



A ROADMAP  
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# INTRODUCTION

## Introduction

The signs that the climate crisis is already happening are clear. The most recent Intergovernmental Panel on Climate Change report detailed the evidence from more than 6,000 studies that found that over the past decade, a series of record-breaking storms, forest





To aid this mission, this report provides a roadmap for a just transition for environmental justice communities built on four pillars: long-term environmental justice, dedicated funding stream, dialogue and long coalition, and economic development.

The four pillars of just transition were developed based on analysis of previous transition efforts, policy analysis, interviews with directly impacted stakeholders and community leaders, and in response to questions posed by the Climate Equity Network. (The complete list of questions can be found in Appendix A.) The research in this report is only one part of just transition and is meant to provide a reference point and framework to facilitate a broader discussion of how to move towards policy implementation and coalition building. Far from being dispositive, the four pillars of just transition are meant to provide a blueprint for communities fighting to ensure that sustainability and equity goals are fully integrated and community voices shape future policies to transition our economy away from fossil fuels.

There is more research to be done on just transition, particularly within specific sectors, such as agriculture. Every sector will be impacted by the transition to a low-carbon future differently and this report does not address specific sectors. Future research should address needs and opportunities on a sectoral basis and focus on the specific needs of rural communities. Moreover, while we discuss what kind of policies and programs could be funded, we do not make specific cost estimates. Some general transition cost estimates can be found in Professor Robert Polli /Span 370425.35 Tm9BDC 57.35g®

## A HISTORY OF NJ TRANSITION

Transitioning away from fossil fuels is not the first industrial transition workers and communities have faced. To assist workers negatively impacted by globalization and trade, the Trade Adjustment Assistance program (TAA) began in 1974 to provide economic support for displaced workers, such as wage supplements, job reallocation allowances, income support for workers in training programs, and skills training and career counseling.<sup>11</sup> While intended to help displaced workers move into equivalent jobs and careers, uneven funding and support of the program, a restricted scope, and fluctuating eligibility requirements have limited the program's success.<sup>12</sup>

Between 1974 and 2013, fewer than half of the 4.8 million eligible workers received program benefits.<sup>13</sup> Of those workers who did receive assistance, 40 percent of displaced workers did not find employment within the first two years after their initial job loss and another 40 percent found work at lower wages with fewer benefits.<sup>14</sup> Moreover, due to the limited scope of TAA, the vast majority of today's unemployed workers, many of whom lost their jobs due to automation or robotics, are not eligible for support under the TAA program.<sup>15</sup>

However, with strategic changes, transition programs, such as the TAA program, can be successful. Analysis from Cornell University and the Apollo Alliance argues that adequate financial support, including fully funded pensions and health benefits, and transitional income support for as long as participants are in training programs, are necessary for successful transition programs.<sup>16</sup> Unsurprisingly, without continual financial assistance, participants enrolled in training programs generally dropped out when the financial assistance ended.<sup>17</sup>

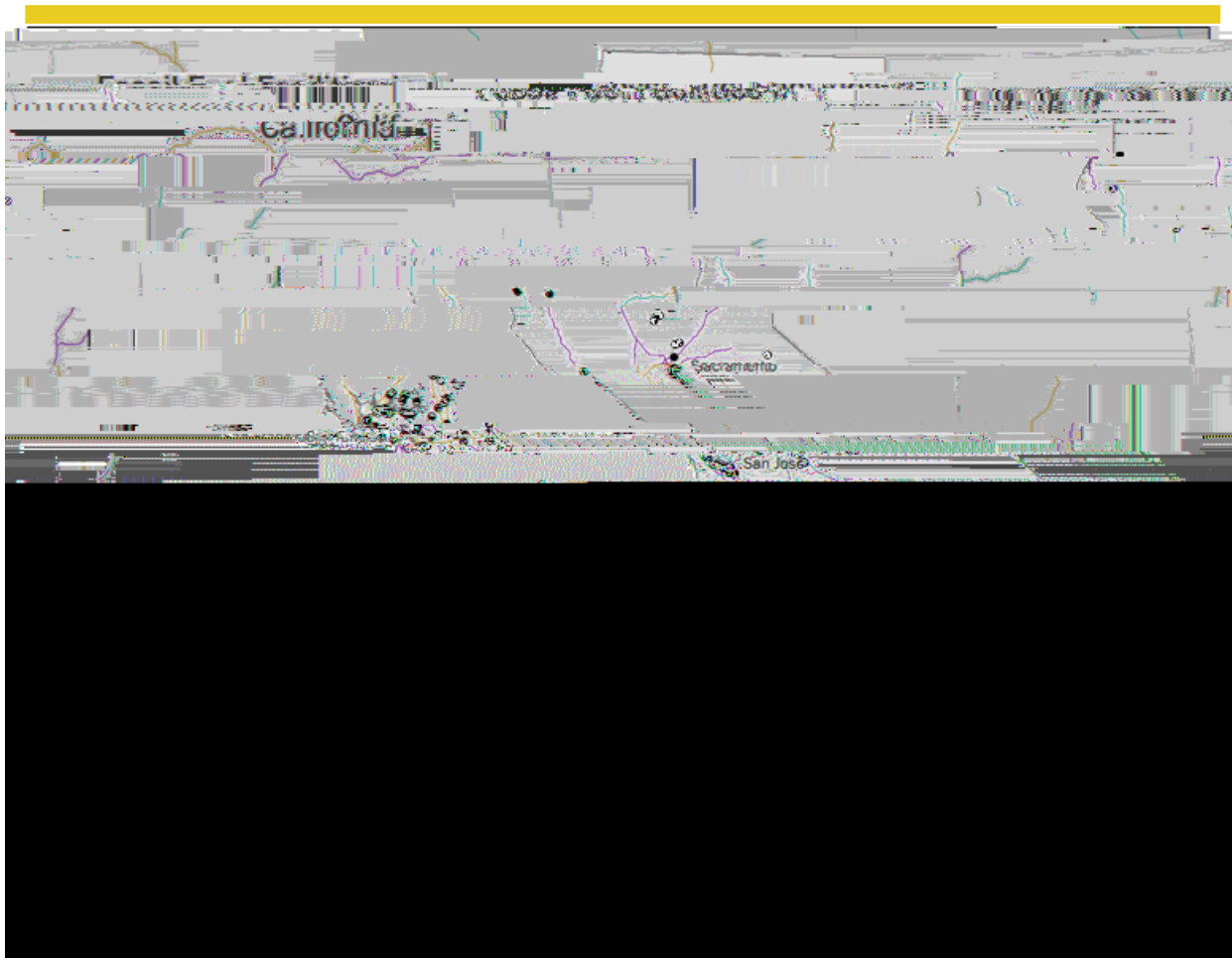
Moreover, demand for workers needs to be aligned with a supply of trained workers. Jobs must be available for trained workers when they complete their training programs, rather than some time in the future. One failure of the TAA is the inability to place workers in similar paying jobs with similar levels of benefits, an outcome that can both shatter hopes and seriously impact life trajectories. Using subsidies to ensure well-paying jobs are available for trained workers will help complete the pipeline from training to placement.







The first map (Figure 1) shows where fossil fuel facilities are located in the state. As shown, there are clusters of facilities around the East Bay/Sacramento area, around the Bakersfield oil region, and in the South Bay near Los Angeles.



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Figure 2 overlays the location of fossil fuel facilities on neighborhoods identified by CalEnviroScreen (CES) as the most environmentally overexposed and socially vulnerable. As this map shows, there is significant overlap between where fossil fuel sites and environmental justice communities are located. The “top 25 percent of CalEnviroScreen census tracts” refers to the top 25 percent of neighborhoods with the highest cumulative impact scores—or, those that suffer the most from the cumulative impact of pollution burden and socioeconomic and health vulnerability. As shown, over 40 percent of fossil fuel facilities are located in areas with the top 25 percent highest CES scores.

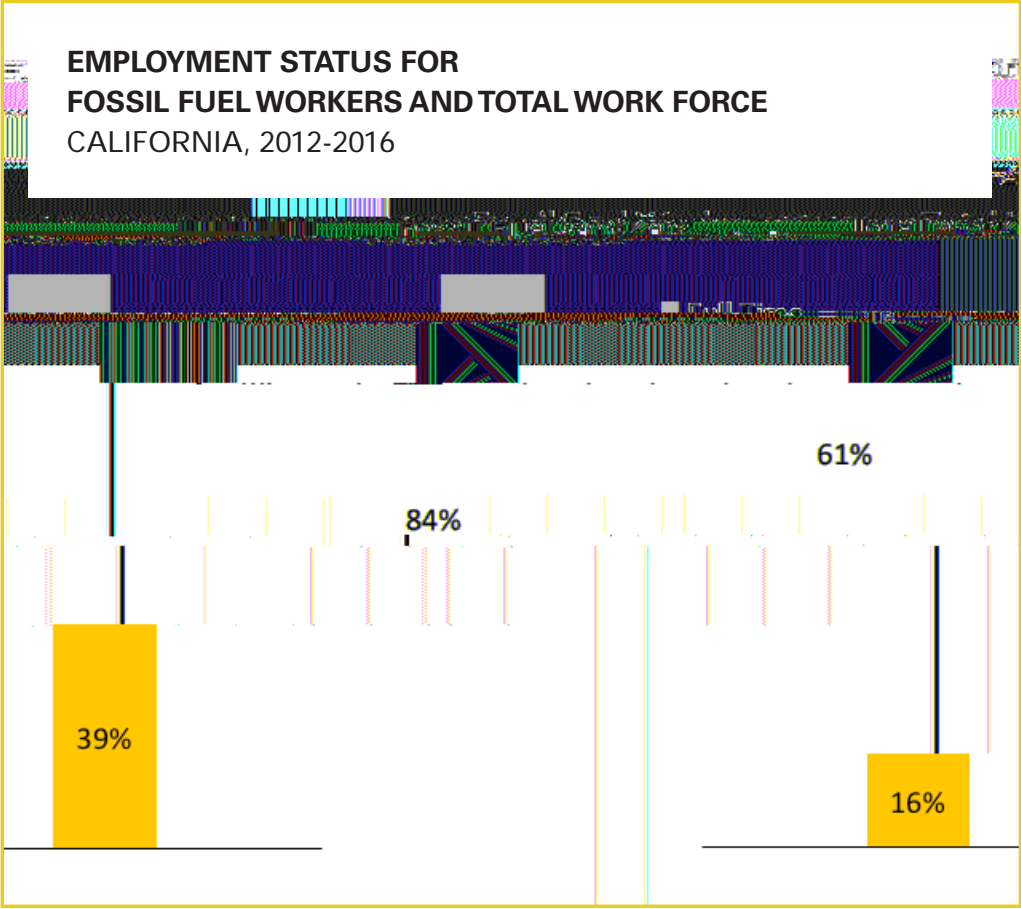
These communities are comprised of residents who are low-income, often majority people of color, and face higher pollution burdens than other communities. For example, communities in the top 25 percent of the CES scores are nearly 85 percent people of color (compared to 55 percent people of color in the rest of the state) and have nearly twice as high a share of people living below 200 percent of the poverty level.<sup>24</sup>



The general spatial patterns indicate that environmental justice communities likely face more of the pollution burdens associated with living in proximity to these facilities while the benefits of fossil fuel production, including access to energy and employment, are shared broadly across geographies. A just transition, if integrating equity and sustainability goals, could provide opportunities to improve community health by reducing local pollution burdens while also targeting new job and training opportunities in these areas.

As the state transitions away from fossil fuels, renewable energy production has increased. In 2017, renewable energy was responsible for 30 percent of in-state power generation, of which solar energy represents 12 percent of overall total energy production and 60 percent of renewable power generation.<sup>25</sup> Renewable energy generation is also a strong job creator, especially when looking at the solar industry. For example, the Solar State's 2017 Solar Census reported there were 86,414 solar jobs in California.<sup>26</sup>

Whereas renewable energy is a strong job creator, there must also be a focus on the quality of jobs created. Fossil fuel jobs pay significantly higher than the average job. In 2016, the average annual salary of a fossil fuel worker in California was \$87,785, compared to the average annual workforce salary of \$50,014.<sup>27</sup> Moreover, as the chart below shows, workers in the fossil fuel industry are far more likely to be full-time employees than those in other sectors. Eighty-four percent of jobs in the fossil fuel industry are full time, compared to 61 percent of jobs in the overall workforce. Full-time jobs provide more economic stability and security, and as fossil fuel jobs decline, ensuring as many full-time jobs are created as possible is key to protecting workers in a low-carbon economy.

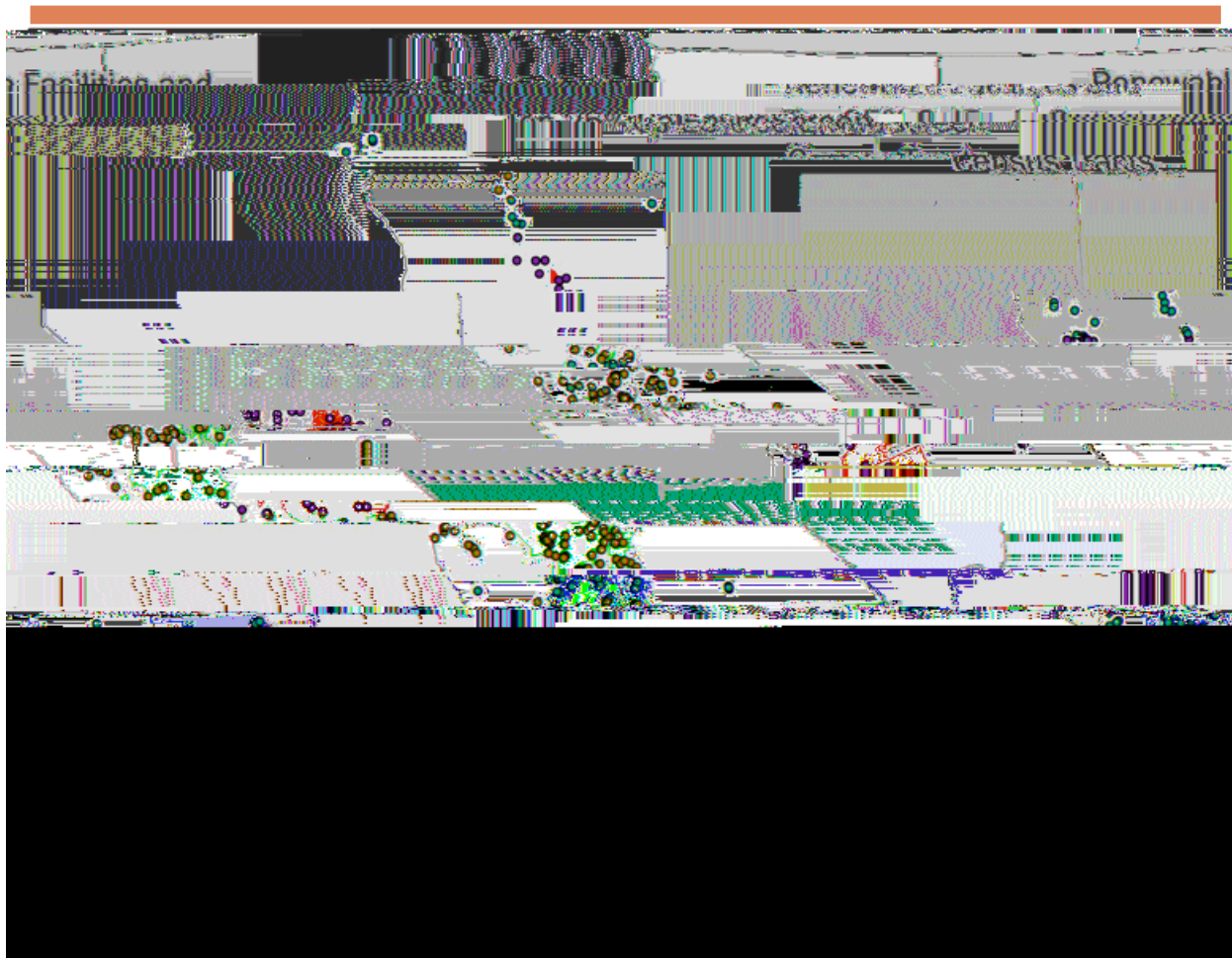


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While California is a leader in solar generation, the benefits of solar production are not shared equitably across the state. Although solar generation is a strong job creator, the quality of jobs depends on many factors. Utility-scale facilities that employ unionized labor provide high quality jobs paying family-sustaining wages and benefits.<sup>28</sup> In contrast, rooftop solar photovoltaic installers are paid the lowest within the industry.<sup>29</sup> This discrepancy underscores the need for a holistic approach to a just transition that looks beyond emissions reductions and towards creating a low-carbon economy with good, quality jobs.

Similar to the map of fossil fuel facilities, we provide a map that shows the location of renewable energy facilities in relation to environmental justice communities in California. We define renewable energy facilities as power plants that use the following clean fuel types: solar voltaic, solar thermal, wind, geothermal, or battery. We define clean fuel types as energy generated with resources that do not produce co-pollutants—or those localized pollutants that directly harm human health that can accompany greenhouse gas emissions. These data come from the California Department of Energy Power Plant Inventory. Again, we use CalEnviroScreen to identify environmental justice communities.

As a parallel to the visual representation of the location of fossil fuel facilities and their proximity to environmental justice communities, we map renewable energy facilities to see whether these facilities are placed in communities that have borne the environmental burden of fossil fuel facilities, which can be an indication that these communities may be receiving some benefit from a low-carbon transition. The map also shows which communities could be prioritized for future renewable energy deployment. Finally, this type of spatial analysis helps highlight areas that have both fossil fuel facilities and renewable energy facilities, such as Kern County. In these areas, special attention must be paid to ensure that a just transition is occurring.



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Some renewable energy production is place-based, meaning there are areas of the state that are more suitable for renewable energy installation, particularly large-scale installations. For example, geographically, certain areas of the state are better suited for large-scale solar installations because they have open land that receives high intensity sunshine. However, the cluster of renewable energy facilities, as shown above, indicates that there could be more renewable energy production in environmental justice communities currently burdened with fossil fuel industries.

While environmental justice communities are disproportionately exposed to pollution caused by fossil fuel facilities, the benefits of a transition to renewable energy are not being felt by the same communities. And, as mentioned above, these communities are not sharing in the economic and employment gains from fossil fuel activity.

For a just transition, renewable energy generation and use should be centered in communities that have borne the pollution burden of the extractive economy. As California moves to being 100 percent powered by renewable energy, environmental justice communities need to be prioritized for not only generation of renewable energy, but also job creation in carbon-free energy production.

Moreover, communities located near fossil fuel facilities should be prioritized for environmental remediation. When military bases were closed across the country during the rounds of Base Realignment and Closure (BRAC) between 1988 and 2005, the federal government saw energy generation as a priority. The EPA took the lead in remediation, which was necessary to ensure that the land could be used productively after the bases closed. Of the bases that had been remediated by 2015, 41 percent of former military bases were reverted back to their original owners (many state and local governments deeded land for bases at reduced or no cost), 35 percent were conveyed to local redevelopment authorities to develop and create jobs, and 17 percent were conveyed for public benefit, which allows property transfers to state and local governments and nonprofit organizations for public benefits,

# FOUR PILLARS OF JUST TRANSITION: A ROADMAP

While daunting, understanding that we must end the use and extraction of fossil fuels allows policymakers and stakeholders to create and implement transition plans to protect displaced workers and communities before extraction sites and plants close. Closing extraction sites and power plants cannot happen overnight or even within a few months. Shutting down these operations typically takes years, which gives advocates the time to organize a strong, diverse coalition, develop a proactive transition plan, and prepare elected officials to implement policies and funding streams to support these efforts.

Though limited, previous successful just transition examples can illuminate which elements must be included in a roadmap to ensure the transition away from fossil fuels is just and equitable. In the few successful examples of just transition, four key guiding principles emerge: 1) strong governmental support, 2) dedicated funding streams to support transition programs and efforts, including job training and creation, 3) strong, diverse coalitions, and 4) diversifying economic opportunity.





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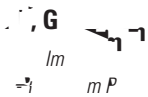
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Longer-term restructuring of local economies and transforming former fossil fuel sites is also



The dominant role coal and steel production played resulted in a small number of very large firms dominating Ruhr's economy, which meant that when coal and steel production began to decline, there were few industries available to help counter the economic losses from the declining industries.<sup>40</sup> Moreover, skills retraining was limited in the region due to the absence of higher-technical schools or universities.<sup>41</sup> Transitioning the Ruhr region required short-term, immediate assistance for displaced workers, such as unemployment benefits, pension, and health care benefits, and long-term policies that reimaged economic development and attracted new industries and sectors that could diversify the economic and employment bases.<sup>42</sup>

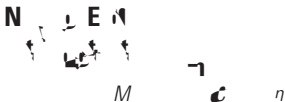
For longer-term transformation, the region looked to attract investment from high-tech and knowledge-based firms, expand the service sector, and promote local entrepreneurship.<sup>43</sup> For example, in the early 1990s (at a time when coal was still dominant), a former coal city, Gelsenkirchen, began to invest in solar energy, transforming the city into a "solar city, that today remains one the largest suppliers of solar energy in Europe.<sup>44</sup> The federal government also invested in building an educational infrastructure to create new technical institutions and universities in the region.<sup>45</sup>

The inclusion of technical institutions and universities highlights the need to move beyond replacing coal/fossil fuels with renewable energy. As discussed further below, regions and communities benefit most from diverse economic bases and replacing one energy source

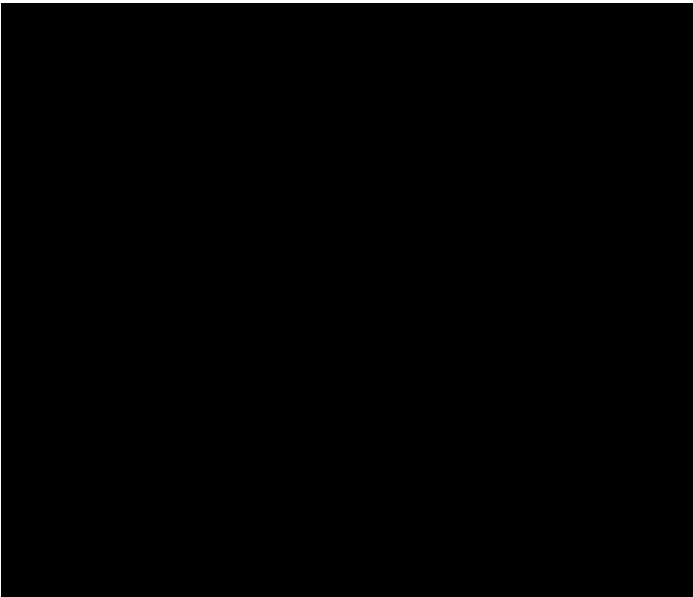
with another continues sole-industry dominance. Instead, as evidenced in the Ruhr region, bringing in multiple u/GS1 gs0 igte4ts. Inssctorindtreng9.8nncees e. c bases, whiwth anotheat. In9.8 loss ofs.

The closing of the Mohave Generating Station (MGS) and Black Mesa coal mine, and the impact it had on neighboring Native American communities, demonstrate the importance of having dedicated and steady funding.<sup>50</sup> The Mohave Generating Station was a two-unit, 1580 megawatt coal-fired power plant located in Laughlin, Nevada near the Arizona state border.<sup>51</sup>

Closing the mine and the plant was an environmental victory, but also drastically reduced revenue that the Navajo Nations and Hopi Tribe relied upon. A strong just transition coalition worked with experts and allies to use the regulatory process in a creative way to provide a dedicated funding stream to support the Navajo and Hopi communities as the mine and power plant ceased operations. Through the SO<sub>2</sub> emissions trading program, a cap-and-trade mechanism, a separate account was created that was funded with revenue from sulfur allowances.<sup>59</sup> The sale of SO<sub>2</sub> allowances created a revolving fund of \$4.5 million annually to pay development deposits for renewable energy projects that benefit the Hopi Tribe, the Navajo Nation, and California ratepayers.<sup>60</sup> In addition, the Navajo Green Economy Fund and Commission was created within the structure of the Navajo Nation tribal government to support a just transition.<sup>61</sup>



The Black Mesa Water Coalition (BMWC), one of the members of the Just Transition Coalition, implemented several programs to help transition away from fossil fuels. The BMWC's programs seek to preserve and protect the integrity of indigenous cultures while building strong, sustainable communities led by empowered, young people through both short-term programs, such as the Black Mesa Solar Project, and long-term visioning, such as the Restorative Economy Program.<sup>62</sup>



The Solar Project's goal is to generate 1-5 megawatts of Navajo-controlled energy. In the Restorative Economy Program, youth are taught to organize communities and learn to use traditional practices, such as wool production and farming, and sell products. As part of building a restorative economy, Marie Gladue, a Navajo elder, leads BMWC's Just Transition Campaign to move from an extractive to restorative economy, using healing workshops to address the trauma caused to the land and people from the coal economy.<sup>63</sup>

Another mechanism for creating a dedicated funding stream is dedicating revenue raised from a carbon fee, such as a carbon tax or cap-and-trade program, to just transition efforts. The chart below shows a comparison between the proposed Washington State Carbon Fee Initiative and California's Cap-and-Trade program. While the campaign to pass a carbon fee in Washington was ultimately unsuccessful,<sup>64</sup> the proposed allocation of revenue provides a blueprint for how to fund and support community and worker transition.

The Greenhouse Gas Reduction Fund, which captures the proceeds from California’s cap-and-trade program, allocates funds to 12 state agencies to administer programs and grants that reduce greenhouse gas pollution. While research suggests that California’s cap-and-trade system is not addressing the disparities in exposure to environmental health hazards<sup>65</sup>—a key concern for environmental justice communities—environmental justice communities fought for and won dedicated funding to benefit their communities through SB 535. The bill requires a certain percentage of cap-and-trade revenue, now increased to 35 percent, be dedicated to investments that benefit “disadvantaged communities” (as defined by CalEnviroScreen).<sup>66</sup> Through this legislation, revenue is being spent on projects like affordable housing, public transit, home weatherization, urban greening, and more.

Washington State Carbon Fee Initiative (I-1631)	California Cap and Trade
<p><b>Estimated revenue \$2.2 billion in 2023</b></p>	
<p><b>Revenue allocation:</b></p> <ul style="list-style-type: none"> <li>■ 70% to clean energy</li> <li>■ 25% to clean water and healthy forests</li> <li>■ 5% to local communities</li> </ul>	

Another funding example from California’s cap-and-trade program is the Transformative Climate Communities (TCC) Program, established through AB 2722, which supports community-led development and infrastructure projects that benefit the state’s most disadvantaged communities.<sup>67</sup> The California Strategic Growth Council reports that in its first year (2018), TCC allocated \$140 million to Fresno, \$40 million to the Watts community in South Los Angeles, and \$40 million to Ontario for comprehensive, integrated, cross-cutting projects to reduce the burden from climate change disproportionately felt by environmental justice communities.

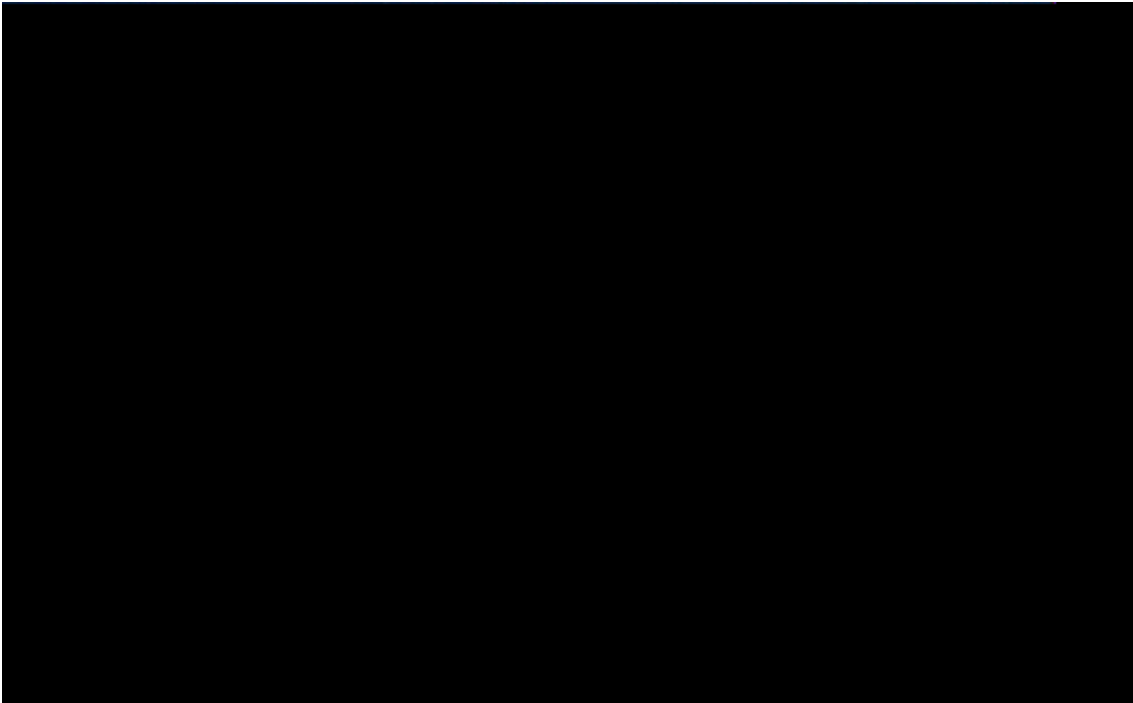




The shared goals between workers, community members, businesses, utilities, and environmentalists are clear: thriving communities with strong economies and clean air and water. A proactive, visionary transition plan can encompass and deliver these goals and ensure the burdens and benefits of transitioning to a low-carbon future are broadly shared. Bringing diverse interests together before facilities close allows for a transition plan that addresses the needs of directly impacted stakeholders and protects against one or two groups advancing their interests and leaving others behind.

The case of the Diablo Canyon nuclear power plant closing provides an example of a proactive transition plan that, through the support of a strong, diverse coalition, provided a blueprint to safely take the plant offline with a trained workforce, provide a future for the workers and communities, and ensure the power produced by nuclear energy would be replaced by renewables. Diablo Canyon is also an example of what a strong labor-community-environmental coalition can win by staying together and not settling for diminished transition packages that do not address the entire coalition’s needs.

Diablo Canyon  
PG&E, Natural Resources Defense Council, Environmental California, Alliance for Nuclear Responsibility, IBEW Local 1245, Coalition of California Utility Employees  
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In anticipation of the plant’s closing and the California Public Utilities Commission (CPUC) proceedings to determine the terms of retiring Diablo Canyon, a diverse coalition came together to propose a plan, the Joint Proposal, to protect workers and the community surrounding Diablo Canyon.<sup>71</sup> The coalition included PG&E, the Natural Resources Defense Council, Environmental California, the Alliance for Nuclear Responsibility, and the pertinent unions—IBEW Local 1245—and the Coalition of California Utility Employees.

The Joint Proposal included replacing Diablo Canyon with a greenhouse-gas-free portfolio to substitute for the Diablo Canyon power; an employee retention, retraining, and compensation plan; and mitigation to the local community for the loss of tax revenue and other economic

The example of the Huntley Coal Plant shutdown in Tonawanda, New York also shows the importance of a strong coalition, as well as the need for dedicated funding streams and proactive visioning. Due to the falling cost of natural gas, the Huntley Coal Plant was no longer economically competitive and its operator, NRG, began to reduce production and tax payments to the town.<sup>79</sup> Between 2008 and 2012, the town lost \$6.2 million in tax revenue.<sup>80</sup> As a result of the decrease in tax revenue, three schools in the town closed and the plant's workforce was reduced by 60 percent.<sup>81</sup>

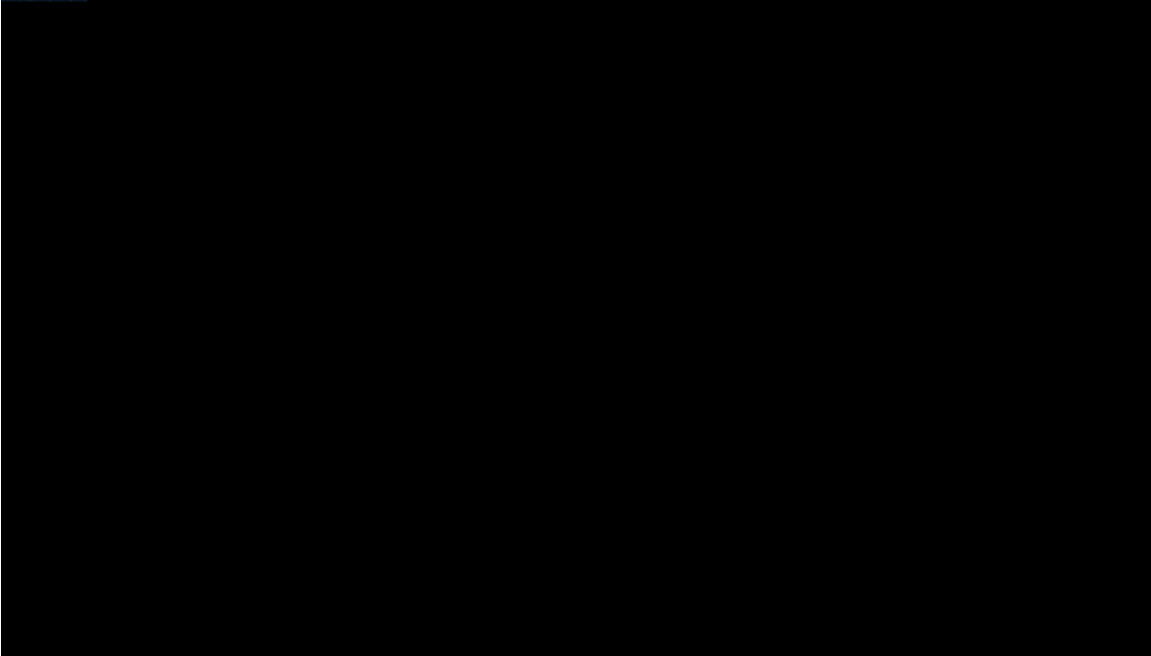
In response, those directly impacted by the plant's declining operations formed the Huntley Alliance, including the Kenmore-Tonawanda Teachers Association, the Western New York Area Labor Federation, the Steelworkers, the IBEW, the Clean Air Coalition, and the Sierra Club.<sup>82</sup> For two years, the Huntley Alliance organized the town around a transition plan that would save the school system, protect workers, and protect against increased electricity costs for ratepayers. Their efforts were successful and, in 2015, when NRG officially announced it would retire the coal plant, the state legislature dedicated \$30 million in gap funding, which increased to \$45 million in 2017.<sup>83</sup>



give feedback on a draft of the Tonawanda Tomorrow plan at a public workshop during "Tonawanda Tomorrow Public Meeting #3".

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Since the adoption of AB 32 ten years ago, California has reduced emissions by 11 percent while also growing the state's economy by nearly 16 percent, refuting the idea that reducing emissions harms economic growth.<sup>85</sup> In fact, bold climate policy sparks innovation and, as California demonstrates, the ambitious greenhouse gas reduction targets created demand for new products and technologies. Businesses, with state support, responded with clean technological and market innovations that reduced emissions.<sup>86</sup> This example shows how bold climate policy generates new business demand, helping to diversify and strengthen the economy.

On the federal level, the Obama Administration attempted to address this issue of diversifying

Pikeville, KY to help launch a new College of Optometry to both grow the region's healthcare workforce and improve access to vision care in Central Appalachia.<sup>89</sup> These investments were targeted towards growing sectors, such as health care and technology, and ensuring that workers were trained for these sectors. The investment is expected to graduate 60 optometrists, provide care for 12,000 patients, and bring \$26 million in direct economic regional impact within three years.<sup>90</sup> Grants were also given to provide training and access to IT careers and develop small business hubs around the region.<sup>91</sup> These investments are similar to how the Ruhr region invested in educational and training infrastructure to help bring new industries to the region.

The continuation of POWER+ investments is extremely unlikely, given the change in the Administration. The disruption facing the POWER+ program, and its potential grantees, again highlights how crucial consistent, predictable funding and support is for long-term planning. Starting and stopping investment leaves regions partially developed and stagnant.

The previous examples of Black Mesa and the Ruhr region also included economic diversification in their transition plans. Both former fossil fuel reliant communities invested in solar energy but also in other industries and sectors to minimize their reliance on one industry or sector. In Black Mesa, the focus was on shifting from an extractive to a restorative economy, one that is rooted in traditional practices and businesses that will lead to long-term rehabilitation of the land and economy. In Ruhr, in addition to "Solar City," the region invested in culture and education to provide multiple opportunities for members of its community. Moreover, the Tonawanda Tomorrow plan also looked to attract a diverse array of industries and businesses to strengthen the town's economic base.

# CONCLUSION

Transitioning to a low-carbon future will be complicated, expensive, and require broad-based public and political support, but inaction is not an option. The impacts of climate change are already manifesting and there is an urgent need to be proactive about creating a just transition. While challenging, the transition to a low-carbon future also presents an opportunity to create a more equitable future with broadly-shared prosperity. Just transition requires a holistic, comprehensive vision that moves beyond emissions reduction to addressing issues of health care, affordable housing, transportation, and others to ensure communities and workers can thrive in a low-carbon future.

The four pillars of just transition—strong governmental support, dedicated funding streams, strong, diverse coalitions, and economic diversification—will provide a roadmap to an equitable, low-carbon future. Translating the pillars into policy can build upon previous examples and also include new initiatives, such as elements of the Green New Deal. The Green New Deal provides several examples of strong governmental policies, such as a federal job guarantee and comprehensive and affordable health care coverage that address the need for a holistic transformation of our economy and society, as we transition away from fossil fuels.<sup>92</sup>

The Green New Deal is also an attempt to scale up our efforts to address climate change in a way that fits the scale of the problem. While some have labeled the program excessively “ambitious,”<sup>93</sup> this sort of ambition is desperately needed. This points to an issue that we have raised several times above: how can we take what seem like promising examples and build them out fully and rapidly?

Leveraging the role of California as the world's fifth largest economy can help bring some of these programs to scale. Using the procurement power of the state, examples such as Buy Clean or local procurement requirements can both create demand for local businesses to fill, diversifying local economies away from fossil fuels, and substantially reduce greenhouse gas emissions by dramatically reducing supply chain emissions. Due to the size of the state, public procurement is able to create meaningful market demand.

Similar to ideas within the Green New Deal, the public sector can be a driver of job creation through public investments. Public projects are more likely to include local hiring provisions





- <sup>1</sup> “Global Warming of 1.5°C” (Geneva, Switzerland: Intergovernmental Panel on Climate Change, World Meteorological Organization, 2018), 5, <https://www.ipcc.ch/sr15/>.
- <sup>2</sup> Jerry Brown, “Executive Order B-55-8 To Achieve Carbon Neutrality,” C.F.R. 2-2 § (2018), <https://www.gov.ca.gov/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>.
- <sup>3</sup> Benjy Egel, “California Now World’s Fifth-Largest Economy, Bigger than Britain,” The Sacramento Bee, May 4, 2018, <https://www.sacbee.com/news/business/article210466514.html>.
- <sup>4</sup> Rachel Morello Frosch et al., “The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap” (USC Program for Environmental and Regional Equity, May 2009), <http://dornsife.usc.edu/per/climategap/>.
- <sup>5</sup> Morello Frosch et al.
- <sup>6</sup> Lara Cushing et al., “Carbon Trading, Co-Pollutants, and Environmental Equity: Evidence from California’s Cap-and-Trade Program (2011–2015),” PLOS Medicine 15, no. 7 (July 10, 2018): e1002604, <https://doi.org/10.1371/journal.pmed.1002604>.
- <sup>7</sup> Cushing et al.
- <sup>8</sup> Alexandria Ocasio-Cortez, “Text- Recognizing the Duty of the Federal Government to Create a Green New Deal.” Pub. L. No. H.Res.109 (2019), <https://www.congress.gov/bill/116th-congress/house-resolution/109/text>.
- <sup>9</sup> Vanessa Carter, Manuel Pastor, and Madeline Wander, “Measures Matter: Ensuring Equitable Implementation of Los Angeles County Measures” (Program for Environmental and Regional Equity, University of Southern California, January 2018), [https://dornsife.usc.edu/assets/sites/242/docs/M\\_A\\_Final\\_WebVersion\\_02.pdf](https://dornsife.usc.edu/assets/sites/242/docs/M_A_Final_WebVersion_02.pdf).
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- <sup>12</sup> Elena Foshay, Jill Kubit, and Lara Skinner, “Making the Transition: Helping Workers and Communities Retool for the Clean Energy Economy” (Apollo Alliance & Cornell Global Labor Institute, 2009), [https://www.climatechange.ca.gov/eaac/comments/2009-12-11\\_California\\_Labor\\_Federation\\_attachment\\_2.pdf](https://www.climatechange.ca.gov/eaac/comments/2009-12-11_California_Labor_Federation_attachment_2.pdf).

- <sup>13</sup> U.S. Department of Labor, Employment and Training Administration, "Trade Adjustment Assistance for Workers Program" (Washington D. C.: U.S. Department of Labor, Employment and Training Administration, 2013), <https://www.doleta.gov/tradeact/docs/AnnualReport13.pdf>.
- <sup>14</sup> Lori G. Kletzer, *Job Loss from Imports: Measuring the Costs* (Washington, DC: Institute for International Economics, 2001).
- <sup>15</sup> Mireya Solís and Jennifer Mason, "Globalization on the Cheap: Why the U.S. Lost Its Way on Trade," Brookings (blog), August 28, 2017, <https://www.brookings.edu/blog/order-from-chaos/2017/08/28/globalization-on-the-cheap-why-the-u-s-lost-its-way-on-trade/>.
- <sup>16</sup> Foshay, Kubit, and Skinner, "Making the Transition: Helping Workers and Communities Retool for the Clean Energy Economy."
- <sup>17</sup> Loren Yager, "Trade Adjustment Assistance: Improvements Necessary, but Programs Cannot Solve Communities' Long-Term Problems" (Washington, DC: United States General Accounting Office, July 20, 2001).
- <sup>18</sup> U.S. Energy Information Administration (EIA), "California - State Energy Profile Analysis," November 15, 2018, <https://www.eia.gov/state/analysis.php?sid=CA>.
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- <sup>20</sup> Union of Concerned Scientists, "It's Time to Upgrade the Electricity Grid," February 16, 2017, <https://www.ucsusa.org/clean-energy/increase-renewable-energy/upgrade-the-electricity-grid>.
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