



Statewide Workforce Education & Training BUSINESS PLAN | STAGE 2

May 3, 2016



Statewide Team & Local Implementation

Mission

- To facilitate, support and provide subject matter expertise for the transfer of energy efficiency knowledge and skills to the industry across all sectors, balancing the needs of the State, customers and our communities.

Vision

- Be an innovative statewide advisor and leader of workforce education and training to help meet the State's energy efficiency goals, leverage the collective strength of the four IOUs, become more effective, and activate a strategic network of partners.

Customer Profile

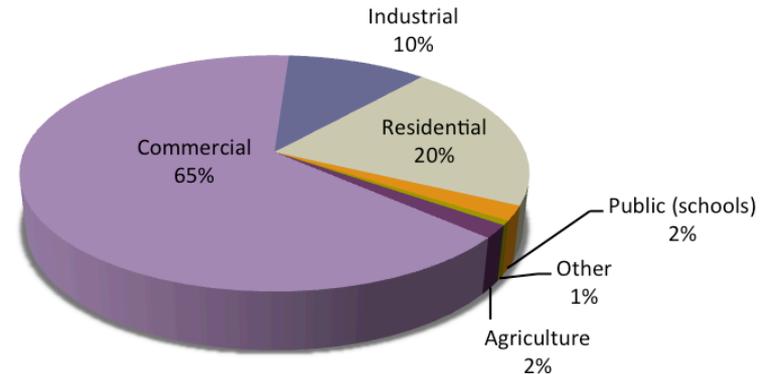
Customers and In-House Staff/Decision Makers

- Building Owners/Homeowners
- Facility Managers
- CEOs/Business Owners
- Developers

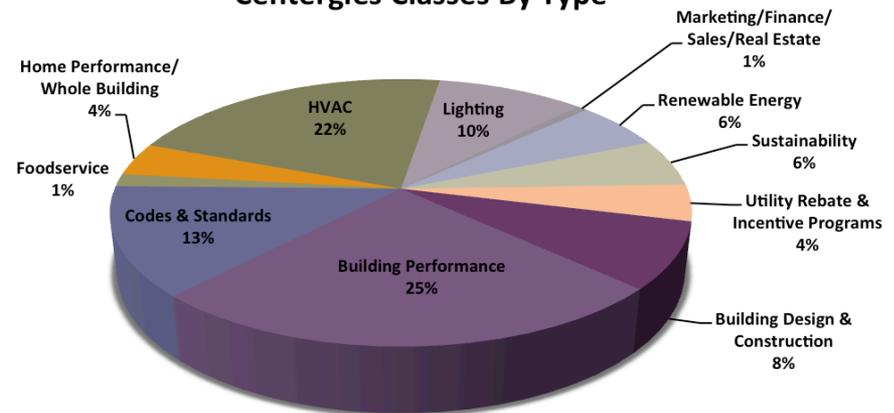
Market Actors: Influence and Serve Customers

- Designers & Architects
- Contractors & Builders
- Engineers
- Educators
- Future Market Actors – Students, Workforce

Centergies Offerings by Sector



Centergies Classes By Type



Market Reach

Industry Area	Market Actors (Statewide)	Estimated Reach by Centers	Percent Reached (Statewide)
HVAC and Refrigeration	19,700	9,427	44%
Government Agency/Regulatory/Inspector	12,500	3,263	26%
Engineering/Architectural Design	58,200	13,053	22%
Lighting	68,300	8,339	12%
Construction	161,200	9,064	6%
Boilers/Water Heating Sales	56,000	3,263	6%
Other	55,800	2,901	5%
Motors	49,400	2,538	5%
Facility Operations and Maintenance	163,000	3,263	2%
Energy Technology Research/Consulting	N/A	5,801	N/A
Pumping/Hydraulic Equipment	N/A	2,175	N/A
Renewables	N/A	5,076	N/A
Don't Know/Refused	N/A	2,175	N/A

Source: Opinion Dynamics (2010) p. 58.

Key Collaborators & Partners

- **Training Providers**
- **Trade Associations**
- **K-12 and Post-Secondary Education**
- **Industry**
- **Government Agencies**
- **Unions**
- **Community Based Organizations (CBOs)**
- **Local, Regional and State Government**

Gaps to be Addressed

- Effective interaction with resource programs and other programs
- Aligning demand with necessary resources
- Identifying partners to strategically extend reach and outcomes
- Ensuring relevancy and value of classes to market and customers
- Serving the audiences who fulfill the program's objectives
- Clearly defined role and scope of the WE&T program
- Metrics that demonstrate impact and outcomes

Overarching Challenge

- Magnitude, breadth and depth of audiences that require training and education to meet State energy goals
- WE&T is only one part of this solution and focused on energy efficiency. In order to have long-term impacts, WE&T cannot do this alone.

“It is not the core mission of utilities to effectuate the level of change needed to create a comprehensive WE&T program, nor can ratepayers fully fund the effort.”

*Instead it envisioned the IOUs “as a catalyst to action by sponsoring several foundational activities...to review their existing programs and **better align them within the context of a comprehensive WE&T strategy.**”*

(CPUC, CAEESP, Section 9-page 75)

Problem Statement 1.

There are thousands of disconnected education and training providers in California, and while energy efficiency may be important to some of the providers it is rarely THE priority.

Further, students/learners/business owners have limited motivation to engage in Energy Efficiency education.

Summary of Providers

Focus	Type	# Sites	Program Tracks
Workforce Development	Workforce Investment Boards	49	
	One-Stop Centers	259	
	Regional Occupation Programs	–	211
Post-Secondary Education	Community Colleges		
	Adult Schools		
	Regional Occupation		
	CSU/UC		
Other Training Resources	Community Based O		
	Apprenticeship (Join		
	Private Training Org		
Certification Organizations (may not be exhaustive list)	<ul style="list-style-type: none"> • Building Performance • LEED • Northern American Excellence (NATE) • Refrigeration Services Engineers Society (RSES) • RESNET • No. American Board of Certified Energy Professionals (NABCEP) 		

“California’s workforce development infrastructure is made up of a complex web of institutions providing skills development, job matching and other workforce development activities. These institutions are funded by a variety of state and federal programs and sources, including, but not limited to, private employers, student fees, and charitable contributions.”

DVC Needs Assessment, p. 121

Solution 1. Collaborations

Target value-added collaborations with other education and training providers and statewide stakeholders.

Objective

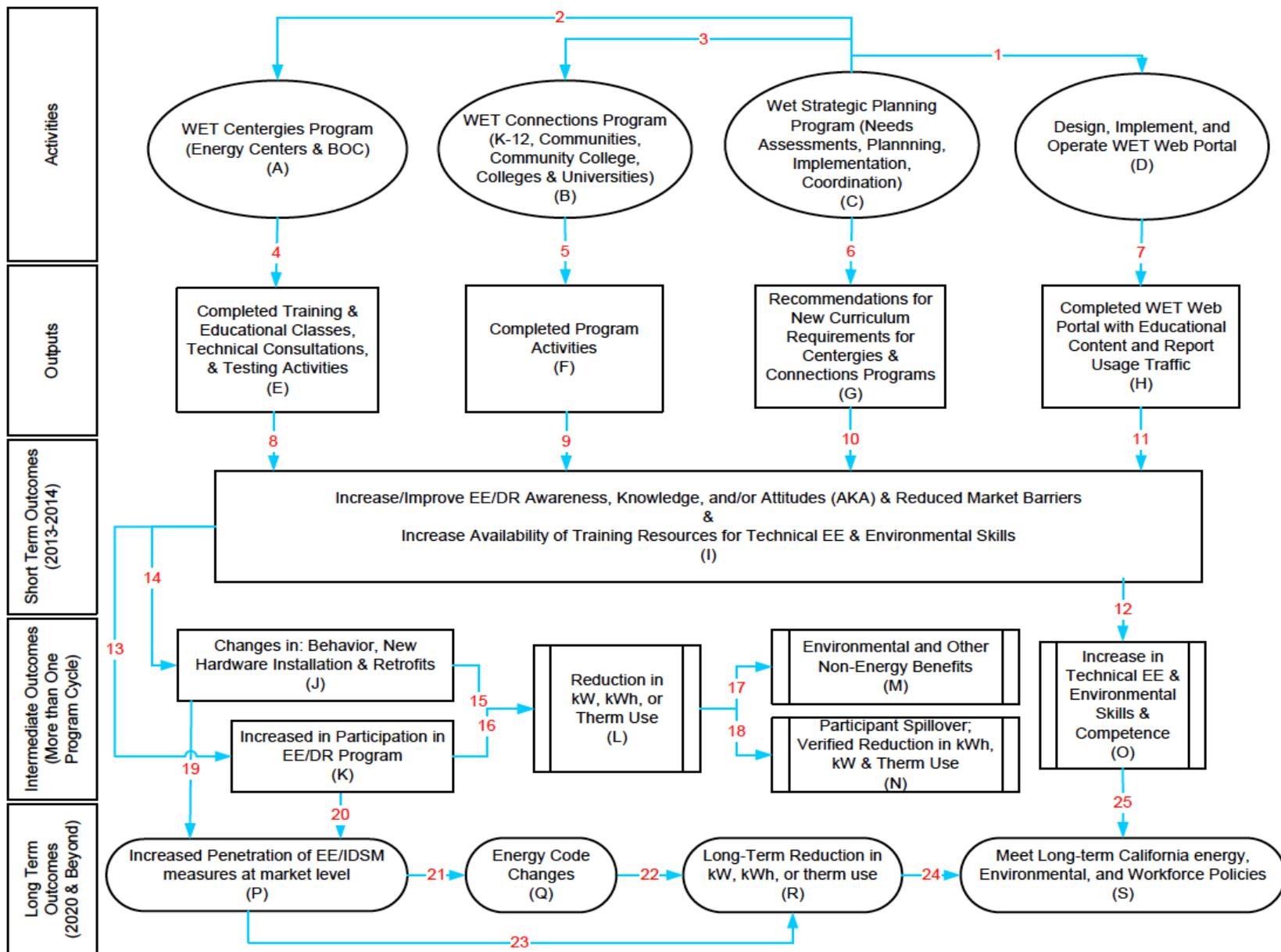
- The network of collaborators will complement, focus, and/or expand WE&T's reach and depth of EE concepts and activities with key audiences.

Strategies

1. Develop and maintain a **network “map” of partners**, collaborators and education providers and use as a guide for targeting value added relationships.
2. Establish **communication tools and resources** for potential participants to navigate and determine the right programs and provider for their need.
3. Address energy efficiency training and workforce development **gaps and needs** statewide by creating and fostering targeted collaborations as appropriate.
4. Establish an EE sector “data feed” process to receive and **analyze jobs/EE forecast** data on an annual or semi-annual basis

Problem Statement 2.

- The scale and dynamic nature of the educational landscape (and the energy industry) means there are a large number of stakeholders, resource and regulatory inputs across the State.



Opinion Dynamics, "2013-2014 Statewide WE&T Program: Program Theory and Logic Model Update"

Solution 2. Engagement & Feedback Process

Establish a comprehensive internal and external engagement and feedback process to ensure WE&T provides the right services to the right audience through the right channels.

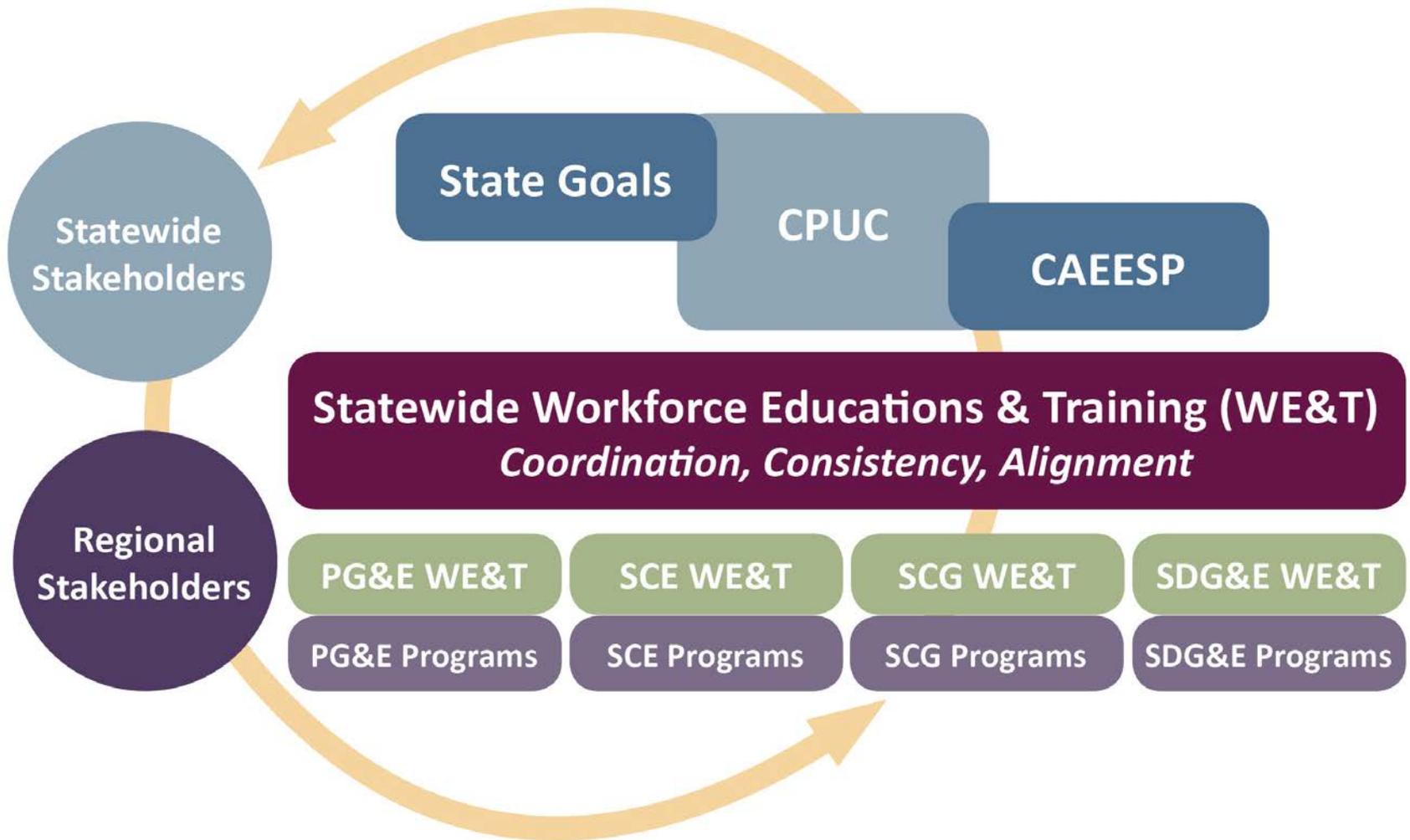
Objective

- Stakeholders will be actively engaged and part of a process of continuous improvement and feedback.

Strategies

1. Continue to refine the process of **engagement with internal and external stakeholders**, started with the Statewide Engagement Forum, that allows for iterative feedback and continuous improvement of WE&T Statewide Programs and informs Regional WE&T program.
2. Utilize input and insights from process to **inform statewide priorities** and as a tool for program planning and refinement.

Solution 2. Engagement & Feedback Process



Problem Statement 3.

- Each audience type — market actors, customers and decision makers — require diverse delivery, content and delivery approaches to meet their skill level, availability, needs and interests. Each audience type has a different potential impact on achieving the state goals.

“... a high-performance building, requires the deliberate consideration and integration of many attributes. In addition, **the building owner and design team need to address the planning, financing, design, construction, operations and maintenance of the building in a holistic and interdisciplinary manner.**”

- High Performing Building Council Fact Sheet

Learning and Teaching Trends

- Big Data
- Collaborative learning
- Digital and online learning
- Interest-driven
- Skills 2.0



Solution 3. Access & Reach

Improve and expand access and reach, build awareness and make it easier to participate in WE&T programs.

Objective

- Key audiences participation, depth of knowledge, and satisfaction increases.

Strategies

1. Develop a **data-driven marketing strategy** and approach/campaign to target key audiences to participate.
2. Explore and implement **technological and customer-driven solutions** for education and training offerings targeted to occupations and sectors.
3. Establish participant tracking and **satisfaction measurement tools** and protocols to be implemented locally.
4. Revamp WE&T online presence via IOU websites, statewide energy efficiency sites and other providers' sites to allow for **ease of access, understanding and gathering of information.**

Problem 4

- Traditional data sources and metrics are not relevant and timely enough for WE&T to develop the highest value programs

“... providing courses that align with Adult Learning Principles and skill-building are more costly than courses that largely focus on presenting and disseminating information. One of the three current PPMs monitors the number of classes offered rather than the level of training offered. If PPMs continue to only cover the number of courses then the Centers will naturally focus on the cheapest way to get a large number of classes to the market.”

Opinion Dynamics, “2013-2014 Statewide WE&T Program: Program Theory and Logic Model Update; Centergies Data Needs; And Critical WE&T Data Needs”, 2014

Adding Value . . .

- Data correlation to market influencers and education of those market influencers supports a more targeted approach to reaching the highest impact areas in achieving the increase in savings.
 - SB 350 – Clean Energy
 - AB 802 – Benchmarking & Data
 - AB 758 – Existing Buildings
 - And More...

“The IOUs are interested in better understanding the impacts of WE&T... to identify patterns in the types of courses, student profiles, or learning methods utilized in courses where course content is being implemented as part of the student’s job. ... The study can also potentially lead to metrics for WE&T beyond counting classes and number of students.”

CPUC, “Energy Efficiency – Evaluation, Measurement and Verification Plan, Version 6, 2013 – 2016”, 2015 page 300.

Solution 4. Efficient, Effective & Accountable

Ensure that Statewide WE&T efforts are managed and implemented to be efficient, adaptable, and accountable.

Objective

- Targeted market and customer data analysis and project management leads to more relevant and valuable programs that support energy savings.

Strategies

1. Determine **data needs** for Statewide WE&T administration and evaluation to ensure progress towards identified goals.
2. Create a routine process to **collect and disseminate data analysis and recommendations** to regional IOUs.
3. Identify **clear and measureable metrics** for education and training offerings.
4. Combine the Centergies, Planning, and Connections subprograms to establish a **single, comprehensive WE&T program**.

Overarching Solution: Statewide Initiatives

Create statewide, integrated, WE&T initiatives to support State goals and implement regionally.

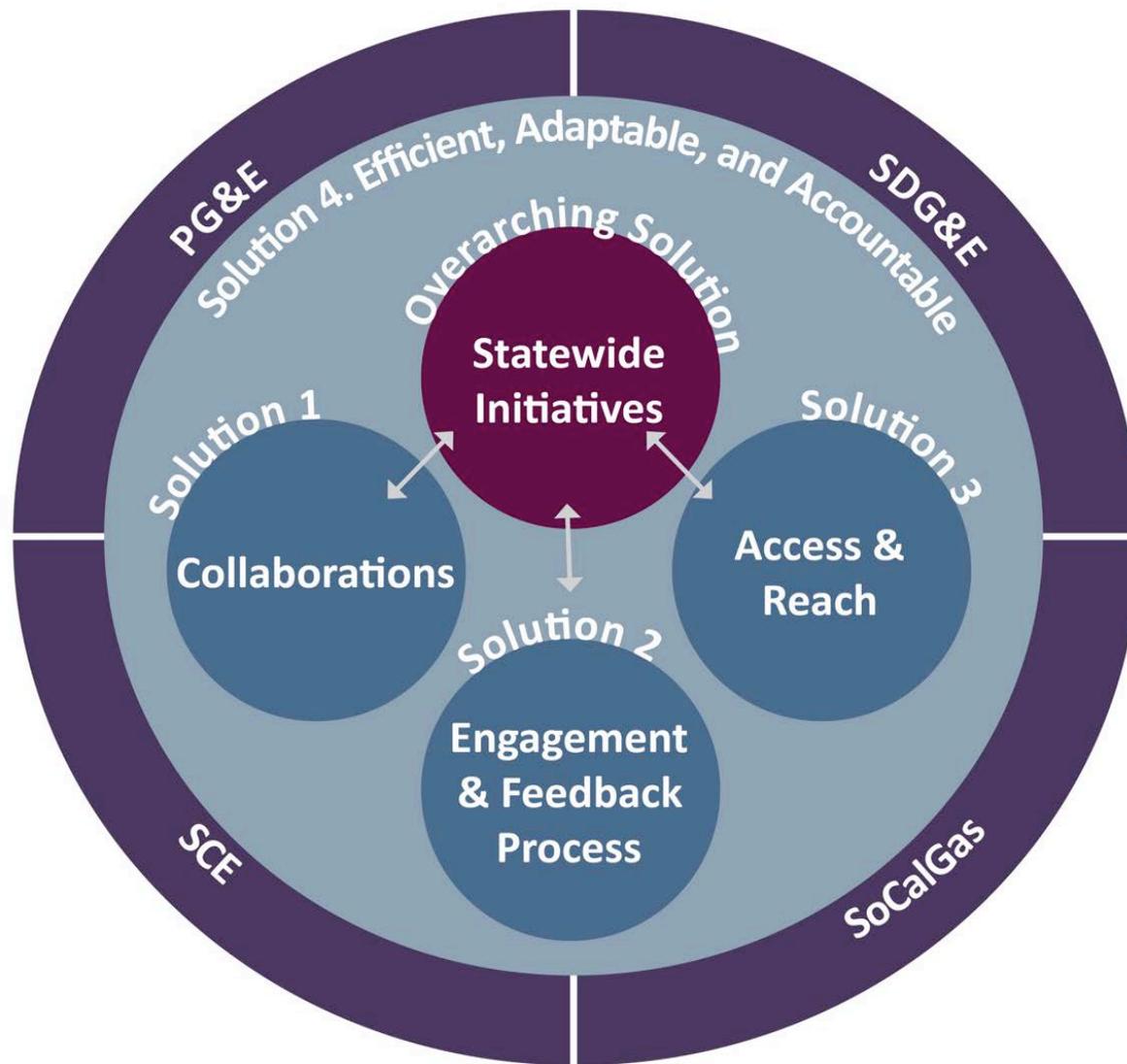
Objective

- WE&T programs are aligned to State needs and goals and provide a consistent framework for the four IOUs.

Strategies

1. Establish and utilize criteria to identify, refine, and manage statewide initiatives that are inline and appropriate to the role of the WE&T program
2. Establish an implementation framework for statewide initiatives

Overarching Solution: Statewide Initiatives



Success Indicators & Outcomes

- EE Resource Programs and external stakeholder groups look to WE&T for energy training content and expertise
- WE&T programs are aligned with future training needs of internal and external partners



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