



## ENERGY WORKFORCE SECTOR STRATEGY

# Energy Workforce Sector Strategy (EWSS) Sacramento Regional Industry Forum September 17, 2013 Co-hosted by Green Capital Alliance and Sacramento Employment and Training Agency

## Meeting Minutes

### PARTICIPANTS

Terri Carpenter, Sacramento Employment and Training Agency (SETA), Public Information Officer

Jim Caldwell, Workforce Incubator, CEO

Christopher Cole, SMUD, Principal Energy Advisor

Michael Day, BESTCO (Beutler Energy Services and Technology Company), Division President

Ben Finkelor, UC Davis Energy Efficiency Center, Executive Director

Rick Garbrick, Barnum & Cellilo Electric, Inc., Maintenance/Sustainable Energy

Brad Hurte, Workforce Incubator, Senior Consultant

Kathy Kossick, SETA-Sacramento Works, Executive Director

Rick Larkey, North State Building Industry Foundation, Director – Workforce Development

Kelvin Marshall, SMUD, Principal Energy Advisor

Suzanne Mayes, Green Capital Alliance, Project Manager

Robin Purdy, SETA-Sacramento Works, Deputy Director

Derek Reichstein, Ygrene Energy Fund, Commercial Energy Advisor

Bill Sherbet, BASC Solutions, President

Baldeo Singh, Sacramento Conservation Corps, Director of Work Training Programs & Operations

JD Stack, Workforce Incubator, Senior Consultant

Donnetta Webb, Sacramento City College, Dean – Advanced Technology Division

Susan Wheeler, SMUD, Workforce Planning and Education Relations Strategist

Farah Wissinger, Sacramento Unified School District, Manager – Environmental Sustainability

Jon Zeh, Sacramento City College, Chair – Mechanical Electrical Technology Department

### PRESENTATIONS

- JD Stack opened the meeting. He described PG&E's Energy Workforce Sector Strategy (EWSS) Projects and pointed to policies that are driving energy efficiency (EE) adoption.
- Suzanne Mayes and Terri Carpenter also welcomed participants and described Valley Vision's Green Capital Alliance and workforce programs of SETA-Sacramento.
- Jim Caldwell then presented an overview of the Energy Workforce Sector Strategy (EWSS) project. This included:
  - Energy efficiency market drivers
  - EWSS research process



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▪ Long-term and near-term employment outlook

▪ Distribution

of job openings by region

- Survey of education and training programs pertinent to energy efficiency
- Current and planned portfolio of energy efficiency training programs
- Brad Hurte then walked participants through slides of the EWSS web portal that focused specifically on the employer resources section of the portal and its linkages to various college and university programs relating to energy efficiency. He asked for feedback and suggestions for improving the portal content.

### **OPEN DISCUSSION**

#### **Key Points:**

1. M. Day observed that CSUS used to have a strong HVAC program in its engineering department but no longer does. He suggested they need to be stimulated to re-introduce it.
2. M. Day said more companies are placing weight on third party certifications (e.g., certified energy auditor, certified energy manager).
3. R. Larkey pointed out that Cosumnes College and Sacramento City College have building inspection programs.
4. R. Purdy noted that CSUS has a Sustainable Facilities Manager program.
5. M. Day described a frustrating process to develop a curriculum for a commercial energy auditing course as a contractor. After months of work developing instructional materials based on industry-accepted software models and signing up several dozen potential customer projects, a single project manager nixed reference to the specific model used. That decision essentially debilitated the program in spite of efforts to appeal the decision. As a result, actual project done dropped to just 5-6 and firms such as his ended up having to lay off EE staff. He emphasized the need to lock down the project methodology before proceeding and to maintain consistency in the process. He suggested a workforce ombudsman or advocate be assigned (within CPUC or IOUs) to identify where companies may have to lay off people due to process delays or decisions that may damage a program. "Currently, there is no way to appeal or fix such problems."

#### **Feedback on EESectorStrategy.com Employers Section**

1. R. Larkey said the Employer Resources section was helpful information.
2. M. Day thought it was not much different from information displayed by colleges and he could not see the value-add.
3. S. Wheeler countered that compiling this resources within one source is very helpful.
4. M. Day acknowledged that it could be useful information for counselors and students to help them fine-tune their last two years of schooling.
5. T. Carpenter highlighted Sacramento's tool known as [CareerGPS.com](http://CareerGPS.com), which provides one clearinghouse of all training programs and quarterly demand forecasts of employer hiring.
6. R. Purdy suggested the web portal link to the EDD's [CalJobs](http://CalJobs) website, which is the state's job matching system.



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### Feedback on Priority Occupations and Career Paths

1. M. Day identified HVAC installers as a priority because of expected increased demand due to tremendous backlog of equipment replacements since 2007-2008. “This will be a demand driver for the next few years, then it may decline. It’s a cyclical pattern in the industry.” Another driver of HVAC demand is increased absorption of commercial space as the real estate market recovers. “Absorption drives replacement of HVAC systems.”
2. M. Day also expects HVAC will shift to more of an IDSM market due to CPUC policy directives. “EE will compete for talent with Demand Response and Generation. Within five years big ESCOs will own and lease-back systems to customers.” Third-party aggregation will also become much bigger.
3. Specific skill needs M. Day expects to grow are:
  - Energy modeling and standards and methodology
  - Building energy auditors
  - Monitoring and verification using sensors and data
  - Information technology skills such as controls and networking
  - Sales training
4. He predicts that in the next six years the EE market will change more than it has in the past 60 years.
5. R. Garbrick identified advanced lighting controls tied to automated demand response (ADR) systems will be a new area with significantly increased demand. People will need to know much more than how to install lighting. They will have to understand the whole lighting management system. He believes there will be a need for certifications on energy management systems (EMS), automated lighting controls (ALC), and automated demand response (ADR) systems.
6. M. Day said, “I agree completely”. The new part will be the IT guy who will need to lay components on top of HVAC, plumbing, and electrical trades (e.g., automated generation signal (AGS) systems for voltage regulation and ancillary services on the grid).
7. Both M. Day and R. Garbrick the lighting field is changing dramatically from a maintenance function (i.e., changing T12s to T8s) to installing and managing advanced lighting controls that will be required by the new Title 24. “The old lighting guys will be in decline 7 years out.”
8. J. Zeh believes the demand for building commissioning will increase significantly. He suggests that a 2-year degree is a good place to start on this and then to supplement that with 2-3 weeks of manufacturer training. “A good path would be a two year commissioning program followed by CALCTP certification and then manufacturers’ training and certification.
9. M. Day strongly argued for field experience immediately after completing training courses, or else the training value will diminish quickly. “That’s when training clicks in to complete understanding.” He suggested paid internships of 2-4 weeks could offer students field experience to cement their book learning and offer employers to determine which workers will work out best as employees. He recommends that WE&T dollars be used to fund the paid internships because employers are likely to be reluctant to pay this on top of their cost to pull aside a top producer for training interns.
10. R. Larkey mentioned that the North State Building Industry Foundation has a paid-internship program for out of work youth. The foundation, as employer of record, pays for workers comp and most of the wage, thereby reducing the employer’s cost and liability. He said this infrastructure could be employed for EE field training as well.
11. R. Garbrick added that he needs people who understand commercial codes.

### Next Steps

1. R. Larkey suggested the first step is to get clear in identifying certificates needed for each occupation and set of standards. Then for the existing workforce identify who needs training, who



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should do the training, and finally establish direct field experience in conjunction with training courses. “Internships must dovetail with the training.”

2. M. Day recommended local government partnerships (LGP) as a way to integrate training components with scheduled projects to enable field experience opportunities.
3. D. Webb said that contractors under Title 24 will need people with funded field experience. “Perhaps some WE&T dollars and WIB funds could be used to put these pieces together in an integrated fashion.”
4. M. Day concluded by advocating that a consistent evaluation system needs to be set up first. Then other components of training and experience will fall into place.

Minutes prepared by JD Stack.

Corrections can be sent to [JD@EmpowerAdvisors.com](mailto:JD@EmpowerAdvisors.com).