Joint Legislative Committee on Climate Change Policies and the Assembly Committee on Jobs, Economic Development, and the Economy.

August 30, 2017

Testimony:

Good afternoon. My name is Jim Caldwell, Sector Navigator for the Energy, Construction, and Utilities Sector within the *Doing What Matters for Jobs and the Economy* initiative of the California Community Colleges.

Thank you for the opportunity to provide testimony about the energy efficiency workforce for the built environment. I'll focus on energy efficiency in commercial buildings, in which the AB 758 Scoping Plan calls for half of California's 10 billion square feet of commercial building space to be Zero Net Energy by 2030.

The California Community Colleges are stepping up to the Zero Net Energy challenge as part of our Strategic Vision:

- By 2020, increase by 20% the number of CCC students who complete degrees, certificates, and specific skill sets that prepare them for an in-demand job
- Increase the percentage of Career Education students who report being employed in their field of study from 60 to 69 percent
- Reduce equity gaps among traditionally underrepresented student groups, with the goal of cutting achievement gaps by 40% within 5 years and fully closing those achievement gaps within 10 years.

Within this context, I'll lay out today's workforce landscape and describe solutions that we propose to implement with the California Workforce Development Board plus industry and Labor partners.

Here's the backdrop. In 2008, the state's energy efficiency workforce policy was made clear in the CEC's Energy Efficiency Long Range Strategic Plan …

> "By 2020, California's workforce is trained and fully engaged to provide the human capital necessary to achieve California's economic energy efficiency and demand-side management potential."

Where are the combined efforts of the state's career education providers in developing that workforce? The simple answer is that we don't know. There's no statewide plan, no metrics, no timeline, no progress report, and frankly - no urgency. But does it matter?

The evidence says it <u>does</u> matter. One example is Heating, Ventilation, and Air Conditioning (HVAC) – which accounts for 30 to 40% of energy consumption in buildings. According to the CEC, 50% of commercial HVAC systems are not installed and maintained to their specified level of performance. That percentage is 85% for residential HVAC. These findings are well-correlated with utility ratepayer-funded research that says two-thirds of

HVAC technicians have never received certification from an accredited training institution. It's unlikely that Zero Net Energy can be achieved with this kind of workforce.

Why do we have this problem? A major factor is that no organization is charged with solving it. The state's primary career education entities – community colleges, Apprenticeship Programs, and community-based organizations - all contribute to the solution, but are not aligned with each other or mapped to the SB 350 Clean Energy and Pollution Reduction mandates.

AB 398 takes a major step by requiring the California Workforce Development Board to deliver a plan to the legislature by January 1, 2019. It offers the potential for a statewide partnership that "owns" the workforce challenge: breaking down siloes, aligning initiatives, and leveraging multiple funding streams.

The good news is that a strong foundation for the plan is coalescing between the California Community Colleges and major industry associations. The recently-formed Coalition for Energy Efficiency organizes planning among the Community College System, Labor, and Environmental Justice organizations. Members of this Coalition are jointly developing training programs for Advanced Lighting Controls, Energy Storage, Microgrids, and Automated Demand Response – all of which address essential Zero Net Energy competencies that are seriously lacking in today's workforce.

It may seem counterintuitive, but training more people and cultivating higher skill levels are not the hardest parts of solving the workforce quality problem. Students – especially millennials – aren't lining up to enter the trades. It just not their thing, or so they think. Employers have trouble releasing their workers to be trained. Why would they? Most operate in a low-bid environment where workforce quality isn't valued, so they have trouble seeing training as a strategic investment.

A systemic change is needed. One that creates new student perspectives, stronger incentives for employers to develop a quality workforce, and alignment of investments in training programs with the highest contribution to the state's energy efficiency mandates.

And we need much better labor market data. Traditional sources do not address the demand for emerging occupations that are known to be critical in a Zero Net Energy workforce.

The workforce plan prescribed by AB 398 has the potential to affect this change.

The California Community Colleges have developed new models for energy efficiency career education as the foundation for replicating and scaling programs for a Zero Net Energy workforce. Our industry and Labor partnerships offer potential for leveraging disparate funding streams and aligning the state's primary training providers with California's energy efficiency mandates. It appears that many programs can be taken to scale and most of the remaining constraints can be minimized by the AB 398 workforce plan.

We are pleased to join the California Workforce Development Board, Labor, industry, and Environmental Justice organizations in developing a plan that effectively breaks down barriers to statewide alignment and maps out an effective integration strategy.

Thank you.

Attachment 1

California Community Colleges

Vision for Success: *Six Goals to Achieve by 2022*

• Increase by at least 20 percent the number of CCC students annually who earn degrees, credentials, certificates or specific skill sets to prepare them for an in-demand job;

• Increase by 35 percent the number of CCC students transferring annual to a UC or CSU;

• Decrease the average number of units accumulated by CCC students earning associates degrees, from approximately 87 total units (the most recent system-wide average) to 79 total units – the average among the quintile of colleges showing the strongest performance on this measure;

• Increase the percentage of CTE students who report being employed in their field of study from 60 to 69 percent – the average among the quintile of colleges showing the strongest performance on this measure;

• Reduce equity gaps across all of the above measures through faster improvements among traditionally underrepresented student groups, with the goal of cutting achievement gaps by 40% within 5 years and fully closing those achievement gaps within 10 years.

• Reduce regional achievement gaps across all of the above measures through faster improvements among colleges located in regions with the lowest educational attainment of adults, with the ultimate goal of fully closing regional achievement gaps within 10 years.

http://californiacommunitycolleges.cccco.edu/Portals/0/Reports/vision-for-success.pdf

Attachment 2

The Coalition for Energy Efficiency

(1) BlueGreen Alliance
(2) Sierra Club California
(3) California Community Colleges Chancellor's Office
(4) Coalition of California Utility Employees
(5) Joint Committee on Energy and Environmental Policy
(6) Coalition for Clean Air
(7) IBEW-NECA California State Labor Management Cooperation Committee
(8) California Labor Federation
(9) Western States Council of Sheet Metal, Air, Rail and Transportation Workers
(10) California State Pipe Trades Council
(11) Operating and Stationary Engineers, locals 39 and 501
(12) Avery Energy Enterprise; and
(13) Cal SMACNA (California Association of Sheet Metal and Air Conditioning Contractors, National Association)