EXECUTIVE SUMMARY

Advancing Equity in California Climate Policy:
A New Social Contract for Low-Carbon Transition

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Reversing climate change and addressing income inequality are the twin challenges of our time. Solving them both means a safer, more stable future for generations to come. If we don’t stop and reverse climate change, our environment and our economy could collapse. If we don’t address the growing gap between rich and poor, our political structures and our economy will continue to fray, robbing us of both the funds and the political will to address climate change.\textsuperscript{1}

Tom Dalzell  
Business Manager and Financial Secretary  
International Brotherhood of Electrical Workers Local 1245

Why do we care about jobs? Because we know that a good-paying and safe job is important to a good life and good health of families and our communities. And we know that the same people and powers that destroy our environmental health are also exploiting working people. We see that we are bound together and that, even though we may disagree now and then, our interests are the same.\textsuperscript{2}

Diane Takvorian  
Executive Director  
Environmental Health Coalition, San Diego, California  
Environmental Justice Representative, California Air Resources Board
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California’s leadership role in climate policy has once again been confirmed by the passage of Senate Bill 32 (Pavley, 2016), which commits the state to the ambitious target of reducing greenhouse gas emissions to 40 percent below 1990 levels by 2030—staying the course to an 80-percent reduction by 2050. A central issue in the SB 32 political debate, as well as the many related policies that preceded it, is the impact of climate policy on equity: how to ensure that low-income and working-class Californians do not disproportionately bear the costs and are included in the benefits of California’s transition to a low-carbon economy. This report presents a Climate Policy Equity Framework to assist California decision-makers interested in reducing greenhouse gas emissions in ways that promote economic, social, and environmental equity. We suggest that policymakers, regulators, community groups, advocacy organizations, and business interests should develop a “social contract” to manage a transition to a low-carbon economy that both maximizes the benefits of low-carbon economic development and minimizes the risks to working people and disadvantaged communities. This social contract can strengthen the broad political coalition needed to stay the course on the state’s ambitious greenhouse gas reduction goals, particularly in the face of accelerating greenhouse gas emission reductions and a legal challenge to the constitutionality of California’s cap-and-trade system.3 The Climate Policy Equity Framework can then guide policy development and program implementation to reflect and support the social contract.

But what is climate equity? How can it be defined in a way that promotes both good jobs and prioritizes those communities that are hardest hit by climate change, multiple environmental hazards, and socio-economic stressors? What key criteria can then be used to develop and assess policies such as renewable portfolio standards, incentives for energy retrofits, cap and trade, transit-oriented development, low-carbon fuels and vehicle deployment, and much more? And finally, when faced with trade-offs between different equity criteria or tensions between environmental justice and labor interests, how can decision-makers maximize equity outcomes?

To answer these questions, this report proposes a “Climate Policy Equity Framework” that operates at three levels to:

◆ Articulate equity principles and goals to guide policy design;
◆ Present key criteria to analyze how close a particular climate policy or program comes to meeting these equity goals; and
◆ Propose indicators that point the way to mechanisms and strategies to advance climate equity.
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We then apply these equity criteria to assess progress on environmental justice, economic equity, and public accountability goals, using the limited data currently available. Our assessment highlights positive developments, remaining challenges, and the data gaps that must be filled to facilitate more complete assessments in the future. We also apply the criteria and indicators to two specific climate policy arenas—energy efficiency and renewable energy—to illustrate how to improve the equity outcomes of specific climate policies and programs. Finally, we present a preliminary set of recommendations to illustrate some concrete opportunities for equitable climate initiatives.

BACKGROUND

California’s voters and elected officials have embraced the imperative of addressing climate change by pursuing aggressive strategies to curtail greenhouse gas (GHG) emissions. From the carbon reduction targets set in the state’s landmark 2006 Global Warming Solutions Act (Assembly Bill 32) to the mandate to procure 50 percent of the state’s electricity from renewable energy and to double energy efficiency savings by 2030 in Senate Bill 350 (2015) to the commitment to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 in Senate Bill 32 (2016), the Golden State is leading by example with the most comprehensive set of multisector climate policies in the nation.

In addition to the climate crisis, California faces a crisis of growing disparities in income, wealth, and public health. The increase of low-wage work has been a direct contributor to economic inequities. At the same time, an expanding body of research demonstrates that economic and racial inequality influences where people live, work, and play, and what health risks they are exposed to as a result of their location. Indeed, study after study has demonstrated that inequity goes beyond the economy: air quality is worse, and health risks are higher for communities of color in the state, contributing to a “climate gap” in which the greatest effects of climate change may be felt by populations already challenged by economic and social disadvantage.
Improving climate equity will require reducing disparities across generations, groups, and geographies. While many economists—and more than a few politicians—believe that disparities are simply a necessary (although unfortunate) consequence of economic growth, recent research shows otherwise: high levels of inequality are toxic for economic prosperity and sustainability. Research on environmental and health disparities parallel this finding, revealing that environmental injustices have negative spillover effects for society at large.

Moreover, many advocates have recognized both the need and the opportunity to broaden the political coalition for climate action beyond traditional environmental groups. Polling from the Public Policy Institute of California consistently shows that low-income residents and people of color express significantly greater concern about climate change than upper-income and white respondents. As California’s non-white populations grow, so does their representation in the state legislature, as evidenced by the rising importance of Latino caucus members proposing policies to address both climate issues and the interests of disadvantaged communities and low-wage workers. Support for climate policy from the labor movement is increasingly essential, as labor unions step up their engagement in climate legislation. In California, the road to climate policy runs through—not over—climate equity.

Equity Concerns and Policy Advocacy in the Labor and Environmental Justice Movements

Advocates from environmental justice (EJ) groups and labor unions have been actively involved in California’s climate policy debates, bringing different perspectives to bear on climate policy and its implementation. These groups have pushed to make “climate equity” a guiding principle in climate policy, albeit with somewhat different interpretations of what the goals of climate equity should be.

EJ advocates have been deeply concerned about cap and trade exacerbating toxic hotspots in communities near polluting facilities. Cap-and-trade programs allow businesses to choose to trade allowances or buy offsets instead of reducing GHG emissions—and only the latter will lead to the reduction of co-pollutants (the toxic air pollution that accompanies GHG emissions). Given the state’s commitment to cap and trade, EJ groups have fought a rearguard battle to insure that some of the funds generated from the cap-and-trade program go precisely to those communities. And as evidence has mounted that public and ratepayer investments have concentrated in more-affluent populations, EJ organizations have worked to ensure that disadvantaged communities have access to renewable energy, zero emission vehicles, and other low-carbon goods and services.
Meanwhile, labor unions and their allies have advocated for a low-carbon economy that generates good jobs and protects middle-class workers as their industries change. Significant progress has been made on this front, most recently with the passage of the Renewable Portfolio Standard (RPS) in Senate Bill 350, which will expand opportunities for unionized construction workers. Jobs in utility-scale renewables, which are counted towards meeting the RPS, are good jobs—with family-supporting wages, skills development through apprenticeship training, and strong benefits. But not all the “green” jobs generated by climate policy are good jobs, and the building trades and other unions fear that the trend toward low-wage work will spread within the low-carbon economy. There are also concerns for the potential loss of middle-class jobs in fossil fuel industries that may be at risk of decline.

### A Climate Equity Framework

What does a new social contract for the low-carbon transition look like? One that addresses climate effectively, reduces rather than exacerbates inequality, and builds a sustainable political coalition? We offer here a “Climate Policy Equity Framework” that poses three questions intended to steer policy design and evaluation in a more sustainable and equitable direction. They are:

- **Does the policy promote Environmental Justice?**
  Climate policy should aid the state’s most environmentally impacted and socioeconomically disadvantaged communities by reducing environmental health risks; expanding access to beneficial goods and services; and increasing both community-level resilience and access to resources from public investments in low-carbon goods and services.

- **Does the policy promote Economic Equity?**
  Climate policy should generate high-quality, career-track, and family-sustaining jobs in clean economic growth sectors; include specific efforts to create pipelines to these jobs for workers from disadvantaged communities; and contain supports for workers and communities in carbon-intensive industries at risk of disruption or decline due to climate policy.

- **Does the policy promote Public Accountability?**
  Climate policy should embrace inclusive, effective participation in decision-making; identify and incorporate constituencies at every stage in the process; and utilize a robust set of indicators that benchmark and measure progress on sustainability and equity goals—and quickly change policy if it does not meet the grade.

This report further defines specific criteria under each of these three principles and presents the available evidence on progress and remaining challenges, while noting the significant data gaps that prevent a full evaluation.
Table 1 presents the goals and criteria for the principle of environmental justice.

**Table 1**

**Principle 1. ENVIRONMENTAL JUSTICE**

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
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<tbody>
<tr>
<td><strong>Goal:</strong> Reduced environmental and public health risks to disadvantaged communities.</td>
<td></td>
</tr>
<tr>
<td>EJ1</td>
<td>Decreases pollution regionally and locally in toxic hotspots.</td>
</tr>
<tr>
<td>EJ2</td>
<td>Improves public health outcomes associated with pollution exposure and climate vulnerability.</td>
</tr>
<tr>
<td><strong>Goal:</strong> Expanded access to benefits in disadvantaged communities.</td>
<td></td>
</tr>
<tr>
<td>EJ3</td>
<td>Expands access to goods and services arising from clean, low-carbon development (e.g., renewable energy, low-carbon mobility).</td>
</tr>
<tr>
<td><strong>Goal:</strong> Protection from adverse economic consequences for disadvantaged communities.</td>
<td></td>
</tr>
<tr>
<td>EJ4</td>
<td>Avoids raising the cost of electricity, transportation fuel, and water for disadvantaged communities.</td>
</tr>
<tr>
<td>EJ5</td>
<td>Increases economic and social resilience to gentrification-induced displacement created by low-carbon urban development.</td>
</tr>
</tbody>
</table>

A key concern of environmental justice advocates has been whether cap and trade is causing adverse or suboptimal impacts in disadvantaged communities, partly because the combination of offsets and carbon-only pricing can fail to reduce local health-harming co-pollutants. At this point, there is not enough information to determine whether such adverse impacts are occurring; this is an area where data limitations undermine our ability to assess the problem. Although the California Air Resources Board (CARB)—the state’s cap-and-trade regulator—is working to evaluate the environmental justice impacts of carbon trading, it is not clear to what extent CARB will include co-pollutants in its assessment or how it will respond if adverse impacts are discovered. On the positive side, cap and trade has generated investment for some of these disadvantaged communities (almost $2.4 billion for fiscal years 2012/13 through 2015/16) for a variety of programs that promise to improve air quality and public health outcomes. Here, too, it is difficult to assess whether and how these outcomes have improved due to data limitations.

A number of other climate policies and programs have begun to focus on expanding access to the benefits of low-carbon economic growth in disadvantaged communities, including cost savings on utility bills and job training and employment opportunities. With some exceptions, public and utility incentives that encourage the adoption of low-carbon goods and services have concentrated in wealthier households that have the resources needed to reap the economic benefits of rooftop solar installations or electric vehicles. To make these and other goods more accessible to low-income households, a number of climate policy programs have put in place a patchwork of new incentive programs (e.g., the
Multifamily Affordable Housing Solar Roofs Program and the Charge Ahead California Initiative) and older, well-established programs (e.g., utility low-income weatherization programs) that carve-out special subsidies for low-income households. Increasingly, policymakers and regulators are attending to the disparities that emerge when access to low-carbon goods and services depends on owning significant assets.

There are also growing equity concerns about the potentially regressive effects of climate policy in which low-income consumers carry a disproportionate burden of the costs of climate policy. In some cases, new or existing regulations help mitigate the rising costs of basic necessities like electricity and water. For others goods, like transportation fuel, regulatory safeguards do not yet exist to prevent companies from passing increased costs of climate policy on to consumers. Without mechanisms in place to counteract regressive effects, low-income households in disadvantaged communities are likely to suffer. This concern is especially real for those who may be impacted by processes of gentrification due to transit-oriented development. These and other risks make community-level resilience an important priority for climate policy.

Table 2 presents the goals and criteria for the principle of economic equity.

Table 2

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>Goal:</td>
<td>High-quality, career-track jobs in clean economic growth sectors.</td>
</tr>
<tr>
<td>EE1</td>
<td>Generates jobs with family-supporting wages, benefits, career paths, and safe and healthy working conditions.</td>
</tr>
<tr>
<td>EE2</td>
<td>Supports prevailing wage and skilled workforce standards in the construction industry.</td>
</tr>
<tr>
<td>EE3</td>
<td>Increases access to career-track jobs for workers from disadvantaged communities.</td>
</tr>
<tr>
<td>Goal:</td>
<td>Just transitions for workers and communities in sectors at risk of decline due to climate policy.</td>
</tr>
<tr>
<td>EE4</td>
<td>Provides income supports, retraining, and job placement into comparable jobs for displaced workers or bridges to retirement for older workers.</td>
</tr>
<tr>
<td>EE5</td>
<td>Supports economic development for communities affected by plant closures and sector shrinking.</td>
</tr>
</tbody>
</table>

The key concerns that labor and jobs advocates focus on are job quality (wages, benefits, working conditions, and career paths of the jobs being generated in the new economy), job access (who is getting the jobs), and potential loss of family-supporting, middle-class, unionized jobs in the old energy economy. A review of the available evidence indicates that California climate policies have resulted in modest positive net job creation (growth minus decline) and significant job growth in specific segments of the
clean energy economy, particularly in renewable energy generation and energy efficiency. However, while the data is too limited for a comprehensive assessment, there is evidence that this job growth has not always led to high-quality, career-track employment opportunities. While job loss is not an immediate risk, the state does not yet have a comprehensive plan on how to mitigate this risk as emissions targets become more stringent.

The main success story for job quality is utility-scale renewables, whose growth has been induced by California’s Renewable Portfolio Standard (RPS), which currently sets a target of 50-percent renewable energy by 2030. This initiative is a key legislative victory for the state’s building trades unions, as the RPS has generated significant numbers of union-wage jobs with full health and welfare benefits and investment in training through apprenticeship. However, available evidence shows that distributed solar (commonly known as rooftop solar) generation is much lower wage and lacks a career ladder, even while it offers the most potential to site renewables in disadvantaged communities. Jobs in energy efficiency are of mixed quality. Indicators suggest that these jobs follow the general pattern of the construction labor market: career-track jobs with benefits and training predominate in publicly funded construction and unionized commercial and industrial market segments, while jobs with much lower wages and fewer benefits are found in non-union and residential segments.

Meanwhile, evidence is almost nonexistent on job access—e.g., the extent to which workers from disadvantaged communities are being hired into career-track job opportunities in the low-carbon economy. We identify specific interventions to improve job access—community workforce agreements (CWAs)—that have been successful in the broader construction industry in California but are not yet common in clean energy construction projects. This reality may be changing, however, as these interventions and approaches are being implemented in high-speed rail, some utility-scale renewables, and the Los Angeles Department of Water and Power (LADWP) low-income energy efficiency program, which we highlight in our case study on energy efficiency.

Finally, there is no evidence to date that climate policy has caused job loss, thanks to California’s long history of environmental regulations, lack of dependence on coal, and the specific cap-and-trade policy of allocating free allowances to industries at risk of emissions (and jobs) leakage. While job loss is not yet a concern, planning for even modest risk of industry decline in fossil fuel industries is important to ensure a “just transition,” so that workers and communities are protected.
Table 3 presents the goals and criteria for the principle of public accountability.

Table 3

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
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<tbody>
<tr>
<td><strong>Goal:</strong></td>
<td><strong>Enhanced participation in public decision-making.</strong></td>
</tr>
<tr>
<td>PA1</td>
<td>Fosters inclusive and effective participation of key constituencies at every stage of the decision-making process.</td>
</tr>
<tr>
<td><strong>Goal:</strong></td>
<td><strong>Transparent monitoring of equity outcomes.</strong></td>
</tr>
<tr>
<td>PA2</td>
<td>Translates desired equity outcomes into measurable benchmarks for continuous monitoring.</td>
</tr>
<tr>
<td>PA3</td>
<td>Generates reliable, consistent, publicly available data on equity outcomes.</td>
</tr>
<tr>
<td><strong>Goal:</strong></td>
<td><strong>Continuous learning and improvement.</strong></td>
</tr>
<tr>
<td>PA4</td>
<td>Allows for midcourse corrections and policy learning to advance equity goals.</td>
</tr>
</tbody>
</table>

The public accountability criteria address both environmental justice and economic equity by ensuring the participation of key constituencies in public decision-making and tracking progress towards desired equity outcomes. California has a strong track record of public participation in climate decision-making and has made significant progress on monitoring, but there are opportunities to strengthen the voices of equity advocates and further develop the data collection and reporting infrastructure needed for monitoring.

The environmental justice community now has direct representation via two designated appointments on the California Air Resources Board (CARB), which oversees AB 32 implementation. Likewise, the Strategic Growth Council, which oversees initiatives authorized by SB 375 to encourage low-carbon transportation and urban development, also benefits from EJ perspectives, though not through formal designation. Labor has not been accorded the same legitimacy in the form of designated appointments on regulatory boards.

Likewise, the state has made substantial progress in building the data infrastructure needed to address equity concerns. The CalEnviroScreen tool ranks communities according to their exposure to pollution from multiple sources and the vulnerability of the resident population to its effects, literally putting disadvantaged communities on the map. This resource has raised the public visibility of the interests and needs of disadvantaged communities for the purposes of targeted investment from cap-and-trade revenue. However, gaps in data collection and reporting still prevent us from clearly seeing where progress is being made and where problems remain unaddressed. To improve our ability to benchmark and monitor desired equity outcomes, we need better data on cap-and-trade sources and transactions,
changes in local co-pollutant emissions, job growth and loss, and job quality and access for members of disadvantaged communities. Improving the availability of good data on equity outcomes will afford a clearer picture, which in turn can help inform more policy to ensure that public subsidies and ratepayer investments are fairly distributing the costs and benefits of climate policy among California’s households and communities.

Incorporating Equity Principles in Two Arenas of Climate Policy: Energy Efficiency and Renewable Energy

To demonstrate the utility of the Climate Policy Equity Framework, we assess two GHG reduction strategies in the electricity sector: energy efficiency and renewable energy. In both examples, we use this framework to show how reducing GHG emissions while promoting equity is possible.

The first example is the low-income weatherization program implemented by LADWP. This example illustrates how energy efficiency programs can provide benefits to low-income households, generate family-supporting and career-track unionized jobs, and provide a pathway into these good jobs for workers from disadvantaged communities. It also underscores the important role of coalition building among EJ, labor, economic equity, and environmental organizations, which have provided the political momentum to advance a stronger climate and social equity agenda simultaneously. Incorporating labor standards and other features of the LADWP program is possible and should occur, not only in the low-income programs administered by the investor-owned utilities (IOUs) and those programs funded by the Greenhouse Gas Reduction Fund, but also in the IOUs’ other (non-low-income) energy efficiency incentive programs, which represent the state’s largest energy efficiency funding stream. We also propose an expanded commitment to energy efficiency retrofits in the MUSH (municipal, university, school, and hospital buildings) and multifamily affordable housing markets, which can produce deeper retrofits due to long-term public or non-profit ownership and concomitant long payback periods, and which use Community Workforce Agreements (CWAs) with prevailing wage and apprentice standards and local hire provisions to help improve job quality and job access. An added benefit for
realizing energy savings is the harnessing of the state’s certified apprenticeship system, which produces the best-trained construction workforce in the state. These strategies can expand the positive impact of state and ratepayer funded energy efficiency programs on equity, while ramping up to achieve SB 350’s goal of doubling energy savings by 2030.

The second example looks at renewable energy, specifically solar energy deployment. The equity framework highlights the challenges that arise when labor and EJ have prioritized different segments of the solar industry and the new models of solar deployment that can overcome these challenges. Building trades and utility workers unions support utility-scale solar, which has generated good union jobs. They were major and critical supporters of SB 350’s new 50-percent RPS for that reason. The unions also lobbied state lawmakers to limit other regulations (like net energy metering) that favor distributed rooftop solar, which is generally low wage and non-union. EJ groups share labor’s concern about sustainable wage jobs with pathways to middle-class careers but also seek to expand local renewable energy in disadvantaged communities. As a consequence, EJ groups have supported distributed rooftop solar, promoting policies that expand subsidies to households in disadvantaged communities. These positions have put EJ groups and labor on opposing sides in a number of policy fights about solar.

Policymakers and advocates should consider the Climate Policy Equity Framework as they implement current climate initiatives and develop future policies.

Labor and environmental justice groups have held several meeting in recent years with the goal of finding alignment on values and principles, working towards a joint policy platform that addresses the concerns of both constituencies. We use the Climate Policy Equity Framework to illustrate ways to find common ground as multiple solar business models evolve. In utility-scale solar, there can be a stronger commitment to having explicit targeted-hire goals and jobs-tracking systems. In distributed solar generation, community solar offers a model that can serve multiple households and businesses in a locality, expanding access beyond those who own solar-friendly roofs, bringing benefits and jobs to a local level in a more cost-effective manner than small-scale rooftop solar, and providing more fertile ground for the adoption of labor standards and CWAs. And, as boundaries between rooftop and grid-scale solar deployment models increasingly blur due to changing business models in the electricity sector, labor and EJ have the opportunity to influence regulatory responses and industry practices to meet climate and common equity goals.

Will this end all tensions? Surely not, but we suggest that while obvious “win-wins” open the first common ground between groups, there may be a wider range of policy agreements in specific contexts.
Working together can lead to better outcomes for labor, environmental justice communities, and the climate. There is also a need to recognize that disagreements do not need to produce dissension. On the other side of many of these disputes, there lurks a set of actors who do not value protecting the environment, enhancing job quality, or improving neighborhood quality of life. Keeping our eyes on the prize also means shifting our gaze to new and creative approaches that build political momentum for shared goals.

Looking Forward: Recommendations

In looking forward to building the low-carbon economy with a new social contract, we suggest that policymakers and advocates consider the Climate Policy Equity Framework as they implement current climate initiatives and develop future policies. While the following recommendations for GHG reduction strategies are by no means exhaustive—something well beyond the scope of this report—they do exemplify significant opportunities for improving equity in areas of climate policy of great concern to EJ and labor groups in California. Labor and EJ leaders developed many of these suggestions and others emerged through discussions with both labor and EJ organizations, including a number of meetings organized by EJ and labor groups and a workshop that the authors organized in March 2016 with advocates from a broad sample of unions and EJ organizations. While the participants did not officially endorse these recommendations on behalf of their organizations, the workshop allowed the authors to informally test their resonance.

1. **Require labor standards on construction projects that the state funds, incentivizes, or mandates to meet GHG reduction targets.**

Labor standards—including prevailing wage, benefit, and apprenticeship standards—are crucial mechanisms for ensuring that low-carbon economic development results in high-quality, family-supporting careers. Labor standards are often linked with targeted hire provisions to broaden access to career-track jobs for disadvantaged workers. A number of vehicles exist for attaching labor standards to state GHG reduction measures that involve construction work.

**Energy Efficiency and Distributed Generation Incentive Programs:**
Implement labor standards for renewable energy, energy efficiency, and other low-carbon construction projects subsidized by public investment and utility ratepayer incentive programs.

**Greenhouse Gas Reduction Fund (GGRF), Proposition 39, and Other Public Investment Programs:**
Require a community workforce agreement (CWA), or similar arrangements that include labor standards and targeted/local hire provisions, on fully subsidized public and ratepayer investments in low-carbon sectors.
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**Power Purchase Agreements (PPAs) for the Renewable Portfolio Standard (RPS):**

Require a CWA on RPS-eligible, utility-scale renewables in power purchase contracts. Alternatively, give preference in the PPA selection process to projects with a multi-craft CWA.

**Low-Income Weatherization Programs:**

Require a wage floor and build career ladders for low-income energy efficiency retrofit programs funded by utilities and the GGRF.

2. **Invest in GHG-reducing public works projects that reach low-income Californians.**

Prioritizing low-carbon investments in the public sector (i.e., public buildings and public infrastructure projects) offers a variety of equity benefits by providing a vehicle for CWAs (see Recommendation 1) and ensuring direct investment in disadvantaged communities, while meeting GHG reduction goals.

**MUSH Sector Energy Efficiency and Clean Energy Investments:**

Create a comprehensive deep retrofit program for MUSH (municipal, university, school, and hospital) and multifamily affordable housing markets that incorporates a CWA and is funded by existing ratepayer, GGRF, and Prop. 39 funds.

**Green Zones:**

Support comprehensive GHG reduction and community resilience investments in the most disadvantaged communities, devised through a multi-stakeholder, community engagement process that includes both environmental justice and labor organizations.

3. **Ensure equitable distribution of ratepayer and public incentive funds for private low-carbon investments.**

Equity can be advanced by ensuring that programs to encourage adoption of solar, electric vehicle, and other low-carbon technologies do not require participants to be homeowners, have disposable savings, or have access to credit in order to benefit from government incentives. To the extent possible, decision-makers should design programs to incentivize low-carbon investments that are delinked from ownership of individual assets like homes or vehicles.

**Community Solar Programs:**

Expand community solar programs that provide distributed solar to multiple households (including pass-through benefits to renters), prioritize participation from disadvantaged households and siting in disadvantage areas, and require the incorporation of CWAs.
4. **Ensure just transitions for workers and communities affected by the decline of GHG-emitting industries.**

California is unlikely to lose jobs in the short term, but as we approach the stringent GHG reduction targets set for 2050, the risk of job loss may grow, particularly in sectors that are inextricably linked to fossil fuels, like oil and gas extraction and refining.

**Industrial Planning for High GHG-Emitting Industries:**
Identify a lead state agency and a funding source and initiate an inclusive planning process to mitigate transition losses for workers and communities potentially impacted by industrial decline due to climate policy.

5. **Ensure that cap and trade does not exacerbate pollution hotspots in disadvantaged communities and amend the program where necessary.**

Ongoing concerns about the possible adverse impact of the cap-and-trade system on existing environmental justice hotspots requires developing robust evaluation and collecting the data to monitor exposure, with a trigger to respond if cap and trade exacerbates pollution hotspots, particularly in disadvantaged communities. Addressing these issues requires:

- Incorporation of co-pollutant emissions into CARB’s GHG Emissions Mapping Tool.
- Public reporting of cap-and-trade transactions by facility.
- Restrictions on facility-level trading and offset purchases at facilities in prioritized disadvantaged communities when necessary.

6. **Ensure participation from labor and EJ representatives in all climate policy arenas.**

California can build on a strong track record of public participation by filling in the following gaps and incorporating the multiple equity criteria in its public processes.

**Inclusion of Both Labor and EJ Voices in State Bodies Responsible for Implementing Climate Policy:**
Fill gaps in labor and EJ representation on state bodies (such as CARB, CPUC, and CEC) tasked with decision-making and implementation related to AB 32 and other climate legislation.
Participatory Planning for the Sustainable Communities and Climate Protection Act (SB 375):
Implement a statewide participatory planning framework that clarifies a standard process for developing a Sustainable Community Strategy (SCS) to reduce the carbon footprint of urban development as mandated in SB 375.

7. Monitor equity performance across California’s climate policies and programs.

California should collect consistent, reliable, and publicly available data to monitor performance on key equity indicators. Although measuring progress may seem like a small step, we highlight the importance of performance reporting, following the adage “what gets measured gets managed.”

Statewide Public Accountability System to Track Equity Outcomes.
The state should develop an annual Climate Equity Report based on tracking equity outcomes to enable state officials to monitor whether equity goals have been reached, to identify areas where climate policy should be improved to advance equity, and to hold public bodies accountable for progress on equity in GHG reduction measures.

With the climate crisis brewing, the Golden State stands poised for an energy revolution and massive reworking of the state’s built infrastructure. At stake, as well, is our social infrastructure: whether we will generate the high-quality employment and access to a clean environment that has long been a key part of the California Dream. To build on our significant progress, we need a bigger and broader movement concerned with both economic and environmental equity, one that can effectively counter backward-looking business interests that oppose climate policy but collaborate with business, civic, and agency leaders who support action. And to do this, we need the environmental justice and labor movements to model the sort of collaborative unity that creates broad and ongoing political support for a more sustainable and equitable California. Building a social contract for the transition to a low-carbon economy requires agreement among political actors about goals and strategies. We hope this report helps clarify the policy framework that is needed to implement and support such a social contract.
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Carol Zabin planned and supervised the report. Abigail Martin and Carol Zabin led the writing with substantial contributions from the other authors. All authors helped to conceptualize ideas and review drafts.

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Endnotes


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