



GREEN AND INCLUSIVE

ADVANCING A SUSTAINABLE AND SOCIALLY JUST TRANSITION FOR BOULDER

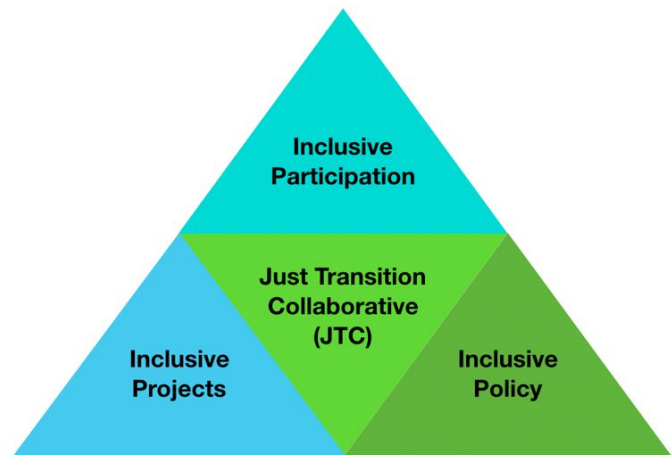
The Just Transition Collaborative, May 2019

Overview

The concept of a “just transition” emerged from grassroots social movements, including those for labor rights, Indigenous rights, civil rights, environmental health and environmental justice. It refers to transitioning to a sustainable economy with workers, communities and those most impacted by environmental and economic problems at the center of decision-making and solutions.

The Just Transition Collaborative (JTC) at CU Boulder engages in community partnerships to advance social and environmental justice in the transition from fossil fuels to a renewable-based economy. The JTC is led by a governance Board including Magnolia Landa-Posas (JTC Community Engagement Manager), David Ciplet (Assistant Professor of Environmental Studies), Michelle Gabrieloff-Parish (Environmental Center Director of Climate Justice), Phaedra Pezzullo (Associate Professor of Communication) and Manuela Sifuentes (CU Engage Director of Community Partnerships). We support leadership of underrepresented groups to foster more equitable and inclusive energy, climate and employment policies, projects and participation in decision-making. Launched in July of 2016, the Just Transition Collaborative (JTC) was created in response to concerns expressed by community stakeholders that the City of Boulder’s draft Climate Action Plan should better integrate considerations related to equity.

As represented in the triangle (right), the JTC works to enhance inclusive participation in decision-making processes and policies and projects that advance a just transition. In December of 2016, through our report “A Just Transition for Boulder’s Climate, Energy and Employment Future,” the JTC advised the City of Boulder to incorporate social justice objectives into its Climate Commitment Document.



As a result, the City’s approved 2016 Climate Action Plan includes a commitment to pursue a socially just climate and energy transition, and specific objectives to: (a) strengthen civic leadership of underrepresented constituents; (b) generate socially just economic and employment opportunities; and (c) promote equity in energy costs and ownership of green technologies. We’ve since worked closely with community partners, impacted residents and City and County officials to support the implementation of these objectives through

culturally-relevant, inclusive, community-engaged and innovative forms of policy guidance. This includes a commitment to “integrating social equity considerations in all major energy transition initiatives to improve the economic, social and political opportunities for all segments of the Boulder community.”¹

This study session report offers a series of recommendations for next steps toward a just transition. This report has been informed by three sources of input. First, based on the City’s 2016 Climate Action Plan, the Ciplet Lab researched and identified opportunities for enhancing equity in Boulder in relation to transportation and green jobs programs and policies. The output was informed by 35 interviews with City and County staff and a review of related programs and scholarship. Six University of Colorado Boulder students participated in the data collection: Emily Schaldach, Ivonne Morales, Emily Hite, Rebecca Page, Lauren Gifford and Harsha Maragh.

Second, Magnolia Landa-Posas, Deanne Grant (consultant and CU Boulder PhD Candidate), and Manuela Sifuentes, took notes and compiled a document summarizing the outcomes, insights gathered, and survey results from our community engagement activities. Third, Landa-Posas conducted individual meetings with participants in our Climate Justice Leaders and Climate Justice Assembly programs to gather input in response to draft recommendations developed. These include recommendations on how the City can best pursue equitable community engagement, policy and project development related to the implementation of the Climate Action Plan on transportation and green jobs. David Ciplet, Magnolia Landa-Posas, Phaedra Pezzullo, Michelle Gabrielloff-Parish and Emily Hite, wrote this report.



JTC Executive Board: David Ciplet, Manuela Sifuentes, Magnolia Landa-Posas, Michelle Gabrielloff-Parish and Phaedra Pezzullo

¹ Boulder’s Climate Commitment. May 2017. <https://bouldercolorado.gov/climate>

Our Work

In 2017-2018, the JTC supported the City and County to implement its objectives for a just transition in three ways:

Energy and Equity Research

Assistant Professor of Environmental Studies, David Ciplet worked with six undergraduate and graduate ENVS students during the summer of 2017 to conduct research on equity issues in energy, transportation and green jobs, contributing to this report.



Climate Justice Leaders: Raynita Johnson, Elizabeth Achulo and Andean Seybert

Climate Justice Leaders Program

Magnolia Landa-Posas and the Philanthropiece Foundation's Neda Kikhia established the 'Climate Justice Leaders' program, which developed leadership capability impacted community members to contribute to more inclusive climate policy and projects. The Climate Justice Leaders (CJL) program was created in order to address the lack of a diverse representation in Boulder city and county sustainability efforts. Our pilot cohort consisted of 10 community leaders that represented communities of color, immigrants, youth, elders and low-income communities in the city and county of Boulder. Leaders were compensated for their time and expertise with stipends for every meeting and workshop that they attended. In addition to monetary compensation we also provided leaders with childcare and dinner in order to eliminate possible barriers for participation in our 2 to 5-hour weekend and evening meetings. After the completion of the program the majority of our

participants have joined, applied for or are currently seeking positions in the following programs: Foundation for Leaders Organizing for Water and Sustainability, People Engaged in Raising Leaders, the Health Equity Advisory Committee and the Boulder Housing Partners Board of Commissioners.

One of the Climate Justice Leaders, Angela M. Ortiz (in the photo below) stated that she enjoyed how our program created a space to grow, learn and collaborate alongside a diverse set of community leaders in Boulder. Angela is a Colombian native who became passionate about social justice, cultural diversity, and intersectional oppression and transformation shortly after migrating north in 2001. In line with her passion for justice and diversity, Angela is a skilled language service provider (Spanish/English/American Sign Language), an experienced Urban Agriculture Educator and Permaculturalist and currently serves as a Program Coordinator for the Foundation of Leaders Organizing for Water and Sustainability. Angela joined the Climate Justice Leaders program to learn more about the process of policy making in regards to sustainability and equity issues. When asked what she found most valuable about the program Angela said that, “the process was a reminder of the power and voice that I and my community have to create change.” After the CJL program Angela participated in the People Engaged in Raising Leaders program and is currently exploring opportunities to join a board or commission in the city of Boulder. She hopes to continue to contribute in the development of resilient and sustainable communities by building bridges between people, cultures, natural resources and the earth.

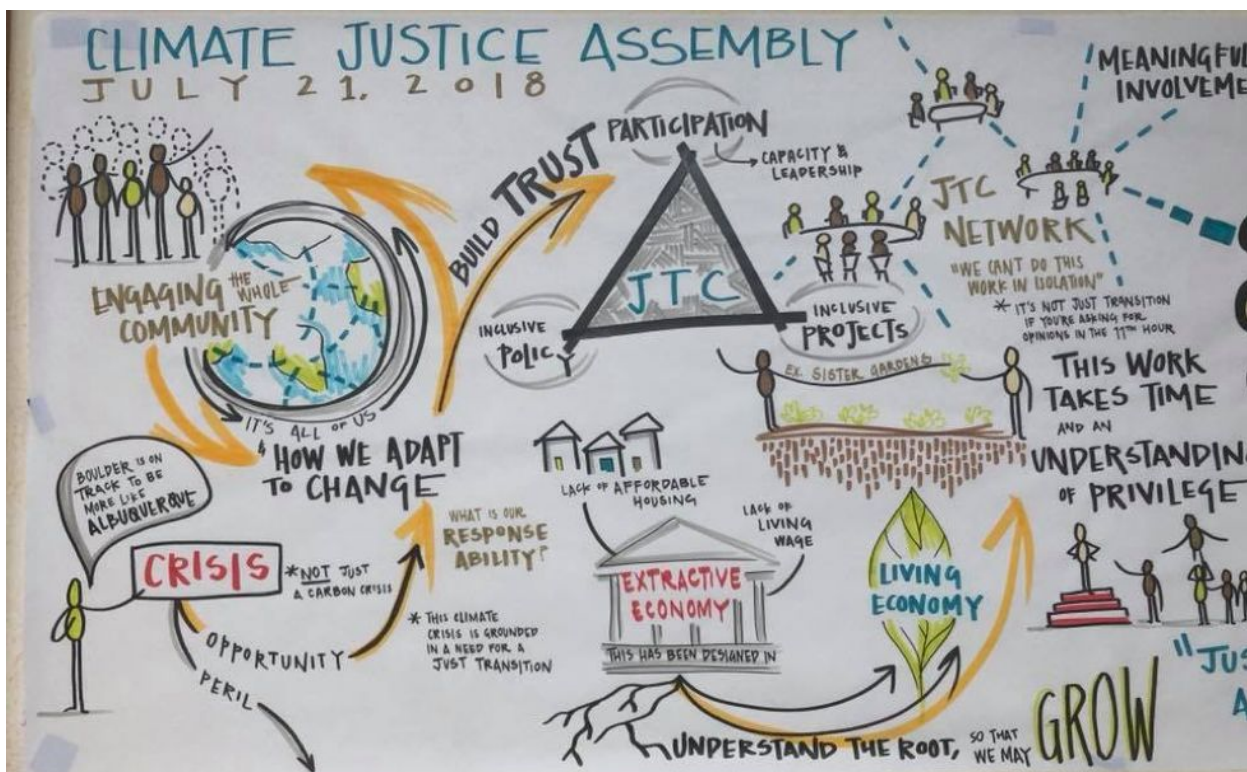


Climate Justice Assembly

The ‘Climate Justice Assembly’ (CJA) included four workshops that brought together 35 diverse community leaders, including the Climate Justice Leaders, policy-makers (including the Mayor and City Council members), and NGO and university representatives to envision new forms of collaboration, policy and project action and assessment. The work of the CJA included three parts: 1) identification of policy practices and goals in the City of Boulder and Boulder County that are important and relevant to underrepresented communities; 2) identification of equity needs and barriers in policies and programs, including those related to green workforce development and transportation; and 3) engagement in conversations about how power, identity and bias influence City and County work on equity and sustainability. An orientation was facilitated for stakeholders to bring them up to speed with the work of the Climate Justice Leaders.



Climate Justice Leader Angela Ortiz speaks to Boulder City Council with other Leaders behind her, May 7, 2019



Graphic recording of Professor Phaedra C. Pezzullo's talk with Climate Justice Leaders, July 21, 2018.

Advancing a Just Transition

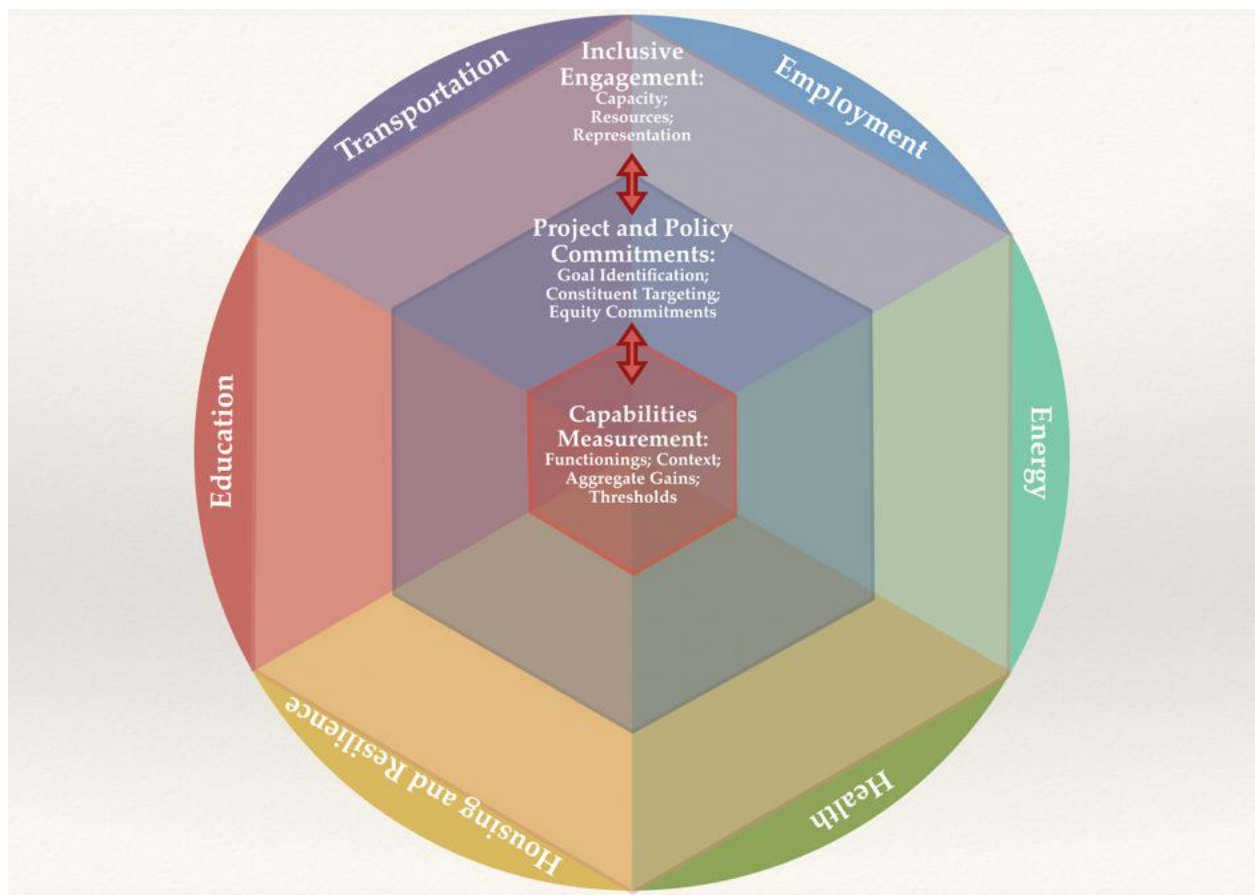
Importantly, a just transition should not be viewed as one isolated area of policy-making, but as a core set of principles and practices that are addressed in all aspects of municipal planning. In other words, it should be the core framework from which all other relevant decisions are made. We discuss three mutually supportive approaches to advance a transformative policy for a just transition: *inclusive engagement*; *targeted projects and policies*; and *capabilities measurement*. These are



presented as a visual representation in Figure 1 and detailed in Tables 1-4. We provide examples and present recommendations for the City of Boulder in each area.

Notably, there are four important considerations to illustrate about Figure 1. First, the specific list of issues (transportation, employment, energy, health, education, etc.) are included only as examples. The priority issues themselves should be identified through inclusive engagement processes. Second, these issue areas should not be pursued in isolation, but rather, as part of a broader eco-system of overlapping priorities, policies and programs that need to be dealt with through a coordinated effort. Third, the scope of priorities should not be limited to the confines of the municipal borders. In a global economy, local decisions have impacts for communities around the world. Policies should work to mitigate harm resulting from consumption and production activities that extend beyond the boundaries of the municipality. Fourth, double-sided arrows are used to indicate that these processes should not be viewed sequentially, but rather, as an iterative process by which measured outcomes inform targets and processes, and vice-versa.

Figure 1: Just Transition Policy-Making Model



INCLUSIVE ENGAGEMENT

Inclusive engagement leads from the position that enabling equitable and effective policy-making requires public investment in the capacity and leadership of underrepresented community members, and in political processes that are truly open-ended and accessible. There are three main components of inclusive engagement: capacity building, representation and resources.



First, *capacity building* requires strengthening leadership skills, affirming the value of existing knowledge and behaviors, including those that are not normally validated by dominant knowledge systems; developing policy skills and an understanding of how government systems and programs function; and education about technical issues,

dominant cultural norms, and political opportunities. For example, through the JTC's Climate Justice Leader's program, directly impacted community members were prepared to participate effectively in Boulder's climate and energy policy making processes. This allowed participants an opportunity to engage in in-depth and sustained conversations around policy, sustainability and equity that they are often not invited to or don't feel welcome participating in. In doing so, they were encouraged to see themselves and leaders that can be more civically engaged in the future. After the completion of the program the majority of our participants have joined, applied and/or are currently seeking positions in the following programs: Foundation for Leaders Organizing for Water and Sustainability, People Engaged in Raising Leaders, the Health Equity Advisory Committee and the Boulder Housing Partners Board of Commissioners.

Second, inclusive engagement necessitates leveraging *resources for community benefit*. As low-income members of society, taking time out of their busy lives to share, learn and engage with in policy-making processes can often be a financial burden. As such, shifting the terrain of who is empowered to participate in public policy processes requires significant financial investment, including in stipends for participants, childcare, translation services, food and transportation to and from events. The CJL addressed this by providing participants significant financial compensation for every session that they attended, by ensuring that meetings were held in accessible locations, by providing childcare services for all meetings, and by providing food at all events. The JTC hopes to offer mini-grants to CJL participants to develop their own community and neighborhood projects and initiatives, and to lead community-defined policy advocacy efforts. Other essential resources include funding for research and technical support that specifically responds to community member concerns.



Climate Justice Leaders Angela Ortiz and Andrea Nawage interviewed for KGNU Radio

Third, inclusive engagement necessitates *representation* in policy-making processes in ways that move beyond top-down information delivery to community-driven empowerment.

This includes formal governance processes that counter the disproportionate influence of private sector actors, by offering community members a meaningful seat at the table. Too often, governance processes bring low-income stakeholders into the process only during the final stages of policy enactment, without any clear avenues for them to shape priorities and actions.



A just transition necessitates the ability of impacted communities to have meaningful representation in decisions that impact their lives from the start of policy development through implementation, enforcement and assessment.² Policy commitments in this area include those that enhance access to information, promote fair hearings, enable deliberation, and empower directly impacted constituents to have meaningful participation in decision-making.³ Such an approach recognizes that low-income communities of color, Indigenous peoples and other directly impacted groups are systematically excluded from decision-making processes, resulting in disproportionate environmental impacts in these communities.⁴ Just transition advocates therefore argue that related policy processes should draw leadership primarily from those communities most impacted – at the “front lines” of environmental problems.⁵



²Yenneti, K. and Day, R., 2015. Procedural (in) justice in the implementation of solar energy: the case of Charanaka solar park, Gujarat, India. *Energy Policy*, 86: 664-673; Bullard, R.D. and Johnson, G.S., 2000. Environmentalism and public policy: Environmental justice: Grassroots activism and its impact on public policy decision making. *Journal of Social Issues*, 56(3): 555-578.

³Sandweiss, S., 1998. The social construction of environmental justice. *Environmental injustices, political struggles*, 10(8): 31-58.

⁴Camacho, L.A., 1998. *Ethics of consumption: the good life, justice, and global stewardship* (No. 107). Rowman & Littlefield.

⁵Farrell, C., 2012. A just transition: lessons learned from the environmental justice movement. *Duke Forum for Law and Social Change*, 4 (45): 45-63; Climate Justice Alliance, 2017. climate justice alliance just transition principles. <https://climateaccess.org/resource/just-transition-principles>.

RECOMMENDATIONS FOR INCLUSIVE ENGAGEMENT

EQUITABLE AND INCLUSIVE POLICY TEMPLATE AND PROTOCOLS:

Requests to integrate equity considerations into policy often emerge at a very late stage in the policy implementation process, after a clear agenda and use of resources has already been established. Community engagement should be rooted in open-ended processes in which priorities, commitments and strategies are yet to be defined and in formalized efforts to elevate the role of individuals that have the least time and resources. Moreover, Boulder needs to shift from a “check-box” approach of holding one-off public meetings (and potentially creating meeting fatigue), to strategies that build institutional processes, capacity, resources and recognition of impacted communities necessary for meaningful representation and leadership. We recommend that the City:

- generate a template for minimum standards and best practices by which equity considerations are integrated into planning, policies, and assessment;
- increase communication between different City of Boulder organizational units in an effort to connect work relate to equity and sustainability; and
- Increase willingness and practice of slowing down and listening to the needs of underrepresented communities



Climate Justice Leaders gather at Boulder City Council, May 7, 2019: Andy Better, Magnolia Landa-Posas, Peterson Jean, Angela Ortiz, Andrea Nawage and Elizabeth Achulo

LEADERSHIP CAPACITY BUILDING:

The City should support projects that build the capacity and leadership skills of underrepresented people to participate effectively in shaping the City's approach to sustainability and equity. This could build upon the successes of the JTC's Climate Justice Leaders program.

INCLUSIVE ENGAGEMENT FUND:

Requests to get community input are often accompanied with limited resources and time devoted to building capacity of the underrepresented individuals to participate effectively, or to conduct related research. Moreover, the city does not offer any formal support structures for people of color and low-income constituents to take leadership positions in City boards and commissions. While 20% of Boulder County residents identify as persons of color, only 7% of municipal board and commission members are people of color. It can be intimidating and isolating for underrepresented community members to join governance boards without strong support networks and allies. We recommend establishment of an 'inclusive engagement fund'. Possible avenues for funding include revenue from the Boulder Sustainability Tax, the Health Equity Fund, and if implemented, a vehicle fuel fee. Such a fund should provide predictable long-term funding to support organizational efforts that:

- build the capacity of community members directly impacted by environmental, economic and social problems and underrepresented in policy-making processes;
- support underrepresented constituents to join all City governance boards and Committees;
- partner with the County to support efforts such as the People Engaged in Raising Leaders (PERL) program;
- increase partnerships with organizations and communities that center equity;
- provide relevant expertise on inclusive engagement, offer inclusivity and equity trainings, and review new plans and initiatives in relation to equity concerns;
- make funding accessible without major time investment in the application process by relevant organizations that often have limited capacity and resources; and
- reach decisions with representation from directly impacted constituents.

INCLUSIVE ENGAGEMENT TRAINING AND CAPACITY FOR CITY STAFF AND REPRESENTATIVES:

Inclusive policy engagement should be led by municipal staff trained with the skills, resources, cultural competence and influence dedicated to engaging communities meaningfully. Existing staff and board members need training to support inclusivity and to

shift oppressive and exclusionary culture. The City of Boulder is currently pursuing a Racial Equity Project, in partnership with the Government Alliance on Race and Equity (GARE). This includes working to 'normalize', 'organize' and 'operationalize' racial equity tools and a data-driven approach to change the internal city culture. It is important that such efforts are supported by:

- predictable long-term funding and a commitment to extending this work to all agencies, boards and commissions;
- trainings that respond to the specific concerns of underrepresented agency members and constituents;
- trainings that ensure that communications efforts appropriately center equity and sustainability from the beginning; and
- highly professional translation and interpretation staff.



The JTC's Magnolia Landa Posas engages with Boulder City Council Representative, Mary Young, at the Climate Justice Assembly, July 21, 2018

Table 1: Key Features and Recommendations for Inclusive Engagement

Approach	Key features	Just Transition Recommendations
<p><i>Inclusive engagement:</i> Public investment in the capacity and leadership of underrepresented community members and political processes that are truly open-ended and accessible</p>	<p><i>Capacity building:</i></p> <ul style="list-style-type: none"> · Strengthening leadership skills · Affirming the value of existing knowledge and behaviors not validated by dominant knowledge systems · Supporting development of policy skills and understanding · Education about technical issues, dominant cultural norms, and political opportunities <p><i>Resources for community benefit:</i></p> <ul style="list-style-type: none"> · Significant financial investment, including in stipends for participants, childcare, translation services, food and transportation to and from events · Funding for research and technical support that specifically responds to community member concerns <p><i>Representation in policy-making processes:</i></p> <ul style="list-style-type: none"> · Formal governance processes that counter disproportionate influence of private sector with priority given to public constituents · Meaningful representation in decisions from the start of policy development through implementation, enforcement and assessment · Policy commitments that enhance access to information, promote fair hearings, enable deliberation, and empower directly impacted constituents · Policy leadership primarily from those communities most impacted – at the ‘front lines’ of problems 	<ul style="list-style-type: none"> · Equitable and Inclusive Policy Template and Protocols · Inclusive Engagement Fund · Inclusive Engagement Training and Capacity for City Staff

TARGETED PROJECT AND POLICY COMMITMENTS

Political commitments should be directly informed by the inclusive engagement discussed above. Project and policy commitments should take the form of ‘targeted universalism.’ Typically, in public policy, universalist approaches are pursued. These offer broad goals for society without clear delineation of how resources should be directed specific community members in relation to these goals. Goals such as achieving 100% renewable electricity or a 50% reduction in personal gas-powered vehicle use by a particular year are examples. In these cases, limited attention is directed to addressing the specific differences in opportunities and well-being of different groups. Without clear prioritization, those that have the odds stacked most against them are least likely to benefit. The broader universal target is also unlikely to be achieved.

For example, a goal to decrease personal gas-powered vehicle use (and related traffic and emissions), will benefit those that have the resources to shift behavior (time, money, social capital, etc.), or that have fewer social, cultural, economic and environmental barriers standing in their way. A large landscaping corporation may have the capital to shift to electric vehicles, while a small minority-owned company may not. This further exacerbates inequality between the two groups, and also creates the potential for erosion of public support for such goals. Recent widespread protests against a gasoline tax in France provides an example of a policy goal and commitment without targeting benefits to those constituents most disadvantaged.

Alternatively, ‘targeted universalism’ directs attention and resources to those groups that are situated most disadvantageous in relation to the social, economic, political and environmental conditions of society. A targeted universalist approach has the potential to help everyone to achieve the goal, but it prioritizes those individuals and communities that are most disadvantaged. In the case of reducing gas-powered vehicle use, the political commitments would explicitly target those groups that face the greatest barriers to reach a given threshold or target. Targeted universalism requires at least three steps. First, *goal identification* necessitates inclusive and open-ended policy processes to develop targeted universal goals. Second, *constituent targeting* involves identification of the constituent groups most likely to be at a disadvantage in achieving such a goal and recognition of the specific barriers that they face. Third, *equity commitments* require prioritization and commitment of municipal financial, staff and time resources to ensure that there is equity in opportunity in relation to the goal, particularly in overcoming identified barriers. Targeted universalism recognizes that a just transition necessitates that policies redistribute resources to those that are most socially, economically, and environmentally disadvantaged, and redirect harm away from these communities.

RECOMMENDATIONS FOR TARGETED POLICY & PROGRAM COMMITMENTS

BLUEPRINT FOR A NEW GREEN DEAL:

Economic globalization has spurred increased outsourcing of low and middle skill jobs, proliferation of local policies and laws hostile toward unions and collective bargaining has undermined worker protections, and horizontal business models are becoming increasingly common across the US, resulting in fewer opportunities for advancement and upward mobility for workers.⁶ In addition, the prevalence of free market ideology over the past several decades has resulted in industrialized countries such as the US divesting from public welfare services and relying heavily on the workplace as a means of alleviating poverty.⁷ Since the 2008 recession, many cities have instituted ‘business-friendly’ policies and incentives to attract new businesses that have resulted in deregulation of labor practices and further marginalization of the working poor.⁸ Economic policies, globalization, and proliferation of technology has driven many industries to replace labor costs with technology advances and outsourcing, offering benefits to consumers but driving down labor conditions and reducing employment opportunities in low-wage, professional, and technical sectors alike.⁹

A broad national coalition, including Congresswoman Alexandria Ocasio-Cortez, are pushing for a massive federal program of investment in clean energy jobs and infrastructure, with the goal of transforming the economy to be more socially just. Boulder has an opportunity to establish itself as a national leader for how the emerging green economy can be a lever to generate positive social change and opportunity for marginalized groups and the community at large.

Specifically, Boulder’s climate and energy commitments have the potential to create local green jobs that are equitable and fair. With careful investments in comprehensive workforce development programs, equitable economic development policy, and local labor protections, these commitments can translate into meaningful and sustainable job opportunities for underrepresented or marginalized communities and can safeguard basic rights for these community members. Any such effort should be driven by the ideas and participation of those constituents most directly impacted. We recommend establishing a blueprint for key initiatives for a Green New Deal in Boulder, which could serve as a guide

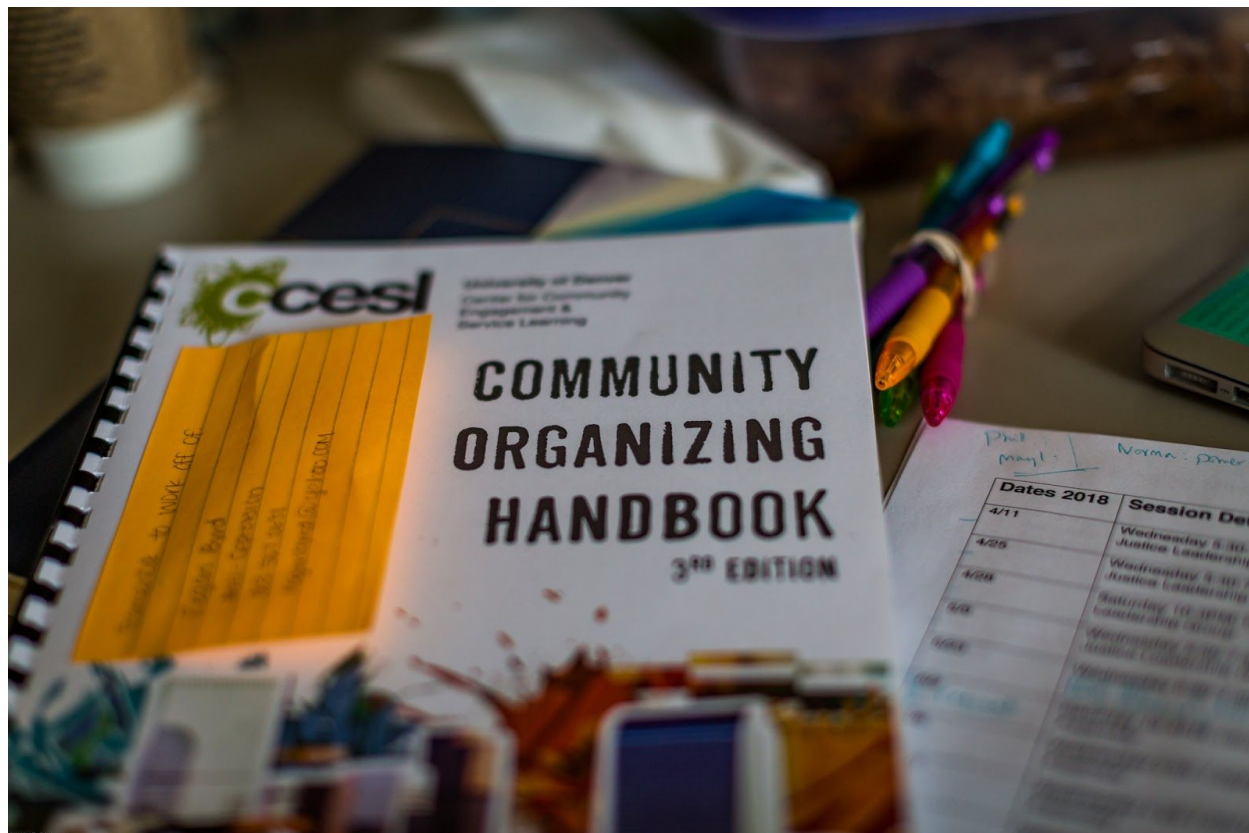
⁶ Choitz, V., Helmer, M. and Conway, M., 2015. Improving jobs to improve care: the SEIU Healthcare NW Training Partnership.

⁷ Bednarzik, R.W. and Theodos, B., 2006. *United States Services Trade, Employment, and Competitiveness* (Vol. 17, No. 5). National Bureau of Asian Research.

⁸ Choitz, V., Helmer, M. and Conway, M., 2015. Improving jobs to improve care: the SEIU Healthcare NW Training Partnership.

⁹ Bernhardt, A., Batt, R., Houseman, S.N. and Appelbaum, E., 2016. Domestic outsourcing in the United States: a research agenda to assess trends and effects on job quality.

for directing revenue generated through initiatives such as a fuel levy and sustainability tax. Here we identify four example project and policy commitment areas that a Green New Deal in Boulder could target, with example projects and policies from other cities.



⇒ GREEN NEW DEAL COMMITMENT #1: JOB TRAINING FOR AN INCLUSIVE GREEN WORKFORCE

The phrase “green collar economy” was coined to refer to a new employment sector of environmentally friendly jobs that would also serve to lift workers out of poverty.¹⁰ This initiative was specifically designed to combat the intentional or unintentional racial discrimination in environmental policy-making, encourage environmental justice, and address pervasive issues facing low-income communities of color, like widespread unemployment and mass incarceration. The first wave of green jobs within the “green-collar economy” included jobs like retrofitting existing homes and installation of low-carbon technologies. Early forays into the green jobs economy demonstrated the need for public and private sector investment. For the last decade, green jobs have been identified as a way to: a) fill new, emerging careers in clean energy and environmental protections while b) placing disenfranchised workers in well-paying jobs with long-term

¹⁰ Jones, V., Conrad, A. and Kennedy, R.F., 2008. *The green-collar economy: how one solution can fix our two biggest problems* (p. 15). New York: HarperOne.

staying power.¹¹ However, in a rapidly changing green economy, meeting the workforce development and skills training needs of emerging green sectors is challenging and requires cities and countries to adopt proactive skills development strategies that align with emerging demands.¹²

When identifying “green jobs” we are specifically referring to socially-just jobs engaged in the green economy. Green jobs have been broadly defined, encompassing careers that involve the protection of wildlife or ecosystems, reducing pollution or waste, or reducing energy usage and lowering carbon emissions. Not all green jobs are just and equitable--increasingly the term is used to refer simply to jobs in the renewable energy and energy efficiency sectors. Green jobs are often thought of largely entry level work, which is not well-paid. Our conception of green jobs points to a range of types of employment, from contingent wage labor to white collar employment opportunities. Analysis of green jobs training programs should be cognizant of the inclusivity of underrepresented groups to all sectors of this emerging economy, particularly those that offer more sustainable salaries and career advancing opportunities.

According to Cleary and Kopicki (2009)¹³, “The majority of green jobs in the nation’s energy sector will not be new occupations in the immediate future, but rather traditional occupations that may require an additional layer of green skills and knowledge.” This means that the growth of green jobs will not only come from training new workers, but also from updating the skillsets of established members of the workforce. For example, relevant labor needs might include electricians, heating and air conditioning installers, carpenters, roofers, insulation workers, construction managers, building inspectors and auditors, electrical and mechanical engineers, measurement and verification technicians, energy management analysts, project managers, financial analysts and technology designers and manufacturing workers, among others.¹⁴

Green jobs also encompass traditional “white collar” and higher paying jobs associated with growing green industries, such as green design, engineering, and finance, as well as administrative, management, and creative jobs at green companies such as secretaries, project managers, accountants, and communications professionals.¹⁵

¹¹ Ella Baker Center. 2009. Making Green Work.

<https://ellabakercenter.org/sites/default/files/downloads/making-green-work.pdf>

¹² ILO (2011) Greening the Global Economy: the Skills Challenge. Skills and Employability Department.

http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_164630.pdf

¹³ Cleary, J. and Kopicki, A., 2009. Preparing the workforce for a “green jobs” economy. *Rutgers, NJ: John J. Heldrich Center for Workforce Development*.

¹⁴ Ibid.

¹⁵ Hendricks et al. 2009. A Green Jobs Primer: Job Creation in the Clean Energy Economy. Center for American Progress.

<https://www.americanprogress.org/issues/green/reports/2009/04/06/5844/a-green-jobs-primer/>

Marginalized communities face barriers in the general economy to accessing skill- and career-building employment opportunities and building intergenerational wealth due to a wide range of factors, including racial discrimination in workplace hiring, disproportionate criminalization and incarceration of poor people and people of color, among others.¹⁶ Unequal opportunities in education, which has resulted from generations of segregation, discrimination, and inequitable school funding,¹⁷ results in reduced future employment prospects for marginalized communities.¹⁸

A green economy should strive to correct these general economic mobility barriers as well as provide opportunities for market-driven, appropriate, and inclusive training opportunities to facilitate access to quality, career-track jobs. Examples of initiatives that promote the right to inclusive training and mobility include workforce development programs that reduce employment barriers more broadly (e.g. support for acquiring legal documentation, educational diplomas, improving English language skills, managing criminal records),¹⁹ earn-as-you-learn job training programs, apprenticeships, and job placement services that are targeting emerging green employment opportunities,²⁰ project-level community benefit agreements (CBAs) for new development projects that require specific inclusive hiring practices,²¹ and government-mandated worker transition plans for any utility restructuring or power plant decommissioning.²²

One promising example of workforce inclusivity is the rising proportion of Latinos employed in the rapidly growing solar industry, though how Latino representation in the solar industry compares with traditional energy efficiency and electricity industries, including the quality of jobs occupied by Latinos within each industry, varies regionally and in some cases lags behind.²³

¹⁶ Bird, K. (2007). The intergenerational transmission of poverty: an overview. CPRC Working Paper 99. Overseas Development Institute.

¹⁷ Ladson-Billings, G. 2006. The Achievement Gap to the Education Debt: Understanding Achievement in the US Schools. *Educational Researcher* 35(7): 3-12.

¹⁸ Annie E. Casey Foundation. (2006). Race Matters: Unequal Opportunities in Education. <http://www.aecf.org/m/resourcedoc/aecf-racemattersEDUCATION-2006.pdf>

¹⁹ Lee, J & Ito, J. 2008. A Greener Future for Los Angeles: Principles to Ensure an Equitable Green Economy. Strategic Concepts in Organizing and Policy Education (SCOPE).

²⁰ Zabin, C, Martin, A, Morello-Frosch, R, Pastor, M, Sadd, J. 2016. Advancing Equity in California Climate Policy: A New Social Contract for Low-Carbon Transition. Center for Labor Research and Education, University of California Berkeley.

²¹ Liu, Y. & Keleher, T. 2009. Green Equity Toolkit. Standards and Strategies for Advancing Race, Gender, and Economic Equity in the Green Economy.

²² Zabin, C, Martin, A, Morello-Frosch, R, Pastor, M, Sadd, J. 2016. Advancing Equity in California Climate Policy: A New Social Contract for Low-Carbon Transition. Center for Labor Research and Education, University of California Berkeley.

²³ US Department of Energy. 2017. Transforming the Nation's Electricity System: The Second Installment of the Quadrennial Review. <https://www.energy.gov/policy/initiatives/quadrennial-energy-review-qer/quadrennial-energy-review-second-installment>



Boulder is fortunate to already have strong support structures for training and connecting individuals with employment opportunities. Workforce Boulder County is a critical institution and resource in the region that serves to match worker skills with employer needs across industries and job-types. It also serves as a primary hub for information about and referrals to relevant vocational programs and skill building opportunities throughout the region. Having a strong, central institution such as Workforce Boulder County is an essential foundation for building workforce mobility and inclusivity across the regional economy. The established traditional vocation-specific training programs through well-known educational institutions such as Red Rocks and Front Range community colleges and the BVSD Technical Education Center, add an additional layer to this foundation.

Emerging apprenticeship-based initiatives such as CareerWise Colorado also offer great promise for addressing the skill gap among Colorado's youth and local workforce and emerging employer needs in the region. CareerWise's model of partnering directly with businesses and public schools and building demand-driven apprenticeships into high school curriculum promises to equip youth from a broad range of backgrounds with directly employable skills and creates vertical career pathways early on. CareerWise's focus on technical skills such as IT and programming holds promise for preparing youth from traditionally marginalized communities to enter technology design and engineering fields, which are critical areas of job growth as the green economy becomes increasingly automated and technology-based.

The City of Boulder has an opportunity to build upon these existing programs to support the training of an inclusive green workforce, simultaneously improving employment conditions and meeting sustainability goals. One model to look to is The Los Angeles Utility Pre-Craft Trainee Program (UPCT). UPCT is a pre-apprenticeship program that provides skills training for entry-level workers who are interested in long-term careers with the utility but may not have the previous experience or background needed to pass required civil service examinations.

The program is a partnership between the Los Angeles Department of Water and Power and the International Brotherhood of Electrical Workers (IBEW) Local 18. UPCT provides on the job training in water infrastructure, power grid maintenance, and energy efficiency, as well as coaching in math, reading comprehension, and soft skills, to build overall employability. It is full-time 'earn-while-you-learn' pre-apprenticeship that pays \$16 per hour and provides full health benefits and on-the-job, classroom-based, and online training. IBEW actively recruits participants from marginalized communities across LA that have faced barriers to employment, such as long-term unemployment, having a conviction history, or being a single parent. Once participants complete the pre-apprenticeship program, they become IBEW union members and are qualified for family-supporting occupations including line workers, electrical mechanics, and steam plant operators.

Another example program is The Los Angeles Cleantech Incubator (LACI). LACI is a non-profit organization that seeks to cultivate and accelerate clean technologies, through technical assistance, coaching, mentoring, and networking services. LACI has recently created a Diversity & Inclusion Initiative to support underrepresented groups to enter the clean tech industry. This initiative, while still in its infancy, represents a possible avenue for building opportunity for marginalized communities to enter middle and upper-middle class jobs in emerging green tech sectors.

LACI has formed a Diversity in Entrepreneurship Advisory Council, comprised of business, government, and community leaders from underrepresented communities, to provide oversight and direction as the organization builds out specific activities to foster an inclusive tech industry. Planned activities include: Women in Cleantech, an initiative that focuses on empowering women through workshops, mentorships, and advocacy; building a workforce pathway for underrepresented groups in clean tech through college internships, workforce development programs, and coaching for existing clean tech employers on diversity hiring best practices; and conducted targeted outreach strategies to recruit women and minority-owned small businesses in the cleantech sector into their incubator services.



Michelle Gabrielloff-Parish presenting at the Climate Justice Assembly, July 21, 2018

⇒ GREEN NEW DEAL COMMITMENT #2: SUPPORT STRUCTURES FOR INCLUSIVE GREEN ENTREPRENEURSHIP AND GREEN BUSINESS TRANSITIONS

A green economy also creates entrepreneurial opportunities to start new businesses and meet emerging demands for green services and products (US Department of Labor Women's Bureau 2011). Employment opportunities exist throughout the supply and service chains of Boulder's growing green economy. There is a need to assess the extent to which pathways exist for marginalized and underrepresented communities to access entrepreneurial opportunities and high-quality jobs in Boulder's green service and supply chains.

Boulder is fortunate to already have some support structures in place for small, minority-owned businesses and entrepreneurs. Boulder's Small Business Development Center's (SBDC) offers free consulting and workshops, early-stage funding and talent acquisition programs, and support to low to moderate income communities (primarily Latino communities in Boulder County) to start small businesses. Notably, SBDC's Path to Entrepreneurship (P2E) program supports low to moderate income communities (primarily Latino communities in Boulder County) to start small businesses. The P2E program is an important resource for elevating low-income and marginalized communities into the business-owning class and building economic mobility and intergenerational wealth among these groups. There is considerable entrepreneurship opportunities in the green economy in areas such as solar-powered landscaping, low-emission heating and air-conditioning, electric vehicle charging stations, and renewable energy technology development. It is critically important to position underrepresented entrepreneurs to capitalize on these opportunities and enter the green jobs economy in higher paying roles beyond basic installation and construction. Increased funding is needed to support

A gap currently exists in support for underrepresented entrepreneurs to build and transition their businesses to serve the green economy. In other cities such as New York City and San Francisco, green development has led to gentrification that has pushed many small culturally-relevant businesses out of the community.²⁴ This could be mitigated through support structures and funding designated specifically to maintain and grow the community of small and minority-owned businesses. Such support could be generated through fees on developers, the provision of low-interest loans, and the apportionment of revenue generated through sustainability initiatives.

The City of Boulder could also support the development of a more diverse business community by funding a green entrepreneurship training center, perhaps in partnership with SBDC and other relevant organizations such as CU Boulder's Innovation and Entrepreneurship Initiative, the Watson Institute, and Galvanize Boulder. One model for

²⁴ Gould, Kenneth and T. Lewis. 2017. *Green Gentrification: Urban Sustainability and the Struggle for Environmental Justice*. New York, NY: Routledge.

this is the Opportunity Hub (OHUB) in Atlanta, Georgia. OHUB seeks to grow the number of minority-owned start-up companies. It is supporting underrepresented communities to move beyond 'blue-collar' construction and installation jobs typically associated with green economies and into higher-paying sectors of the clean energy economy.

OHUB achieves this by: exposing disadvantaged youth and college students to the start-up industry through participation in hackathons and other industry events; running a coding training and job-placement program for disadvantaged youth, in partnership with Iron Yard, the nation's largest coding school; and launching a \$1 million seed fund with support of affluent residents of color across Atlanta to specifically support minority entrepreneurs. OHUB seeks to mitigate the risk inherently involved in entrepreneurship that many minority communities have an aversion to, by partnering with white ally businesses and building a broader coalition of entrepreneurs and venture capitalists that see the value in supporting minority entrepreneurs.

Importantly, model initiatives that advance an inclusive green economy are needed to identify constraints, opportunities and best practices in specific sectors. The JTC, in collaboration with the Boulder Small Business Development Center, will engage the Climate Justice Leaders and teams of graduate students to support landscaping business owners from underrepresented groups to transition from fossil fuel-powered equipment to environmentally sustainable practices and solar-powered technologies.



Climate Justice Leaders Elizabeth Achulo, Angela Ortiz and Peterson Jean with City of Boulder Senior Environmental Planner, Brett KenCairn at the Climate Justice Assembly, July 21, 2019

⇒ GREEN NEW DEAL COMMITMENT #3: ROBUST WORKER PROTECTIONS AND LIVING WAGE INITIATIVES

Commonly cited criteria for defining high quality jobs include family-supporting wages, basic benefits, career-building opportunities, wealth-building opportunities, and a safe and healthy working environment.²⁵ National trends toward wage stagnation, increased reliance on contract work, and replacement of labor costs with technology have resulted in a significant decrease in high quality jobs.²⁶ Moreover, the proportion of household budget that goes toward paying for housing and transportation has increased significantly over the past decade, disproportionately impacting low-income families.²⁷ Protecting and expanding unionized and well-paid jobs in emerging green sectors or traditional sectors transitioning to or being replaced by green industry is critical to protecting the quality of green jobs. Unionized jobs and worker-owned cooperatives empower workers to collectively bargain for good wages, benefits, and working conditions. Some industries poised to benefit, or grow, from an expanded green economy may already have high proportions of unionized jobs like construction or utility workers. Conversely, unionized jobs associated with a fossil fuel-based economy (e.g. resource extraction) may diminish, while some newly created green jobs (e.g. rooftop solar panel installation) may be low-wage and non-unionized.²⁸

Quality green jobs also need to address the growing trend toward mechanization of work, and ensure workers are trained for jobs that will remain relevant in a changing economy, including jobs related to green technology engineering and design. The right to quality employment should also extend to undocumented communities, which must be targeted from a variety of different angles, including innovative programs to match undocumented communities with job opportunities and immigration advocacy efforts such as driver's license and in-state tuition programs.

Boulder City Council has made progress in providing a living wage—the amount a working adult requires to cover their basic needs—for City workers, not including seasonal employees and non-profit contracts. Few other measures in Boulder work to ensure a broader economy that is accessible, just, and desirable for socially and economically

²⁵ Ito, J and Yardenna, A. 2005. "Under the Line." SCOPE; Brett, D and Woelfel, T. 2016. Moving Beyond Job Creation: Defining and Measuring The Creation of Quality Jobs. Pacific Community Ventures InSight.

²⁶ Bernhardt et al. 2015. Domestic Outsourcing in the US: A Research Agenda to Assess Trends and Effects on Job Quality. Prepared for the Future of Work Symposium, U.S. Department of Labor. https://www.dol.gov/asp/evaluation/completed-studies/Future_of_work_research_agenda_to_assess_trends_and_effects_on_job_quality.pdf

²⁷ Enterprise Community Partners. 2014. Impact of Affordable Housing on Families and Communities: A Review of the Evidence Base. <http://homeforallsmc.com/wp-content/uploads/2017/05/Impact-of-Affordable-Housing-on-Families-and-Communities.pdf>

²⁸ Zabin, C, Martin, A, Morello-Frosch, R, Pastor, M, Sadd, J. 2016. Advancing Equity in California Climate Policy: A New Social Contract for Low-Carbon Transition. Center for Labor Research and Education, University of California Berkeley.

marginalized constituents, including people of color, undocumented people, women, veterans, the homeless, the elderly, differently-abled peoples, and low-income people. Colorado law does not allow for municipalities to establish their own minimum wages, as have been done in cities such as Los Angeles and Seattle. However, there are other steps that Boulder can take to support better wages, working conditions and labor rights for its workforce. A New Green Deal in Boulder could work to ensure that the emerging green economy supports workers' rights and economic justice for underrepresented constituents.

For example, Boulder could pursue a program similar to the Clean Energy Works Portland program in Portland, Oregon. This program provided low-interest, long term financing to homeowners for comprehensive home energy efficiency retrofitting services, while building equitable workforce opportunities for marginalized communities. The City of Portland convened local construction union chapters, community-based labor organizations, and minority contractor associations, to craft a 'community workforce agreement' that ensured that disenfranchised and underrepresented residents have access to family-supporting jobs created through the program. The agreement included requirements that at least 80% of employees are hired locally, that pilot program workers must earn at least 180% of state minimum wage, that 30% of total technical project hours must be performed by people of color (POC), women, and low-income residents, and that at least 20% of all dollars earned from pilot program employment must be by POC- and women-owned businesses. The program also partnered with Worksystems Inc, the regional workforce development coordinator, to create extensive training and employment support for job seekers in the home services industry. This includes a new state-registered residential weatherization installer apprenticeship program. The mayor also convened and invited community and labor groups to sit on a Stakeholder Evaluation and Implementation Committee, to allow for ongoing community oversight of the program.

⇒ **GREEN NEW DEAL COMMITMENT #4: ACCESS TO THE GREEN ECONOMY THROUGH HOUSING, TRANSPORTATION AND CHILDCARE REFORMS**

A green economy that advances social justice should also promote liveable conditions as they relate to employment, such as accessible housing, transit, and childcare. Affordable and well-located housing options are a critical component of creating a strong, equitable local economy in which lower and middle-income families can access employment opportunities, spend less time and resources on commuting, and spend less resources on child care.²⁹ When housing is affordable and located near transit or job centers, residents have stronger economic prospects.³⁰ Automobile and transit access have been shown to

²⁹ Enterprise Community Partners. 2014. Impact of Affordable Housing on Families and Communities: A Review of the Evidence Base. <http://homeforallsmc.com/wp-content/uploads/2017/05/Impact-of-Affordable-Housing-on-Families-and-Communities.pdf>

³⁰ How Housing Matters website. 2019. <https://howhousingmatters.org>

have a critical impact on incoming earnings and ability to retain employment³¹ and can benefit the entire labor market by connecting workers with available jobs.³² Lower-income families more constrained by housing and transportation costs are likely to have smaller job search areas and have fewer job prospects.³³

In areas where public transit is limited, owning a car may actually be more beneficial to lower-income workers in cases where searching for and switching to better-paying jobs is not possible to do via public transit.³⁴ Even if public transit is extensive, proximity to public transit increases housing prices, making it difficult for low-income families to live in areas where they can access employment opportunities.³⁵ Availability of affordable and accessible childcare also plays a role in workers' ability to sustain quality and career-building employment or education.³⁶ Not only do low-income parents face barriers in finding affordable child care that is accessible by transit, but low-income parents are more likely to work irregular hours, making access to child care even more difficult.³⁷ An equitable, local green economy requires regional comprehensive planning and coordination to ensure that residents can live and work in communities that are foster sustainable lives,³⁸ as well as deep investments in child care affordability, quality, and availability that allow families to sustain quality employment while investing in their children.³⁹

³¹ Pendall et al. 2014. Driving to Opportunity: Understanding the Links among Transportation Access, Residential Outcomes, and Economic Opportunity for Housing Voucher Recipients. The Urban Institute.

<https://www.urban.org/sites/default/files/publication/22461/413078-Driving-to-Opportunity-Understanding-the-Links-among-Transportation-Access-Residential-Outcomes-and-Economic-Opportunity-for-Housing-Voucher-Recipients.PDF>

³² Enterprise Community Partners. 2014. Impact of Affordable Housing on Families and Communities: A Review of the Evidence Base.

<http://homeforallsmc.com/wp-content/uploads/2017/05/Impact-of-Affordable-Housing-on-Families-and-Communities.pdf>

³³ Kneebone, E. and Holmes, N., 2016. Concentrated poverty in the wake of the Great Recession. *Brookings*. <https://www.brookings.edu/research/us-concentrated-poverty-in-the-wake-of-the-great-recession>.

³⁴ Waller, M. 2005. *High cost or high opportunity cost? Transportation and family economic success*. Center on Children & Families Policy Brief No. 35. Washington, DC: The Brookings Institution.

³⁵ Enterprise Community Partners. 2014. Impact of Affordable Housing on Families and Communities: A Review of the Evidence Base.


<http://homeforallsmc.com/wp-content/uploads/2017/05/Impact-of-Affordable-Housing-on-Families-and-Communities.pdf>

³⁶ Mitchell, A., 1992. *Child Care Choices, Consumer Education, and Low-Income Families*. National Center for Children in Poverty, Columbia University, New York, NY.

³⁷ Kronstadt, J and Favreault, M. 2008. Families and Economic Mobility. The Urban Institute. https://www.urban.org/research/publication/families-and-economic-mobility/view/full_report

³⁸ Center for American Progress. 2015. Expanding Opportunities in America's Urban Areas. <https://www.americanprogress.org/issues/poverty/reports/2015/03/23/109460/expanding-opportunities-in-americas-urban-areas/>


³⁹ The White House (2015). Fact Sheet: Helping All Working Families with Young Children Afford Child Care. Office of the Press Secretary fact sheet.



Affordable housing is an enormous area of focus that is beyond the scope of this report. However, one relevant program to mention is The Twin Cities Community Land Bank is a non-profit organization based in the Twin Cities, Minnesota that purchases and holds available land and properties to meet longer term community housing goals: 'It was formed as a strategic tool for government, neighborhood-based organizations, community development corporations, and nonprofit and for-profit developers to further community-based economic development and affordable housing goals.' The land bank strategically acquires real estate with the goal of benefiting low- to moderate-income families of color. It coordinates with developers, non-profit organizations, and city governments to develop and rebuild communities to link affordable housing with jobs, transportation, and education. One of the land bank's first initiatives was to partner with the National Community Stabilization Trust to transfer foreclosed and abandoned homes from financial institutions to local government. The Land Bank is an example of how cities can safeguard livable conditions related to employment, by accessing valuable land located nearby employment and economic opportunities and prioritizing development of affordable housing in areas that might otherwise become inaccessible.

Aside from housing, transportation accounts for the largest single cost for residents. An RTD working group convened in 2017 recommended transportation access provisions that, if implemented, would potentially benefit socially and economically marginalized constituents. First, a low-income pass would provide a 40 percent discount to qualifying riders whose incomes are at or below 185 percent of the federal poverty guidelines. Second, a youth pass would discount the fare for riders 13 through 19 years old by 70 percent, and provide individuals 12 years old and younger free ridership with a fare-paying rider. In addition, Boulder County has numerous initiatives through its Mobility for All to provide more accessible and affordable transportation options for constituents that currently face inequity in Boulder's transportation system. Councilmember Mary Young has also put forward recommendations to identify barriers and solutions, create relevant communication channels, and leverage community assets to provide greater access to transportation options for the Latino community in Boulder County.

As part of a New Green Deal, the City of Boulder could build upon the successes of these programs to fund model programs to enhance equity and accessibility in its public transportation system. One possibility is to focus on expanding free access for Boulder County youth, seniors, and differently-abled people to the RTD system. This would have the benefit of supporting the next generation of transit riders, including those that are low-income and lack other options, by getting more youth out of cars and into more active transportation. It would also address the climate crisis by reducing school commute car trips and changing youth attitudes towards public transit. Boulder could model its efforts in this area on the Free MUNI for Youth Campaign (FMFY) in San Francisco.



Families in San Francisco were facing the end of yellow school bus service due to budget cuts, rapidly rising cost of MUNI youth passes, and increasing criminalization from fare enforcement. FMFY launched a campaign to win free transportation for all youth in San Francisco. This youth-led campaign fought for over two years to identify local funding sources that enabled a sixteen-month pilot program, which successfully launched in March 2013.

Over 40,000 low and moderate-income youth were eligible across San Francisco; over 30,000 youth enrolled in the pilot phase. The FMFY pass is valid year-round so that youth can access school, after-school programs, jobs, internship opportunities and city-wide amenities such as parks, arts and cultural institutions, and recreation centers. The campaign then continued to organize and advocate, and in the spring of 2014, the Board of Directors of San Francisco MUNI voted to continue the program for two years and seek permanent funding. FMFY coalition members are now working with allies in senior and disability rights organizations to expand free transit to their communities as well as develop a regional version of the program.

Enhancing Boulder's bicycle and bikeway access to low-income community members is another potential strategy. The Better Bike Share Partnership (BBSP) is an effort led by the City of Philadelphia to ensure that the city's Indego bikeshare program is accessible to all neighborhoods and people. Nationally, only 9 percent of low-income people of color, 18 percent of high-income people of color and 13 percent of low-income white residents have ridden bikeshare in their cities. In response, Indego spoke with low-income and minority residents to provide bikeshare stations where they are most needed, installing 20 stations in underserved communities. In addition, while a monthly pass is normally \$17, Indego provides a \$5 Access Pass to low-income residents for people who receive public assistance.

Nationwide, only 32 percent of bikeshare systems have any kind of low-income pass. A cash-payment option is available for those who don't feel comfortable with, or lack, credit. Finally, Indego has a City Ambassador program which partners with community-based organizations to strengthen access and opportunities for biking. As a result of these initiatives, according to the City of Philadelphia, forty-five percent of Indego passholders are from nonwhite groups and 35 percent of passholders have incomes less than \$25,000.



Climate Justice Leader Theresa Halsey

Table 2: Key Features and Recommendations for Targeted Programs and Policies

Approach	Key features	Just Transition Recommendations
<p>Targeted Programs and Policies:</p> <p>Resources and policy commitments primarily support those groups that are most disadvantaged by social, economic, political and environmental conditions</p>	<p>Goal identification:</p> <ul style="list-style-type: none"> · Inclusive and open-ended policy processes to develop targeted universal goals <p>Constituent targeting:</p> <ul style="list-style-type: none"> · Identification of the constituent groups most likely to be at a disadvantage in achieving defined goal · Identification and recognition of the specific barriers that these constituents face <p>Equity commitments:</p> <ul style="list-style-type: none"> · Prioritization and commitment of municipal financial, capacity and time resources to ensure equity in opportunity in relation to the goal · Focus on overcoming identified barriers for disadvantaged constituents 	<ul style="list-style-type: none"> · Boulder Green New Deal: <ul style="list-style-type: none"> ⇒ Job training for an inclusive green workforce ⇒ Support structures for inclusive green entrepreneurship and green business transitions ⇒ Robust worker protections and living wages ⇒ Housing, transportation and childcare reforms

CAPABILITIES MEASUREMENT

A capabilities approach to policy measurement, developed by Nobel Prize winning economist Amartya Sen and philosopher Martha Nussbaum, posits that policy should ensure that all members of society are able to live the lives that they have desire to value. A capability then, can be understood as ‘the *real opportunity* that we have to accomplish what we value’.⁴⁰ This approach has been employed at the international level to measure well-being through the Human Development Index. This includes indicators that assess the extent to which people live a long and healthy life, their ability to acquire knowledge and education, and the extent to which they have what can be understood as a decent standard of living. At a more local level, countries and municipalities are beginning to define, support and measure the achievement of context-specific capabilities in areas such as health, housing and transportation. We propose a capabilities approach to measurement of policy success have four main focus areas: *functionings; context; aggregate gains; and thresholds of measurement*.

Functionings can be understood as the activities, situations or states of being that people recognize to be important. For example, functionings might include things such as having a meaningful job, feeling safe, being well-nourished, being able to recover from a flood, and having the ability to get to school conveniently. Through a capabilities approach, well-being can be characterized as a diverse collection of observable functionings. The point is not just that we measure progress better; rather, that we orient our policies to directly enhance what matters most to people, especially those that are most deprived of the ability to live the types of lives that they have reason to value.

First, a focus on functionings differs from the most common approaches of orienting public policy: growth and resource-oriented approaches. A growth approach focuses on the amount of economic activity or employment that occurs in a given period. If the economy is assessed as growing, it is assumed that this is positive for members of the community. Alternatively, a resources approach places more emphasis on the creation and delivery of public goods such as homeless shelters, internet services and open space. While a resources approach is more attentive to issues of equity than the growth approach, it still falls short in a few important, if subtle, ways (as outlined in Table 4).

Notably, the delivery of goods isn’t necessarily or always a good proxy for improvements in quality of life. For example, you can provide internet services, but if some people don’t have the ability to use the internet to enhance their knowledge base, for example, due to a lack of literacy, it’s not likely to lead to improvements in their lives. Similarly, a robust public transportation system may mean little for low-income residents if it doesn’t enable them to safely and conveniently get to work. Or a huge area of open space may mean little to people who have trouble accessing it or are not culturally inclined to use it. While resources

⁴⁰ Sen, A., 1992. *Inequality reexamined*. Clarendon Press.

delivered are sometimes useful forms of measurement, functionings are more direct measurements of life improvements.

Second, a capabilities approach to measurement recognizes that while there are universal functionings that people should have in any part of the world, such as good nutritional health, literacy and access to desirable shelter, there are also desires specific to distinct social groups, cultures and contexts. *Context* acknowledges that while there are universal rights which should be provided in all societies, such rights often take on specific meaning in particular contexts and cultural belief systems. For example, having the ability to protect natural resources with particular cultural and spiritual significance may uniquely be valued by a community as important for a valuable life. Thus, what to measure should be defined by the needs and aspirations of directly impacted communities through deliberative processes.

Third, a capabilities approach focuses on *aggregate* forms of measurement across categories of functionings. It's very difficult to understand life improvements for people, if you don't have comprehensive measures that consider the ability of people to access various functionings in concert. Functionings like health, leisure, meaningful employment, and desired housing are best understood as part of an ecosystem of human needs or desires. A deficit in one area may make it difficult for individuals to thrive in another area. Similarly, some functionings might be more important to some people than others.

Fourth, a capabilities approach focuses on measuring the percentage of the overall population that have that meet *thresholds* of well-being across categories in relation to prior years. This sheds light on the extent to which those that are most deprived of well-being are experiencing life improvements. In unequal societies, such as Boulder, such an approach is needed to elucidate the experience of those that are most socially, politically and economically marginalized. Importantly, the main target groups are not the middle class but those that lack well-being in particular focus areas, or those that fall below aggregate thresholds across categories.

RECOMMENDATIONS FOR CAPABILITIES MEASUREMENT

ESTABLISH A JUST TRANSITION INDEX:

Focusing on a just transition offers an ideal opportunity to shift from more conventional measurement forms of progress in Boulder, to a more comprehensive and equity-oriented lens of capabilities. Such an approach could be modeled after the country Bhutan's 'Gross National Happiness Index' (GNHI), but adapted to focus on just transition. How might such a capabilities approach to measurement look in practice? In Bhutan, the GNHI has been utilized to measure well-being across eight types of functionings: psychological well-being, health, education, cultural diversity, time-use, good governance, community vitality, ecological diversity and resilience, and living standard (as outlined in Figure 2).



Just Transition Collaborative and allies, Boulder City Council Meeting, May 7, 2019

There are three notable characteristics of this approach which Boulder could pursue as part of developing a Just Transition Index. First, the types of functionings, their relative weight of importance, and the ways in which they are assessed, are the result of intensive deliberation processes, with particular attention to those most deprived of well-being. Extensive consultation processes were held, including focus groups with citizens, pilot surveys, a final survey, and extensive consultations. The final survey took 7-8 hours to complete and was delivered to 950 respondents in twelve districts. Moreover, the indicators are regularly updated based on further deliberative processes.

Second, the focus of the index is to raise the standard of everyone above a certain well-being threshold. This directs primary attention to improving the well-being of those that are most marginalized in society. Moreover, the focus is not merely on addressing

poverty, but on ensuring that all members of society have the ability to flourish over a wide array of conditions. While the focus is to move everyone above a well-being threshold (measured by reaching 'sufficiency' in two-thirds of the 124 measurement categories), progress is also assessed in relation to four cutoffs: unhappy, narrowly happy, extensively happy, and deeply happy. Third, functionings are not viewed in isolation. There is recognition that people have a diversity of desires: not everyone seeks the same functionings in life.



Figure 2: Bhutan's Gross National Happiness Realms and Indicators Source: <http://gnhusa.org/wp-content/uploads/2016/11/gnh-domains.png>

Table 3: Key Features and Recommendations for Capabilities Measurement

Approach	Key features	Just Transition Recommendations
<p>Capabilities measurement:</p> <p>Policy is assessed on improvements of disadvantaged community members to accomplish what they value</p>	<p>Functionings:</p> <ul style="list-style-type: none"> · Activities, situations or states of being that people recognize to be important · Direct measurements of life improvements, particularly of those that are most marginalized <p>Context:</p> <ul style="list-style-type: none"> · While there are universal functionings that people should have in any part of the world, there are also desires specific to distinct social groups, cultures and contexts · What to measure should be defined by the needs and aspirations of directly impacted communities through deliberative processes <p>Aggregate Gains:</p> <ul style="list-style-type: none"> · Functionings like health, leisure, meaningful employment, and desired housing are best understood as part of an ecosystem of human needs or desires <p>Thresholds of Measurement:</p> <ul style="list-style-type: none"> · Focus on measuring the percentage of the overall population that have that meet <i>thresholds</i> of well-being across categories in relation to prior years · Main target groups for measurement are those that lack well-being in particular focus areas, or those that fall below aggregate thresholds across categories 	<ul style="list-style-type: none"> · Just Transition Index

Table 4: Distinct Approaches to Measurement of Policy Effectiveness


Public policy approach	Growth	Resources	Capabilities
Focus areas	Isolated measurement of economic exchange, accumulation and expansion	Isolated measurements of social, economic or environmental goods obtained	Aggregate measurements of desired functionings
Example areas of measurement	Gross domestic product Employment growth	Income Caloric intake New jobs accessed Provision of internet services People served by public transit Homeless served by shelters Acres of open space created	Ability to purchase goods needed to live a dignified life Nutritional health Satisfaction, fulfillment and upward mobility with employment Ability to utilize the internet to acquire knowledge Ability to safely and conveniently get to work Access to desired housing Experience of a healthy natural environment; universal ability to utilize open space for leisure
Who defines areas of measurement	Business community, labor groups, policy-makers	Policy-makers, NGOs	The public, particularly marginalized community members through highly deliberative processes

How success is defined	Gross increases in economic indicators	Increases in the sum, mean or median of resources acquired	Sufficiency or flourishing in desired categories of functioning Percentage of population that meet thresholds of well-being across categories
Target groups	General public, business community, unemployed	The average member of a given community	Those that lack sufficiency in a focus area Those that are below aggregate thresholds

Moving Forward

The JTC is eager to continue to work to advance a just transition in Boulder. Our work for 2019 is contingent on funding. The JTC is currently fundraising for two potential projects. With proper funding and commitment to the issues, the City of Boulder could establish itself in a leader towards a just transition in these areas:

Inclusive Green Landscaping: In partnership with the Boulder Small Business Development Center and other partners, this project will serve as a model for cultivating an inclusive green economy in Boulder and in cities across the US. We will recruit and assemble a second cohort Climate Justice Leaders made up of underrepresented small business owners and workers from the landscaping sector. The leaders will work to identify possibilities and constraints for minority-owned landscaping businesses to adopt sustainable technologies and practices. We will also engage teams of graduate students to support the landscaping business owners to transition from fossil fuel-powered equipment to environmentally sustainable solar-powered technologies. This may include developing, piloting, and commercializing solar-powered electric charging stations in landscaping vehicles, assessing of sustainability and environmental benefits, developing customized educational training programs, creating access to new revenue sources and markets, and creating and implementing green entrepreneurship plans. This project will serve as a model for cultivating inclusive green economic sectors in Boulder and in cities across the US. It will also provide research capacity, visioning support, training opportunities, and financial resources for entrepreneurial leaders of minority-owned businesses in Boulder County.



Inclusivity Template: We are also looking forward to our continued work with the City of Boulder in regards to efforts that address the intersection of sustainability, equity and resiliency. Requests to integrate equity considerations into policy often emerge at a very late stage in the policy implementation process, after a clear agenda and use of resources has already been established. We would like to help the City to develop and adopt a protocol and template for minimum standards and best practices by which equity considerations are integrated into policies, their development, and implementation.

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Climate Justice Assembly, July 21, 2018

For information, contact: Magnolia Landa-Posas, JTC Community Engagement Manager, magnolia.landaposas@colorado.edu

The Just Transition Collaborative: <https://www.colorado.edu/jtc>

