

A **JUST TRANSITION** FOR BOULDER'S CLIMATE, ENERGY & EMPLOYMENT FUTURE



Just Transition Collaborative
UNIVERSITY OF COLORADO **BOULDER**

Boulder is a visionary, world-leading

city on many issues, including climate science, resilience, and sustainability. The Climate Commitment¹ signals an opportunity to imagine climate change not only as one of our greatest challenges, but also to foster dialogue about the type of city we want to become and how social equity is pivotal to our future. As a concept that emerged from labor, indigenous, environmental justice, and other grassroots movements, we urge that the City of Boulder adopt a Just Transition framework² for its climate and energy planning. Boulder could set an example for bold and innovative governance.

A Just Transition approach recognizes that ecological solutions require economic and equity solutions as well. Realizing just solutions requires inclusive policy processes and soliciting input from all Boulder's diverse communities on their needs and ideas. It will also require assessing and defining those populations most likely to be impacted by environmental problems and related climate and energy policies.^{3,4} This involves prioritizing a range of public participation opportunities and listening to and learning from people under-represented in decision-making processes and who experience forms of discrimination and inequality. In this way, a Just Transition framework strives to improve shared living standards for all people.

Boulder faces social equity challenges in achieving the goal of 100% renewable electricity by 2030. Non-homeowners lack the opportunity to invest in on-home solar and may bear the brunt of shifts in utility rates.

Boulder rental properties exhibit far lower energy efficiency ratings than other properties, which may result in higher energy cost burden for low-income people. In some industries at the national level, green jobs suffer from a lack of racial, gender, and economic diversity. For example, in the solar industry, one of the fastest growing job sectors in the United States, African Americans and women make up only 6 percent and 22 percent of the solar workforce respectively, while representing 12 percent and 50 percent of the overall workforce.⁵ Effectively transitioning to a renewable energy economy will necessitate an inclusive process that takes diverse public needs and interests into account.



JUST TRANSITION COLLABORATIVE, 2016

We recommend

that Boulder's Climate Commitment initiate dialogues concerning challenging questions that we face together, such as:

- >> How can we support job training that ensures that green jobs are socially just and accessible to people in all demographics and neighborhoods?
- >> How can public investment in solar energy and energy efficiency benefit those most impacted by high utility rates?
- >> How can we provide a fair transition for workers currently in fossil fuel-related industries and for under-employed populations?
- >> How can we ensure that decision-making processes for climate and energy solutions are transparent, inclusive, and diverse?
- >> How do we inspire all our neighborhoods and workplaces to feel invested in this transition?

We recommend that Boulder adopt four goals for the Energy priority area of the Climate Commitment. These include:

- ① *Build inclusive community leadership and policy engagement*
- ② *Promote equity in energy and resource costs and ownership of green technologies*
- ③ *Generate socially just economic and employment opportunities and mitigate related losses*
- ④ *Provide regional leadership to address equity in climate and energy*

The Just Transition objectives are intended to be measurable, adaptable to community input, and implemented sequentially based on community needs. We recommend the development of additional goals, objectives, and metrics in subsequent years for the Resources and Ecosystems priority areas of the Climate Commitment with meaningful community engagement.

1 Available at: <http://bouldercolorado.gov/climate>

2 The concept of a just transition was developed by labor and climate justice leaders such as Tony Mazzochi, Jose T. Bravo, and Jihan Gearon. The Just Transition framework has involved proactive plans for workers losing jobs as a result of environmental policy; leadership by communities and labor on the front lines of climate and environmental impacts; and an approach that strives for sustainable economies that harm no one in the transition from fossil fuels. See the Just Transition Alliance at: <http://www.jtalliance.org/docs/whatwedo.html>

3 Considerations of diversity include income, race, ethnicity, gender, age, ability, veteran status, and other demographics. There is likely to be diversity of experiences even within conventional demographics. For example, foreign-born Latinos may experience distinct and disproportionate impacts related to policy changes.

4 There exists a large literature documenting the disproportionate burden of environmental problems as experienced by communities of color and low-income people. For an overview, see Mohai, P., Pellow, D. and Roberts, J.T., 2009. *Environmental Justice. Annual Review of Environment and Resources*, 34, pp. 405-430.

5 The Solar Foundation. 2015. *National Solar Jobs Census 2015*. Available at: <http://www.thesolarfoundation.org/solar-jobs-census/>

GOAL #1: BUILD INCLUSIVE COMMUNITY LEADERSHIP & POLICY ENGAGEMENT:

Strengthen community capabilities and leadership, advance diversity in policy input, and collect stories among a diverse community, including under-represented groups, to guide and inspire public engagement in fostering a just transition.

Rational:

System change requires changing not only systems of energy, but also cultures, including habits, values, and policies. Such changes should benefit all members of our community, including people most impacted by racial, gender, and economic discrimination. Transforming our way of life beyond a fossil-fuel based economy requires that we face communication barriers and identify democratic possibilities for all members of our community. By including Community as a central theme of the Climate Commitment, the City advances a transition in which we all thrive and invent new ways of living together.

To decarbonize, we need to democratize our ways of working with each other and our energy systems. This requires becoming more aware of how the City shares its resources, listens to diverse community voices, and engages publics about policy and programs. Under-represented people warrant additional efforts to be included and heard.

OBJECTIVES:

Diversity in policy input:

In order to ensure more diverse representation in climate and energy policies and processes, we recommend that the City:

- >> Develop strategic alliances across government organizations, nonprofits, businesses, and schools to inform, educate, support, and engage diverse communities
- >> Assess and define those populations who are likely to be most impacted by related policies and practices in order to hold the plan to a high level of accountability
- >> Identify people and organizations consulted, and the ways in which they are involved, in order to promote transparency about who is shaping policy
- >> Track for biases in the policy input processes and report on results
- >> Offer training and educational opportunities for City officials involved in environmental policies to identify and address implicit biases
- >> Facilitate more varied public engagement efforts and opportunities that foster greater participation by under-represented groups



FLOWS WATER AND ENERGY LEADERS, 2016

Diversity in recipients of city grants:

In order to ensure that city grants are serving those most impacted by economic and environmental issues, we recommend that the City:

- >> Collect demographic information⁶ for each grant application and allocation
- >> Include equity and accessibility for all demographic groups as criteria for grant evaluation
- >> Track diversity in grant application and allocation and report on results
- >> Share grant recipient stories with the community to expand the impact of the amazing efforts happening in our community

Diversity in local stories:

In order to expand our knowledge, foster community, address implicit biases, and remind us how many people are working to address climate change in diverse ways, we need to improve our abilities to communicate with and engage each other. Everyone in our community has knowledge about how to address climate change, but we don't always hear or recognize the knowledge, contributions, and experiences of under-represented individuals and groups. We recommend that the City:

- >> Dedicate resources to help identify, engage, share, and circulate our best stories of innovation, cultural knowledge, and hope across all demographic groups. There are already substantial initiatives like the Foundations for Leaders Organizing for Water and Sustainability (FLOWS) underway through the CU Environmental Center's Climate and Energy Justice Program that provide examples to address unequal impacts and develop new opportunities
- >> Recognize and celebrate existing leadership among lower income and ethnic communities, including low-carbon and environmentally sustainable lifestyles

6. Common demographics to be tracked may include racial and ethnic minorities, women, low-income people, veterans, and those that are disabled. Additional demographics should be assessed relative to specific objectives.

GOAL #2: PROMOTE EQUITY IN ENERGY & RESOURCE COSTS & OWNERSHIP OF GREEN TECHNOLOGIES:

Ensure energy and resource costs and impacts associated with decarbonizing energy sources— including those related to electricity, heating, fuel and transportation—are not disproportionately experienced; ensure that related programs, ownership of assets, and resources benefit groups with higher needs.

Rational:

Even small increases in energy costs can have devastating impacts on low-income individuals and families and those dependent on fuels for their livelihood. At the same time, shifts in public incentives and energy-related technologies can have major positive impacts on these same groups, including those related to declining costs of renewable energy.⁷ The success of the City's energy, efficiency, and transportation programs should thus be assessed in relation to their impacts on those that experience high energy, resource, and employment-related burdens.

OBJECTIVES:

Utility rate affordability and relief:

Increases in energy costs have disproportionate impacts, particularly on low-income individuals. Extreme hot and cold temperatures amplify this burden, resulting in elevated air conditioning costs in summer and heating costs in winter. The City should prioritize minimizing utility rate burden on any particular group, such as the elderly, people of color, and low-income individuals. This may include targeted subsidies to mitigate burdens associated with City and County initiatives, monitoring to ensure that relief programs are targeted effectively, and community and collective ownership options of infrastructure, procurement, and distribution systems to make energy more affordable. We recommend that the City track the following:

- >> Energy and heating costs as share of income and living expenses and other investments
- >> Shifts in energy burden related to climate change and the impacts of City, County and other climate and energy programs
- >> Access, knowledge, and use of related relief programs

⁷ Bloomberg New Energy Finance. 2016. "New Energy Outlook 2016: Powering a Changing World."

Access to renewable energy:

Non-homeowners experience a lack of opportunity to invest in on- home solar and to use renewable energy incentive programs to mitigate utility costs. The City should prioritize benefiting non-homeowners, small and minority-owned businesses, and those with high energy burden through related renewable energy incentive programs. For example, incentivizing community-shared solar systems (known as solar gardens) may provide benefits from renewable energy for those with lack of access to household ownership. Ensuring that such funds specifically benefit low-income and under-represented groups will require targeted planning and data collection on:

- >> The share of City and other renewable energy program dollars that benefit non-homeowners, including those with high energy burden
- >> Access, knowledge, and use of renewable energy programs by non-homeowners and small and minority-owned businesses

Access to energy conservation and efficiency:

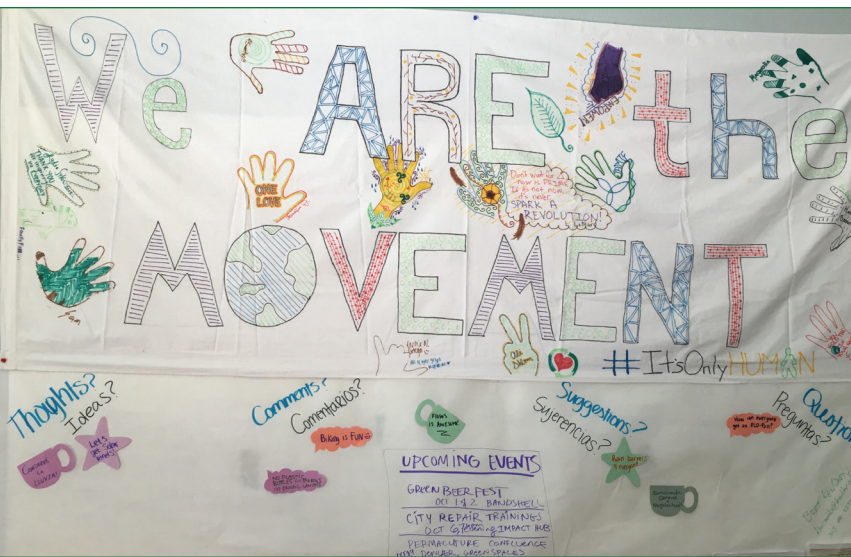
Boulder rental properties exhibit far lower energy efficiency ratings than other properties, resulting in higher energy cost burden for those in the low-income spectrum. These consumers will also likely higher costs associated with a shift to renewable energy. Relevant concerns include buildings and homes constructed with inefficient materials, outdated or substandard technologies, high barriers to energy efficiency technology and appliance upgrades, and disparate access and use of incentive programs.

Energy efficiency upgrades require capital investments that pay back over time but can be difficult to fund for low-income individuals, leading to slower rates of adoption of energy. High efficiency upgrades to residences are likely to increase the value of the property and have an impact on rent/purchase prices. A concern is that landlords pass on upgrade costs to tenants, thereby increasing rents. Energy efficiency requirements for new builds will likely lead to an increase in project costs (but a decrease in lifetime costs). Without proper incentives and rules structures, the increase in project costs may make properties less affordable. The City's energy conservation and efficiency programs should prioritize reducing cost burden, lessening initial capital costs of energy efficiency upgrades for low-income and other vulnerable residents, and making existing and new housing more affordable for vulnerable individuals and groups. We recommend that the City compile related data on:

- >> Home and building weatherization and efficiency technology needs and barriers (for example, those related to heating and cooling, thermostat technologies, and efficient appliances)
- >> How costs of energy efficiency building and retrofitting requirements are distributed and experienced, particularly related to low-income housing
- >> Access, use, and education about efficiency rebate and incentive programs



PEOPLES CLIMATE MARCH, NYC, 2014



BANNER BY FLOWS WATER AND ENERGY LEADERS, 2016

Access to vehicle efficiency:

Vehicle fuel costs have disproportionate impacts on those that are low-income and that depend on vehicles for work. The City should prioritize reducing the burden of fuel costs for workers that contribute to the Boulder economy. This includes attention to issues of equity and burden in any incentive-based programs for alternative fuel vehicles, vehicle fuel efficiency outreach and education programs, and trades, contract and small business vehicle efficiency programs. We recommend that the City track the following:

- >> Use of and access to alternative fuel vehicle rebates and other relevant incentive programs
- >> Vehicle efficiency burden for individuals in trades, contract work, and small businesses
- >> Education and awareness of vehicle efficiency programs

Equitable public transportation:

Low-income and minority communities often depend on public transportation more than other groups. Yet transportation systems are often not designed with adequate input from these groups. Equity concerns related to transportation include factors such as:

- >> Low-income individuals spend a higher proportion of their income on transportation
- >> Individuals in the service economy are less likely to be able to take advantage of telecommuting options
- >> High parking fees and tolls can have a disproportionate impact on low-income individuals
- >> Larger families may find it more difficult not to own a car
- >> Lower income areas and communities of color have less safe routes to work and school

Examples of responses may include taxpayer-supported free or lower-cost vehicle transportation options, such as a free Ecopass for low-income individuals; making bike and car sharing more accessible and affordable for low-income families; and making transportation materials and instructions culturally accessible. To inform equity responses to transportation, we recommend that the City:

- >> Conduct an assessment of mobility options and concerns among lower-income segments of the community and track the share of income spent on transportation
- >> Evaluate public transit accessibility and usage among lower-income and other demographics of the community
- >> Update the Transportation Master Plan (accepted in 2014), including its focus areas of Complete Streets, Regional Travel, Transportation and Demand Management, Funding, and Integration with Sustainability Initiatives. This update should provide specific forms of community engagement in order to identify program objectives and assessments related to equity and social justice concerns

GOAL #3: GENERATE SOCIALLY JUST ECONOMIC & EMPLOYMENT OPPORTUNITIES:

Rational:

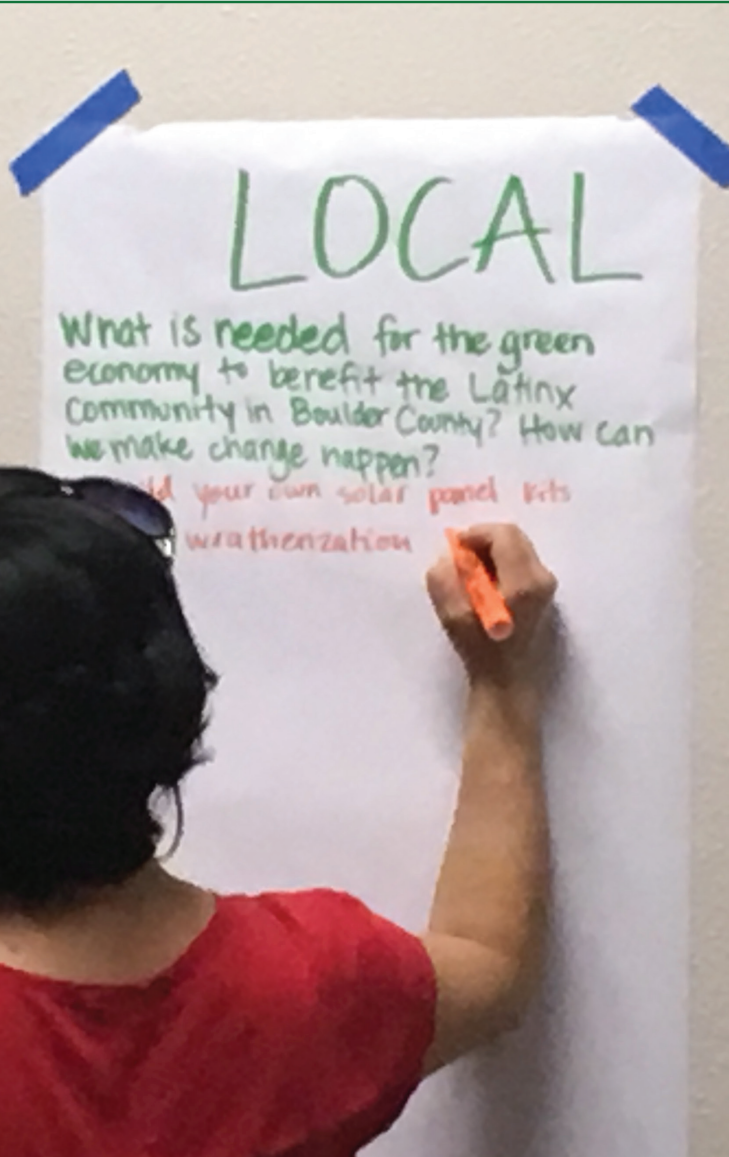
The growth of renewable energy and other green businesses and jobs in Boulder will require concerted efforts to promote inclusivity and diversity in the skilled labor force, to advance strong wage and labor protections, and to raise awareness among marginalized populations regarding green job opportunities and the benefits of renewable energy investment.

OBJECTIVES:

Good green jobs:

To be socially just, Boulder's Climate Commitment and related policies must promote strong labor standards; include and train racial and ethnic minorities, women, and other marginalized groups in the workforce; and ensure broad awareness of the employment opportunities and emerging trends in the green economy. We recommend that the City:

- >> Identify and adopt a target for green jobs created through the Climate Commitment by 2030
- >> Identify and adopt a target for a living wage for jobs in the green economy in the City and County, including for all employees of the City and its contractors
- >> In relation to the City's climate and energy policies, track the number and types of green jobs created and employment demographics including union and non-union jobs, the distance travelled by workers in green sector jobs and the associated energy/time burden, and previously held jobs by workers to track if green jobs are replacing jobs lost in displaced industries.
- >> Consider additional rebates and loans for small and minority-owned green businesses
- >> Support career pathway models to invest in green workforce development including for job seekers from diverse demographics. This will require research on training needs and returns on public investment, as well as partnerships with schools, the Workforce Center, and local businesses
- >> Launch and incubate holistic 'green jobs' programs, like Foundations for Leaders Organizing for Water and Sustainability (FLOWS). This program builds partnerships between CU Boulder students and staff and primarily low-income community members for water and energy conservation. These programs could be built to serve veterans, low-income community members, homeless people, students, and youth.



JUST TRANSITION COLLABORATIVE, 2016

Entrepreneurial opportunities for all:

Boulder's Climate Commitment can generate opportunities for existing and new businesses to expand into green landscaping; heating, ventilation, and air conditioning; home weatherization; and distributed energy. The City should commit to catalyzing leadership opportunities for racial and ethnic minorities, women, and other socially and economically marginalized groups in the business sector of the green economy. The City should also commit to providing incentives for green businesses that meet identified best practices for labor and labor rights. We recommend that the city commit to the following:

- >> Identify and adopt a target for minority and women-owned and led businesses created through the Climate Commitment Plan by 2030
- >> Identify and adopt criteria for green businesses in terms of best social justice and employment practices
- >> In relation to the City's climate and energy policies, track the number of new green businesses in the City and serving the City, leadership of green businesses by demographic, green businesses meeting best social justice and employment practices, and access to green entrepreneur and business incentive programs by demographic
- >> Target City grants to support minority-owned green businesses and green businesses with strong social justice practices

GOAL #4: PROVIDE REGIONAL LEADERSHIP TO ADDRESS EQUITY IN CLIMATE AND ENERGY:

Boulder's wealth and health are deeply integrated with regional and global economies. Changes in the City will have implications for communities and workers beyond our borders, particularly in neighboring towns and counties. A Just Transition requires that that climate and energy policies have positive impacts on those who live and work outside of our borders. The City of Boulder can serve as a model for inclusive, just, and effective climate and energy transitions.

OBJECTIVES:

Coordinate and guide climate and energy efforts regionally:

Boulder is connected to surrounding communities through its workforce, energy grid, transportation systems, business infrastructure, and its policies and culture of innovation. Boulder must support the equity needs of its neighbors. We recommend that:

- >> Boulder engage in proactive dialogue with neighboring municipalities and their residents, workers, and leaders to identify justice concerns and possibilities for collaboration, leadership, and solidarity in climate and energy policy planning and implementation

Provide opportunities for displaced workers and businesses:

While Boulder's Climate Commitment will spur growth in economic opportunities in numerous sectors, some jobs and businesses will also be lost, particularly in those related to fossil fuels. The City should commit to support a just transition for workers and business in displaced industries, both within the City of Boulder and in neighboring towns and counties. We recommend that the City commit to the following:

- >> Identify and adopt a target for the re-employment of displaced workers
- >> In relation to the City's climate and energy policies, track the number of businesses and jobs displaced in Boulder and neighboring counties, the demographic make-up of workers in these displaced jobs, and how these workers are re-integrated into the local economy

Additional recommendations for a Just Transition:

- >> Construct a broader "Social Equity" or "Just Transition" index to track the City's progress
- >> Ensure just labor and environmental practices in the local and international production of green technologies
- >> Continue to focus on the significant role and impact of affordable housing on sustainability. The high cost of housing in Boulder is a large contributing factor for many of the climate and equity issues and solutions discussed
- >> Integrate and support resilience building at the neighborhood level



FLAWS WATER AND ENERGY LEADERS, 2016

AUTHORS:

This paper was authored by the Executive Board of the Just Transition Collaborative (JTC), in consultation with community partners.

Launched in July 2016 in response to Boulder's draft Climate Commitment, the JTC is led by University of Colorado Boulder faculty, staff and students in environmental and environmental justice studies, environmental communication, public engagement studies, and sociology. We partner with the Latino Task Force of Boulder County and other community-based organizations. We have come together to address the complex challenges of a just energy, climate and cultural transition with a collaborative, interdisciplinary, and inclusive approach.

The JTC works to advance environmental, social, and economic justice in the transition from fossil fuels to a renewable-based economy and in response to climate change. We support leadership by under-represented individuals and groups to foster equitable energy, climate, and employment practices and policies, as well as to produce community-relevant research. This document was developed with input from numerous individuals and organizations and through input generated at numerous community engagement events, as outlined in the separate document titled, "Boulder Climate Action Community Engagement Plan for a Just Transition."

ABOUT THIS REPORT:

David Ciplet Assistant Professor of Environmental Studies, University of Colorado Boulder; Interim Executive Director of the Just Transition Collaborative

Phaedra Pezzullo Associate Professor of Communication, University of Colorado Boulder; Executive Director of Boulder Talks; Executive Board Member of the Just Transition Collaborative

Michelle Gabrielloff-Parish Energy and Climate Justice Manager at the University of Colorado Environmental Center; Executive Board Member of the Just Transition Collaborative

Manuela Sifuentes Director of Community Partnerships, CU Engage at the University of Colorado Boulder; Executive Director, the Latino Task Force of Boulder County; Executive Board Member of the Just Transition Collaborative



INDIVIDUALS & ORGANIZATIONS CONTRIBUTING TO THIS DOCUMENT INCLUDE:

Boulder County Public Health

Adam Reed, Director, Renewable and Sustainable Energy (RSE), University of Colorado Boulder

Brenda Ingram-Lyle Founder and Executive Director, The Family Learning Center

Dan Benavidez International Consultant and Author

Elizabeth Crowe Co-Director, Coming Clean

Leah Sprain Assistant Professor of Communication, University of Colorado Boulder

Cecilia Jones Latino Task Force of Boulder County Board Member

Brianne Eby Ph.D. student, Environmental Studies Program, University of Colorado Boulder

SUSTAINABILITY ROOTED IN SOCIAL JUSTICE

