-firmsobstructing-climate-action-in-europe.
- IndustriALL represents workers in the mining, energy and manufacturing sectors.
- http://www.ilo.org/beijing/what-we-do/projects/ WCMS_182418/lang-en/index.htm
- While climate change became increasingly central the impacts of toxics and OSH remained an important concern. The magazine Hazards, for instance, followed the Just Transition debates as associated with toxics, going back to the 1990s. As with the OCAW and the earlier approach to Just Transition, Hazards also points to a desire within the union movement to associate Just Transition with a broader set of concerns than just climate change and climate policy.
- 11 http://www.justtransitionfund.org/
- ¹² F20 organized the conference Shifting the trillions our contribution to a just transition during the G20 Ministerial in Argentina (September 2018), for example. http://www.foundations-20.org/wp-content/uploads/2018/08/Agenda-F20-08.08.18.pdf.
- ¹³ Goods 2013; Felli and Stevis 2015; Morena 2018; Leonardi 2018.
- ¹⁴ Evans and Phelan 2016; Healy and Barry 2017; Newell and Mulvaney 2013; Snell 2018; Stevis and Felli 2015; Goddard and Farelly 2018; McCauley and Heffron 2018.
- ¹⁵ Key framings assessed were put forward by Stevis and Felli 2015; Goddard and Farelly 2018; Cock 2015; Newell and Mulvaney 2013; McCauley and Heffron 2018. The heuristic is modelled after Hopwood et al. (2005) who map different perspectives on sustainable development.
- 16 https://www.c2es.org/content/the-business-case-for-climateaction/
- 17 See, for example, http://www.bteam.org/announcements/its-time-for-a-just-transition-to-decent-jobs-in-renewable-energy/

- 18 See, for instance, the British TUC's five Just Transition principles https://www.tuc.org.uk/sites/default/files/ documents/greenfuture.pdf.
- 19 http://kftc.org/issues/what-do-we-mean-just-transitionappalachia
- ²⁰ https://cooperationjackson.org/ announcementsblog/2017/1/8/heres-how-we-prepare-to-beungovernable-in-2017
- ²¹ http://www.orjta.org/about/principles-of-a-just-transition/
- ²² http://www.ienearth.org/justtransition/
- ²³ http://jtalliance.org/what-is-just-transition/
- ²⁴ https://www.theguardian.com/environment/2018/oct/26/ spain-to-close-most-coal-mines-after-striking-250m-deal
- 25 https://climateactiontracker.org/countries/brazil/
- ²⁶ https://www.theguardian.com/world/2007/mar/09/brazil. renewableenergy
- ²⁷ Oil and gas production alone contributes 26% of domestic emissions. See Government of Canada. 2018. National Inventory Report 1990–2016: Greenhouse Gas Sources and Sinks in Canada. Canada's Submission to the United Nations Framework Convention on Climate Change. Gatineau: Environment and Climate Change Canada, p. 10.
- 28 https://www.alberta.ca/coal-communities.aspx
- ²⁹ https://www.alberta.ca/coal-community-transition-fund.aspx
- 30 https://www.alberta.ca/support-for-coal-workers.aspx
- 31 https://www.alberta.ca/coal-tuition-voucher.aspx
- 32 https://www.bmu.de/en/pressrelease/kabinett-beschliesst-dritten-klimaschutzbericht/
- ³³ Seasonally adjusted figures of Federal Employment Agency: https://statistik.arbeitsagentur.de/Statistikdaten/ Detail/201808/arbeitsmarktberichte/monatsberichtmonatsbericht/monatsbericht-d-0-201808-pdf.pdf, regional figure available at Regionalverband Ruhr: https://www. metropoleruhr.de/nl/regionalverband-ruhr/statistik-analysen/ arbeit-und-soziales/arbeitsmarkt.html.
- 34 https://www.cleanenergywire.org/news/commission-watchmanaging-germanys-coal-phase-out
- 35 https://www.nytimes.com/2018/09/14/world/europe/germany-forest-coal.html
- ³⁶ UNEP, WWF and GIZ have been key actors in the policy formulation.
- ³⁷ Among others: Government of Kenya (2008; 2013a,b; 2016a,b) and the policies on the implementation of the UN Sustainable Development Goals.
- 38 https://www.prospect.org.uk/be-involved/outreach-projects/ ketawu
- ³⁹ See, for instance, https://www.dailymaverick.co.za/ article/2018-03-15-op-ed-numsa-supports-a-transition-fromdirty-energy-to-clean-renewable-energy/.
- 40 https://www.news24.com/Green/News/numsa-accuses-greenpeace-of-insulting-workers-20180319
- 41 http://www.statssa.gov.za/publications/P0211/ P02112ndQuarter2018.pdf
- 42 http://kftc.org/issues/what-do-we-mean-just-transitionappalachia
- 43 https://www.kystudentenvironmentalcoalition.org/justtransition-working-group.html
- 44 http://www.appfellows.org/

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Abbreviations and Acronyms

CCOO CCTF	Building Equity and Alignment for Impact Confederación Sindical de Comisiones Obreras Coal Community Transition Fund Communications, Energy, and Paperworkers' Union of Canada Climate Justice Alliance
CCTF	Coal Community Transition Fund Communications, Energy, and Paperworkers' Union of Canada
	Communications, Energy, and Paperworkers' Union of Canada
CEP	
	Climate Justice Alliance
CJA	Climate Justice Alliance
CLC	Canadian Labour Congress
COP	Conference of the Parties
CWTP	Coal Workforce Transition Program
DGB	Deutscher Gewerkschaftsbund (German Trade Union Confederation)
FES	Friedrich-Ebert-Stiftung (Friedrich Ebert Foundation)
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICEM	International Federation of Chemical, Energy, Mine and General Workers' Unions
ICFTU	International Confederation of Free Trade Unions
IG BCE	Industriegewerkschaft Bergbau, Chemie, Energie (Mining, Chemical and Energy Industrial Union)
IG Metall	Industriegewerkschaft Metall (Union of Metalworkers)
ILO	International Labour Organization
ITUC	International Trade Union Confederation
JTA .	Just Transition Alliance
JTC .	Just Transition Centre
NGO	Non-Governmental Organization
NUMSA	National Union of Mineworkers of South Africa
OCAW	Oil, Chemical and Atomic Workers' Union
OSH	Occupational Safety and Health
REI4P	Renewable Energy Independent Power Producers Procurement Programme
SDG	Sustainable Development Goal
TUC	Trade Union Congress
TUCA	Trade Union Confederation of the Americas
UN	United Nations
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
WEDO	Women's Environment and Development Organization
VER.DI	Vereinte Dienstleistungsgewerkschaft (United Services Trade Union)
WWF	World Wide Fund for Nature

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Mapping Just Transition(s) to a Low-Carbon World

Just Transition—the idea that justice and equity must form an integral part of the transition towards a low-carbon world—is increasingly being mobilized both to counter the idea that protecting the environment and protecting jobs are incompatible, and to broaden the debate to justice-related issues such as the kinds of jobs and societies we envision for the future.

From its origins in the labour movement in the United States, Just Transition has evolved and spread to other geographies and constituencies, from environmental justice groups to the international trade union movement, international organizations, the private sector and—since its inclusion in the preamble of the Paris Agreement—global, national and subnational policy circles.

This report, by the Just Transition Research Collaborative, unpacks the different understandings, narratives and framings of Just Transition that underpin the concept's growing popularity and uptake. Six short country case studies then provide insights into how Just Transition is—or is not—being mobilized on the ground.

The report suggests ways that Just Transition can inform policy discussions on the role of equity and justice in the shift towards a low-carbon world, and calls for a progressive interpretation of Just Transition to promote transformative change and climate justice for all.







