This document outlines strategies that can help California generate the greatest quantity of good jobs from Prop 39 funding and other clean energy programs, and improve job opportunities for low-income Californians. These recommendations are based on extensive research on workforce development in the clean energy sectors and the results of American Recovery and Reinvestment Act (ARRA) and other green jobs programs. Prop. 39 provides a clean slate to implement best practices that maximize positive job impacts and address inequality. We highlight the need to address the following job impacts:

**Quantity of jobs:** Energy efficiency and clean energy investments generate about ten to twelve jobs per million dollars of annual investment. While Prop. 39 can generate jobs across California, we caution against over-promising on the number of jobs, particularly the number of new entry-level jobs. The more Prop. 39 funds are matched with private investment, the more jobs Prop. 39 will produce.

**Quality of jobs:** Energy efficiency and clean energy investments produce good jobs when there are clear skill certifications for workers and performance standards for participating contractors. These standards are also key to insure that high quality work is performed and energy goals are met.

**Access to jobs for targeted groups:** Youth, veterans, women and disadvantaged workers can gain access to jobs through a combination of workforce development services (training, case management, and job placement) and targeted hire policies and/or jobs programs specifically designed for entry-level workers. This explicit linkage of training-to-jobs is necessary to maximize opportunities without raising false hopes for placing graduates in jobs.

As some green training programs illustrated, training alone cannot create jobs. The great majority of funds should be spent on energy efficiency and clean energy investments that create jobs. A key element of Prop. 39's workforce strategy should be setting standards on the energy efficiency and clean energy funds to ensure that they create good jobs and that there are pathways into these jobs. Training investments should only be made when there are concrete opportunities for preparing workers for actual jobs and careers.

**Recommendations for Energy Efficiency and Clean Energy Investments**

*Prop. 39 dollars should be focused on schools, institutional, industrial, and commercial markets which offer great opportunities for leveraging private and local public financing, achieving energy savings, and creating career jobs.*

- Some portion of Prop. 39 dollars should be leveraged through financing strategies that provide investors with managed risk and building owners with access to practical and viable financing options.

*Prop. 39 and leveraged funds should facilitate participation in the CEJP by schools and other entities through:*
• Providing technical assistance, a list of pre-qualified contractors, and standardized contracts to lower risks to building owners and managers and help them navigate retrofit and clean energy investment options.

• Embedding quality and workforce standards in program design and financing.

Prop. 39 and leveraged funds should explicitly include standards for participating contractors and minimum training/skill standards for workers.

• Prop 39 investments should utilize contractors who participate in state-certified apprenticeship programs, which offer career training and tie wages to skill acquisition.

• Prop 39 programs should require specialized skill certifications for key tasks, such as quality assurance and code compliance.

Prop. 39 should ensure access to entry-level jobs with career paths for veterans, youth, women, and disadvantaged Californians.

• Targeted hire goals should be embedded in contracts for energy efficiency and clean energy investments, with realistic expectations about the number of entry-level jobs that can be created with Prop. 39 funds1.

• Contracts should include apprenticeship requirements to maximize utilization of apprentices enrolled in state-certified apprenticeship programs.

• Prop. 39 funds should support jobs programs, such as summer youth employment, pre-apprenticeships and other “learn-while-you--earn” models linked to state-approved apprenticeships, for entry-level jobs. These programs should be clearly linked to educational opportunities, like the green high school Partnership Academies, or career pathways, such as state-certified apprenticeship or the Los Angeles Department of Water and Power’s (LADWP) pre-craft training program for utility jobs.

Recommendations for Workforce Development Investments

Prop. 39 should develop a request for proposal (RFP) process for training investments that is managed by the Labor Agency with input from the California Energy Commission (CEC), California Public Utilities Commission (CPUC) and other energy experts, with the following criteria for selection:

1 Our rough estimate of the number of jobs per year created by Prop. 39 (without leveraging private capital) is about 5,000 jobs per year, including about 100 entry level blue collar construction trades jobs per year, and a smaller number of entry level in other occupations. This estimate is derived a $100,000 per job rule of thumb, and makes other assumptions based on research in the 2011 UC Berkeley study, “California Workforce Education and Training Needs Assessment for Energy Efficiency, Demand Response, and Distributed Generation” (http://www.irle.berkeley.edu/vial/).

- Training should be demand-driven, with deep engagement from employers in the design and implementation of training programs, and include other commitments from employers, such as the commitment to hire new workers and/or increase the skills of incumbent workers.

- Training should emphasize “green” skills that are embedded in a broader occupation, not just specialized green tasks, because these have greater impact on energy efficiency and clean energy generation and help trainees develop a career with a future.

- Funds should be targeted to career pathway programs that offer ongoing educational and career advancement and combine foundational skills (work readiness; basic skills, including English language learning; and science, technology, engineering and math skills) and technical training.

- Training should lead to industry-recognized credentials and certifications that, to the extent possible, provide college credit or are linked to credit-bearing programs.

- Priority should go to training that is based in existing institutions-- i.e. Department of Education, Community Colleges, State Workforce Investment Board, Employment Development Department, State-approved Apprenticeship Programs, Employment Training Panel, workforce investment boards, etc. that can sustain funding after the grant ends and/or is conducted at an employer’s worksite.

- Funds should be available to “sector strategy” intermediaries that can build and coordinate partnerships among employers, labor, educational institutions, community-based organizations, philanthropy and others.

- Programs that expand utilization of state-approved apprenticeship programs and other “learn-and-earn” models that promote industry recognized skills credentials should be favored.

- Priority for investments in entry level training should go to low-income communities.

Prop. 39 should also direct workforce development dollars toward statewide and system-wide alignment of California’s major training and education programs for energy-related skills and occupations.

- Prop. 39 should support alignment of state-certified apprenticeships programs with programs that prepare entry-level workers by funding pre-apprenticeship programs affiliated through appropriate documentation, such as a memorandum of understanding (MOU), with a state-approved apprenticeship program(s). These include pre-apprenticeship partnerships in community colleges, high schools, Youth Build, Conservation Corps, and similar established organizations. Funding for this pre-
apprenticeship training should be carefully calibrated to estimates of demand for new apprentices.

- Prop. 39 should support incorporation of energy related skills in high performing state-registered apprenticeship programs\(^2\), both through apprentice training and journey-upgrade training, in collaboration with the community colleges and adult education. This should include the incorporation of health and safety training on the specific risks in this sector.

- Prop. 39 should support high quality high school partnership academy, linked-learning pathway, and concurrent enrollment programs that demonstrate articulation with community college career technical education (CTE) programs that lead to jobs related to energy efficiency and clean energy.

- Prop. 39 should encourage partnerships among community colleges, adult education providers, local workforce investment boards, state approved apprenticeship programs, and other public programs to leverage multiple resources.

- Prop. 39 should encourage coordination and co-funding with other sources of workforce training in occupations relevant to energy efficiency and clean energy, including the CEC’s Energy Program Investment Charge (EPIC) funding and the investor-owned utility (IOU) ratepayer funds for workforce education and training.

Prop. 39 should designate the Labor Agency as lead agency to direct and manage research needed for successful implementation of workforce development investments and jobs programs, as well as data tracking and evaluation of the job impacts of Prop. 39. This includes:

- Research on labor demand and skill gaps, employer engagement, and other information needed to design successful training and education programs.

- Data tracking on the quantity and quality of jobs per dollar invested, the demographic and geographic profile of workers in these jobs, and the job placement and career outcomes (and costs) of training investments.

- Analysis of the impact on job creation of program characteristics and other dynamics in order to make annual recommendations for program refinements based on these findings.

\(^2\) Where high-performing is defined as those programs with graduation rates in excess of 50% of the average completion rate for the applicable trade over the previous 5 years