Workers and Communities in Transition:
Report of the Just Transition Listening Project

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JUST TRANSITION
LISTENING PROJECT

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LABOR NETWORK
FOR SUSTAINABILITY

The Just Transition Listening Project is a project of the Labor Network for Sustainability.

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

The idea of "just transition" has recently become more mainstream in climate discourse. More environmental and climate justice advocates are recognizing the need to protect fossil-fuel workers and communities as we transition away from fossil-fuel use. Yet, as detailed in our report, transition is hardly new or limited to the energy industry. Throughout the decades, workers and communities have experienced near constant economic transitions as industries have risen and declined. And, more often than not, transition has meant loss of jobs, identities, and communities with little to no support.

While transition has been constant, the scale of the transition away from fossil fuels will be on a level not yet experienced. Fossil fuels are deeply embedded in our economy and society. Transition will not only affect the energy sector, but transportation (including passenger and freight), agriculture and others. Adding to the challenges of the energy transition, we are also transitioning to a post-COVID-19-pandemic world. As such, we cannot afford, economically or societally, to repeat the mistakes of the past that left so many workers and communities behind.

To better understand how transition impacts people, what lessons can be learned, and what practices and policies must be in place for a just transition, in the Spring of 2020 we launched the Just Transition Listening Project (JTLP). The JTLP has captured the voices of workers and community members who have experienced, are currently experiencing, or anticipate experiencing some form of economic transition.

Those who have suffered from transitions are rarely the ones whose voices are heard. Yet, no one is more able to fully understand what workers and communities need than those who have lived that experience. The JTLP is the first major effort to center these voices. In turn, the recommendations provided can make communities and workers whole. In many ways, these recommendations are common sense and fundamental to creating a just society, regardless of transition. Yet, the failure of elected officials to deliver just transition policies points to the need for wide scale movement building and organizing.

This report summarizes lessons learned and policy recommendations in three overall concepts for decision-makers: Go Big, Go Wide, and Go Far.

- The scope and scale of the transitions we will experience in the climate-safe economy will require us to be ambitious—**Go Big**. We will need a comprehensive approach that addresses the impacts on workers and communities across geographies, demographics and industries. The federal government will need to play a lead role. There are promising state and local just transition models, but none have access to the resources to fully fund their efforts. Strengthening the social safety net, workers' rights, and labor standards will also be critical to supporting workers and communities equitably. Job creation will be central to assure successful transitions, and the federal government can and must invest heavily to support creation of good jobs in emerging clean industries in every region of the country.

- Just transitions must also be holistic—**Go Wide**. A common theme throughout the interviews we conducted as part of the JTLP was the trauma individuals and families experienced as their economies were devastated. Several people referenced suicides, drug addiction, and depression among friends and co-workers who struggled with a loss of identity and relationships as factories that

were central to their communities shut down. There are inspiring models of how unions and communities took matters into their own hands to provide mutual support and empower people in the midst of transitions. But much more can be done to build and strengthen this social infrastructure. Going wide also requires that unions and other workers' organizations, frontline community organizations, and Indigenous nations are deeply engaged throughout the process of the transition.

- Finally, just transitions must look into the future—**Go Far**. Workers who have established careers in an industry for many years complained of being offered training programs for jobs that did not exist in their region. The commitment to support these workers and their communities financially was often short-term with devastating consequences. Just transitions require a longer-term commitment of support and investment in workers and communities. Just transitions also require attention to generational differences: a younger, more diverse workforce has been growing into energy industries that will likely not offer long-term careers. It is essential to create good career alternatives for this generation.

The major findings of this report derive from more than 100 listening sessions, including qualitative interviews and focused discussion groups with workers and community members from across the United States conducted between May and October of 2020. Several themes emerged through these sessions, including a more complete picture of what transition entails, how coalitions come together, and what pathways to a just future exist. The main findings and some key recommendations for policymakers and movement organizations are provided as bullet points in this executive summary. The full report follows.

Main Findings

United Steelworkers Health, Safety & Environment Conference, Pittsburgh, 2019. Photo: Vivian Price

- Transitions are inevitable and constantly happening across the economy. Past transitions, driven by market forces, corporate entities, and short-sighted public policies left workers and communities largely behind with little to no support.
- The existing transitional policies are fragmented and inadequate, leading to the destruction of human capital as well as deep resentment and opposition to social and environmental policies
- Workers and community members from all regions of the country are suffering from an historic decline and lack of access to opportunities. Many also face the threat of losing opportunities in the near future. The COVID-19 pandemic and persistent structural racism and wealth inequality have exacerbated these realities. People affected by past unjust transitions are reacting harshly to climate action and policy, creating tensions between labor, community and environmental movements that often erupt into open conflicts.
- Individual and collective understandings of transitions range widely according to type of work, class, gender, race, age, political ideology, previous experiences with environmentalists or the climate justice movement, and relationships with unions and the community.
- Just transitions in any sector require both targeted short-term and proactive long-term policies.
- In the inevitable energy transition some, but not all, fossil-fuel workers will be employed in the renewable energy sector.

- Plans for supporting workers and communities in the transition away from fossil fuels must attend to local conditions and be rooted in the needs and aspirations of workers, unions, and disproportionately impacted communities.

Recommendations

Building on the themes of Go Big, Go Wide, and Go Far, we have drawn further recommendations from our interviews, and present them in three categories: recommendations for policymakers, recommendations for advocates, and recommendations for future research.

Recommendations for Policymakers

- Address immediate impacts of crises and transitions. This includes:
  - Immediately pass a robust relief plan to support workers and communities suffering from a transition, economic or otherwise. The relief should include recurring direct payments until the economy has recovered, and any investment should be in low-carbon sectors and not double down on the fossil fuel economy of the past.
  - Protecting displaced workers through a comprehensive set of policies appropriate for their circumstances, including wage replacement, alternative and comparable employment, health insurance coverage, relocation support, childcare, and pension and retirement contributions. Policies should also cover clerical, seasonal, and part-time workers impacted by the transition.

  - Creating and expanding government rapid response teams in every state to address job displacement and mass layoff situations, such as the Rapid Response Team in Massachusetts or the Transition Center in the Lordstown auto plant shutdown. Transitional services should extend to spouses and include mental health support, retraining opportunities, relocation, childcare services, and assistance from caseworkers who can help people consider career pathways, available resources, and how to access them.
  - Provide bridge funding for localities where the public sector is affected by the withdrawal of fossil-fuel tax revenues.
- Invest in long-term equitable economic transformation. This includes:
  - Any decision-making bodies should include all affected parties including workers, Tribal, environmental justice, communities.
  - Creating dedicated and robust funding to support transition efforts, including a Just Transition Fund.
  - Expanding the Trade Adjustment Assistance program (TAA) to include climate and other dislocations. Increase program funding and benefits, and open eligibility as widely as possible.

- Seeding new sustainable industry growth in historically underserved regions, in addition to traditional fossil-fuel regions. This could be accomplished through legislation in the vein of the Green New Deal to create substantial numbers of new, high-quality low-carbon jobs and build significant low-carbon infrastructure. Any program must ensure Indigenous, marginalized, and disproportionately impacted communities have access to all economic opportunities and are protected from projects that degrade their living conditions.

- Targeting investment and procurement to under-resourced regions and urban areas to prepare them for the economy of the future, including broadband access expansion, public transit build-out, and repairing essential infrastructure such as drinking water systems.

- Ensuring that any federally funded projects advance equity by prioritizing the creation of quality domestic jobs which include targeted hiring of workers from historically marginalized communities and those displaced from the fossil-fuel industry. Such projects should ensure prevailing wages and Project Labor Agreements, training and advancement opportunities, labor neutrality agreements, and promote and monitor affirmative action goals.

- Supporting community-based efforts to bring diverse interests together to reimagine transitioning regions. Include labor, environmental justice, Tribal and community groups in decision making and oversight processes, such as the process that led to Colorado's Office of Just Transition, as well as in the implementation of transition plans envisioned by Washington State's Initiative 1631.

- Strengthening and expanding social protections, including universal access to health insurance and decoupling from employer-based health coverage, childcare, and provide a living wage. Further, the government should serve as employer of last resort, ensuring a decent job for any person who seeks gainful employment. A new job in the waiting is typically the best transition plan.

- Protect the right to organize. Pass the Protecting the Right to Organize (PRO) Act so workers in all industries can have a voice on the job and bargain collectively with their employers.

- Subject all energy and infrastructure projects to Free, Prior, and Informed Consent when they involve Indigenous lands.

- Incorporate sustainability in every step of the transition process, from protection of pristine space to resource extraction through to waste management, including recycling.

Recommendations for Labor and Movement Organizations

- Labor unions, workers' rights organizations, and advocacy organizations should build cross-movement relationships by forming labor-climate-community roundtables, networks and/or committees at the state and/or local levels to build and sustain genuine personal and political relationships over time.

- Labor unions should establish or expand any pre-existing environmental and climate committees, task forces, or other entities that can develop and deploy educational programs for members on issues of climate change; social, economic, and environmental justice; and just transition.

- Environmental and other advocacy organizations should create labor committees to develop and deploy educational programs on issues of labor, job quality standards, and just transition.

- Labor unions should adopt environmental and climate policy concerns as part of their advocacy agendas, and community organizations should adopt the right to organize and the promotion of strong labor standards as part of their advocacy agendas.

- All organizations should create more mentorship and leadership development opportunities, especially for women, people of color, Indigenous people, and immigrants.

Recommendations for Future Research

- Identify where fossil-fuel activity is occurring, such as fossil-fuel power plants and extraction sites, the timeline for drawing down these activities, and the workforce and economic impact of this drawdown. This data can help workers and communities plan proactively for transition ahead of closure, rather than dealing with the situation reactively once a closure has been announced.

- Analyze the environmental, social and labor practices of the emerging clean energy sector. A just green transition requires a clean energy sector with high standards and long-term provisions to prevent future unjust transitions.

- Review past and ongoing transitions in order to identify promising policies/practices, with particular attention to those treating workers and communities as a whole (and not only as economic entities) while erasing any patterns of marginalization.

- As noted, the energy transition is only one transition. Additional research is needed on ongoing sectoral transitions that will require just transitions, such as automation, digitalization, hybrid working, and health care

A woman holds a Just Transition Now sign at a rally in Minneapolis, Minnesota. Photo: Lorie Shaull, Wikimedia (Creative Commons)

Workers and Communities Say No to Bearing the Burden of Change Call for a Just Transition to Climate Security

By Jeremy Brecher

Economic Change Is Threatening Workers and Communities

American workers and their communities are facing historic economic transitions. Our current economic transition is a transition to growing hardship and injustice.

Coal, oil, and gas workers face closures of their industries and jobs, which cannot compete with increasingly cheaper renewable energy, and because of public demand for phasing out fossil fuels to protect the climate. Further, the COVID-19 pandemic and resulting economic pressures are triggering massive and irreversible downsizing of many industries and permanent job losses for millions of workers. Growing economic and political inequality is aggravating discrimination, job degradation, insecurity, and permanent impoverishment. One measure of the threat is the increase in the number of "deaths of despair" in recent years—whether by suicide, or alcohol or opioid use—that have contributed to an unprecedented decline in life expectancy in the U.S. for each of the last four years.

While many of these problems have been long-festering, we face them today in a new context. 2021 has started with new national political leadership in both the White House and Congress. President Joe Biden and the Democratic congressional leadership have promised to address the climate crisis, the crisis of racism, and the crisis of job loss and economic insecurity and inequality. At the same time, we face a violent, racist right-wing insurgency fueled by workers' loss of economic security in the past and fear of loss in the future. Increasingly visible devastation from climate change is generating a new commitment to climate protection, which makes protecting the wellbeing of workers and communities still more pressing. The human need and political demand for an economic recovery that will "build back better" opens new opportunities to address climate protection, worker wellbeing, and social justice in a different and more favorable context.

Let Worker and Community Voices Be Heard

The Labor Network for Sustainability (www.labor4sustainability.org) strives to build a labor climate movement. We provide a voice within the labor movement for policies that are ecologically sustainable while also advancing the movement for good jobs and a "just transition" for workers and communities who have been hurt by the effects of climate change and by the transition to renewable energy. For more than a decade, we have been proposing and advocating strategies for protecting working people from the threats of change as well as taking advantage of the opportunities change presents. We recognize that economic transition is both inevitable and already underway. We believe that workers and communities must play a role in shaping this transition.

To help develop more adequate responses to the economic transition threatening workers and communities, LNS and partner organizations launched the Just Transition Listening Project (JTLP). Between May and October of 2020, an Organizing Committee conducted over 100 in-depth "listening sessions," typically lasting an hour or more, with workers from dozens of unionized and nonunionized industries; union leaders; members of frontline communities, including environmental justice communities, communities of color, and Indigenous communities; and leaders from labor, environmental justice, climate justice, and other community organizations. The purpose of these interviews was to capture the voices of workers and community members who have experienced, are currently experiencing, or anticipate experiencing some form of economic transition.

We believe that those who are most affected by our current economic crisis must be included in discussions about how to address it. This report presents the findings of our research with communities, analyzed by a team of academic experts. The first part examines the transitions that people have experienced. The second part describes how those affected have built common visions and strategies for change. The third part focuses on solutions.

Transition: Just or Unjust?

The Just Transition Listening Project made one thing clear: the history of economic transitions in America is a history of injustice and failure. For the most part, in the face of economic change, working people have been abandoned by their employers and their government. Participants told stories of paper mill closures in Maine, rubber plants in Texas, aerospace factories in California, auto plants in Michigan, and steel mills in Pennsylvania. In each of these and many other situations, workers and communities have been treated as disposable.

Our interviews revealed how various economic changes have devastated working-class life and communities. For example, one person described how globalization has contributed to transitions without justice over the last few decades: "I personally don't think GM wants to be in the vehicle producing business in the United States. And I don't think that means they are not going to be building vehicles, but I think they're going to be building vehicles in Mexico and China." While the Trade Adjustment Act (TAA) was supposed to protect workers against the destructive effects of free trade agreements, many interviewees scorned both the difficulty of accessing the program and its failure to provide pathways to jobs equivalent to those they had lost.

Automation and other technological changes pose additional threats to workers' livelihoods. A grocery store worker and union member, for example, pointed out the impact of ongoing technological developments in the grocery industry, such as automatic checkout equipment, designed to minimize labor.

Labor policies such as subcontracting and replacing regular with contingent employment likewise threaten workers' economic and physical wellbeing. Trade unionists portrayed such contracting out as a significant threat to the security of their members, removing union protections, driving wages down, and producing unsafe working conditions by employing an inexperienced and inadequately trained workforce.

Interviewees were well aware of the impacts of these attacks on working people and their communities. Loss of livelihood was front and center in their comments. Additional impacts were more subtle, but still devastating. When a major plant or other employer closes, workers lose their jobs, and local people become impoverished or are forced to move elsewhere. This often has a devastating impact on community identity as there may be a breakdown in intergenerational continuity within the workplace, the family, and community institutions such as religious, cultural, and political organizations. Further, there is increasing recognition of social consequences: violence, family breakdown, mental health impacts, and more. Local employers are frequently major local taxpayers as well, and their closing often devastates the tax base, which in turn can undermine a range of local institutions, including schools, municipal governments, and community service providers. The loss of a major local employer also reverberates in loss of customers for small businesses and loss of support for religious, service, and other community organizations.

All these issues are aggravated for workers and communities that have been subject to discrimination and oppression. Interviewees from African American, Latinx, Indigenous, immigrant, and other marginalized groups frequently pointed out that for them, attacks on working people were not exceptional results of industrial change, but rather the norm even in times of prosperity and stability. Many in these groups had been excluded from access to better jobs or from any employment at all. Their communities were burdened by lethal pollution due to environmental racism, and deprived of healthcare, transportation and other services available to more privileged communities. Indigenous Americans were subject not only to discrimination but to denial of treaty rights that would have provided community security and alternative pathways to economic well-being.

The history of unjust transitions has generated a growing demand for just transition, a set of policies and practices that will provide favorable livelihoods and ways of life for those who might otherwise be thrown on the economic scrapheap as well as those who have historically been blocked from such opportunities. Alternatives to economic devastation have been offered by local workers and communities, national legislation, and academic studies and reports. This research and experimentation provides a strong starting point for programs to build a future for those who might be forced to bear the cost of change that is necessary for the wellbeing of all.

Economic change is inevitable, and some changes are necessary to realize common benefits such as climate protection, and to correct the injustices currently imposed on those who face discrimination in the economy, and pollution and deprivation in the community. The alternative to a just transition is not to maintain the status quo but rather to suffer the cruelty and hardship of an unjust transition.

Toward Just Transitions

While a variety of public policies were supposed to have provided transition assistance to displaced workers and impacted communities, they have often been so inadequate that workers have considered them more of an insult than an aid. One interviewee spoke with scorn about plans like the one that would turn coal miners into computer programmers. Neither the skills required nor the locations of work made sense in terms of real people and real jobs. Even if some workers found jobs by moving from Appalachia to Silicon Valley, the abandoned coal towns would continue to die.

A far more carefully planned, better resourced, and individually adapted approach is necessary to prevent devastation to people and communities. Proposals for just transition need to concretely address workers' concerns about how they will keep a roof over their heads and feed their kids. Marginalized workers are in particularly acute need of deliberate policy strategies that create pathways to new jobs and healthier communities, which are frequently blocked by underlying injustices such as discrimination in hiring practices and concentrated environmental pollution.

Many workers, however, are understandably suspicious of proposals for transition. To them, "transition" means that they will lose their job. Despite any promises that may be made, they see little evidence that transition will result in a job with comparable wages, job security, or union protections.

One important reason for skepticism is that efforts to implement just transition have been largely invisible. For years there have been virtually no national initiatives to address the devastating economic changes that are already underway. Our research indicates that work has remained at the local and state levels, where we have identified a variety of models addressing various aspects of a just transition. These efforts involve creating policies to counter unjust transitions, and organizing and aligning workers and communities to implement those policies.

Some of these efforts represent a local response to threats that local employers will be shut down. For example, when it became apparent that the Huntley coal-fired power plant in Tonawanda, New York,

was likely to close, utility workers in the plant found their livelihoods threatened (see Case #3). So did public school teachers as local education funding depended considerably on the power plant.

Initially these groups were not in alignment. As the president of one local union pointed out,

> Organized labor and environmentalists and municipal politicians are normally in these silos, and they're operating in such a way as to protect their own interests or to promote their own interests. And these silos can create barriers. So, where you could have colleagues working together, you actually are competing.

In this case, a report on the impending demise of the power plant rallied utility workers, teachers, environmentalists, and local political leaders to overcome their divisions, develop a transition plan, and win funding to implement it. Unions funded training for community "transition delegates" who went door to door for two years. They hired a lobbyist and worked with elected leaders to establish a statewide fund available for towns experiencing fossil fuel closures. The community based environmental group then led a massive "re-visioning" process involving hundreds of townspeople to project what kind of development they would like to see in their town and how they would like to see the money spent to help the town grow sustainably. The workers whose plant shut down were all able to make a transition without having to go on unemployment.

This experience provided part of the inspiration for New York to pass the Climate Leadership and Community Protection Act that in 2019, which provided a fund of $45 million to help other towns pursue a just transition. This case is not unique; for example, when the state of California decided to close the Diablo Canyon nuclear power plant, environmental organizations worked with the unions representing plant employees to ensure that all workers would get alternative jobs or, if they preferred, acceptable provision for retirement (see Case #4).

The nuclear fueled Diablo Canyon Power Plant—in San Luis Obispo County, California. Photo: Marya from San Luis Obispo, USA, Wikimedia (Creative Commons)

One aspect of a just transition is providing for individual affected workers. In 2019, when GM announced it was closing a car assembly plant in Ohio, the United Auto Workers (UAW) local won funding from the Department of Labor for a Transition Center (see Case #5). The Center helps with applications for support programs, retraining and jobs, and for paying for schooling, tools, and transportation. Programs are tailored to individual and specific workforce needs. In Massachusetts, a Rapid Response Team composed of state unions and government agencies assists unions and workers experiencing layoffs or downsizing. The team helps workers access National Emergency Grants and Trade Adjustment Assistance, develops layoff aversion strategies, and assists dislocated workers through retraining and job searches. Members of the team emphasized to interviewers that their work is effective in considerable measure because Massachusetts has a relatively strong safety net.

In the absence of federal support, states are beginning to develop broader and more proactive just transition programs. In 2019, faced with the impending closure of coal mines and coal fired power plants, Colorado passed one of the nation's first just transition laws. It instituted an Office of Just Transition and a large advisory board with funding for the director and a mandate to find more funding in the future (see Case #1). At the end of 2020 the office submitted a Just Transition Action Plan "to help workers continue to thrive by transitioning to good new jobs, and to help communities continue to thrive by expanding and attracting diverse businesses, creating jobs, and replacing lost revenues."

Auto Assembly Line. Photo: Vyacheslav Bukharov, Wikimedia (Creative Commons)

One of the most imaginative plans for just transition policy was the Washington Initiative 1631 (see Case #2), designed to provide support for workers negatively impacted by the transition away from fossil fuels, including full wage replacement, health benefits, and pension contributions. Wage insurance would pay any difference between re-employment wages and the wages workers had been earning in the lost job. The Initiative would also provide retraining costs, peer counseling, job placement services, relocation expenses, and priority hiring in the clean energy sector. It would be funded by a fee on carbon pollution expected to generate more than $2 billion over five years. A public board including government agency officials, a tribal representative, academics, business representatives, and a representative of the environmental justice community would oversee the investments. A minimum of 35% of all investments would be allocated to benefit pollution-burdened environmental justice communities; 15% would assist lower-income populations in urban and rural communities in transitioning to a clean energy economy; and 10% of investments would require formal support from a tribal government. Activity on tribal lands would require Free Prior and Informed Consent. Initiative 1631 was narrowly defeated by massive opposition from fossil fuel companies: Exxon alone spent over $30 million for anti-Initiative television ads in the last days of the campaign.

Just transition needs to not only create jobs, but also ensure that both new and existing jobs are good jobs and that all workers can access them equitably. This report includes several case studies where union and community initiatives achieved just that.

In New York City in 2013, the Teamsters union joined with the labor-community coalition ALIGN to start the "Transform Don't Trash NYC" campaign to improve conditions for sanitation workers and address community impacts of sanitation policies. Sanitation jobs may be defined as environmental or "green" jobs, but they often involve inadequate wages and unsafe and onerous conditions. In 2019, after six

years of organizing, the coalition won a Commercial Waste Zones Law designed, as a coalition organizer put it, to "ensure that commercial waste workers would be treated with dignity and respect and allow for them to be able to have not only good paying jobs, but also safety in their workplace, security in their jobs." The Los Angeles Alliance for a New Economy organized a similar "Don't Waste LA" coalition which won a "Zero Waste in LA" city ordinance aimed to divert 90% of waste from landfills while improving conditions for recycling workers and drivers. In both instances, a move toward zero waste and 100% recycling was central to worker, community, and climate gains.

The advocacy and organizing group Jobs to Move America has developed and is implementing a plan to incentivize government procurements to support domestic manufacturing, local hiring, and the right to union representation (see Case #6). In Los Angeles County, United Steelworkers Local 675, working with Jobs to Move America, organized Proterra and other electric bus manufacturing companies. In addition to winning their first union contract in 2020, they negotiated a Community Benefits Agreement that commits the employer to hire from marginalized communities, and opens the way to manufacturing jobs for displaced refinery workers.

Proterra Electric Bus Demonstration. Photo: Eric Wheeler, Metro Transit, Flickr (Creative Commons)

The Climate Jobs Campaign, which originated in New York state and then spread into Maine, Texas, Illinois, and Connecticut, is organizing to ensure that addressing climate change provides "the opportunity to create lots of good union jobs by investing in renewable energy." They seek to expand support from building trades and other unionists for climate protection by advocating both for more climate jobs, labor standards, project labor agreements, and community benefit agreements to ensure that climate jobs are good jobs. Several building trades leaders in the Northeast spoke about the job opportunities associated with the coming of the offshore wind industry, and others on the West Coast and in the Southwest mentioned the possible expansion of commercial-grade solar, although rooftop residential solar was widely seen as a low-paying option that created few skilled trades jobs.

The Need for National Public Policy

As workers and their communities have been increasingly devastated by unjust transition, the federal government has not only failed to correct that injustice, it has in fact followed policies that increase the threat while dismantling the labor and public policy activities that might have mitigated against it. The COVID-19 pandemic, the resulting economic dislocation, and the rise of militant anti-democratic political forces all expand and intensify the threats of unjust transition. However, the election of a president who campaigned on creating millions of good jobs for climate protection opens new political opportunities for supporting not only the climate but also hard-hit workers and communities.

While the local and state campaigns and policies described in this report have frequently helped win better terms for transitions, they have rarely been able to halt plant closings and other sources of worker and community devastation. For this, national action is required. National just transition policies should be an integral part of broader "build back better" programs designed to address the U.S.'s economic and social crises in the aftermath of the COVID-19 pandemic.

People interviewed by the JTLP offered many suggestions for national public policy to support just

transitions. Such policies include guaranteed employment, income maintenance, universal healthcare, retirement for those who wish it, education, mentoring and counseling, and support for affected communities and small businesses.

The development of such policies could start by substantially improving existing programs. They could, for example:

- Expand and improve the TAA program to include climate and other dislocations and enhance program funding, eligibility, and benefits.
- Strengthen unemployment insurance benefits, both in terms of wage replacement rates and duration of benefits, to maximize the effectiveness of TAA programs.
- Decouple health insurance from employment.
- Create or reinstate union and government rapid response teams in every state to address job displacement and mass layoff situations.
- Update labor laws to even the playing field for workers who wish to form unions and bargain collectively with their employers.
- Create incentives in public bidding processes to prioritize hiring of workers from historically marginalized communities and those displaced from the fossil fuel industry.

Solar and wind farms, Desert Hot Springs, California, 2019. Photo: Vivian Price

Interview participants, however, often stressed the need for more holistic just transition programs. For example, a just transition requires an intergenerational vision of the future for children of workers and community members. A just transition should respond to immediate crises and provide proactive guarantees of security for all, whenever they are confronted by the forces of change. Transition protections may need to start with workers and communities affected by climate change policies, but ultimately, they should include all those threatened by economic change whether from automation, globalization, or other causes. They must counter injustices and provide pathways forward for those in fossil fuel and other industries facing job loss, and for those who have been systematically excluded from such jobs in the past. Just transition should address not only loss of jobs and livelihoods, but the need for greater social cohesion and solidarity.

The failure to provide just transitions for workers facing economic change is characteristic of economic policies and structures that treat the accumulation of private profit as more important than the lives and livelihoods of human beings. The struggle for just transition is part and parcel of a larger struggle to prioritize the protection of people: their environment, their climate, their jobs, their livelihoods, and the equality and justice of their treatment.

Report of the Just Transition Listening Project

By J. Mijin Cha, Vivian Price, Dimitris Stevis, and Todd E. Vachon, with Maria Brescia-Weiler[1]

The major findings of this report derive from more than 100 listening sessions, including qualitative interviews and focused discussion groups with workers and community members who have experienced, are currently experiencing, or anticipate experiencing some form of economic transition. The listening project captured the voices of workers from more than a dozen industries and over 40 labor organizations, as well as non-union workers; frontline communities, including environmental justice communities, communities of color, and Indigenous communities; and leaders from labor, environmental justice, climate justice, and other community organizations who have been grappling with the socioeconomic challenges created by economic transitions. A set of mini-case studies is provided in "Appendix A: Case Studies and Narratives," and greater detail on the data and research methodology are provided in "Appendix B: Data Collection and Research Methodology," and "Appendix C: Description of Data," located at the end of this report.

Appendix A: Case Studies & Narratives

Appendix B: Data Collection & Research Methodology

Appendix C: Description of Data

The results of our analyses are presented under three main categories:

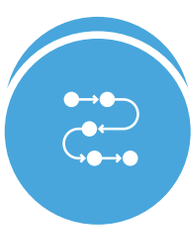
The goal of this report is to uplift the voices, lived experiences, and wisdom of working people and

Problem

The "Problem" section captures the overwhelming challenges and struggles in past and current transitions.

Process

"Process" explores how workers and communities come to understand and engage with these problems, particularly in coalition.



Pathways

"Pathways" considers the solutions that have been pursued or called for by workers and community members in this study.

community members who have first-hand knowledge of social, economic and/or environmental transitions. Our elaboration of particular case studies and our final section on "Pathways" is not intended as a prescription of "what should be done," delivered from researchers on high. Rather, we highlight key insights from those whose lives are deeply impacted by such changes and whose voices are often not listened to or even heard when decisions are made around transitions. For that reason we have largely avoided references to external research.

Problem Introduction

At the nexus of intertwining crises of climate, COVID-19, and inequality, workers and communities face great uncertainty about the future. Will there be adequate support and resources to help weather the transition to a post-pandemic world already in the midst of the climate crisis? Will the patterns of the past repeat with workers and communities bearing the brunt of transition and pushed even further into economic insecurity?

This section describes challenges workers and communities have faced in previous and ongoing transitions, whether from the closure of a plant or being forced to work through a pandemic. While transition is often discussed as a future concern—such as the energy transition away from fossil fuels—or as a static issue—such as when a plant closes—transition is in fact constant and inevitable, as the economy moves through different industries and technologies. Despite this consistency, the inability to support workers and communities through these transitions is painfully clear. This section discusses these failures, and then concludes with insights into what happens after transition, asking the question, what are we transitioning into?

As a term, just transition has become increasingly common in mainstream climate discourse. Just transition appeared in several presidential candidates' climate platforms, including President Biden's. The idea of just transition is particularly relevant in this moment because an energy transition away from fossil fuels is now occurring, despite conservative rhetoric claiming otherwise. While the transition is not occurring at the rate required to reach the emission reductions needed to stop the worst impacts of climate change, with the new Biden administration, the transition to renewable energy will likely accelerate. This acceleration is necessary but also comes with the reality that fossil-fuel workers and communities will be left without jobs and revenue. Just transition discourse acknowledges that mitigating these losses must be part of climate policy.

While there is currently increased attention to the negative impacts of an energy transition, the transition away from fossil fuels is just the latest economic transition imposed on workers and communities. Across the country, workers and communities have already been forced to face transition due to the loss of factories, plants, and entire industries. With few exceptions, previous transitions have been largely unjust for workers and communities, abandoned by both their employers and government. Workers in this country have been left consistently without support and with little opportunity for new work, with devastating results.

Losing a plant or factory that served as a community anchor is traumatic for both individuals and the collective. These worksites provide more than much needed revenue: they are often social hubs that generate community identity. Understanding and addressing the multi-tier, multifaceted impact of transition is fundamental to actualizing a just energy transition, particularly as we move into a post-pandemic world. COVID-19 laid bare just how deep inequities run in our society, as millions were forced

quickly into poverty while the billionaire class expanded its ranks. Given the history of unjust transition and the scale of the low-carbon transition, advancing just and equitable transition policies that seek to remediate, rather than exacerbate, existing inequalities must be foundational to all climate policy.

Transition is Constant and Inevitable

There is considerable attention paid among advocates and scholars to deindustrialization as a major economic transition. Deindustrialization resulted in a constant stream of plant, mill, and factory closures, following a familiar pattern: one mill closure would trigger a series of closures, such as in Youngstown, Ohio, where a single closure in 1977 was followed by a wave of closures in 1979, which shuttered every mill in the town. While deindustrialization is most often associated with the Midwest, there has been constant deindustrialization across the country. In the Northeast, several industries have come and gone, including the textile industry, manufacturing, and paper mills. Much of this deindustrialization was the result of globalization and trade agreements, which incentivized moving factory and plant work to other countries with lower labor and environmental standards, and automation, where technological advancements resulted in machines replacing workers.

These trends continue to date. As an auto worker at the Lordstown, Ohio, plant stated, "as auto workers, you're always expecting it's going to be bad news around the corner, whether it's recessions or they're going to cut a shift, or they're going to lay off 500 people for whatever reason." They opined, "I personally don't think GM wants to be in the vehicle producing business in the United States. And I don't think that means they are not going to be building vehicles, but I think they're going to be building vehicles in Mexico and China" (see Case #5).

Adding to the stress of a closure is the piecemeal manner of closing that many have experienced. For

instance, during the shutdowns in Youngstown, a mill would not close all at once. Instead, portions of the mill or a department would shut down one at a time. This process absolved the company of having to pay any severance or benefits because it was not considered a permanent shutdown. It also gave false hope to workers that their jobs would be saved while pitting those who had been laid off against those still employed.

This and other processes of piecemeal and constant transition are ongoing and leave workers in a continual state of precarity. Such precarity further reduces workers' power as the hope that their jobs will be saved encourages them to side with the company, and in some instances, turn against other workers attempting to organize.

Constant transition and worker insecurity are hallmarks of virtually every industry in every part of the country. Self-checkout at the grocery store is sold as a customer convenience but convenience is only the marketing story. Automated checkout eliminates workers and, as a United Food and Commercial Worker (UFCW) member stated, "We're constantly seeing these technological developments in our industry (grocery stores) that's really designed to minimize labor."

Moving from union labor to contract labor is another way that employers make work more precarious and undermine workers' position. Contract labor allows employers to increase profit by not having to pay for benefits and eliminates workplace security. As a utility workers union member stated, "The largest threat to my membership is the fact that [employers] want to bring in contractors to do the same work that we do, while not hiring new members of [our union], new employees of [company]. They'd rather contract that work out. That's the largest threat to us at this point, is guys that do the same work we do but work for different outfits."

The drive for profit increases worker precarity and puts the public at risk. As detailed by a railroad union member, who was recounting the fight to make rail improvements:

> What we need to do, and what we can do, we have the ability to do this, is to change the rail industry. But we have to–it's a fight. It's a fight to do that, because the people who are currently in charge, they just want to make quick money, and they don't actually care who's harmed in the course of the business of them making the quick money.

Safety is often overlooked in favor of cost savings, which is endemic in subcontractor use. As detailed by a member of the Machinists' union, "They [subcontractors] work unsafe. They've been reported several times for safety issues, the company ignores it. You know what I mean? There's no punishment to them. But if we do the same thing, we get in trouble," indicating that there are safety standards, but they are only enforced against the unionized workers.

The same drivers that led to transitions in other industries are present in the energy sector. Similar to other industries, market dynamics are driving an energy transition as natural gas replaces coal as a primary energy source, due largely to natural gas being cheaper than coal. And, as the renewable energy sector grows and costs fall, it is only a matter of time before there is a meaningful transition from oil and gas to renewables. Renewable energy mandates requiring a certain amount of electricity to be generated from renewable sources is driving the growth and development of renewable sources and a market for renewable energy. As a labor-climate advocate stated, "I see it as an economic reality, that renewable energy is just dirt cheap and it's getting cheaper all the time as that technology is advanced and developed and as it's implemented on a more industrial scale. We live in a market based economy where price counts. And I see renewable energy [development] accelerating, the use of it accelerating, from a purely economic standpoint."

The transition away from fossil fuels encompasses and, in some ways, exceeds all the challenges of previous transitions: an uncertain but inevitable timeline, piecemeal plant by plant or site by site closures, and negative impacts on workers and communities. Many communities never recovered from the legacy of deindustrialization, so to face yet another transition without the resources needed, with even more uncertainty, and a scale as large as the fossil fuel transition is almost inconceivable. As an International Brotherhood of Electrical Workers (IBEW) member stated, "Well, when you think about, like, teaching coal miners to code, and the fact that Silicon Valley is nowhere near Appalachia, that even if they are able to find those jobs, those communities are still going to suffer. And those towns are going to continue to die."

A History of Unjust Transition

Workers and communities have endured past industrial transitions without adequate support or resources, which contributes to workers being suspicious of the idea of just transition. As a labor leader said, "A lot of organized labor see the word 'transition' almost as a trigger word. And the closer you are to thinking that you could lose your employment during this change, the more likely you were to hear the word 'transition,' and think 'you're not gonna do anything to help me until the worst has already occurred. I've already lost the best job I've ever had.'"

This suspicion is well-founded as history shows that when a workplace closed, workers were often given little notice and few options. As a Lordstown auto worker stated, "if they [GM] can come down and shut down an iconic plant like Lordstown, you know, at the drop of a hat out of the clear blue sky, nobody is really safe. It doesn't just apply to the auto industry; it's every industry and it happens every day" (see Case #5).

In past transitions, companies and financial institutions rarely took worker and community concerns into consideration. Workers have long been seen as disposable and replaceable with other workers who will accept lower pay for the same job, or with a technological advancement. A union member detailed how a coalition came together in the wake of steel mill closures and crafted a plan to set up an industrial authority called the Steel Valley Authority. This Authority would have the power of eminent domain to take over closed mills and operate them, saving jobs and keeping steel manufacturing local. Wall Street financial interests blocked the plan, however; workers were unable to overcome the power of finance, and the jobs went overseas.

Unequal Power Dynamics Fuel Unjust Transitions

Employers see workers as disposable and replaceable because of the imbalance of power between workers and employers. Companies like GM can shut down plants whenever and wherever they wish because they have complete control over business decisions, rather than a shared worker-management model. The Wagner Act, also known as the National Labor Relations Act, gave workers the ability to bargain for provisions to help ease the trauma of closures but left them virtually powerless to stop a closure.

The way to build worker power is through organization and unionization. Fossil-fuel jobs like coal mining pay higher wages because the coal miners' union fought, at times in the face of violence, with companies for better wages and benefits. In the time of closures, a union official pointed out that having union protection results in better layoff packages than non-union packages. However, despite pockets of workers with more power, workers are mostly still seen as disposable and replaceable, leading to abrupt closures with no input from or evident concern for workforces.

Nothing highlights the treatment of workers as disposable and replaceable as clearly as the response to the COVID-19 crisis. Workers have been forced to work without sufficient personal protective equipment (PPE) in environments where they were exposed to COVID-19, including health care institutions, grocery stores and farms. A UFCW member recounted, "[I]t was a constant battle to just get people PPE. We had workers wearing garbage bags to work. I just learned today about a COVID outbreak at a place where we filed complaint after complaint. They're not keeping their workers safe."

Photo: Almondbite3, Wikimedia (Creative Commons)

Workers with a long history of exploitation were classified as "essential" because of their fundamentally important contribution to society. This designation, however, failed to confer privileges or protections at the same time as it entailed specific risks for workers forced to work despite unsafe conditions. For workers of color in particular, the designation of essential meant having to return to the workplace earlier than other workers due to disproportionate employment in essential industries such as the service sector and health care.[2]

In the case of essential farmworkers, the designation did not result in extra pay that would reflect their importance. As a farm worker advocate stated, "[W]e're not even getting hazard pay, we're not getting bigger wages, and so I think what we're seeing in the community, in the farm worker community everywhere, no change to the work schedule, no change to the season, no change to the production quotas." Farmworkers had the additional danger of living in cramped conditions and their immigration status often meant they received even less protection. As a farmworker advocate detailed:

> We had been reaching out to all the agencies and the governor's office to really focus in on how to protect essential workers and farm workers, warehouse workers, but nothing was really being done, until April, we had to sue the state because of their lack of attention to agricultural workers, especially, one of the cases was H2A workers, the guest workers, because of the crowded conditions that they live in, in the labor cabins where they have like 12 people and bunk beds and no social distancing, no masks. No masks were even given to workers up until June.

As a result of requirements to work and live in these conditions and the lack of PPE and other protection, COVID-19 outbreaks predictably occurred within the labor camps.

COVID-19 saw people compelled to work because their sector was designated essential, and because many had little to no savings and lacked basic benefits, such as paid sick days: they had no choice but to return to work, with dire health consequences. According to an immigration rights advocate, increased exposure to COVID-19 through the workplace combined with the higher likelihood of living in polluted environments due to long-standing patterns of racialized hazardous waste siting patterns resulted in Black and brown people showing the highest rates of infection and fatalities.

Many interviewees warned that the government's failed response to the COVID-19 crisis is a harbinger of what will happen with the climate crisis. As detailed by an oil refinery worker:

> You know, with this whole thing of climate change, right, I remember one time I got in a conversation with someone about, you know, transitioning to alternative fuels and relying less on fossil fuels, right. And I remember the words, they were like, "You don't understand. The United States can drive any country, anyone, to do anything." But COVID-19 has pretty much opened my eyes that the United States is not in control like people think it is.

The climate crisis, as stated previously, will require a transition on a scale not previously seen. Yet, there is no reason transition must leave workers and communities behind. Understanding the shortcomings of previous transitions can help prevent the same mistakes from being made.

The Failure of Transition Assistance

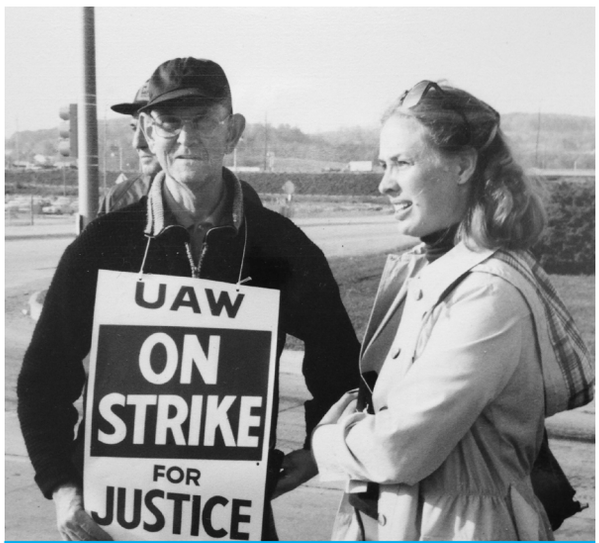
Displaced workers can sometimes access limited transition assistance. In the wake of deindustrialization and globalization, beginning in the 1960s, some workers received support and retraining opportunities through government programs such as the TAA, if they could prove they lost their jobs due to trade and/or globalization. However, over time, displaced workers have generally been left with little to no support because the TAA was too small and narrowly focused to be effective.

The failure of the government to support and protect displaced workers starts with the absence of any meaningful social safety net: when people lose their jobs, they lose basic benefits, and depend on businesses, corporate entities, and charities to provide material support. The impact of this approach has become painfully clear since the onset of the COVID-19 pandemic when millions of people have lost their jobs and health insurance in the middle of a global public health crisis. As an Indigenous advocate stated, "there's no agency that is saying, OK, you need to be under quarantine, you need to stay in your home. You and your family stay in your home, and we're going to make sure you have food. We're going to make sure you have diapers."

In the absence of widespread government support for displaced workers, during the pandemic, mutual aid networks have sprung up across the country to help workers who have lost their jobs and income due to COVID-19. While mutual aid efforts can temporarily feed communities, provide resources to shelter people, and show the benefit of solidarity actions, it is not a replacement for a functioning safety net. For instance, access to decent health care cannot, and should not, rely on mutual aid efforts. A robust safety net is needed for long-term community health and stability.

Workplace Closures Cause Deep Trauma and Grief for Many Workers and Communities

Moreover, the loss of work and revenue is only one aspect of workplace closures. The trauma of workplace closures can run deeper than the loss of income. People become attached to workplaces and losing that identity causes tremendous grief. On the last day of the Lordstown plant operations, one worker recalled, "I even got a chance to come into the plant the last day of work, the last day for it to be. And I walked the last car through the plant and all the way down to the final line. It was the saddest day. You know, you talked to everybody. I got a chance to talk to everybody. And as we walked the car, it was when the car got close to my area that it was like, oh, my God, this is so real. And it's just flood of tears everywhere" (see Case #5).



UAW picket lines in Washington DC, circa 1980. Photo: Anna Stewart, Wikimedia (Creative Commons)

The trauma and grief resulting from loss of workplace and industry extends beyond workers to the larger community. As shared by an interviewee, "I don't know if people got some investment in retraining. My stepfather was a logger. I would say, you know, I don't recall him getting anything. And, you know, there was a lot of just pure sadness in those communities. Not being able to find another job that paid well. Addiction, alcohol, drug addiction, those sorts of things."

Peoples' lives and their attachment to place is ignored and the difficulty in relocating away from family and away from community can have tragic consequences. A Lordstown worker told us, "[Y]ou know, there's such a thing as you can get somebody so tightened that you can't prepare. And I think that's where a lot of our suicides came from. People just weren't prepared for that move, that life. And they just thought they could handle it, and they got there, and it was all wrong. They couldn't do it." This testimony shows that the idea that people can relocate to wherever jobs are created is misguided and underscores the need to create jobs where jobs are lost.

While the TAA and other assistance programs offer some counseling, workers and communities do not receive the support needed to fully cope with the loss of an industry or factory. Given the long history of unjust transitions, this means that worker and community trauma has gone unrecognized and unaddressed for years. The deep sense of loss is exacerbated by the uncertainty of post-transition life. New jobs and industries have rarely adequately replaced lost jobs and industries. In the face of a post-pandemic, post-fossil fuel world, acknowledging and addressing the depth of loss is essential to transitioning to a just future.

Determining the Scale and Scope of a Just Transition

The history of unjust transitions in the United States sparks an understandable if futile desire to prevent transition by preserving existing fossil-fuel jobs, particularly as power plants or coal mines start

to shut down. Woven into this challenge is great uncertainty and anxiety around what fossil-fuel workers will transition into, and what industries will come into communities to replace the employment and tax revenue generated by fossil fuels.

Climate discourse frequently assumes that renewable energy jobs will replace fossil-fuel jobs. In reality, there is often a geographic disconnect between where renewable energy jobs are being created and where fossil-fuel jobs are being lost. Renewable energy jobs also have much lower rates of unionization than fossil-fuel jobs. In effect, the transition away from fossil fuels asks workers to willingly leave well paying, unionized jobs for the unknown. As one oil refinery worker said,

> So I've thought about making a switch, right. But the main thing is that there's not that many jobs out there that offer a wage similar to what I'm getting now, right, that would allow me to live here in California. And I've thought about it, I applied, I've even done the whole keyword search and saved my searches, right. So when jobs come around, in any green industry, whether it's wastewater, right, renewables or solar, and so far, there's nothing out there that's comparable.

Mitigating these losses and providing replacement wages and benefits to workers as well as tax revenue replacement to communities would rectify the problems caused by previous unjust transitions. But is that all that is needed for a just transition? Is focusing on mitigating loss and trauma for fossil-fuel workers and communities a just transition or should there be a more holistic transformation of institutions and society?

Just Transition as a Transformation of Systems

Just transition ideals can be seen along a spectrum. On one end is a relatively narrow concept that addresses and mitigates the job and revenue losses from ending use of fossil fuels. From there, the idea expands to incorporate specific attention to workers and communities who were excluded from the benefits of a fossil-fuel economy in the first place, all the way to understanding just transition as a holistic transformation of existing institutions and structures, fundamentally reconfiguring the relationship between human beings, industry, land and resources.

A just transition that includes all workers recognizes the exploitative nature of existing working conditions and the ties between underlying systemic racism and the precarity of work. Underlying racism and worker exploitation must be addressed for a just transition. As a union official stated:

> I think the just transition piece is going to have to change because people are starting to finally realize that, you know, you get some of these workers that have been in low-income jobs and they lose their jobs and right away elected officials, everyone wants to say, "Oh, we got another company right around the corner that wants to hire all these people." But then they want to put them back in another low wage job. And one of the reasons that people have been dead ended in some of these jobs is because of the systemic racism that they, even down in Fall River and New Bedford in the stitching industry, you know, they never wanted the economic development in some of these regions. They wanted to be able to have workers that they could lay off and bring back and lay off and bring back and layoff and bring back. And I think whatever we do around just transition has to make sure that we think about poverty and we think about communities of color that have been left behind.

In other words, for there to be a just transition, underlying social injustices must be addressed to avoid replicating the same systems of resource and human exploitation.

Moving beyond expanding just transition to include all workers, some argue that just transition must address all exploitation, including exploitation of land and natural resources. In this ideal of just transition, there is a clear relationship between exploitation of land and the climate crisis. Addressing the climate crisis will require not just ending the use of fossil fuels, but a fundamental change in our relationship with land and natural resources.

As such, just transition goes beyond an energy transition: it is a rethinking of land and resource use. An Indigenous advocate warned, "if we continue to operate like land is something to be exploited and used and consumed without repercussions, then we're going to remain in this crisis, and the crisis is going to get worse. Weather is going to get worse. Poverty is going to get worse." Another Indigenous advocate builds on this idea: "when we're thinking about just transition, it means that we try to do the least amount of harm. We take the least amount of things that we need from this environment, and at the same time, try to figure out what we can give back, so that we can have some kind of balance, because we see now that there isn't a balance. And the lack of balance is what we're looking at in the climate catastrophe that's coming."

Changing the relationship to land requires not just land and resource preservation but also a change in our food and food systems. The domination of large-scale factory farms, both for agriculture and livestock, poisons the land through toxic agricultural practices, which in turn also poisons the farmworkers, who face constant toxic exposure on top of being underpaid and overworked. The intertwined nature of systems and institutions that have led to the current state of the industry means that there must be holistic change. As a farmworker advocate stated:

> That's not an answer we can say, oh, just raise the wage, because that's definitely not going to do it. It really requires a deep dive into the whole mechanism of our agricultural system and the institutional and systemic racism that's embedded in our agricultural system, the anti-worker mentality that's within our agricultural system. So it really needs a really deep, holistic transformation of our whole society.

Moreover, maintaining a connection to land can be healing and address historic injustices inflicted upon Native populations. As an Indigenous advocate stated:

I would like for people to remain and maintain their connections to the land, and there's so much that's going on with cultural revitalization, too, like language revitalization and healing, too, like the healing that still needs to take place after the colonization…what is being brought to light, finally, is the systematic racism, and disenfranchisement that went along with that [colonization]. And yet we're still here, despite everything, we're still here. And I feel like we're at this turning point where we, as Native people, are finally recognizing the healing that needs to take place. But I think even the recognition alone is almost like such a big start to that healing and empowering of people.

The more holistic visions of just transition emphasize and address ideals of what is "just" within just transition, whereas the narrower vision of just transition focuses on facilitating an energy transition with provisions to make the transition just.

As detailed in this section, further work is required to understand what makes a transition just and then to implement that vision. The process by which different visions of just transition are realized share similarities and important differences. The next section details how workers and community members engage with the issue of climate change and ideas about just transition, including the processes by which coalitions are formed to promote change, within labor and between labor and community.

Process

Introduction

Understanding the outlines of what constitutes unjust and just transitions, we can turn to a second broad category of themes that address "process." Process refers to the means by which individuals and organizations come to recognize the problems outlined in the first section of this report and translate that understanding into action toward possible solutions, or what we call "pathways," in the final set of findings.

Process includes a variety of important concepts: how people's lived experiences shape their understanding of and response to problems such as climate change, the role of education in raising awareness and understanding of the issues at hand, impacts of industry on attitudes toward just transition, how individual organizations construct solutions, how organizations come together to create shared visions, the formation of cross-movement coalitions including building trust and power, and the types of actions ultimately taken to promote more just transitions.

The International Longshore and Warehouse Union rallies against automation at the Port of Los Angeles, 2019. Photo: Vivian Price

The remainder of this section will consider these findings from several perspectives: how labor and community define and understand the problem, how labor and community get involved with climate and transition work, and how coalitions form and construct possible solutions. A number of cases will be highlighted along the way to offer examples of the types of processes identified in our data (see Appendix A).

Recognizing Diversity in Lived Experiences

One of the most striking things about the listening sessions was the tremendous diversity in experiences of participants in the project. Whether a participant was an oil worker, Indigenous community member, food chain worker, community leader, tradesperson or other worker or activist, the backgrounds of individual research participants shaped their perceptions of just transition.

As outlined in Appendix C, our sample primarily comprises labor union members (65%), environmental justice (EJ) and climate justice (CJ) activists (12%), and members of other community groups (23%). Male participants accounted for 61.6% and female for 38.4% of the sample. About 62.8 % were white, 18.6% Latinx, 10.5% Black, 4.7% Indigenous, and 2.3% Asian. About 41.2% were located in the West, 27.1% in the Northeast, 17.7% in the Midwest, and 14.1% in the South (based on U.S. Census regions).

The unique background and lived experiences of each participant, including their socially constructed positions within society (i.e., not based on nature or biology, but derived from a specific history of social relations), plays a significant role in shaping their understandings of and experiences with economic transitions and the issues of climate change and social, environmental, and economic inequality. In our sample population, it was clear that these various positions within our social system (sometimes

referred to as positionality) often intersected and overlapped to amplify both privileges and the impact of injustices. However, we identified some broad patterns in the data.

How those from Labor Understand the Situation

Fear of Job Loss for Fossil-Fuel Workers

Beginning with participants from labor, on average, those with well-paying fossil fuel-based jobs are less likely to advocate for a proactive transition. As one leader of a union in the fossil-fuel industry told us: "Look, my members, honestly, they don't want a just transition. They want to go to their coal fired power plant every day and continue to work there until they retire." They described climate change denial among some members: "Many of them, they don't think that there's climate change. Like, they are part of a political party that thinks it's a hoax. And so they think that these are people just trying to steal their jobs. And so we're trying to tell people how hostile our members are to this." Another local union leader in the industry said his union stays away from endorsing political candidates for this very reason: "It's just something that we've always avoided because of our membership being a little more conservative leaning, and that not always being the best thing for labor." Both described their memberships as being overwhelmingly composed of white men, and thanks to decades of union bargaining, relatively well paid.

Much of the resistance to transitioning away from fossil fuels seems to derive from the clear understanding among members that there are relatively few job alternatives that would offer comparable pay, health benefits or pension, particularly for non-college educated blue collar workers. One union leader said of members who had worked at a steel mill, "I think generally because our predecessors succeeded in winning really good pay by and large, and really good benefits, I think people appreciated working there…And that was, you know, you still hear a lot of regret, that wherever people went afterward, it can't match working there." This theme recurred throughout the listening sessions: there is a definite understanding that the main reason these dangerous and sometimes unhealthy and polluting jobs pay so well is because of a history of union organizing and bargaining. With the decline of union density to just 6% of the private sector workforce in the U.S. today, similar jobs simply do not exist in other industries, in terms of wages, healthcare, or retirement benefits. Rabid corporate anti-unionism, abetted by pro-business, anti-worker labor laws and politicians, has largely stifled workers' efforts to unionize and raise wages in the renewable energy and other new technology industries.

The Intersection with Social Position

While on average there was resistance to transition among fossil-fuel workers, the story becomes more nuanced when another element in someone's belief system or lived experience intersects with their understanding of the issues. Many workers are conflicted because their experiences on the job and their conversations with other friends and family at home may not align. Other intervening factors include sociodemographic positionality (e.g., race, class, gender and other dynamics), educational experiences, or formative experiences with climate change or injustice.

For example, a young fossil fuel worker and union leader on the West Coast shared his concerns about climate change but was protective of the good job he has that supports his family. Being a person of color and understanding the history of environmental racism in the United States—including disproportionate exposure to pollution due in part to affluent, predominantly white environmental organizations blocking projects in their own "backyards" —he was also wary of environmentalists and skeptical about his chances of finding an equivalent paying job elsewhere. As a young worker, he believes change is going to happen and is necessary, but wants to see a plan developed:

> If you want alternative fuels, that's fine, but let's come up with the how. It's easy for us to always talk about the end point and be like, yeah, we know we can go solar, we can go wind, we can go, you know, all electric cars and stuff, right. But how are we going to get there? That's the question. Obviously, new industries emerge, but will those industries be unionized? That's the question that I have a lot of times, but it'd be nice if the fossil-fuel industry got together, right. Developed a program where they would be able to provide their workers a just transition for the meantime, so we can at least have a buffer, you know, have a little backup plan while we figure something out.

The Role of Education

In addition to social position, formal and informal education, including union education programs, also shapes how many fossil-fuel workers understand the issues of transition and climate change. Several workers and labor leaders in this study worked with or participated in trainings in the 1980s and 90s by the acclaimed health, safety and environmental activist, Tony Mazzocchi, of the Oil Chemical and Atomic Workers Union (now merged with the United Steelworkers). Credited with helping to devise the concept of just transition, Mazzocchi's efforts influenced many workers to see an alternative future where both workers and the environment could be protected.

However, even with this progressive vision, many remain cautious of environmentalists, and as we will discuss below, despite their outspokenness about the need for a just transition, have often had complicated relationships with environmental and environmental justice activists. Additionally, several fossil-fuel union leaders in the South spoke about the desperate need for more education of their fellow labor leaders and members on the issues of climate change and social, economic, and environmental justice.

Support for Job Creation by Building Trades Workers

Like fossil-fuel workers, building tradespersons were also likely to oppose a shift away from fossil fuels, but they can envision more job opportunities in the growth of the renewable sector, energy efficiency upgrades, and retrofits. Much of the variation is geographically driven. Tradespersons working in states with fossil-fuel related job opportunities, such as pipeline projects, are more resistant to change while those in states poised to see job creation from the expansion of renewables are more supportive. For example, one participant spoke about the National Climate Jobs campaign operating in New York, Maine, Texas, Illinois, and Connecticut, where building trades unions are seeing the upside of addressing climate change, including "the opportunity to create lots of good union jobs by investing in renewable energy." Several building trades leaders in the Northeast spoke positively about the job opportunities associated with the coming of the offshore wind industry; others on the West Coast and in the Southwest mentioned the possible expansion of utility-scale solar. Residential rooftop solar was widely seen as a low-paying job that created few skilled trades jobs.

Building trades unions in the construction industry rely on new construction projects to create jobs for their members. This constant need to create opportunities for their otherwise unemployed members creates a strong impetus for an "all of the above" strategy when it comes to supporting construction projects, including fossil fuels and renewables. This underlying structural feature of the construction industry helps to explain the geographic variation in labor leaders' support for new fossil fuel versus renewable projects, even across locals within the same international union. As one leader in a building trades local on the East Coast told us, wind energy is very controversial within his international union. On the one hand it will create jobs for his local members, but at the same time it means decommissioning fossil-fuel power plants in other parts of the country where members of other locals in his same union work. And "the union," he said, "has a duty to represent the members, that's what [the union] is there for, to protect them and make sure that they have work opportunities." Further, the increased likelihood

Rust Belt. Photo: Melusina Parkin, Flickr (Creative Commons)

of fossil-fuel companies to pursue project labor agreements (pre-construction agreements to employ union labor, etc.) with unions has typically led to more union support for these projects.

Experiences with Deindustrialization by Manufacturing Workers

Manufacturing workers, such as those in the auto industry, also see both the threats and opportunities inherent in addressing the climate crisis. However, many are wary of economic change in general because of previous experiences with plant closures, such as GM's Lordstown plant, where workers mostly experienced unjust transitions (see Case #5). One autoworker talked about the politicization of the issue of climate change, comparing it to the way that mask wearing has been politicized during the pandemic: "Because Trump doesn't wear one, none of his supporters wear one." Referencing the popularization of the issue by former Vice President Al Gore, he said climate change itself has come to be seen as "a Democrat thing."

He and others in the manufacturing sector also described cynicism among their members, many of whom had turned against the Democratic Party in the wake of the North American Free Trade Agreement (NAFTA). NAFTA cost them, their families and friends jobs, and hurt their communities by eroding local incomes, reducing opportunities, and eating away local tax revenues. Many blame the Democratic Party for that. Others noted that NAFTA was just the most publicized event in a long history of deindustrialization and "runaway shops," which began in the 1970s and accelerated throughout the 1980s, hollowing out local economies in many U.S. cities and rural and suburban areas.

We heard stories from participants of closures of paper mills in Maine, rubber plants in Texas, aerospace factories in California, auto plants in Michigan, and steel mills in Pennsylvania. By now, abandoned factories and mills have come to define the socio-economic prospects of many American cities and towns. An entire region of the country has been labelled with the somewhat pejorative term "the rust belt," referring to the loss of industry.[3] Often forgotten in these depictions is the real human suffering that came along with it, including the increase in the number of "deaths of despair" in recent years—whether via suicide, or alcohol or opioid use—that have contributed to declining life expectancy

in the U.S. for each of the last four years. The U.S. is the only rich country to experience such a decline.

Workers Outside of Fossil-Fuel Related Industries

Workers outside of the fossil-fuel, construction, and manufacturing industries are more likely to see virtue in a just transition, although they may not be as involved in the process. First responders who are more closely situated to wildfires and pandemics are more likely to connect with the threat of climate change. Educators and public sector workers see climate change as a direct concern because of decreasing budgets, as well as the interest of their occupations in the future of youth. As one educator told us, "we have to be actively organizing around the issues that are impacting our students…and like schools just haven't really been invited into that table to talk about how the environmental issues are impacting our students." Global food chain workers see climate change impact what is grown and served.

Several union leaders from these sectors also raised the idea of "bargaining for the common good," questioning the assumption that the sole purpose of a union was to raise wages for members. As one member of a service sector union said about the recent strike by teachers in Los Angeles: "they weren't fighting just for their direct economic benefit. They were fighting for housing for the students, medical care, nurses at schools, better libraries, schools that would stay open for the community. So it was an all-encompassing bargaining for the common good, socializing whatever benefits that they gain, and making sure that the entire community reaps the reward of being a part of a fight." Union leaders who viewed the labor movement more widely as a vehicle for broad social change were more likely to support the idea of a just transition.

Age and Intergenerational Relations

Another factor which intersected with the positionality of workers to help shape their understanding of the issues of climate change and just transition was their relationship to youth: their own children and grandchildren as well as younger workers in their unions. One refinery worker spoke about conversations he and his wife had had with their adult children about the prospects of having grandchildren, with them saying: "Dad, don't you see what's going on in this world? The climate change? Why would I even think about bringing kids in this world? You know, the pollution." This worker and several others in this study have become very sensitized to the issue of climate change by their children. Another fossil-fuel union leader spoke about the passion of a young worker in his union about the issue of climate change and how he hoped that one day he could "be heard in our halls and listened to."

Amy Yoshida, Union Electrician, Tradeswomen Archives Collection. Photo: Vivian Price

For young workers themselves, there was a clearer understanding of the threat of climate change as well as the eroded menu of opportunities for young folks entering the labor market. One young electrician told us about their efforts to win adoption of a climate change resolution in their union. Another young leader who supported the effort reminded them about the increased rate of cancer in the fossil-fuel industry that affects both younger and older workers. Speaking

about addressing the long-term health implications for workers, they said:

> It's young and old, they both see it, but with younger leadership, they know they've got a long time, and they're going to be dealing with this, and they're the ones that it's going to be falling onto. So I think they're more inclined to deal with it, whereas as, you know, with older leadership, no offense, but it's much easier to just kind of pass that buck, you know.

To begin contending with these concerns, this young leader was inviting a representative from the Sunrise Movement, a youth organization fighting climate change, to come speak with their local and begin a conversation.

Many workers also spoke of their introduction to the union decades earlier by older workers who told them it is their duty to protect and pass on something at least as good to the next generation of workers. A fossil-fuel worker recalled of one of his first jobs:

> there were a couple old paper makers there that were bound and determined to help a young kid understand where those great wages came from, I was pretty proud of 'em, and so they helped me understand that the contract and the benefits were available because people who had gone before me had been willing to sacrifice, and some had given their lives, so that we could all have a better future. And most importantly they let me know that working on that contract meant that I was now responsible for sacrificing if necessary, not just for my own wellbeing but for those who would come after.

It seems common for unions to include strong intergenerational connections that can help foster understanding between older workers and the younger generations that they teach and mentor on the job. In particular, many workers of color and women workers spoke of the importance of intergenerational mentorship and how it had served as a steppingstone to their deeper involvement in the labor movement, both internally by improving the diversity of leadership in their own locals and externally by fighting for the broader causes of labor and social justice.

Some even helped to institutionalize such work. As one tradeswoman explained of her effort to establish a minority caucus in the local, we "understood that communities that had been ignored needed to be approached and brought in, and if they needed assistance in becoming developed enough to succeed, to get the requirements, to get the assistance, the training, the support, the mentoring, that they had a group of people that were ready to do that."

The Effect of the Movement for Black Lives

The Movement for Black Lives played a notable role in shaping some participants' views during the time of this research, as it garnered tremendous national attention and new levels of public support during the spring and summer of 2020. Black and brown workers have always experienced structural racism, but the brutal public execution of George Floyd by white police officers and the massive response in cities and towns across the country touched many labor leaders in new ways.

While not specifically about transitions, the protests sensitized some who were not already aware to the ubiquity of systemic racism. For some labor leaders,

it opened doors to conversations about the history of environmental injustice, and a number of environmental organizations realized the significance of integrating both social and environmental justice into their priorities. In at least one case this led a climate commission to internalize and address just transition priorities. A few participants described their increased understanding of the ways racist decision-making in the past had created unequal environmental benefits and burdens for communities along the lines of race and ethnicity.

How Those from Community Understand the Situation

Moving from labor to the community side of the equation, participants' sense of the problems asso ciated with transition seem to be influenced by attributes such as proximity to and impact of polluters and extractive industries, employment in fossil-fuel related fields, experience with climate justice campaigns, relationship to the land, and generational ties. The main groups in this study include environmental justice organizations, fenceline community groups (in neighborhoods immediately adjacent to polluting facilities and directly affected by their operations), climate justice organizations, and Indigenous activist organizations. As with labor, individual understandings varied by positionality, but there are still broad trends in the data.

Daily Experiences of Injustice

Participants with daily experiences of injustice were most likely to be aware of the issue of climate change and the general idea of a just transition. Such awareness was particularly strong among participants from environmental justice communities. Whereas labor often began engaging with the issues of climate change and transition only in response to a threat to their jobs, members of environmental justice communities recognized the issues more readily as imminent threats to their health, safety, and wellbeing in their homes and neighborhoods.

Possibly resulting from lived experiences such as the impact of Hurricane Katrina on New Orleans, or lead-poisoned drinking water in Flint, Michigan, and other cities across the U.S., most EJ community participants were acutely aware of the connection between their elevated exposure to environmental hazards and the long history of structural racism in America: in their communities, the two issues are in fact one and the same.

Threats to Traditions and Culture

Communities distinct from EJ were also sensitized by daily experiences of injustice. For centuries, Indigenous communities have experienced forced alienation from their land and the resulting damage to their economies, identities, health, and wellbeing. Many Indigenous participants described their experience of decline in traditional ways of life as well as sources of sustenance and livelihood resulting from environmental degradation and climate change.

An elected leader from an Indigenous community in Washington State told their story of growing up in a fishing family and how the elders "talked about how we had millions of blueback in the Quinault system, and I remember hearing stories of my grandparents saying, you can go up to the Quinault and have a boatload of fish, I mean, it was common, there was just so many fish out here, and the year I got elected [2006], we only had 3000 return to the Quinault." The decline was attributed at first to deforestation upriver and erosion, but upon further research it became clear that there were many more interconnected systems at play, including the melting of glaciers and acidification of the ocean.

Experiences like this have contributed to Indigenous participants' appreciation for the notion of a just transition to more sustainable environmental practice. A member of a tribal nation in Oklahoma spoke about how their "people understand we're in a time of crisis in terms of what is happening in the environment, not just with climate change, but with air quality, water quality, contamination that is happening both from fracking, and you know, the damage that is happening to homes and structures, infrastructure because of earthquakes." They spoke about the importance of traditional Indigenous values and natural law as being the foundation of any solutions, saying: "Whatever we do to the land we do to ourselves, and whatever we do today is going to have impact later."

Formative Experiences with Injustice

In some cases, experiences with injustice were formative. A community leader in a western state spoke about their experiences of discrimination as an immigrant youth, which led them first to begin organizing for immigrant rights and ultimately for issues like climate, social and economic justice. They explained, "I experienced a lot of discrimination and racism from both other students, but also the school administrators. And, you know, I had instances of being called wetback, being pushed south because it was back to where I belong." They described how these formative experiences helped them to realize "there's a bigger, broader context to what's happening to me and my family in this country."

How Labor and Community Become Involved with Climate and Transition Work

Within the great diversity of lived experiences and the multiple perspectives from which individuals see the issues of climate change and economic transition, we can identify several main ways in which people from labor and community, and their organizations, become involved with just transition work.

For labor, we can divide motivation into "reactive" and "proactive" approaches. Reactive approaches generally involve responses by workers and unions to negative changes, typically imminent events such as shutdowns and plant closures. Proactive approaches involve labor organizations' efforts to effect positive change to improve opportunities for workers in the future. There were many more instances of reactive compared with proactive approaches in our data, as well as approaches existing somewhere between these two poles. We will briefly review some examples of each here and elaborate in more detail in the next section.[4]

Community members largely came to be involved as a result of lived experiences of environmental, economic and other forms of injustice within their communities.

Paths to Labor Involvement: Reactive and Proactive Approaches

In terms of reactive approaches, Case #3 describes in detail the Huntley plant closure in Tonawanda, New York. In short, the local teachers' union, utility workers' union and others came to engage in just transition work once it was clear that the local coal plant, a major employer and source of tax revenue, was going to shut down and there was no way to prevent it.

Our research participants emphasized the important role that outside/independent research played in informing and educating their unions about the imminent crisis. A similar example of occurred when workers at the Diablo Canyon Nuclear plant in California became aware of the imminent shutdown of their plant (see Case #4). Again, independent research played an important role in educating the workers about the issue, but one key difference from Tonawanda was that there was more lead time allow-

ing the union and partners to plan for a safe and orderly decommissioning of the plant over a period of several years.

Proactively, the case of Climate Jobs NY, provides an example of unions coming together to promote a just transition for workers by creating good union jobs in construction, possibly manufacturing, and more. Participants from Climate Jobs described their efforts to win strong labor standards in emerging green sectors, spur green infrastructure investments that can reduce emissions and create good union jobs, and promote a holistic just transition for workers and communities who currently rely on fossil-fuel industries.

Similarly, participants from, Jobs to Move America (JMA), a strategic policy center, described their efforts to ensure that public spending leads to public good by incentivizing government procurements to support domestic manufacturing and domestic producers to hire workers locally and from disadvantaged communities (see Case #6). JMA has already had several proactive wins, including the creation of new manufacturing facilities within the U.S. which have created some unionized job opportunities for historically disadvantaged workers.

As these two proactive cases demonstrate, labor can, and sometimes does, engage in forward-looking efforts to create good job opportunities for workers as part of a transition to a more sustainable economy.

In between the reactive and proactive approaches, a leader in the Massachusetts AFL-CIO described their work with the Rapid Response Team, which assists unions and workers who are experiencing layoffs or downsizing. The team is housed within the state federation and partners with state agencies to help displaced workers and impacted communities. When information arises suggesting there may be a closure or mass layoff somewhere in the state, the Rapid Response Team immediately develops layoff aversion strategies to prevent layoffs and dislocations, if possible. When layoffs are unavoidable, the team assists dislocated workers exploring new career paths, either through retraining or job searches. The team also helps the state access funding to assist dislocated workers and affected communities through National Emergency Grants from the U.S. Secretary of Labor and in trade-related closures, through the federal TAA.

Participants from the Rapid Response Team described how, in the case of some power plant closures, the team was able to get the closings "trade certified," which made the displaced energy workers eligible for benefits under the TAA:

> And what we were able to do, because we've done this for several nuclear power, several power plants, whether they're fossil fuel or whatever, we were able to get them trade certified. And the reason we were able to get them trade certified was because Massachusetts buys power, hydropower from Canada. And if we can prove that the plant closing or layoff had anything to do with foreign competition, they were able to get these workers trade certification. And what that means is you can get up to two years' worth of unemployment, you can get retraining, all kinds of money for retraining, you can get moving expenses, you can get relocation expenses. There's a program for people who are over 50 years old and you can get benefits for that. There's a supplement, they supplement a part of your income

> for two years if you make less than what you were making before.

Importantly, they noted that these programs only worked because of the strong social safety net in place in Massachusetts, largely a result of decades of organizing by labor and other groups fighting for a robust unemployment insurance program in the state. In other states with weak social safety nets, the TAA has been described by many as being inadequate.

Overall, each year the Rapid Response Team assists thousands of laid-off workers, their unions, companies, and communities. Additionally, the team regularly provides information at employee meetings, workshops and union meetings so that people can be prepared in the event of an unanticipated closure. The team also conducts regular research to develop and employ best practices in dislocated worker services.

Whether the approach is reactive or proactive, many labor participants talked about the pragmatic nature of their just transition work. That is, while many were personally somewhat idealistic and appreciated environmental justifications for change, they often discussed needing to root the argument in concrete economic and political terms to justify the work to their fellow union leaders or members.

One leader of a fossil-fuel workers' union involved with Initiative 1631 in Washington state (see Case #2) told us that saving the world does not often motivate workers, so instead they speak "more in terms of economic reality, and political reality." This approach emphasizes the economic pragmatism of increasingly competitive pricing of renewable energy sources, and political pragmatism of harnessing the broad and growing public support for addressing climate change in their home state. They acknowledge both economic and political arguments are somewhat driven by the reality of climate change, but explain:

> I just found that with labor folks it was easier to discuss it from those more pragmatic perspectives. And because it doesn't make any difference then what you think about the environment. You could think global warming is a bunch of bunk, and some of 'em do. But if you're smart enough or pragmatic enough to realize that you can power an electric vehicle for like 20% of the cost of gas right now, it's only a matter of time.

Similarly, a fossil-fuel union leader from a western state discussed how they avoided using the term "transition" when framing the issue with their members. Instead, they spoke pragmatically about trying to "get the best deal" for workers in light of a situation that cannot be changed.

Paths to Community Involvement

By contrast with organized labor, community members and organizations often get involved with climate and just transition work because of their lived experiences of perpetual injustice and recognition that they cannot count on anyone else to address the issues facing their communities. A community leader in California spoke about the physical and mental impacts of living next to a major oil drilling site, as well as how the pollution has interacted with the COVID-19 pandemic, making community members particularly susceptible to the disease:

> We have the majority of oil drilling in all [the city] and they are right next to people's homes, right where they're sleeping, right where the bed is, right where they're eating, right where they're studying, they continue to listen to all this equipment going back and forth and back and forth and affecting them mentally, because they know exactly when it's going to hit. They tell me that right there, like a clock, you know, like a clock just ticking right there. And it's hard on the quality of life of people in [the community], we have seen how degraded it is with the

> COVID pandemic, because when you are already overburdened with pollution, you are the first one to get affected in your lungs by COVID, which affects the lungs. And so these people, you know, people in [the community], have been suffering pollution on an ongoing basis, 24/7 from refineries and oil drilling operations, and now we're under a pandemic. They are also the first one on the line to get sick and die.

Another community member and educator spoke about the impacts of climate and environment on the health of their students and children in the community:

> Even before the fires and, you know, just some of our climate issues, [our neighborhood] is surrounded by freeways, and so our students, many of them have asthma. We're also a food desert, so we don't really have the healthiest grocery stores. So a lot of our students have diabetes.

These experiences have led community members to organize for stronger environmental regulations of existing industry, and to promote clean, renewable energy sources to supplant polluting fossil-fuel facilities. One participant told us how their community organized against the construction of a new fossil-fuel plant in their already pollution-burdened environment and successfully pressured the utility company to accept a bid for a clean solar installation instead.

Communities experience the injustice of increased exposure to environmental hazards, as well as the injustice of being blocked from opportunities to secure well-paid, unionized jobs at the plants situated in low-income neighborhoods. Many community members discussed the history of discrimination in hiring practices in the United States generally and some unions specifically as a major reason for the workforce being much whiter than the surrounding community. This has led some community activists to pursue jobs and training programs that might create pathways for historically disadvantaged workers to gain access to new clean energy jobs.

As with labor, education plays a key part in inspiring action among community members also. A community leader and organizer in Alaska described how a conversation with their father about the proposed Pebble Mine led them to do some research on the potential dangers he had mentioned:

> Once I started educating myself more about it and realizing how toxic tailings are [the materials left over after the process of separating the valuable fraction from the uneconomic fraction of an ore] and how impactful the tailings impoundment breach could be, and acid mine drainage, then I just really, I feel like it lit my fire. And I recognized in myself a need to work on it in some way and put my energy into doing whatever I could to help stop it.

Community members may take action once they learn that it is necessary, and because their daily experiences of systemic injustice, from the vantage point of EJ and fenceline communities, compel them to pursue structural solutions. To address inequalities that are baked into the structure of society, pragmatic solutions often begin by envisioning a radically different world in which equity triumphs over injustice. In other words, the pragmatic is idealistic. As one Indigenous community leader told us:

> I would start by pointing out that for tribal nations, we recognize that the multiple apocalyptic challenges of our generation are but symptoms of a much deeper imbalance. And that deeper imbalance didn't begin just last year, or 2020, or even 10 years ago, or even a lifetime ago. It began centuries ago. And so we've known that there's a day of reckoning coming… You just cannot continue on a trajectory and not at some point have a correction, whether it's an intentional correction of leadership or a divine creator's correction. And I believe that's where we're at right now. And so I've come to embrace this moment because I think it was necessary. We just could not continue the path that this country was continuing on, and knowing that there

> was a day of reckoning, and in this day of reckoning, it presents an opportunity.

This idea of a reckoning and the need for broad systemic change echoed the sentiments of other community and Indigenous activists. Many spoke of having nothing to lose and everything to gain and made the point that social justice and equity are not mere tag-on solutions to other problems, but are themselves the central issues to confront.

Convergent or Divergent Paths?

The different perspectives and approaches pursued by various labor and community groups can often create tensions between labor and community. In some cases these tensions have placed labor and community at odds with one another.

Along those lines, we note that there were some union leaders who refused to talk to us because of their experiences losing jobs and their aversion to the term just transition. In some cases, these leaders allied with their employer and elected officials to try to delay closing or revive fossil-fuel facilities. In the case of the Philadelphia refinery that exploded in 2019 and was shut down soon thereafter, it was difficult to find anyone to speak to us about how the workers confronted an abrupt loss of work. The case, briefly elaborated here, is a clear example of the tensions that often exist between labor and community around issues of transition and how they can end up opposed to one another.

Community groups had complained about the Philadelphia refinery for years, but the union resisted attempts to work with them, putting its hope behind its failing employer, who ended up declaring bankruptcy after the explosion. Even after the refinery closed, union leaders organized protests to reopen the refinery.

While the employer may be an adversary when it comes to wages or working conditions, they have enormous influence over workers' hopes and fears concerning job security. This is what Kazis and Grossman described as "Job Blackmail" in their classic book, *Fear at Work: Job Blackmail, Labor, and the Environment*.[5] The unionized segment of the coal, oil, and gas industries, and their affiliated industries in manufacturing, built power over the decades to command excellent wages and benefits, and are well aware that it will be hard to find comparable blue-collar jobs, thus strengthening the incentive for protecting existing jobs.

Union leaders in fossil-fuel industries are faced with a paradox of how best to represent their members. How do they balance their fears about the increasing shift away from the fossil-fuel economy with their members' concerns about ongoing access to good jobs? The United Steelworkers find themselves in this dilemma, and when faced with the situation in the refinery mentioned above, tried to work with the bankruptcy court and elected officials to find a prospective new owner to reopen the refinery. But those efforts failed. The best they could do was gain a year's contract for a skeleton crew of caretaker workers and a severance package of $5 million for members, totaling about $8000 per person. Meanwhile, despite reports of neglected maintenance, the company got an advance of $50 million on a $1.2-billion insurance claim, and unsecured creditors received $29 million. Non-union workers received nothing.[6]

In another case, union officials representing electricians at a coal plant that had been shutting down units over some years were reluctant to even be involved in negotiations, thinking that it might jeopardize the possibility of saving jobs. Meanwhile, Steelworkers at a nearby plant who were not going to lose their jobs did participate because they were worried their paychecks might be affected if their employer faced increased property taxes after a shutdown to make up for the loss of revenue.

Overcoming Differences and Aligning Paths

Labor and community are often at odds with one another when issues of climate and just transition intersect. One interviewee told us about a case when trade union workers came to testify at a public hearing against the shutdown of a gas plant, opposing the interests of a disproportionately impacted community that wanted to shift from dirty power to clean energy. Yet others in the trades, particularly young workers, said they thought there would be more work in the clean energy field and it was important to make sure it was unionized and well-paid.

It is often challenging for union members to think about how working with the community will help solve their problems. A young leader at a USW local responded to a question about how labor and community might come together to work around climate change by observing that local businesses grew up around the huge fossil-fuel workplaces:

> You'll go to certain pockets and there's nothing there, you know, but then you'll see like a little corner restaurant that makes their money based on these workers working there and coming in every day and buying food, you know. So the restaurants, the local markets or whatever, they would get impacted, right. So somehow some way, I mean, you want them to get taken care of, but to me, honestly, that's really far, right, because it's kind of like, and I'm not trying to sound selfish, but it's kind of like the same analogy of on an airplane, right, where they run the drill of putting your respirator on, and they said, "Put yours on before you put someone else's," right. So it's kind of like, first we're trying to solidify our potential plan for ourselves, you know what I mean. But, yeah, the community, we should factor them in, but at least right now, I am clueless as to how.

This young leader is recognizing the reality that small businesses are greatly impacted by the workplaces around them. From the perspective of workers and unions, communities appear to be potential victims of shutdowns and are also often antagonists rather than useful partners, who cause shutdowns by protesting polluting industries. Understandably, for many workers in fossil fuels, the driving question is: what kind of work is there going to be for me if the facility is shut down? Highly paid workers ask, how are you going to convince me that I can land another job where I get $100,000 a year with bonuses, benefits and a pension?

Detroit Wall. Photo: Shannon McGee, Flickr (Creative Commons)

These concerns seem light years away from the majority of environmental justice and Indigenous organizations that are also concerned about a just transition. Many of them conveyed ambivalence in meeting with fossil fuel and construction unions, expressing that these unions only care about defending members' jobs, regardless of what happens to

the communities that are disproportionately impacted by toxic emissions, or to people whose land and human rights are disrespected. They brought up cases in which unions asked for support when it was convenient and then dropped joint concerns when labor was through with their negotiations.

Yet they also empathized with workers' concerns. Although workers of color and Indigenous people have generally been excluded from good work opportunities or remain in the bottom tiers of the job hierarchy, often in non-union positions, community and EJ activists acknowledged that their own people are sometimes workers in the jobs that are at risk. Many community and EJ participants felt they needed their own version of a union to affect change, even while they recognized that living wages, immigrant rights, labor standards, and health and safety are common issues with labor, and that outside of the fossil fuels sector, unions and the working class overall are far more diverse.

A community organizer in Alaska reminded us of who really benefits when communities and workers are divided. Talking about their struggle to prevent the proposed Pebble Mine which would have catastrophic impacts on the local environment and fishing industry in Bristol Bay, they said:

> It's just really gross to see how these multinational corporations come in and behave. They have their classic playbook, you know, where they come in and try to sell this amazing thing that's going to be just so great for everybody. And then they work to divide communities because that weakens community bonds and then it just makes it easier for them to go in and do their bidding…they promise jobs, but the fishing in Bristol Bay provides so much more than the mine itself would provide. And probably, I anticipate that if the mine is actually built, most of the jobs are not going to go to local people. They're going to go to people who have worked other mine sites in other parts of the world or other parts of the country, and they're the ones that are going to come in and they're going to get those good jobs.

In sum, there are instances of overlap and instances of hard disagreement between labor and community, but most instances fall along a spectrum between these two poles. This is what makes the process of relationship and trust building so important, the topic to which we shall turn next.

Constructing Possible Solutions Through Coalition Building

"There's not a one size fits all cookie cutter solution to put out there, because what is going to be effective here in Oklahoma is not going to be effective in Hawaii, is not going to be effective in Washington state."

- Indigenous leader

Labor has a huge role to play in working with other organizations to assure a strong recovery. While unions have effectively achieved goals through political influence and member mobilization, they often join with other groups to wage critical campaigns. The scale of the suffering from the pandemic compounded by growing inequality, racial injustice and climate change demands this kind of bold action.

As the market for coal and other non-sustainable energies declines and more states set clean air goals, states are shutting down or planning the shutdown of coal power plants and mines. Refineries and gas plants are also closing or are under consideration for shutdown or phaseout. This trend has been escalating for decades, with major impact on workers and communities. Unions are torn on how to best represent and prepare their members. Until what point should they try to defend jobs no matter what, and when and how should they try to create a plan for change?

Communities surrounding fossil-fuel industries are impacted by the changes through the loss of direct

and indirect employment and tax revenues. They also face the issues of mitigation when plants vacate contaminated land, and from the longer lasting effects of emissions. Most of the communities are already economically vulnerable, composed largely of working-class white or Black, Indigenous, immigrant and other historically marginalized people.

People who live or work in areas that depend on the fossil-fuel economy, where few other good jobs exist, are in a particularly difficult position. Workers and the communities whose livelihoods are lost are often angry, economically, and psychologically depressed, with high prevalence of addiction and suicide as well as failing institutions. These communities can be places of despair, rage at broken promises and suspicion about attempts to address transition. It is here where people put their faith in leaders who promise to turn back the clock.

We spoke with people in Detroit, Michigan, Jackson, Mississippi, and Longmont, Colorado, where there have been local efforts to create innovative cooperatives and meaningful connections to redefine their cities. These are important alternatives to investigate.[7] But throughout the U.S. and in many other countries, economic displacement has happened without many successful efforts to repair the damage. In various states there have been efforts to respond to shutdowns or climate and environment-related changes in employment. They vary in part because of the politics and infrastructure of the states or region. Clean air legislation or greenhouse gas (GHG) emissions goals can set up a legal framework for phasing out the source of emissions, but the most affected people need to be involved in deciding how to structure the transition in a person-centered way.

As one worker noted, other countries structure policymaking so that unions have actual power in making political decisions: "[F]or example, Norway, right, a union is actually part of their system. The union is equal and government really makes it a point to make sure that union is at the table." Likewise, environmental justice and Indigenous groups as well as disproportionately affected communities demand a share of decision-making power. An Indigenous leader in Appalachia asserted that winning people over to a plan for the future must include their participation: "It's gonna be harder to get through to people because their trust, especially in rural West Virginia, Pennsylvania and Ohio, trust is a thing. So that's another reason we need to get the people in those communities involved."

The Process of Coalition Building

This section of the report is designed to provide community organizations, unions, environmentalists and government officials with information on previous efforts to define and plan a just transition. We draw from the accounts of interviewees who faced workplace uncertainty due to environmental and market forces and created partnerships to build power. We often hear about the outcomes of coalitions without understanding what it took to make the coalitions possible. Here we discuss the process of coalition building and how different groups managed to come together and find common ground.

Most of the accounts we highlight are from workers or communities facing imminent or likely phaseouts or shutdowns of fossil-fuel workplaces. But we also touch on a few stories that portray how labor worked with the community around safety and health issues and/or an environmentally hazardous practice. Brief narratives about coalitions organized to create an enhanced or just transition for fossil-fuel workers and communities can be found in Appendix A.

Our main question in this section is: what did the process of coming together to create a positive transition look like? By listening to the experiences and thoughts of coalition participants who strategized to reach agreements, we answer the following sub-questions: What were important differences and

tensions between the groups? How did they build relationships of trust? How did they move from trust to developing a shared vision? What kinds of plans did they arrive at and why? What obstacles did they face?

The following discussion draws from the accounts of coalition participants describing how they came to sit down with each other and build enough trust to create a formal transition plan. They shared a great deal of information about the challenges, achievements, and lingering concerns about the process of coalition building.

Insights into the Coalition Building Process

This report is meant to provide insights into coalition building drawn from participants' stories. We have organized the stories in terms of the themes of building trust and shared visions rather than in reference to specific cases. This honors confidentiality, and it focuses attention on how each of the various groups articulated their experiences. While the individuals involved also brought their own history and chemistry to each coalition, this section emphasizes how groups interacted during the process of working together, opening the black box of coalition building.

The Importance of Building Trust

A food alliance activist spoke about the challenges of bringing together farmworkers, restaurant workers, healthy food advocates and related groups into a coalition to build power for change. His words suggest why building trust is so important:

> What I can say is that in order for organizations that come from different backgrounds and that represent different populations to be able to engage with each other, they first have to be able

CICS Teachers and Staff Strike Picket Line Chicago, Illinois, 2019. Photo: Charles Edward Miller, Wikimedia (Creative Commons)

> to share a vision. If you don't share a vision, it is virtually impossible to bring folks together. And that isn't to say that people can't develop a vision in the course of being brought together, but that is a much harder and steeper climb than sharing a vision.

We will explore participants' stories about how they came to acknowledge a shared vision and work together in trust.

How to Set the Table

Conveners of climate talks for a just transition understood they needed to structure a dialogue to bring people with disparate visions together. In some cases, people knew each other from working together on other campaigns. But whether people knew each other or not, they were based in different interest groups and they had to find a process for listening to each other. A labor leader explained that having a professional facilitator lead was a good way to begin talks: "[N]ot jumping into substantive discussions around the issues was really important to the process." They continued:

> …when you have so many different interests around a table, and this issue [just transition] is so important to so many people, to have somebody leading the process that people can trust and people can have faith in that their goal is to help us meet our goal as a group, not pushing an agenda of their own….this was a time intensive process—but making a commitment to carve out time on the front end to truly understand what each other's organizations do, the full breadth of their mission and the services they offer. We [also] had one on one like interpersonal relationship exercises where we got to know each other on an individual level.

There was intentionality in structuring the dialogues. In some cases the coalition's "tables" were created to serve as goal-oriented exchanges of ideas, either bringing all groups together or as specialty tables where members of the same interest group could work out a consensus.

Most of the parties wanted to be at the table, but labor was often the most ambivalent. Union leaders expressed that they had to make tactical decisions about getting involved. Even when it was clear that there was going to be a shutdown, sitting down with environmentalists and community organizations or even talking to workers about the concept of a just transition was a calculated risk. Going back to the membership to discuss the talks was also risky. One participant recalled, "I have to admit that from the beginning of the climate talks when I first walked into a Steelworkers local and talked about just transition, they nearly tarred and feathered me and ran me out of the hall."

In some cases, the state Federation of Labor or regional Labor Council acted as a convening party, bringing different labor participants together to iron out their differences in an all-labor table that met separately from the climate table. Building group commitment helps to transcend the personal identification of a policy with a leader.

Recognizing Power Inequities

Sitting together with other interest groups revealed how difficult dialogues among different sectors can be. One member commented on the all-group climate table in their coalition. At first, each interest group at the table tended to keep to itself and there were clear power inequities:

> When I walked into the climate space, it was really–yeah, people were not working with each other. And you had the conservation groups on one side, the green groups on the other side, the fracking groups on the other side, and grassroots groups almost with no resources or support to do this work, and then unions were on the other side.

People were initially separated by resource inequities and by a tendency to stay within their own comfort zones. It was important to find ways to get them talking with each other. Environmental justice groups had knowledge to contribute to coalitions but spoke of the disadvantage of restricted budgets that limited the members they could bring to the table, prohibited hiring professional researchers, and so forth. They noted that other participants struggled to understand the relevance of racial issues to climate talks, how fossil-fuel work affected immigrant and Indigenous communities, and how:

> … certain communities are most impacted by environmental pollutants because corporations have placed their operations in low-income communities of color for a specific reason. And so it just continues to, I think, highlight the need for racial justice to be part of the climate conversations, which I don't think has been the case for a long time.

Tensions Among the Parties

Communicating their concerns across groups was key to building trust. We often heard that the environmentalists seemed to be the hardest to reach about what concrete needs had to be met. One labor leader expressed his frustration that they were impervious to workers' issues:

> These are not minimum wage jobs. These are good jobs. These are what we call a cradle to grave job: people who start these jobs in their early 20s, sometimes late teens, will work these jobs for 30 to 40 years and retire with a good pension benefit, and the whole time they're working, they have health care benefits, they have a livable wage. They aren't ever going to be millionaires, but these people are, if you will, giving a piece of their body every day to the company–because these are physical jobs, very demanding on people's joints and backs and everything–and so we wanted to ensure somebody who was 40 years old that had worked in this power plant for 20 years and doesn't really have any other skill set, has a way to continue earning a living for their family to ensure there's still food on the table and a roof over their head.

Likewise, members of environmental justice groups explained the trouble they had communicating with the "Big Greens" about what was important to their communities. The EJ's wanted to talk about clean water, clean air, ensuring that their neighborhoods preserve small businesses, and how switching from coal or gas to electricity in itself was not going to address their concerns. They didn't want to focus on the technical aspects of legislation without addressing the outcomes that community members wanted to achieve:

> So in their mind it is like, oh, we're just going to–for them it was so much about the mechanism. Okay, it's a cap and trade, or it's a carbon tax. We're talking about the mechanism. The vision that they had around a clean future often got missed in sort of that, whereas for us of EJ it was all about the vision at the end, how we're more powerful, how we have more resources, how our children and generations are better off. For them, it was sort of winning and then thinking about the mechanism that over time would reduce emissions.

For their part, Indigenous groups were wary of national organizations that came in with preconceived plans rather than recognizing that people who are most impacted must have a strong voice in determining their future:

> And so making sure that we're prioritizing all of those people who are first and most heavily impacted, which, of course, will be the workers, because they're the ones who are going to be losing their jobs and their livelihoods. And then, of course, the people who are impacted by

> these projects, low income, Indigenous, Black, other BIPOC (Black, Indigenous, and People of Color) communities, rural communities as well. Making sure that we're all first at the table to have these conversations, because we don't need people telling us what we need or what we should do. We already know what we need and what we should do. So just put us at the table, and make sure that we have power back so that our voices can be centered and uplifted. And then also people who are in positions of power actually listening to these people's voices. And so for me, that's what that just transition will look like, getting all of the power out of the hands of the few and back into the many, and making sure that we're not left behind.

Not all environmentalists were described as imposing their views. On the one hand, there were times they turned a deaf ear on the people with whom they were hoping to collaborate. For example, after an initial set of conversations in a town where workers were just starting to engage in transition conversations, a branch of one of the large environmental groups staged a demonstration to shut the local power plant down, despite having been cautioned against holding the protest. Not only was that group no longer welcome in the discussions, but the workers no longer participated in the talks and negotiations stalled until the local community based environmental group commissioned a report that convinced everyone that the shutdown was inevitable. Only then did talks resume.

On the other hand, collaboration was sometimes successful. One labor leader who tried to build an alliance with a national environmental group said that they learned from

> the mistakes of environmental organizations in the past with, you know, shutting down plants without any plan for a just transition, and cheering as a bunch of people have just lost their jobs, which was not a good look and has fostered the animosity that we've had for decades. And now they are realizing, a lot of these organizations are realizing those mistakes, and wanting to move forward with a blue green alliance and realizing that there's no chance of this succeeding without labor backing them, just as many, many large movements of this nature have been successful before. So we need to be reaching out to these groups, and forming these alliances, and being known in the community where we stand and what we want to get done.

Another interviewee told us that an alliance between labor and environmental justice groups came relatively easy in their case. Because both are connected to the lives of everyday people, there are bonds between them that foster legitimacy and trust. Both have memberships to which they are accountable. An environmental justice leader explained why they see labor as a natural ally, while insisting that labor needs to prioritize working more closely with Black, Indigenous, immigrant and other historically marginalized people.

> By and large, community sees labor as a partner, the most likely partner on these issues. And it comes up consistently as who groups want to work with, because they see that labor works with and has a system in which they talk with members. They see a democratic system and they see people who are fighting for workers, and I think they're connected…And I think that the other way I would say that it's important for labor to see the partnership is that…if you are not figuring out how to work with people of color you are essentially positioning yourself to be irrelevant in the future.

Trust is harder to build with unions that have largely white memberships unless they do the work of anti-racism. Leaders in the skilled trades tend to have more trouble understanding how racial and gender bias are built into their union structure and how bias permeates society. Here a union officer responds to why their members are mostly white men:

> I would say the demographics, it certainly is probably a little more diverse than it was then, especially with women in the trades. But I would say it really hasn't changed a whole lot. Like

> it's—and I don't necessarily know, I would almost—we do, and I think the utility companies do a lot of outreach to minorities and women, but I would just have to say that probably the majority of the people that are applying for these jobs are probably, I'm just being honest, I think probably white males. And so I don't know, like, I just—I don't know that it's necessarily, I'm not saying that it's anybody's fault, I just think that just typically seems to be the demographic that applies for these jobs, and I think we've all done a lot of outreach to change that.

These words are in contrast to other labor leaders' whose locals initiated training programs specifically shaped by community and labor to recruit, train and place women and men from historically excluded groups, and who continue to suffer from systemic discrimination. Who is sitting at the table makes a difference in finding pathways to transform white supremacy and patriarchy.

There were instances when groups representing Black, Indigenous, immigrant and other communities of color felt isolated and struggled to express their concerns and therefore build trust:

> I would definitely say that for us, as one of the few groups that were in the room that were people of color and did our work through a racial justice lens, it was hard to bring up race conversations, to bring up issues about what white supremacy has to do with climate justice, because I don't think folks had seen it in that angle and had seen it in the way that we see it, because our members see it that way.

Planning for there to be more than one group raising racial justice as a key issue and having the background to speak about it was an aim for some of the conveners. Some interviewees commented that in their coalition inviting representatives of local community organizations appeared to be an afterthought. They emphasized the need to prioritize a seat at the table for people representing grassroots and disproportionately impacted communities. One labor leader observed that their coalition only thought to include tribal communities after meeting for some time. But once Indigenous groups joined, their participation "contributed some of the most powerful experiences in the negotiations."

Climate Strike, Los Angeles, 2019. Photo Credit: Vivian Price

Sitting Down Together is Important

Notwithstanding the tensions among the groups, many interviewees affirmed the value of holding an all-group climate table for people with different interests. Having those conversations was critical to building trust and finding common ground:

> It's a lot more difficult to demonize an organization or an entity if you sit down face-to-face and get to know someone as an individual. And that cuts both ways. So I think doing that was really important because it set the basis for some tough discussions… There were definitely tense conversations, there were definitely very emotional conversations, but I feel like we had a base. We met for nine months. And for me, the why piece was critical, like knowing that everybody around that table was doing what they were doing because they believed in it, they were passionate about it, and they were fighting for a cause. There's a lot of commonalities. Even though we may not agree 100% as to the end result and the solution.

When planning a just transition, it would be useful to future conveners to consider the structural elements in the process of moving from building trust to producing a collective vision, and then creating, writing, and reviewing a concrete plan.

There were various models among the cases we heard about. In one case, the climate table with representatives from labor, environment, community, and municipal government was able to build enough trust to reach consensus around a plan. Public attendance was strong at town halls where attendees learned about the issues and the plan and were asked for feedback. Transition delegates were also selected at the public gatherings and were subsequently trained to carry out a door-to door campaign that built a large effort to lobby elected officials in the state capital.

In other cases, however, coalition plans were not always developed at the joint table. For example, unions sometimes held their own table to discuss ideas and draft language. Sometimes labor and environmentalists met without grassroots environmental justice participation, even when there were objections.

We were told about another structure for building trust and a shared vision. In that case, an environmental justice table brought organizations from Black, Indigenous, immigrant and other communities of color together to discuss their vision for a just transition agreement for their communities. That brought more collective power to their voices. A labor table assembled separately to structure the best possible agreement to support workers laid off from fossil-fuel industries. Labor, environmental justice, plus tribal groups and environmentalists then joined in an all-group climate table to hold negotiations, fed by ideas from the initial labor and EJ tables.

Building a Shared Vision

Participants had contentious debates in all the coalitions once the discussion got to the level of their group's demands. Building trust depended on identifying and clarifying group interests and listening to other members' interests even if they were different or in conflict. The goal was for everyone to see how different interests fit together in way that served each group as well as possible.

It was challenging but valuable to be able to express one's interests in the actual negotiations for the final plan and then come to agreement. An environmental justice leader gave an example reinforcing the account of an Indigenous leader who pushed for Free Prior Informed Consent to recognize Indigenous rights to determine who creates what projects on Indigenous land. As the EJ leader explained:

> I think, by and large, the environmentalists were open to the idea of working with people of color and EJ communities and Indigenous tribal nations, Indigenous people, tribal nations, but then when people brought forward specific concrete ideas that seemed to make the issue more complex, then I think there was a lot of misgivings about like, oh, this is–I mean, they never said it to me, but I think we were more of a pain in the ass than they really wanted to sign up for. And so the negotiations were very difficult and very heated at many times because of the need to iron out those differences.

Indigenous leaders were emphatic that development on Indigenous land, even for renewable projects, required express consent from Indigenous people.

Friction can develop between unions looking for utility scale solar and wind, and communities who view their land as sacred, but coalitions are built through the process of working through such difficult conversations.

Setting Expectations and Following Through

Setting expectations is an important part of building a shared vision. People told us about other instances when compromise was necessary to make their constituencies whole. An EJ leader expressed the grief they endured when unions asked the EJ community to allow certain polluters to continue business as usual contaminating their neighborhoods. According to the union leader, the only way union constituents would sign on to the agreement was to exempt companies that would close up and leave the state. The EJ leader described why they made the sacrifice of acceding to the exemption:

> …in the end of the day, the EJ groups agreed to it because of all the time and energy and trust that had been built through the process, and the deep desire to work with workers and labor, and to recognize that those workers were part of community and that we were connected, that we weren't adversaries, but that we were talking about people and that we were talking about what people needed. And so to me, that was such a radical moment of movement between EJ communities and labor.

On the labor side, workers who would be displaced from well-paying jobs would also have to believe that the plan would work for them. Both leaders recognized and accepted the need for give and take in order to move forward in a powerful alliance.

Beyond setting expectations, building a shared vision requires trusting that each party will follow through on its commitments. We heard about a labor-community environmental coalition in which one party lost another's trust by not living up to a perceived commitment. In this instance a group of union workers allied with Indigenous folks over fighting the emissions that were visibly covering the workers' bodies and residents' homes. They entered a lawsuit together linking health and safety on both sides of the company fence. But when labor was granted its demands, Indigenous leaders felt that the union stopped fighting for the residents' demands, and mistrust soured future relations.

Trust is always contingent and partial, given the pressures on each of the participants. Even within a group there can be disappointments and eleventh-hour reversals. For example, in one case, labor leaders came together in a consensus around what they all thought was an excellent coalition package for displaced workers. At the last moment, some of the leaders backed out of supporting the plan and others were replaced in a new election. This left labor with fewer unions on board, less able to rally their members or provide financial support for the public outreach campaign.

Another labor leader observed that in their coalition, the ideas of how to protect workers were more developed than those for supporting disproportionately impacted communities. The remedy was to create

an evolving plan with an advisory committee built outside the coalition. The advisory committee would solicit feedback from communities to flesh out the plan:

> We ultimately decided [on this] because we recognized we didn't have all the answers. We had a solid understanding of what workers need. There was also a recognition that there was a community element to this that we didn't understand fully, and we were not experts. So we knew our piece, and that's why we were so specific about the wage differential benefits, the TAA benefits, like what would make workers, give them the best shot out of this transition. We recognized that the community element, the disproportionately impacted community elements, were just things that we wanted focused state attention on to work on this adaptive problem. … And because without community, there's no workers, vice versa, in a lot of the areas.

Across all the stories we heard, plans included a range of compromises and advances. One concern that EJ folks raised was whether transition solutions would be adapted depending on the industry, and the demographics and culture of the workers and communities involved. Fracking, for example, tends to be non-union in some places, pay less, and employ more Black, Indigenous, immigrant and other workers of color while other fossil-fuel workers even in the same state may have union pay and benefits as a foundation for their just transition. Paraphrasing one participant, we need more thinking and collective discussion about how to ensure that solutions developed for one industry or community can be adapted to work for others. Rather than "copy and paste," groups need "another full conversation" about how transition should happen in different circumstances.

It is important for coalition parties to find the right language and framework through which to communicate the vision to members and the public. It is critical to use language that does not, however unintentionally, alienate constituents. One labor participant told us that they did not like the term just transition because people didn't understand it. Workers were more interested in the impact of market forces on employment, and would likely respond better to terminology that framed an agreement in terms of preventing a worse outcome:

> I see it as an economic reality, that renewable energy is just dirt cheap and it's getting cheaper all the time as that technology is advanced and developed and as it's implemented on a more industrial scale. We live in a market-based economy where price counts, and I see renewable energy rather accelerating, the use of it accelerating, from a purely economic standpoint.

An environmental justice leader also noted that the language of just transition was foreign to their community, and that it sounded academic. They said that when you talk about what just transition means—namely that workers and communities have rights—then people instantly understand, but it is crucial to find the right words to reach a given audience rather than stick rigidly to predetermined terminology. Whatever it is called—a just transition, the Green New Deal, climate justice, or a new term—the policies and plans need to be something people are willing to fight for.

Even agreement on language and a shared vision, however, does not mean all problems are solved. In one case, folks agreed on a bill to fill a tax revenue hole, keep the price of electricity from rising, protect education, and make plans for plant workers who would lose their jobs. Those aims were practical and achievable, but nonetheless, there were many problems left unresolved, as the agreement did not include site cleanup or the guarantee of new industry with good jobs.

In most places where there was a shutdown, people noted ongoing concerns about finding other work and continuing economic development. Shared plans were valuable but could not always prevail. In one case, the plan was to make companies invest in a cleaner economy, providing guarantees for workers, environmental justice, tribal and low-income communities. When it looked like the plan was gaining popularity, companies invested tens of millions of dollars in ads to oppose it. The following statements

are from various interviewees who felt strongly that despite the outcome, efforts to create a far-reaching plan were worth it:

> It was a first step in our own liberation to shift the direction of the state on environmental justice and industrial power in our direction, in our community's direction, and it was only the beginning. We made them, we forced them. They saw how the possibility of this initiative getting passed was. I still see that as a huge victory, for the relationships that we built with the white enviros but also it has created a shift in how people look at environmental justice and climate change.
>
> I still believe that that [the plan] has some very important concepts and language about equity, and social equity, and economic equity for communities that have been impacted by the ravages of climate change, but really because of industrial production standards that have ruined our environment where we live. I still believe that [the plan] has important language that needs to be looked at.
>
> The ability for this equity board to be able to grant funds and to send money back down to impacted communities to begin to fix the problems was really important, because we are the only ones that can really create the changes and fix the issues that affect our communities. We don't need somebody else to come and tell us how to do it. We know how to do it. We know what's needed. We need the funding and the resources to be able to do it.

Coalition participants offered much insight into processes of planning and carrying out a campaign once a shared vision was consolidated into a bill, initiative, program, or other activity. Several labor folks expressed the need for more time to get out and talk with their members. Rank and file members were not at the table and conversations around climate change can be difficult to have. Interviewees stressed the need for building rank and file climate literacy to strengthen union action on climate change. EJ and Indigenous leaders also stressed the need to finance an education and mobilization campaign in their communities to move any initiative forward. They noted that grassroots organizing was more effective for their constituencies than a media blitz.

Concluding Comments on Process

In the preceding section, we tried to capture how workers and communities understand and define the problems associated with climate change and transition, how they come to engage with these issues, and how coalitions form and operate to develop and promote equitable solutions. We outlined the positionality of groups along a spectrum of interests, and how they become motivated to be part of creating a just transition plan.

Building trust among people with different interests requires intentional planning to set foundations before jumping into developing a plan. Time must be spent gathering stakeholders and creating spaces for people to listen and seek to understand one another's concerns and motivations. Conversations need to be inclusive, encompassing racial and gender diversity, issues facing disproportionately impacted communities, racial justice and Indigenous rights along with attention to workers' concerns and mechanisms for reducing emissions. Every plan needs to be adaptive, tailored to fit local economies and demographics rather than applied as a rigid template. Funding is required to support groups who have local knowledge but few resources to participate in the dialogues, and to implement the final plan.

Groups involved in future talks could benefit from examining how various existing or past coalitions have structured the process, from the incipient conversations through developing a shared vision and a plan, and then apply what works best for their situation.

Pathways to a Just Society

Introduction

Having discussed what we learned about people's lived experience of economic transitions, this report then identified processes for building common visions and strategies for just transitions. Finally, we will focus on solutions or pathways to just transitions. As with the previous sections we draw from participants' accounts of a wide range of experiences with transitional policies, including those that do not explicitly use the term just transition.

The impacts of unjust transitions, compounded by the ongoing crises of climate change and the pandemic, are broad and deep. How bold must a just transition be to address them? We have learned that it must be broad enough to incorporate all people and groups affected by unjust transitions, including communities and workers along the supply chain. The closure of a coal mine, for instance, affects both the immediate community as well as far away power plant communities that depend on that coal. It must also be deep enough to address the inequalities driving unjust transitions.

The need for both breadth and depth is evident in two of the most important pieces of legislation in U.S. history. The National Labor Relations Act of 1935 (the Wagner Act) extended rights to many more workers than ever before, but it also purposely excluded independent contractors, farm workers and domestic workers while it did not mandate the internal diversification of unions, something that had to wait until the consent decrees of the 1970s. The Social Security Act of 1935 excluded various categories of people, including those above. Eligibility for benefits was also based on a person's income, so the Act offered protection for some while it reproduced existing inequalities.

A transformative just transition must neither exclude people affected nor simply treat the symptoms of unjust transitions.

Inclusion: Just Transitions for All

A key lesson from our project is that just transition policies must be inclusive: exclusive policies are not just. A so-called nationwide just coal transition that leaves out Wyoming is not complete, nor is it complete if it includes Wyoming but excludes contractors. Just transition policies that are limited to energy are also partial and exclusive, and fail to address a great many unjust transitions. Finally, transitional policies across the whole economy that obscure persistent discrimination based on gender, color, ethnicity or Indigeneity are certainly not just.

We have organized what we learned about broadening just transitions in terms of scale and scope. Scale refers to the geographic and temporal reach of a just transition policy or proposal. Is it local, state, national, or global? Does it address a short-term problem, like the closing of a plant or a supermarket, or a longer-term transition? Scope refers to who is covered by the policy. For instance, a policy may be national but cover only one sector within the fossil-fuel industry and may cover only formal workers, leaving out subcontractors.

We fully appreciate that the scale and scope of a transition are the result of political contestations. But, whether intentional or unintentional, they have important implications that need to be recognized and addressed.

Scale

The geography of a transitional policy has consequences. A unionist from Massachusetts told us how a combination of the AFL-CIO's Rapid Response Team and the state's higher unemployment benefits eased the pains of transition. He also lamented the fact that the Rapid Response program was allowed to decline nationally while low unemployment benefits in southern states make it impossible to replicate a similar strategy around the country.

The hopeful stories of just transition for the Diablo Canyon nuclear plant (see Case #4) and the Huntley coal plant (see Case #3), both local cases, required state-level policies to make them happen. Colorado's just transition from coal (see Case #1), if properly funded, could become a model for the rest of the country, provided it can be adapted to the Appalachia and Wyoming, and applied to other fossil fuels. Washington state's comprehensive Initiative 1631 (see Case #2) offers a model for the country, but its defeat highlights the formidable local and national opposition of producers who are unwilling to pay the costs of the climate damage they are causing. Cooperation Jackson offers a view toward a more democratic and ecological urban vision. Longmont's municipal justice transition can be a model for other municipalities in Colorado and the U.S. as a whole if the recommendations adopted are properly implemented and the city can generate necessary resources. These cases are the results of imagination and determination. But the challenges of moving from one scale to another can be formidable and sometimes unexpected.

For example, one of the top concerns that participants raised was about health care. Many of those affected by transitions were concerned about losing their employer-based health benefits and hoped for a national health care system. That transition remains difficult, partly because there is strong opposition to Medicare For All from the financial and health care industries, and partly because many unions support health care at the scale of employers. Here we have an example of a policy at one scale serving as an obstacle to a national health care system that is sorely needed.

The significance of scale is also evident with respect to collective bargaining. Some agreements provide for the reemployment of workers in other company facilities, but this strategy is becoming increasingly less effective as fewer and fewer companies are covered by national level collective bargaining, not to mention multi-employer bargaining. The increasing devolution of bargaining units makes coordination across even the same companies ever more difficult. For collective bargaining to play an important role in crafting just transition policies its scale must broaden beyond its current limitations.

The breadth of a just transition is measured geographically and in terms of time. One of the most pressing short-term concerns participants expressed was about those horrible, uncertain months and years after a plant closes or an industry disappears. Who is entitled to whatever benefits there may be and for how long? Are these based on seniority, leaving out younger workers, deepening intergenerational friction and hampering the prospects for collective action? Or are they adapted to the diversity of time horizons and circumstances at hand?

The oscillations between blight and gentrification resulting from unjust transitions demonstrate the need for intergenerational horizons. Transitions affect not only those workers directly impacted, but also their children. All parents we talked to were anxious about how to take care of children, how to ensure that their lives are not derailed by moving from one place to another, and how they can get jobs. Short-term policies forced them to survive the present by sacrificing the future, close and distant. As one Indigenous participant told us,

> it's thinking about a relationship to land and a relationship to future generations, as the two main pillars. Whatever we do to the land we do to ourselves, and whatever we do today is going to have impact later. And so, you know, solutions come from that place.

Scope

A just transition policy may cover a whole city, state or country and may be long-term, but its scope can vary from broad to narrow. One of the programs we learned about highlights that a broader scope must be multidimensional and holistic:

> The Good Food Purchasing Program has five value categories. Labor is just one of them, but it's also human health, environmental sustainability, animal welfare, local economies and labor. And so the way that it works is the legislation has this filter kind of effect where it says the food that this institution is allowed to buy has to meet these quantities and these five value categories. And so they can't pick and choose, like, we're going to be really good on animal welfare, but we're going to suck at human rights.

Narrow scope has significant limitations. Transitional policies that cover only formal workers but not contractors are divisive and unjust. That is also the case with policies that exclude small businesses and their employees whose livelihoods depend on the particular plant or commercial facility. While the labor force of most industries has become more diverse, many of the subcontractors in construction or in servicing plants and commercial buildings are immigrants, often with limited legal rights. As one union member who is also an immigrant told us:

> …we represent what we call service and tech workers, when, you know, the average, or the mainstream health care worker that comes to mind is nurses and doctors. They're all great, they do a wonderful job, not to diminish that, but in the background you have a lot of support staff that make the hospital run alongside of them. […] So it's a wide array of departments that we represent. And that brings a lot of diversity.

We need to be mindful of the legacy of discrimination and stratification by race and gender in the workplace as we develop policies moving forward. As a unionist told us, Bethlehem Steel's Sparrows Point plant had two major USW locals for much of its existence:

> The finishing mills was the cleaner area where it was, mostly, predominantly white and more skilled jobs. And then on the steel side, it was a much higher percentage of African American workers, more hot and heavy jobs.

African American workers who wanted to move to a finishing mill job would have to abandon their seniority, one of the cornerstones of U.S. unionism.

Only the consent decrees of the 1970s started the transition to less racialized and less gendered workplaces in this and other manufacturing workplaces. While there may be more restrictions on formal discrimination today, it is important that just transition policies are explicitly inclusive, for instance, including the multitude of workers that keep a hospital functioning, alongside nurses and physicians.

There are other ways in which narrow scope can cause exclusion and marginalization. An important example is the prioritization of where and for whom a just transition is necessary. Targeting any single industry has a dual impact. On one hand, it can demonize workers in that industry and can make them malleable to corporate arguments that environmental policies, more than corporate choices, are the cause of their problem. On the other, it prioritizes those workers for support over workers affected by other transitions. As a result, it obscures the need for just transitions across the economy—whether these transitions are due to automation, offshoring or climate change—thus creating silos among categories and communities. As one participant noted, we need a just transition in the health sector if we are to move towards universal health care. Without a just transition, health care workers, like fossil-fuel workers, will be subject to job blackmail.

The focus on industry or sectoral transitions can obscure broader demographic and social transitions, whether these involve gender, race, Indigeneity, immigration, age or other factors. The ways in which demographic and social transitions intersect with industry and sectoral transitions requires close attention lest transitional policies breed divisions rather than solidarity. For example, an environmental justice activist recounted how the growth of car manufacturing in Detroit during the inter-war and post-World War Two periods resulted in the recruitment of large numbers of African American workers from the U.S. South. Another worker highlighted how NAFTA resulted in more emigration from Mexico during the 1990s. A few people referred to the consent decrees of the 1970s that sought to integrate the labor force and unions. An Indigenous person told us that they were born in 1970, a few days after Nixon had declared the end of the post-World War Two Indian termination policy, the goal of which was to 'assimilate' Indigenous people.

These broader transitions are important in their own right and have significant implications for the future of the labor and environmental justice movements. As stated by a participant with lengthy experience in unions and other social movements:

> To have a just transition in this country, to have it after we come out of the pandemic, to have it when we get off of fossil fuels, people who do all that work, caring for children, teaching children, caring for sick people, delivering food, whatever, growing food, those people need to be paid a living wage […] the idea of the working class that we conjure up is the big burly white guy with a hard hat on who's whistling at you when you're 25, but the working class is really all those people doing—women, mostly women of color, doing these jobs that are thankless, and they don't have time to take care of their own kids.

Finally, just transitions must cover transitions "from the past" and "into the future." Participants pointed to the significant social inequities and often adverse environmental impacts of the green or clean economy. An IBEW leader, largely skeptical of just transition, highlighted the difficulty of persuading unionized workers in the fossil fuel sector that renewables are the future, when renewables are consistently anti-union employers and provide limited to no benefits. In their view, this discrepancy is largely due to the absence of union rights. An ironworker told us:

> Shell is building a cracker plant for ethylene in Pittsburgh. It was a $6.5-billion Project Labor Agreement. So fossil fuels, a megaproject for fossil fuels, you know, and they've got no problem signing a PLA. They got all the money in the world. Why are we not going to do that for a 10-megawatt offshore wind farm? Why would we not do that for the very first wind turbine that we put up offshore in the state? Do we really want a just transition? Is it more than just words? It has to be followed up. And that's why there has to be a coalition between legislators, environmental groups […] and labor unions, to get together to make a force, to make it a just transition or else it'll just be words, and the NAFTA will happen again.

This unionist highlights the fact that the renewable energy sector is not particularly friendly to workers or communities because it is largely not unionized. This explains why unions support utility scale renewables. Many utilities around the country are already unionized, and it is more likely that utilities

can be unionized more easily compared to distributed energy installers.

Transitions into the future must not only be socially just, however; they must also be environmentally sound. A fisher we talked to reflected on the windmills and solar panels being installed where he lives and works:

> I'm sitting here thinking, what they really need to show is a lithium mine in the Congo with a 12-year-old kid that's going to be dead in a week. Let's show the cost of that battery. Let's show the cost of all these things that we use every day. The human cost is not worth this greed movement. The only "go green" thing I see is they want money.

People opposed to a green transition use similar arguments. That is not a reason for us accept unjust transitions into the future by the renewable energy sector. Rather, like this fisher who is very much concerned about climate change and social justice, we should expect the renewable energy sector to do better both socially and environmentally.

Ambition: From Fragmentation to Transformation

All people in the U.S. have some degree of access to public education, but the inequality of resources is staggering. For this reason, inclusivity is necessary, but it is also insufficient. Inclusion alone will not produce equity. Rather, inclusion must be accompanied with policies that give those affected by transition the voice necessary to shape social choices.

We often hear the saying that if you are not at the table you will be on the menu. We have learned through this project that deepening just transition requires both strong participation—a strong voice—and the possibility of adopting policies that change the rules of the game—a strong choice. In other words, a person, organization, or movement may be given a seat at the table provided it commits to certain table manners, or may earn a seat in order to change those table manners. Moreover, as we suggest, strong voice and choice should neither be occasional nor produce just transitions as the exception to the rule of unjust transitions. Rather, they should be integral parts of a just and democratic society: just transitions should be routinized.

We found it inspiring that such a desire was implicit, but strong, even among many people who were skeptical of the strategy of just transition or who discussed only particular concerns, whether employment or health. As one unionist with many decades of experience told us, people gravitate to their fears and are thus susceptible to job blackmail. When people talked to us about what they desired for themselves and their loved ones, they gravitated to their hopes for a world in which they, their children, their coworkers and their neighbors did not have to face the same predicament of unjust transition. They gravitated to a more just and humane world.

Stronger Voice

Participation can be broad but also shallow. For instance, a company may inform workers and communities that it is closing or relocating. In very few cases, a collective agreement may require the company to go one step further to consult or negotiate with a union over the effects of closing or moving. Only in rare cases is a company required to negotiate whether and how it will close or move. In some countries, governments and some unions do play a limited role with respect to the corporate decisions of key companies. This is extremely limited in the U.S., where the National Labor Relations Act of 1935 and the UAW's Treaty of Detroit of 1950 traded the right to have a say over questions of location and

investment for the right to organize and to bargain for wages, health benefits and pensions.

Our interviews highlighted the declining role of collective bargaining and public policy in tempering the power of corporations, and the need for a stronger voice for unions. Several people told us how strong collective agreements had slowed down the transition and eased its impacts, but also that such agreements are less likely to be negotiated at present. The Diablo Canyon Nuclear plant case (Case #4) clearly pointed out how important collective agreements can be. In the case of the Brayton Point coal plant in Massachusetts, the collective agreement gave workers three to four years of notice.

However, even the strongest collective agreements are limited to dealing with the pace and some of the effects of the transition, rather than whether and how it would take place. For participants, this was all the more painful because many of them were attached to their particular companies and thought of them as part of their lives. As one of the workers from Lordstown said, "So we are a family of General Motors. General Motors did a lot for our family, there's a lot of 'em that transferred, and they're still working." But the same person added a bit later:

> We all keep up with each other on Facebook and they put it out there, "Hey, we've lost another soldier." We always called ourselves soldiers, too. There's nothing, I don't know, there's nothing any sadder than losing all these people, male and female, because we thought they were handling a situation.

As urgent as it may be to build the strength of collective bargaining, it is not the only venue for worker voice. Worker voice is also expressed in the innovations that workers develop. In several cases, we learned about the creative ways in which workers, farmers and communities sought to initiate solutions in response to a transition.

As we mentioned earlier, one unionist recounted the creation of the Steel Valley Authority in Ohio to take over operations from U.S. Steel, which was in the process of shutting down and moving abroad during the 1980s. This grassroots effort was defeated by U.S. Steel, banks and policy makers but serves as a testimonial to the resilience and creativity of workers and the value of hearing and respecting their voice. The examples of such innovative responses are many, in fact.

Building and construction unions in Seattle are active participants in a strategy that leverages future savings from deep retrofitting to borrow the funds necessary to do the retrofitting. The parties involved in this effort have a comprehensive and creative vision that combines finance and environmental goals in a manner that can be upscaled to deeply retrofit whole commercial districts. Two California IBEW locals, in San Leandro and Los Angeles, have created two of the most ambitious net zero facilities in the country and the world. Agricultural workers in the Northwest have created a cooperative that combines respect for the land and appreciation for the many skills of farmers with a commitment to collaboration. Cooperation Jackson in Mississippi is one example of building an alternative urban vision of how just transition can take place. For its part, Longmont, Colorado, provides another example of how a small town with ambitious climate goals and a significant number of people of color and workers in the oil and gas and agribusiness industries is forging its own just transition path.

Jobs to Move America (see Case #6) bridges employment with redirecting manufacturing investment to public transportation through leveraging public procurement. The same has taken place in the food sector where a great deal of food is purchased by public institutions, such as school districts. The National Climate Jobs Resource Center that started in New York State is one in which unions play a central and proactive role. And the Lordstown Transition Center is a creative response by unions to a devastating closure (see Case #5).

Supporting worker initiatives is an important component of just transition because it enables workers

as citizens while taking advantage of their ingenuity and desire to create. But not only unions need more voice. Those communities most impacted by environmental and social injustice also expect to be included and have their voices count with respect to the siting of plants, commercial facilities or infrastructure, the mitigation of their impacts, and long-term zoning and planning. As we were told by a community activist who collaborates closely with unions:

> I am a huge believer that the process must include people who are impacted and people who are experts that can help us guide in the conversation. That's how we do policy. We believe that the people who are closest to the pain are closest to the solution. […] so it has to be both, and disproportionately impacted communities and impacted workers must be centered.

As this activist indicates, the voices of those impacted constituencies, along with unions and social and environmental justice activists, must be written into transition policies. No matter how profound the relations between various stakeholders may become in the process of promoting a policy, they will crumble if some are left out of the policy and its implementation, including the agencies and programs that are set up. The result will be fragmentation, with various stakeholders associated with their 'own' bureaucracies, whether the Environmental Protection Agency for environmental justice or the Department of Labor for unions. It is for this reason that Initiative 1631's (see Case #2) vision of including all affected stakeholders in the management and distribution of funds from fossil fuel fees is an important example of integration rather than separation. While the Initiative did not pass, its provision for Free Prior Informed Consent—so significant for Indigenous people fighting for land rights—has now become part of Washington state law.

This does not mean that unions or communities will replace elected officials. Rather, it means that the rules within which those elected officials operate should also empower workers and communities. As it stands, they largely empower corporations. Many interviewees highlighted the need to collaborate with decision-makers across the board, provided there was common ground. The bill that funded the Huntley transition (see Case #3), for instance, was written with the help of a conservative legislator. An Indigenous activist collaborated with a Republican lawyer over water rights in Oklahoma. Policy makers in Longmont, Colorado, were influenced by the just transition working group while the city recognized the need for people who can bridge cultures. That being said, participants were also clear that collaboration with business or governments should not be a one-way street with unions and community organizations expected to sacrifice their priorities.

Stronger Choice

Our interviews revealed a junkyard of marginal and onerous policies built into collective agreements—such as limited supplementary unemployment—and public policies—such as the Trade Adjustment Assistance program (TAA)—that did not address the impacts of the unjust transition but attest to its recognition. Stated differently, the proponents of unjust transitions recognize the pain that these transitions are inflicting but are not willing to implement anything more than marginal policies that are selective, ineffective and routinely humiliating.

For example, the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 was massive and, one way or another, touched all of society, including the poor, workers, small business, state and local

governments, and corporations. However, this massive policy was reactive and short-term and, in some cases, has bred rather than alleviated inequality and insecurity.

We asked almost everyone about their experiences with the COVID-19 pandemic. In most cases we heard about abuses, such as designating people as essential workers so they could be forced to work, working without PPE, and trying to survive without any kind of support for families with children, a condition that burdened mostly women. The COVID-19 crisis has broadened the classification of essential workers to include people in health, education, food and commerce, and the essential workforce is now both much more diverse and less unionized. While the CARES Act was wide-ranging, in terms of achieving justice, it demonstrates that a massive policy is not necessarily an ambitious one.

In other circumstances, however, workers and communities have also responded purposefully to manage crises. In the Colorado case (see Case #1), for example, unions, environmentalists, and social justice advocates were confronted with a decarbonization bill. They chose to fight for a just transition policy rather than avoid the challenge or oppose the decarbonization bill. While significant elements need to be resolved–especially financing and inclusion of disproportionately impacted communities, but also whether just transition policies will be employed for other fossil fuels–it is nonetheless a purposeful strategy in response to a crisis rather than a mere reaction. The same can be said of the Diablo Canyon nuclear plant (see Case #4) and the Huntley coal plant cases (see Case #3). In the case of Washington's Initiative 1631, in fact, this purposeful action was even broader and more proactive (see Case #2). These cases are all examples of what can be achieved when unions, environmentalists, community activists and supportive policy makers align to deal with a crisis.

Purposeful policies in response to crises can also take a different form, as the Jobs to Move America (see Case #6) and the Climate Jobs initiatives or the AFL-CIO's Rapid Response Team suggest. In the first case, unionists, environmentalists and community activists have launched a strategic initiative that combines green manufacturing and public transportation vehicles by leveraging public procurement. In the second case, unions are spearheading climate jobs as a solution to the climate crisis and as a means to replace fossil-fuel jobs. While the Rapid Response Team is not explicitly environmental it demonstrates how union-driven initiatives can make transitions more just, even under the direst circumstances. The Lordstown Transition Center, for example, was the creative response of committed unionists to the devastating closure of the plant (see Case #5).

As we look at these purposeful and creative efforts to produce something good out of a bad situation, we can see the outlines of what a just transition for workers and communities must include. No matter how promising the future may seem, a transition is not just if it sacrifices a cohort of workers or communities for a brighter future from which they are excluded.

To begin with, there must be a broad discussion as to whether a plant or a commercial facility needs to close. Are there ways to keep it open or repurpose it? If it must close, there should be early warning systems and corporate accountability to avoid manipulation of the process, as was the case with GM's Lordstown plant a few years ago or U.S. Steel's Homestead plant in the 1970s and 1980s. If unavoidable, transition policies must be appropriate and both short- and long-term.

Workers and small businesses that depend on the plant or industry that is closing require support.

Workers require resources that are adapted to their age, allowing them to transition across occupations, places or life stages. These should include income and pension maintenance, relocation benefits, healthcare, a glidepath to retirement, education, mentoring, counseling, guaranteed good employment (rather than mere opportunities), and more.

Many workers told us about the impacts of plant closings on small businesses whose owners and workers they had taken for granted. The overall community that is home to the closing facility also requires transitional policies, such as funding that will help them rebuild and diversify their economic, cultural, and health base. Transitional policies should treat communities as a whole and not only as economic entities.

These kinds of transitional policies are not new ideas. The Redwood Employee Protection Program of 1978, developed with the inspiration and collaboration of the International Woodworkers of America, included almost all the above provisions and is still considered an aspirational model (see Case #7).

It is possible to satisfy many or all the above basic requirements for a just transition if communities and workers have a strong voice and can collaborate effectively. But the overwhelming sense we got from participants in this study—including people that were skeptical of the term just transition—is that we need policies to address the systemic causes of unjust transitions and move us toward a world that is more equitable and democratic. For them, a comprehensive and bold just transition policy, by any name, is not a series of bright events in the midst of defeats, any more than a few labor or environmental justice victories in the last several decades can be held up as evidence of strong labor or environmental rights. Even a large just transition policy–one the size of Medicare or the Superfund—is not enough. A truly profound just transition policy, like a truly profound health care policy, must be universal, and part of a vibrant and comprehensive public sphere akin to the vision of the Green New Deal. Such a vision, moreover, must take into account both its impacts within the USA as well as its unavoidable impacts around the world. As we have reported throughout, a green transition in the USA will draw upon resources from around the world and will affect workers and communities that are distant only in miles. A Green New Deal in the USA must aim towards lifting all boats, thus creating good will across the world. One steelworker remembers how the need for a more internationalist approach was driven home when Brazilian steelworkers told him, and other visiting unionists that they, the Brazilians, were now in the privileged position that US workers had taken for granted for generations.

Such a profound just transition, embedded within a more just society, will require changes in some of the crown jewels of what social scientists have called the post-World War Two capital-labor accord between government, business, and labor, primarily in manufacturing. This accord allowed unions to bargain for a stronger safety net for their members and, indirectly, for the communities in which they lived and/or worked. In exchange, they gave management the right to make location and investment decisions, such as labor-shedding automation. These powers became apparent from the 1970s on as automation led to downsizing, trade agreements led to offshoring, and unions were weakened by corporate attacks. Yet rather than blaming the corporations behind these shifts, many people tended to blame environmentalists, politicians and unions. This pattern is repeating with respect to decarbonization, particularly since the renewable energy sector is largely non-union and often engages in practices that are socially and environmentally damaging.

From Safety Net to a Just Society for All

Major employment-based safety net policies—health care, pensions, the right to organize and bargain collectively—have been under increasing attack since the 1970s, particularly in the private sector. With this in mind, participants told us that we need more than a social safety net that mitigates unjust transitions for those employed and unionized. In their view, we need a stronger social contract that ad-

dresses the causes of environmental and social injustices and enables people to flourish. Such a social contract cannot rest solely on employment-based benefits and rights. Rather, a just society means a larger public sphere in which basic needs—employment, health, education, family time, environmental stability and more—are considered fundamental environmental and social rights. In the words of a farmworker and human rights activist:

> So if you give people wages, better wages, but their environment is still being destroyed by climate change, it's just satisfying enough so that they don't realize all the other damage that's happening to their environment, to the systems, to discrimination, to our society as a whole, and to our planet, then just getting better wages is not the answer. But it mollifies people into being content enough so that they don't see the other undermining of their rights and humanity that are happening.

Several people were explicit about the need to bundle together various policies that collectively enable a larger and stronger public sphere. Others were more implicit, focusing on a select number of issues but not calling directly for such a transformative change. However, their expressed hopes about health, pensions, education, family, the environment or employment could only be addressed through a larger and more just public sphere.

This section outlines some of the social, environmental and economic priorities that people raised, and then closes with our thoughts on the possible pathways to accomplish them.

Fundamental social needs, such as healthcare, education and pensions were high on many participants' agendas. As one of them told us:

> You know, the health care system, I mean, thank God we have it, but when you look at other countries, other nations, health care is not even on the table because it's just a part of what the government provides. So you don't have to go in and bargain wages versus health care, because that's what it comes down to each and every time. The environment obviously is causing people to be sick and causing different respiratory issues. You need your health care for that, if nothing else.

We heard repeatedly how the current health care system makes it difficult for people to change jobs or retire before they are eligible for Medicare. Moreover, the absence of good, universal health care leads companies to hire at levels below health coverage while limiting the flexibility of workers that would consider and welcome employment change. Given the size and impacts of the healthcare sector it is difficult to envision how Medicare for All can be adopted without affecting the whole society and expanding the public sphere. The continuing opposition to the Affordable Care Act, as modest as it is in comparison to healthcare systems in all other affluent capitalist countries, is less about its costs and more about its implications for the private-public balance.

Climate change, environmental health, and occupational health and safety, particularly during this pandemic, were issues on most participants' minds because they realize the value of a healthy environment and the threat of climate change. But we also heard very clearly that it is important to recognize the environmental priorities of all people and communities rather than downplay their concerns compared to the existential nature of climate change. Focusing all environmental policies on climate when children are dying of pollution or the lack of clean water is likely to create divisions and fail to address the range of environmental harms. Several people talked to us about the adverse environmental and social impacts of agribusiness on immigrant and migrant workers. Indigenous people talked about the significance of land and natural resources to them as individuals and as collectives, a worldview with transformative implications for understanding the relationships between society and nature.

Participants seemed to agree on the need for secure and decent employment, as well as proactive creation of environmentally friendly employment. This was a central point even for those who believe that fossil fuels and nuclear power are an important part of the energy mix. As one such participant told us,

> putting a manufacturing plant in this area, along the lake, just directly north of me, is a perfect place, there's a huge amount of acreage that's really underutilized and zoned industrial. It could be manufacturing wind turbine parts, including the blades, which are not easily transported. The blades could be put on the boats right at the Port of Cleveland and transported all over the world […] or rail.

An ambitious public investment program, along with leveraging public procurement, will shift the balance significantly between the public and private domains, as will the production of buses and trains over electric cars. Producing and accessing healthy food was another important concern, and procurement can play a helpful role by improving food quality in the vast number of public institutions. Many discussed the need for alternative food production and distribution systems that are more environmentally sound and contribute to building local relations. Addressing the precarious situation of food workers was also an important priority. While those working in food retail enjoy limited rights and benefits, those in meatpacking are subject to low occupational health and safety standards, especially during the pandemic.

Several interviewees pointed to European countries with national health care or educational systems, which teach us that once these policies are implemented, they become part of the social fabric. Conservative governments in the United Kingdom have come to terms with the National Health System. Conservatives in the U.S. know that, hence their opposition to the otherwise limited expansion of the public sphere through the Affordable Health Care Act.

The adoption of any profound sectoral reform will mitigate the pains of poverty, precarity and unjust transitions. The adoption of several of them, as part of an integrated agenda such as a national Green New Deal, will move us beyond just transitions as an exception to make just transition an integral and routine part of a just society for all. The task is immense but as a labor environmentalist told us,

> Once a bill gets up on the Hill, compromises occur. And shame on us if we start to compromise now, before it's even in the pipeline up on the Hill, which some people are prone to do, compromise too early. So this is a historic opportunity, we need to fight for it, we need to fight hard, and stick to what we believe is necessary as opposed to what might we be able to win.

Concluding Comments on Pathways

Inclusion, in the sense of coverage by a policy and participation in decision-making, does not translate automatically into a deep or ambitious policy. Almost everyone in the U.S. has the right, though not necessarily the means, to buy health insurance or save money for old age. However, available health insurance programs are not the same thing as Medicare and, more specifically, Medicare For All. Provision of generous employer-based health insurance for some makes the adoption of universal health care for all more difficult. And defined benefit pensions are not the same thing as defined contribution pensions.

Neither the Washington State effort (Case #2) nor Colorado's developing plan (Case #1) can address the transitions facing other states, nor can Longmont's just transition plan assist other cities. The just transitions for Diablo Canyon (Case #4) and the Huntley (Case #3) plants do not address the future of the entire nuclear or coal industry in the U.S. But all of them are valuable in themselves, and each can contribute to a national strategy that weaves separate initiatives into a more inclusive and egalitarian

national and global public sphere. Such a strategy is urgent because the anxiety and anger of workers and communities impacted by unjust transitions is ripe for appropriation by exactly the people who caused the injustices to which they respond.

CONCLUSION: MAJOR FINDINGS AND LESSONS

This report would not have been possible without the workers, advocates, and Indigenous leaders who shared their stories and insights into how to stop the pattern of leaving workers and communities behind. Their lived experiences—through unjust transitions, pandemics, and tremendous grief and loss—are an important testimony to what happens during economic transitions. As we stated at the beginning of this report, transitions are about more than just jobs, they are about people and the trauma that remains from being abandoned by workplaces and the government. As we face the enormity of the climate crisis, we must find a way to come together, build power, and ensure the energy transition is just. As one union member stated:

> So, this study, this conversation is important. Having everybody at the table is important. We cannot be so angry with the way things are that we're unwilling to listen to everybody's perspective. We can't be such die-hard labor activists that we completely ignore the plight of the environmentalist, and the same, you know, vice versa, that we care so much about the Earth that we want to not have people working, because we have to find a solution to work together.

This report is more than testimonials, it is a call to action. The window for reducing emissions to the level required to stop the worst impacts of climate change is closing and there is no time to waste. This urgency, however, does not mean that workers and communities must bear the cost and burden of emissions reduction alone. As noted throughout this report, transition does not have to be unjust; it is made unjust through poor policies and a lack of support.

Providing displaced workers with economic support, training, and retraining opportunities, and creating good, union jobs can protect workers while we reduce emissions. Ensuring jobs created in the low-carbon economy are available to all workers, especially those historically excluded from the fossil-fuel economy, and honoring and centering Indigenous communities is fundamental to a just transition. Furthermore, supporting communities through tax revenue replacement and seeding new industries reverses the past model of leaving towns and cities to slowly wither away.

To this end, we provide detailed recommendations based on findings from our interviews. These recommendations are presented below in three categories: recommendations for policymakers, recommendations for advocates, and recommendations for future research.

Main Findings

- Transitions are inevitable and constantly happening across the economy. Past transitions, driven by market forces, corporate entities, and shortsighted public policies left workers and communities largely behind with little to no support.
- The existing transitional policies are fragmented and inadequate, leading to the destruction of human capital as well as deep resentment and opposition to social and environmental policies
- Workers and community members from all regions of the country are suffering from an historic decline and lack of access to opportunities. Many also face the threat of losing opportunities in the near future. The COVID-19 pandemic and persistent structural racism and wealth inequality have ex-

acerbated these realities. People affected by past unjust transitions are reacting harshly to climate action and policy, creating tensions between labor, community and environmental movements that often erupt into open conflicts.

- Individual and collective understandings of transitions range widely according to type of work, class, gender, race, age, political ideology, previous experiences with environmentalists or the climate justice movement, and relationships with unions and the community.
- Just transitions in any sector require both targeted short-term and proactive long-term policies.
- In the inevitable energy transition some, but not all, fossil-fuel workers will be employed in the renewable energy sector.
- Plans for supporting workers and communities in the transition away from fossil fuels must attend to local conditions and be rooted in the needs and aspirations of workers, unions, and disproportionately impacted communities.

Recommendations

Building on the themes of Go Big, Go Wide, and Go Far, we have drawn further recommendations from our interviews, and present them in three categories: recommendations for policymakers, recommendations for advocates, and recommendations for future research.

Recommendations for Policymakers

- Address immediate impacts of crises and transitions. This includes:
  - Immediately pass a robust relief plan to support workers and communities suffering from a transition, economic or otherwise. The relief should include recurring direct payments until the economy has recovered, and any investment should be in low-carbon sectors and not double down on the fossil fuel economy of the past.
  - Protecting displaced workers through a comprehensive set of policies appropriate for their circumstances, including wage replacement, alternative and comparable employment, health insurance coverage, relocation support, childcare, and pension and retirement contributions. Policies should also cover clerical, seasonal, and part-time workers impacted by the transition.
  - Creating and expanding government rapid response teams in every state to address job displacement and mass layoff situations, such as the Rapid Response Team in Massachusetts or the Transition Center in the Lordstown auto plant shutdown. Transitional services should extend to spouses and include mental health support, retraining opportunities, relocation, childcare services, and assistance from caseworkers who can help people consider career pathways, available resources, and how to access them.
  - Provide bridge funding for localities where the public sector is affected by the withdrawal of fossil-fuel tax revenues.
- Invest in long-term equitable economic transformation. This includes:
  - Any decision-making bodies should include all affected parties including workers, Tribal, environmental justice, communities.

- Creating dedicated and robust funding to support transition efforts, including a Just Transition Fund.
- Expanding the Trade Adjustment Assistance program (TAA) to include climate and other dislocations. Increase program funding and benefits, and open eligibility as widely as possible.
- Seeding new sustainable industry growth in historically underserved regions, in addition to traditional fossil-fuel regions. This could be accomplished through legislation in the vein of the Green New Deal to create substantial numbers of new, high-quality low-carbon jobs and build significant low-carbon infrastructure. Any program must ensure Indigenous, marginalized, and disproportionately impacted communities have access to all economic opportunities and be protected from projects that degrade their living conditions.
- Targeting investment and procurement to under-resourced regions and urban areas to prepare them for the economy of the future, including broadband access expansion, public transit build-out, and repairing essential infrastructure such as drinking water systems.
- Ensuring that any federally funded projects advance equity by prioritizing the creation of quality domestic jobs which include targeted hiring of workers from historically marginalized communities and those displaced from the fossil-fuel industry. Such projects should ensure prevailing wages and Project Labor Agreements when possible, training and advancement opportunities, labor neutrality agreements, and promote and monitor affirmative action goals.
- Supporting community-based efforts to bring diverse interests together to reimagine transitioning regions. Include labor, environmental justice, tribal and community groups in decision making and oversight processes, such as the process that led to Colorado's Office of Just Transition, as well as in the implementation of transition plans envisioned by Washington State's Initiative 1631.
- Strengthening and expanding social protections, including universal access to health insurance and decoupling from employer-based health coverage, childcare, and increasing the living wage. Further, the government should serve as employer of last resort, ensuring a decent job for any person who seeks gainful employment. A new job in the waiting is typically the best transition plan.

- Protect the right to organize. Pass the Protecting the Right to Organize (PRO) Act so workers in all industries can have a voice on the job and bargain collectively with their employers.
- Subject all energy and infrastructure projects to Free, Prior, and Informed Consent when they involve Indigenous lands.
- Incorporate sustainability in every step of the transition process, from protection of pristine space to resource extraction through to waste management, including recycling.

Recommendations for Labor and Movement Organizations

- Labor unions, workers' rights organizations, and advocacy organizations should build cross-movement relationships by forming labor-climate-community roundtables, networks and/or committees at the state and/or local levels to build and sustain genuine personal and political relationships over time.

- Labor unions should establish or expand any pre-existing environmental and climate committees, task forces, or other entities that can develop and deploy educational programs for members on issues of climate change; social, economic, and environmental justice; and just transition.
- Environmental and other advocacy organizations should create labor committees to develop and deploy educational programs on issues of labor, job quality standards, and just transition.
- Labor unions should adopt environmental and climate policy concerns as part of their advocacy agendas, and community organizations should adopt the right to organize and the promotion of strong labor standards as part of their advocacy agendas.
- All organizations should create more mentorship and leadership development opportunities, especially for women, people of color, Indigenous people, and immigrants.

Recommendations for Future Research

- Identify where fossil-fuel activity is occurring, such as fossil-fuel power plants and extraction sites, the timeline for drawing down these activities, and the workforce and economic impact of this drawdown. This data can help workers and communities plan proactively for transition ahead of closure, rather than dealing with the situation reactively once a closure has been announced.
- Analyze the environmental, social and labor practices of the emerging clean energy sector. A just green transition requires a clean energy sector with high standards and long-term provisions to prevent future unjust transitions.
- Review past and ongoing transitions in order to identify promising policies/practices, with particular attention to those treating workers and communities as a whole (and not only as economic entities) while erasing any patterns of marginalization.
- As noted, the energy transition is only one transition. Additional research is needed on ongoing sectoral transitions that will require just transitions, such as automation, digitalization, hybrid working, and health care.

APPENDICES

APPENDIX A: SELECTED CASE STUDIES AND NARRATIVES

Case #1

Colorado's Shift Toward Renewable Engergy and a Just Transition [8]

Colorado has a long history of renewable energy policy. In early 2018 a Colorado legislator informed the state labor federation that he was planning to submit a bill to take Colorado to 100% renewable energy by 2035. This bill, which was never introduced, was the impetus for unions adopting a purposely approach to managing this crisis. In other words, labor coalesced internally and decided to lead on energy and environment policy rather than blocking unavoidable policy proposals or just saying no.

Their choice was based on both inter-union discussions and previous events that had fostered collaboration between unions, environmental justice, faith-based, and national and local environmental groups. That collaboration had started with the People's Climate Movement in 2016 and was being rekindled by an environmental/community justice organization during late 2017. During that same time Colorado labor leaders had become familiar with the Washington Initiative and Just Transition at a meeting of Western State AFL-CIO leaders where the Political Economy Research Institute presented a climate jobs report for Washington state.

During 2018 unions continued their own deliberations and commissioned Robert Pollin of the Political Economy Research Institute (PERI) at the University of Massachusetts, Amherst, to write a study for Colorado while they also continued to participate in cross-social movement discussions that were run by a professional facilitator. These discussions succeeded in advancing mutual understanding and have set the foundation for sustained communication.

During that period unions and collaborators crafted a just transition bill to accompany the decarbonization bill that was to be introduced at the 2019 session of the General Assembly. The decarbonization bill aimed to reduce greenhouse gas emissions by at least 90% of the levels of statewide greenhouse gas emissions that existed in 2005 and will, thus, affect all fossil fuels. For various reasons, the just transition bill covered only the coal industry and communities. While the number of workers affected is about 2200, coal is quite significant in the counties and communities affected, mostly on the Western Slope. Both bills passed and were signed into law in 2019.

The Just Transition bill set up an Office of Just Transition (OJT), which became operational in early 2020, and a Just Transition Advisory Committee—consisting of unions, corporations, economic development specialists, representatives of affected counties and disproportionately impacted communities, political leaders, and government officers—with a mandate to solicit input for a draft plan for workers and communities. The Committee started its work in late 2019 and held two large community meetings just before the COVID-19 pandemic led to a ban on public meetings and everything shifted online. The draft plan was submitted to the Office of Just Transition on August 1, 2020, and subsequently opened for public comment. The Just Transition Action Plan was made public December 31, 2020, and the implementation of its proposals are to take place from now and until January 1, 2024. The Plan focuses on communities and workers

and identifies funding as the main issue that has not been resolved, with various solutions to be explored. It also identifies a moral obligation to develop policies for disproportionately affected communities.

To advance the Plan the Office of Just Transition will require more resources. The major financial obstacle comes from the Taxpayer's Bill of Rights, the 1992 constitutional amendment that limits state spending and requires voter consent for new taxes. The financial challenge, as well as the realization that a comprehensive transition that will protect workers and revitalize communities will cost significant amounts of money over time, has made it clear to all involved that federal support is likely necessary. A stronger OJT, along with the continued commitment of unions, environmentalists and community activists, can ensure that just transition remains on Colorado's agenda.

Case #2

Washington Initiative 1631: Model of Financing and Redistribution (defeated at the polls)

This innovative coalition put environmental justice, and Indigenous and workers' rights together at the center of their environmental plan. The Initiative was also historic in its structuring of a fund based on a corporate carbon fee to be directed solely towards worker transition, green energy and community investment addressing the funding problem. Equally important, labor, community, tribal and environmental justice members were well-represented on the decision-making committees.

Washington Initiative 1631 was not triggered by an imminent plant shutdown, although there was clear momentum from the state legislation setting GHG reduction goals in 2008. Those goals contributed to the decision to close the TransAlta mines, and the negotiation (without union representation of the workers) for a multi-faceted transition, with dedicated funding by TransAlta, in the phaseout of Centralia, the state's last coal plant, by 2025.

Leaders in labor and environmental justice who were alarmed about the climate crisis saw the opportunity to bring equity for labor and Black, Indigenous, immigrant and other historically marginalized communities of color into environmental legislation in Washington. They set up a structure that would center environmental justice concerns with strong advocacy for labor and the environment. Unions participated in the negotiations and were encouraged about the prospect of good green jobs by a report on the Green New Deal in Washington produced by Robert Pollin in 2017.

A key point of agreement by all was that a funding mechanism was needed and that the polluters would pay a fee dedicated to reinvestment. The final initiative called for a carbon fee on many large polluters. Critical components included $50 million to be set aside and restored each year as a support fund for laid off workers that would provide wage replacement and insurance, benefits, retraining, pension, counseling, relocation fees, and priority hiring in renewable energy jobs. Seventy percent of the revenue would go to clean air and energy investments, 25% to clean air and water, and 5% to a community fund. Targeted percentages of these investments would go to EJ and lower income communities. A portion would also go to tribal communities but with a caveat that instituted Free Prior and Informed Consent (FPIC), an Indigenous right enshrined in the

United Nations Declaration on the Rights of Indigenous Peoples so that Indigenous people can exercise their sovereign rights over their land. FPIC became part of Washington state law despite the defeat of 1631.[9] Another unique feature was the formation of a public board for accountability that would include voting representatives from unions, local communities, EJ and the tribes to oversee the distribution of funds.

In the last stretch leading up to the vote on the Initiative, Exxon spent over $30 million to convince voters that a yes vote would lead to higher prices at the pump. Setbacks in raising money from environmental and labor groups made it impossible to compete with corporate oil money and the initiative was defeated.

Case #3

Huntley Plant Closure Fund: Creating a Community Support Fund

The Huntley Alliance achieved a milestone transition fund to assist towns going through the shutdowns of the fossil-fuel industry to manage the sudden loss of revenue. It brought together white- and blue-collar workers with a community based environmental organization and elected officials to come up with a plan, and involved hundreds of townspeople in reimagining their future.

Huntley Power Station .Photo: Sänger, Wikimedia (Creative Commons)

The primary objective of this coalition was to stabilize the economy and make sure that when the town of Tonawanda, a white working-class suburb of Buffalo, lost a major revenue source in the form of a coal power plant, the bottom did not fall out. A local community based environmental group, Clean Air Coalition of Western New York (CAC), initiated the dialogue by contacting the Western New York Federation of Labor, AFL-CIO (WNYALF) and the local teachers' union, which had already experienced job loss from the declining revenues of the town's coal power plant.

To achieve its objective, the CAC, teachers, several blue-collar unions and rank and file workers, municipal officials, and the WNYALF met and then organized among the townspeople over a two-year period. They worked with elected leaders to write a bill to establish a statewide fund available to help keep towns experiencing fossil fuel closures afloat. A regional union affiliate provided funds for training community representatives to learn about the plant shutdown and its likely impact without assistance. These transition delegates went door to door to meet with the public. Pooling their resources, the coalition hired a lobbyist and began negotiating with state representatives while building public support for the fund.

Elected officials were willing to take the project on and the fund was written into law. Once it was clear that they would be successful with the fund, the community based environmental group

led a massive re-visioning in which hundreds of townspeople got involved to project what kind of development they would like to see in their town and how they would like to see the money spent to help the town grow sustainably. The workers at the coal power plant were all able to transition without anyone having to go on unemployment.

Creating a fund helped not only this town, but other towns could apply to what became a $45-million fund using resources "from the Regional Greenhouse Gas Initiative, the nine-state carbon cap-and-trade program that auctions pollution credits to industry" and redirects those resources directly to municipalities.[10] The coalition had the advantage of being in the State of New York, which had passed a clean air goal in 2009 and had funds set aside to use toward sustainability.

Case #4

Diablo Canyon Nuclear Plant Closure

This an example of how a strong coalition came together to secure a proactive transition plan that adequately supported the workers, community, and climate.[11] In anticipation of the plant's closing and the California Public Utilities Commission (CPUC) proceedings to determine the terms of retiring Diablo Canyon, a coalition came together to propose a plan, the Joint Proposal, to transition those impacted by Diablo Canyon closing.

The coalition included PG&E, the Natural Resources Defense Council, Environmental California, the Alliance for Nuclear Responsibility, and the pertinent unions, International Brotherhood of Electrical Workers, Local 1245, and the Coalition of California Utility Employees. The Joint Proposal included replacing Diablo Canyon with a clean energy portfolio to substitute for nuclear power; an employee retention, retraining, and compensation plan; and mitigation to the local community for the loss of tax revenue and other economic costs of closure.

Diablo Canyon Power Plant, 2008. Photo: Tracey Adams, Flickr (Creative Commons)

When the Joint Proposal was presented, the CPUC approved only parts of the plan and funded transition programs at lower levels than proposed. For example, the CPUC approved only $222.6 million of ratepayer funds for the employee program even though the estimated cost was $350 million. The CPUC declined to fund the community transition plan through rate recovery while the Joint Proposal had provisions to protect San Luis Obispo County against the loss of tax revenue from the closure of Diablo Canyon. The Joint Proposal created an $85-million Community Impacts Mitigation Program, which would also offset any potential negative impacts to essential services, and the creation of a $10-million Economic Development Fund to ease local economic impacts arising from the plant's closure.

Rather than accept the CPUC's diminished transition plan, the coalition behind the Joint Proposal went to the state legislature and introduced SB 1090, which required the CPUC to accept the Joint Proposal as originally presented. The bill passed both the state Assembly and Senate and was signed by then Governor Brown on September 19, 2018.

Case #5

Lordstown Transition Center: Managing an Unjust Transition through Creating a Support Center for Displaced Workers in Ohio

Unionists have fought for more humane transitions by using public resources when available. One example of a union that tried to strengthen resources for its members is a United Auto Workers (UAW) local in Ohio. In 2019 GM finally confirmed the rumors that they were going to shut their car assembly plant. Rather than bring in another car model, the company was going to build a battery plant and another company was going to build electric trucks. Union leadership tried to save their jobs by building a coalition with local businesses. Having been unable to save the jobs, they pivoted to creating a transition plan for the members, ranging from 1500 who had gradually been laid off to another possible 1800. GM offered people jobs if they relocated, but "a good 30 percent" did not want to break up their families or tear up their roots.

The UAW local reached out to Senator Sherrod Brown and Congressperson Tim Ryan who helped write a grant for a Transition Center from the U.S. Deptartment of Labor, with the State of Ohio as the partner who handled the funds.

> We pushed for it and we got it. It wasn't just government like, "Let's put this thing in there," right. We were reaching out to the state saying, "Hey, we're going to have this big layoff, we need help here. Hey, we're going to have all these thousands of people coming in –," I think we had about 15 to 1800 active, and then another 15, 1800 hundred that had already been laid off, so you're talking about 3000 people that are now shuffling to the union hall every day trying to get some help and support. And, "My unemployment's not working…how does the TAA, the TRA (Trade Readjustment Allowances) work? What should I do? Where do I go to get a job?"

The union leadership had a good sense of what their members needed. The Center provides help with applications of all sorts, fills in paying for school if the payment does not come in on time, pays for tools to start a new career, fixes vehicles needed for work, helps spouses get retraining and more. Aside from their services, the Center, staffed by laid-off union members, is a place where workers come to vent and get emotional support. It is housed in the old union hall, which they are holding on to in hopes that the UAW International will be able to organize the new electric industry. There is no guarantee those will be union jobs, so most workers are retraining as nurses or HVAC technicians if they have not relocated.

Meanwhile the whole Mahoning Valley, formerly a bustling industrial area, is an area in need of sustainable development. This case raises the question about what kinds of efforts it would take to bring more organizations to Ohio or the many other states that are experiencing displacement to create a more just transition for workers and communities.

Case #6

Jobs to Move America: Creating a Pathway from Fossil Fuel to Local Good Green Union Jobs

United Steelworkers (USW) Local 675 worked with Jobs to Move America (JMA), a strategic policy center that works to transform public spending to advance good jobs and healthier communities, to organize one of several electric bus manufacturing plants in Los Angeles County. Their partnership came out of a decade-long effort of several unions working together to develop sustainable businesses that could support good union jobs. Steelworkers International had a relationship with JMA and invited the local to get involved with them.

JMA uses public procurement agreements with government entities to leverage incentives for business to work with unions and develop apprenticeships and community benefits programs in their contracts. The IBEW and the Sheetmetal Workers have also been able to organize electric vehicle factories with similar strategies. Since the Steelworkers do not have access to many of the opportunities the Building Trades have in solar, wind, and other construction-based occupations, the Proterra Bus contract provides a manufacturing option to displaced refinery workers and a future for the USW membership to grow.

Once USW won the organizing drive, the work of winning the first contract began. JMA helped negotiate the community benefits agreement that commits the employer to hire from marginalized communities. The Secretary-Treasurer of the local explained what bringing Proterra into the Steelworkers realm meant to members of his union, particularly the new leaders:

I know that top officers and key players like the Next Generation committee chair and so on and so forth, we're thinking about, okay, how do we make a transition from dirty, unsustainable fossil-fuel production to the clean energy economy? And what concrete things can be done to get us from this point to that? And we're still trying to figure that puzzle. But along the way, we've managed to, fairly recently, along with a great, great, great deal of help from the Jobs to Move America organization, to organize an electric bus manufacturing company called Proterra. And we also worked in conjunction with JMA on the community benefits agreement. So it looks like we're going to be able to establish an apprenticeship program for manufacturing electric busses. And the wage scale, even for electric bus manufacturing, is probably about half of what it is in the oil sector. But we hope to get that up some. And part of the problem is–I mean, that's a nice problem for an oil worker to have, but it makes the transition difficult–is that oil workers in the U.S. are probably among the most highly paid industrial workers of the world, just shy of nuclear workers. So transitioning them is going to be problematic.

This union official, who has been in the fight for a just transition since the time of the Labor Party in the 1990s has seen the gulf between having good intentions and watching people lose their livelihoods:

I think that with a just transition, I need to be able to explain to each one of my members and their families, here is the plan for you…their concern is, how am I going to keep a roof over my kid's head? How am I going to feed my kids? And until we can address that gut level question properly, you're going to get a reaction based on fear. Fear does not like change. Fear wants the status quo. So we have to come up with concrete ideas to say to individual workers, okay, this

is the plan for you and your family, in my opinion. And so much of this policy work seems to be missing the concrete answer to those questions.

In the summer of 2020, the USW and Proterra signed their first contract.

Case #7

Redwood Employee Protection Program 1978 [12]

What was extraordinary about the Redwood Employee Protection Program (REPP) was that it was set up as an entitlement that could not be rescinded. This program was an historic piece of legislation approved and supported by the AFL-CIO, and it received a great deal of academic and policy attention during the 1980s and 1990s. The significance of the history behind the REPP is being revisited in a study by historian Saul Levin.

This Amendment to the National Park Act of 1968 was an addendum promoted by Congressional Representative Phil Burton to expand the protected Redwood National Park to almost double its size in the original bill. Since logging was one of the most lucrative and unionized jobs in a rural area where there were few alternatives, most of the unions were vehemently opposed to its passage. Burton had introduced this legislation annually for eight years running and realized he needed his prime constituency, labor, to support the bill. He began meeting with UAW economist Nat Weinberg to understand what labor needed to back the legislation.

The UAW at the time was involved with progressive organizing in Detroit and Dearborn around environmental justice, bringing labor and civil rights communities together. Weinberg saw the opportunity to write landmark legislation for federal lands to connect restoration with workers' rights and employment. In this he had the collaboration and support of the leadership of International Woodworkers, a union with a long history of environmentalism. During the 1980s, however, shifts in IWA's membership and leadership made it more susceptible to job blackmail, leading to the 'spotted owl' conflicts that followed. Another group that was important in learning from the timber workers about their concerns was the Emerald Creek Committee at Humboldt College. Their actions in the forests were pro-worker and pro-Indigenous and they ended up giving important testimony for the bill in Washington, DC. The groundbreaking transition included up to six years of pay, benefits, vacation, relocation and retraining for full time and seasonal workers as well as a three-year bridge to retirement for those 62 and over. It also included rehiring workers to restore the damaged forest area, including the Indigenous foresters who had traditional skills and those who had learned from them.

APPENDIX B: DATA COLLECTION AND RESEARCH METHODS

The following data collection and analytical methods were used to address the main research question for this project: What does a just transition look like?

Data Collection

The data used for this analysis was collected using a snowball sampling method in which an initial set of key informants were identified and then asked to provide names of other people who should be contacted, who were then also asked to provide names of others who should be contacted, etc. The initial informants were identified by leaders in major labor, climate, environmental justice, and Indigenous rights groups. Reasonable efforts were made to ensure a diversity of voices and experiences were captured in the listening sessions.

For the interviews, two sets of open-ended interview questions were created, the first for rank-and file workers and community members, the second for organizational leaders. The interviews were semi-structured and typically conversational in nature (sometimes called intensive or in-depth interviewing). This approach allows for the interviewer to learn about the topic at hand from the respondent through open-ended questions which may not be asked in exactly the same way or in exactly the same order for each and every respondent. In fact, the structure of the interview evolved over the course of the project to incorporate things the interviewers had learned in previous interviews. The primary aim of this approach is to hear from participants, in their own words, what they think is important about the topic. With the informal conversational approach, the researcher relies on the interaction with the participants to guide the interview process.

All interviews began by inviting the participant to provide an autobiographical sketch of themself, including how they came to be involved with their labor or community organization and issues related to economic transition. The detailed and conversational nature of the interviews allowed for the free exploration of many facets of each participant's concerns as they came up in conversation, often leading to new and unexpected insights.

Interviews were conducted by a combination of the authors of the current study, volunteers, and paid interviewers, including workers and community members interviewing their co-workers and neighbors. All interviewers participated in an orientation and an interviewer training prior to conducting interviews in the field. The interviews were conducted via a video conferencing platform and recorded for transcription purposes.

Supplemental data are drawn from a series of six webinars organized by the Just Transition Listening Project. Each webinar involved five or six people who collectively explored just transition during the current crises, the history of just transition, just transitions and Black workers, just transitions and young workers, relations between unions and other movements, and just transitions around the world.

Analytic Approach

Our analytic approach was an iterative process of simultaneously interviewing, transcribing, and coding the data. All interviews were recorded and immediately transcribed, and transcripts were coded into major themes in order to inform future observations and interviews. Coding is the means of identifying "cues," or key points of data, and breaking them into conceptual components. It begins with the line-by-

line coding of the very first interview. This process is called open coding or initial coding. Concepts are collections of codes of similar content that allow the data to be grouped. During coding, examples are pulled out and grouped together into concepts. Each concept can be related to larger, more inclusive concepts to form categories of similar concepts that are used to identify general themes which inform the major findings. This method is an iterative process of moving back and forth between empirical data and emerging analysis which makes the collected data progressively more focused. In the end, the knowledge that is generated is a collection of themes that detail the subject of the research.

The main advantages of this approach are its intuitive appeal, its ability to foster creativity, its conceptualization potential, its systematic approach to data analysis, and the richness of data that can be gathered. This qualitative approach produces a thick description that acknowledges areas of conflict and contradiction within the data and allows us to identify the situated nature of knowledge as well as the contingent nature of practice, both of which are valuable when studying actors across a great variety of organizations.

Finally, this approach also allows us to follow the data where they lead to reveal important insights that may be outside the box of existing knowledge. That is, the process of simultaneous coding and sampling allows the researchers to uncover deeper processes that might be missed in a more traditional, theory-driven approach that overlooks certain cues that do not activate prior knowledge from existing theories. In sum, the research process is one of discovery, because the research process itself guides the researchers to examine all the possibly fruitful avenues that lead toward understanding.

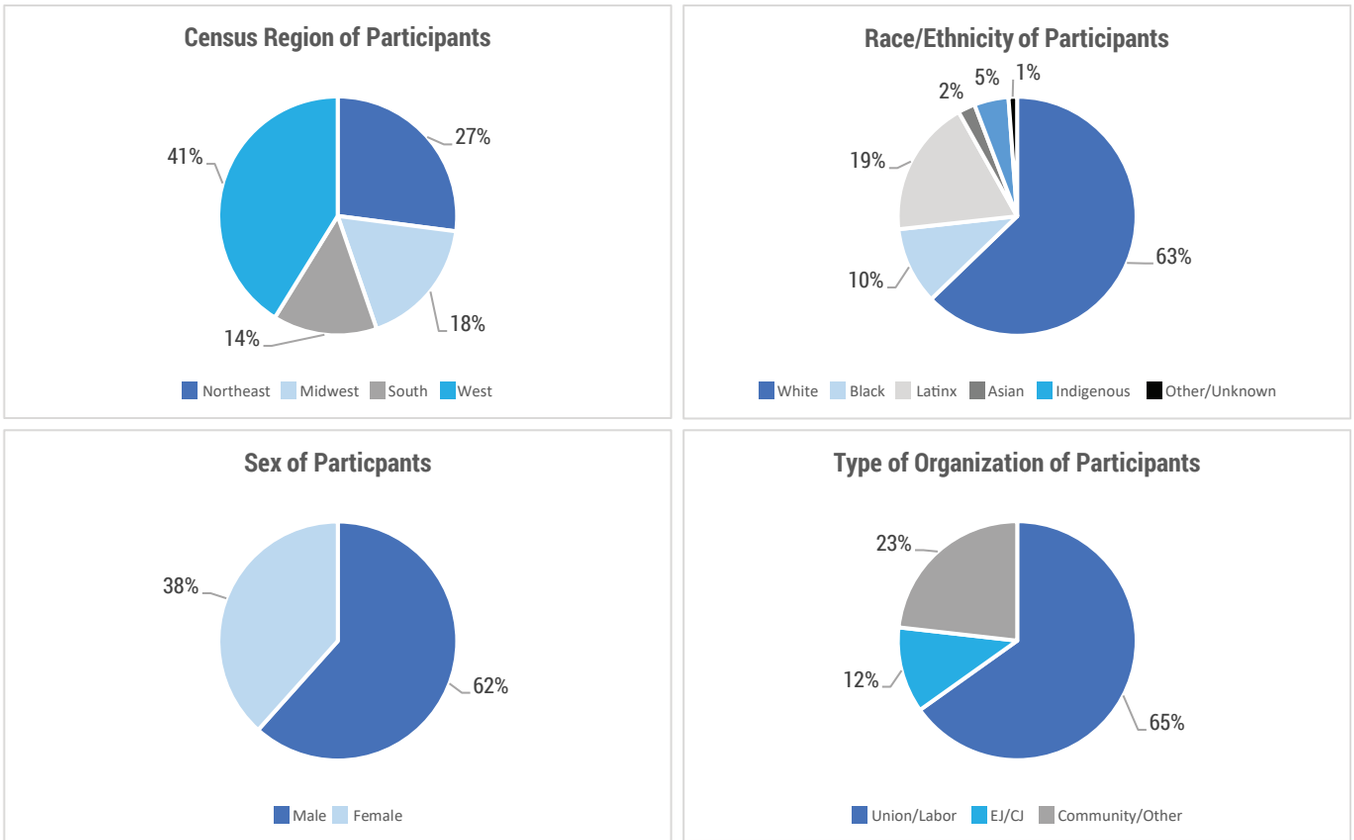
All quotes used in this report have been anonymized to protect the identity of research participants in this study.

The preliminary findings of this report were presented to the Organizing Committee of the Just Transition Listening Project in December 2020. This summary report is prepared for multiple audiences, including policymakers, labor organizations, and community and movement organizations. In addition to this report, a longer, more detailed study of this data, including narrative stories and additional case studies is underway by the authors of this study.

APPENDIX C: DESCRIPTION OF DATA

Figure C-1 provides a visual representation of some of the key sociodemographic characteristics of the participants who took part in the listening sessions. Panel A. reflects the sex composition of participants, Panel B. is race, Panel C. is the geographic region, and Panel D. is the type of organization with which participants were primarily affiliated. It should be noted that the relatively higher percentage of male participants reflects the demographics of the key industries from which many of the labor participants were drawn, including oil, gas, utilities and construction. While there was some gender diversity within these interviews, we still found the industries to be largely segregated along lines of sex as well as race and ethnicity. The variation along lines of race in the sample roughly approximates the distribution within society at large; however, we note that Black participants were under-represented by about 3% (13.4% of Americans identified as “Black or African American” in the 2010 Census) and Indigenous participants were over-represented by the same amount (1.3% identified as “Native American” in the 2010 Census). We acknowledge the underrepresentation of Black participants as a major weakness of the sample and encourage more research and data collection on the experiences of Black workers and communities related to economic transitions.

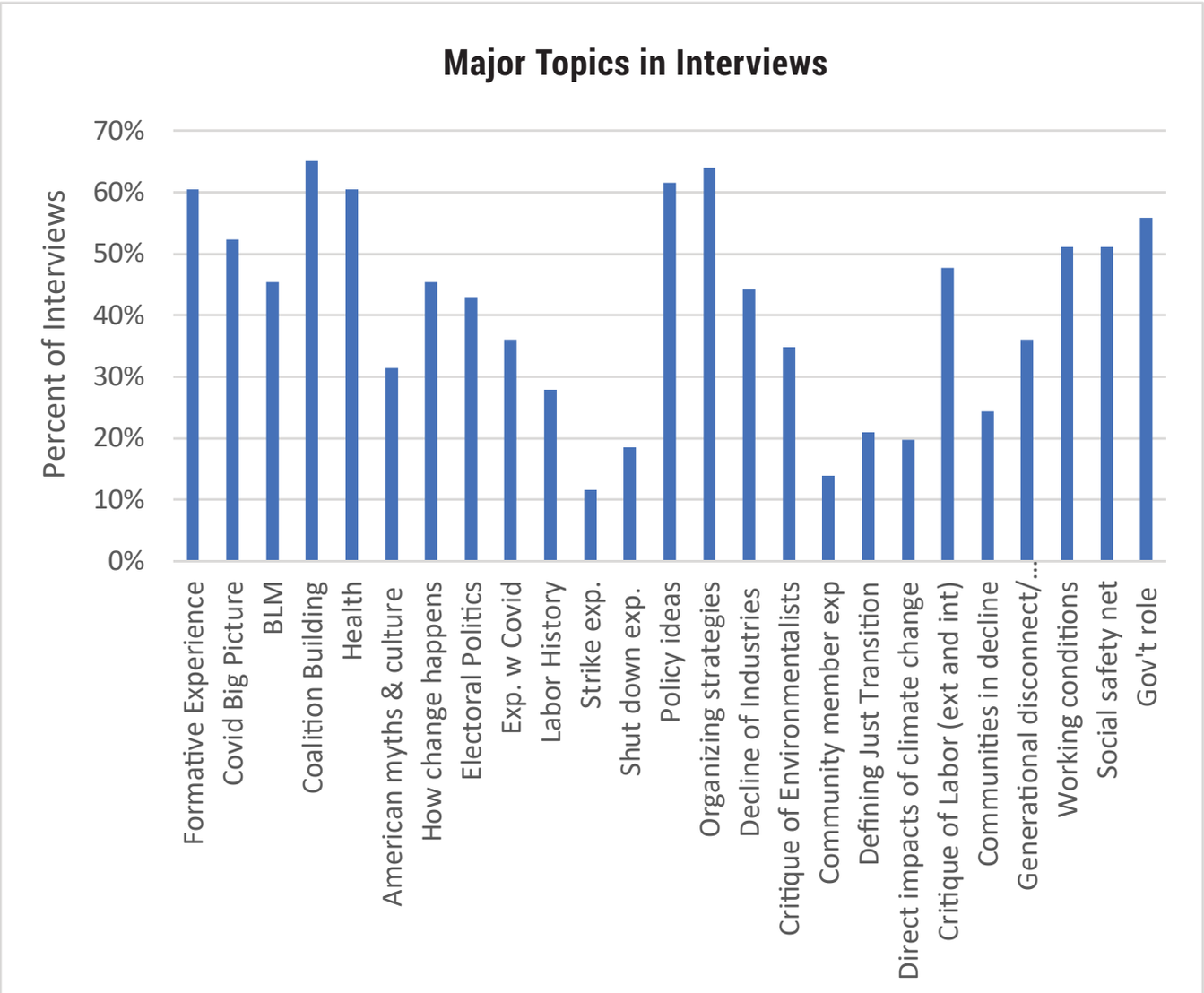
Figure C-1. Demographic Profile of the Data



Regarding geography, the West Coast was overrepresented, and the South was underrepresented as a proportion of the sample. These discrepancies are due in part to the snowball method of sampling, as well as the presence of unions and dispersion of historically impacted industries. We acknowledge this as a weakness in the data and encourage further research in these regions of the country. Finally, looking at the types of organizations the participants were involved with, the sample comprised a majority from labor (66%) and the rest from environmental justice and community organizations.

Figure C-2 reflects the dispersion of major topics that emerged in the listening sessions. As noted earlier, there was a basic interview guide, but the semi-structured, "conversational" method often led participants to discuss additional topics beyond the broad set of discussion questions. We note here some of the most common topics included coalition building, health and healthcare, policy solutions, and organizing strategies. Other prevalent topics included COVID-19, the Movement for Black Lives, electoral politics, industrial decline, and the social safety net.

Figure C-2. Major Topics Discussed in Interviews



Figures C-3 and C-4 display the differences in major topics discussed along the lines of sex and race, respectively. Notably in Figure C-3, female participants were significantly more likely to discuss BLM, health and healthcare, electoral politics, and the role of government. Women were also more likely to describe important formative experiences that brought them into their work around just transition. The men in the sample were far more likely to discuss labor history, experiences with plant shutdowns, decline of industries, and generational differences. In Figure C-4, we see that the non-white participants were more likely to discuss Black Lives Matter, experiences with COVID-19, and the role of government than white participants. Also reflective of the largely white sample of fossil fuel workers, the non-white participants were more likely to be involved with community groups as opposed to unions. As with the male participants in Figure C-3, the white participants were also more likely to discuss labor history and experiences with plant closures. White participants were also more likely to discuss policy solutions.

Figure C-3. Major Topics Discussed in Interviews by Sex

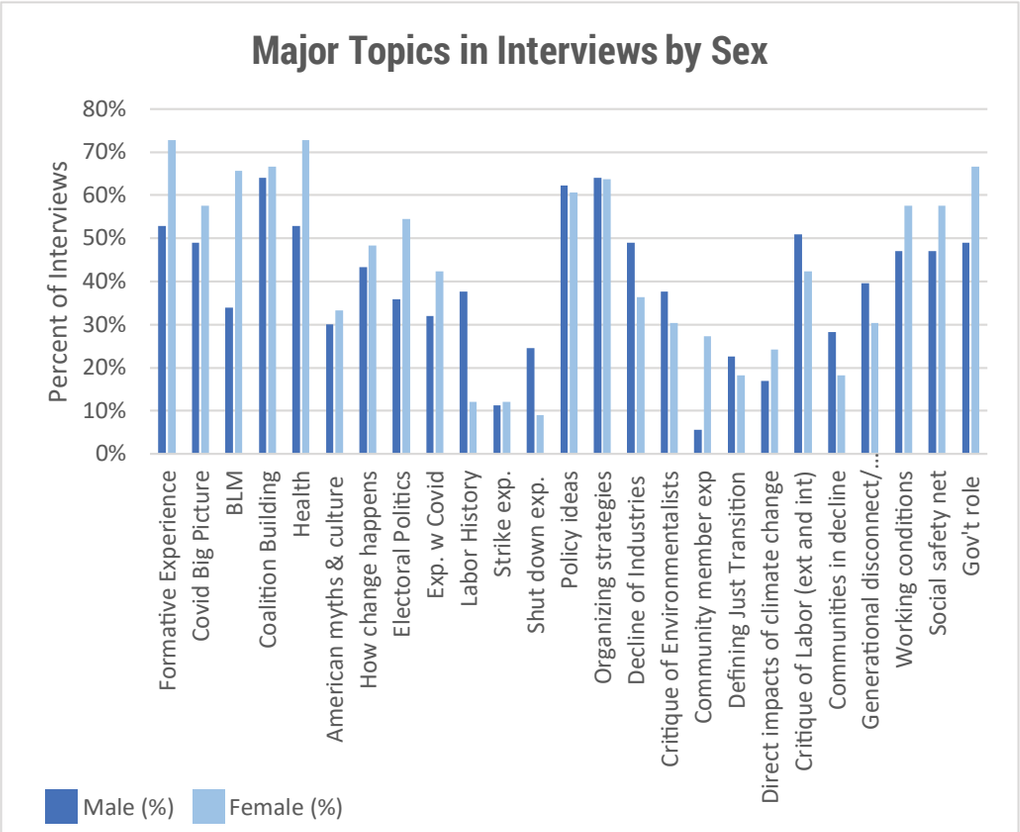
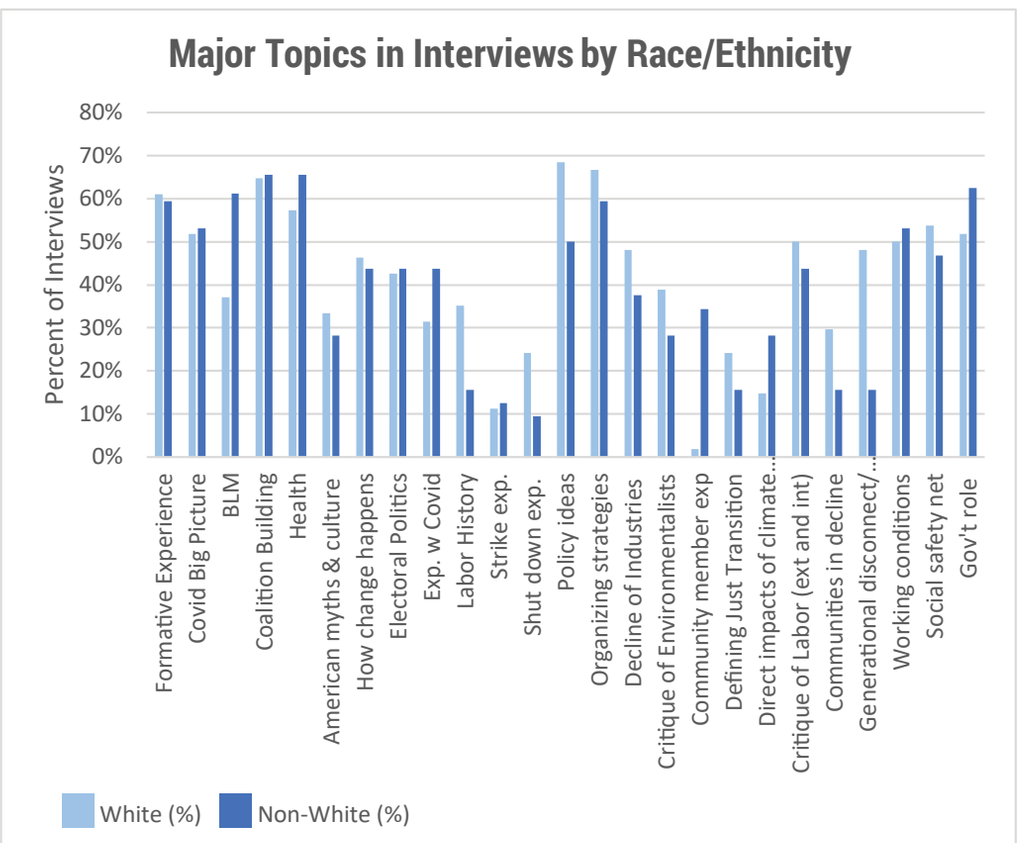


Figure C-4. Major Topics Discussed in Interviews by Race/Ethnicity



ENDNOTES

[1] All authors contributed equally to this report and are listed alphabetically for convenience.

[2] https://www.epi.org/publication/black-workers-COVID/

[3] The term is generally attributed to Walter Mondale, who referred to the deindustrialization of this part of the country in an attack against the policies of President Ronald Reagan during a campaign speech to the United Steelworkers in Cleveland, Ohio, during the 1984 presidential election.

[4] Due to space limitations, we are unable to go into detail about every example in the data, and the data, while extensive, do not include every existing labor-climate effort.

[5] Kazis, Richard, and Richard Lee Grossman. 1982. *Fear at Work: Job Blackmail, Labor and the Environment.* New York, NY: Pilgrim Press.

[6] Two non-unionized inspectors also filed a class-action lawsuit alleging that the company did not follow the WARN Act, which mandates a 60-day notification period before a plant conducts a mass layoff. That case is still in court.

[7] Akuno, K. (2020). Tales From the Frontlines: Building a People-Led Just Transition in Jackson, Mississippi in eds. Edouard Morena, Dunja Krause and Dimitris Stevis (eds), *Just Transitions: Social Justice in the Shift Towards a Low-Carbon World.* Pluto Press; Make Detroit the Engine of a Green New Deal, https://climatejusticealliance.org/make-detroit-engine-green-new-deal/

[8] https://cdle.colorado.gov/the-office-of-just-transition

[9] https://www.atg.wa.gov/news/news-releases/ag-ferguson-announces-historic-tribal-consent-and-consultation-policy

[10] Waldman, S. March 31, 2020, In power-plant closure fund, a recognition of the energy grid's future, Politico https://www.politico.com/states/new-york/albany/story/2016/03/in-power-plant-closure-fund-a-recognition-of-the-energy-grids-future-032983

[11] This case study is adapted from Cha, et. al, "A Roadmap to an Equitable Low-Carbon Future: Four Pillars for a Just Transition," available at https://dornsife.usc.edu/pere/roadmap-equitable-low-carbon-future/

[12] https://secure.ssa.gov/apps10/poms.nsf/lnx/0301401310 and https://www.yournec.org/history-lesson-how-40-year-old-econews-articles-inspired-a-masters-thesis-on-the-green-new-deal/

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