

ENERGY WORKFORCE **SECTOR STRATEGY**



Executive Committee

Of the Advisory Council

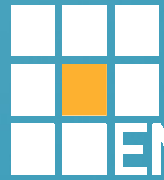
March 11, 2013

Agenda

Purpose: Guidance for the March 28th Advisory Council

Agenda:

- Review 2012 Findings and 2013 Plan
- Establish Advisory Council Agenda
- Define Executive Committee's Ongoing Role



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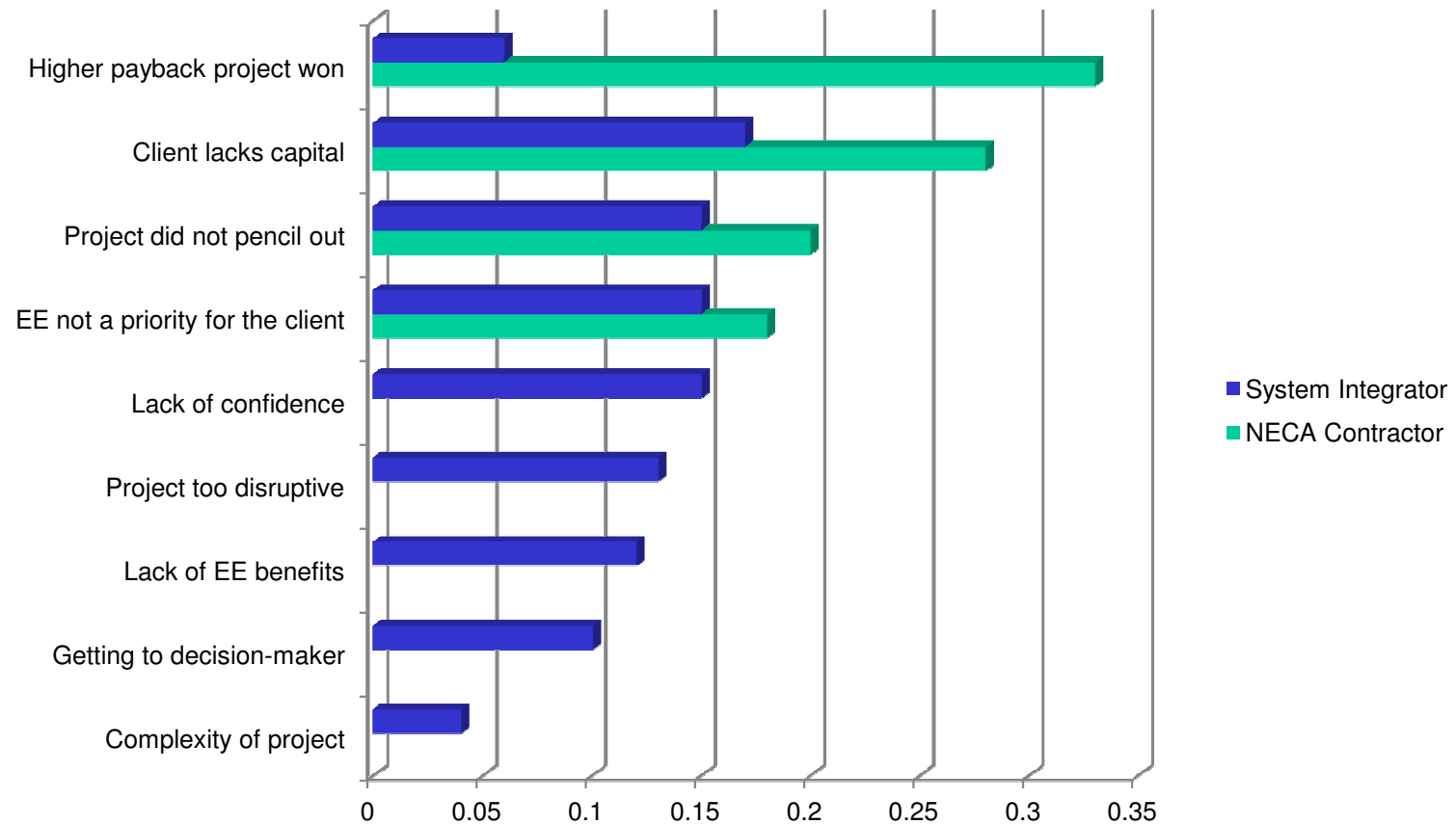


2012 Findings

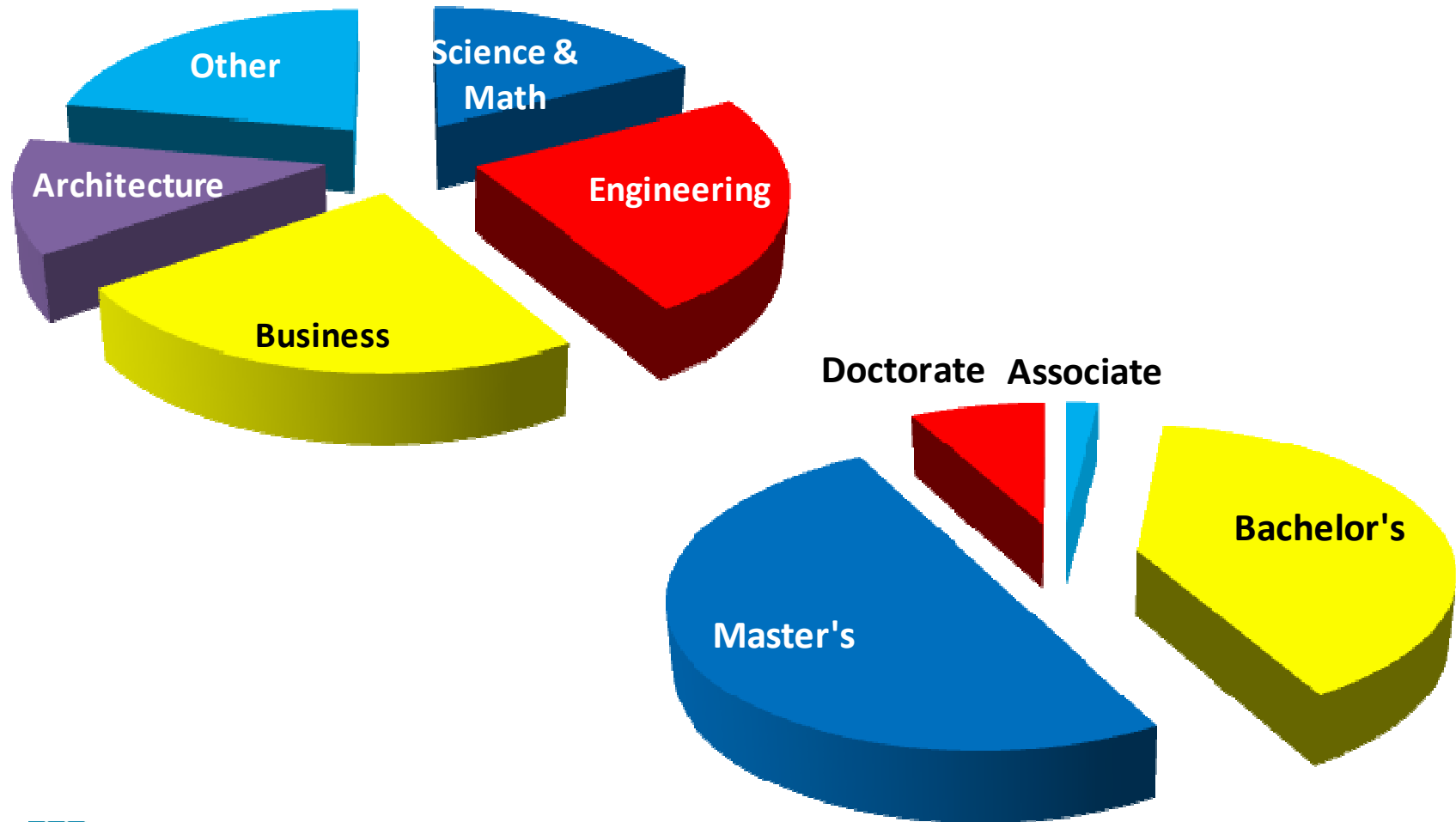
2012 Findings

- Barriers to Market Adoption
- Profile of Top-Performing Professionals
- Geographic Distribution of In-demand Jobs
- Job Openings Mapped to College Programs

Barriers to Market Adoption

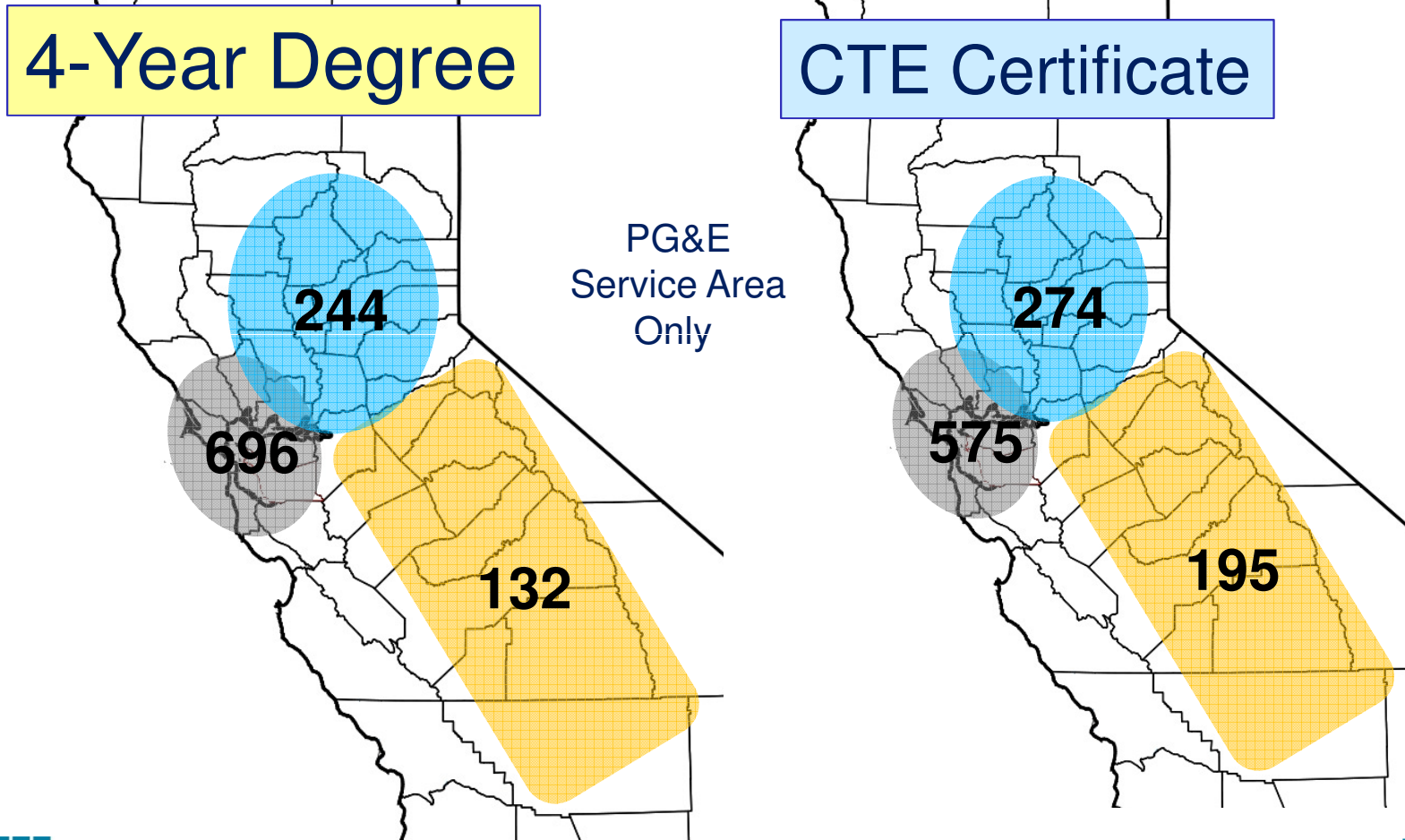


Profile of Senior Energy Professionals



Annual Distribution of Job Openings

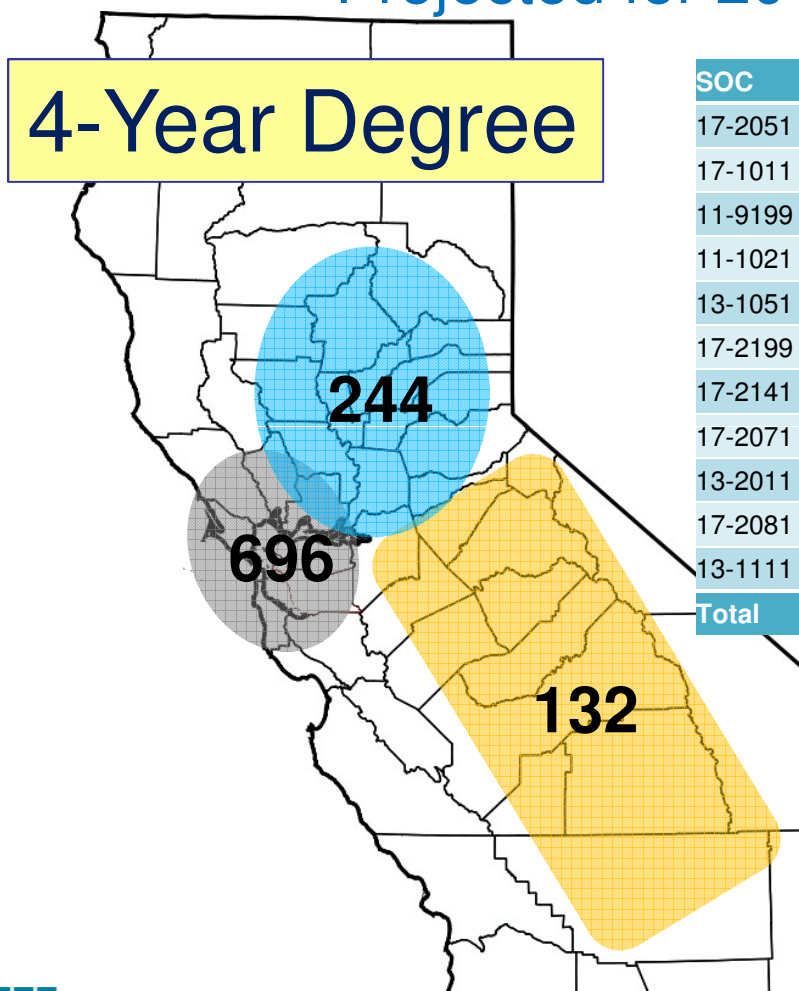
Projected for 2012 - 2016



Annual Distribution of Job Openings

Projected for 2012 - 2016

4-Year Degree

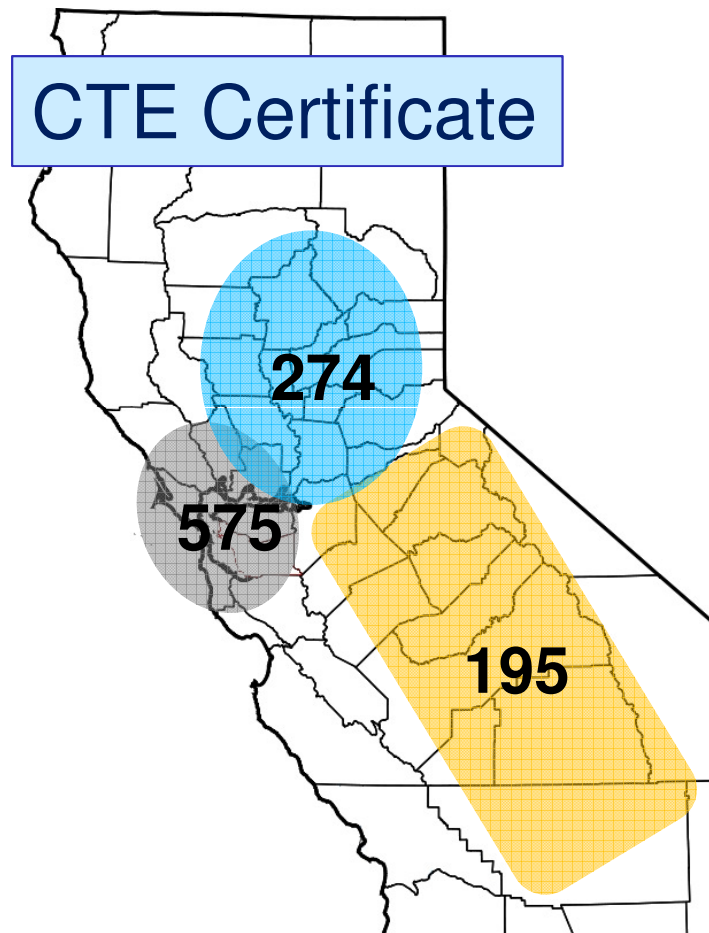


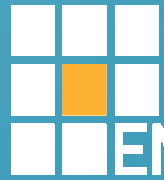
SOC	Brief Description	Bay	North	Valley	Total
17-2051	Civil Engineers	216	70	32	318
17-1011	Architects	162	47	16	225
11-9199	Managers	70	25	11	106
11-1021	Operations Managers	51	20	11	82
13-1051	Cost Estimators	40	20	10	70
17-2199	Engineers	41	17	7	65
17-2141	Mechanical Engineers	36	14	14	64
17-2071	Electrical Engineers	24	14	7	45
13-2011	Accountants	21	8	8	37
17-2081	Environmental Engineers	16	5	10	31
13-1111	Management Analysts	19	4	6	29
Total		696	244	132	1,072

Annual Distribution of Job Openings

Projected for 2012 - 2016

SOC	Brief Description	Bay	North	Valley	Total
47-2111	Electricians	149	86	75	310
47-2152	Plumbers	109	44	26	179
47-2031	Carpenters	94	46	20	160
47-1011	Construction Supervisors	86	43	21	150
11-9021	Construction Managers	46	20	15	81
49-9021	HVAC Installers	32	13	20	65
47-4011	Construction Inspectors	32	12	9	53
47-2211	Sheet Metal Workers	27	10	9	46
Total		575	274	195	1,044





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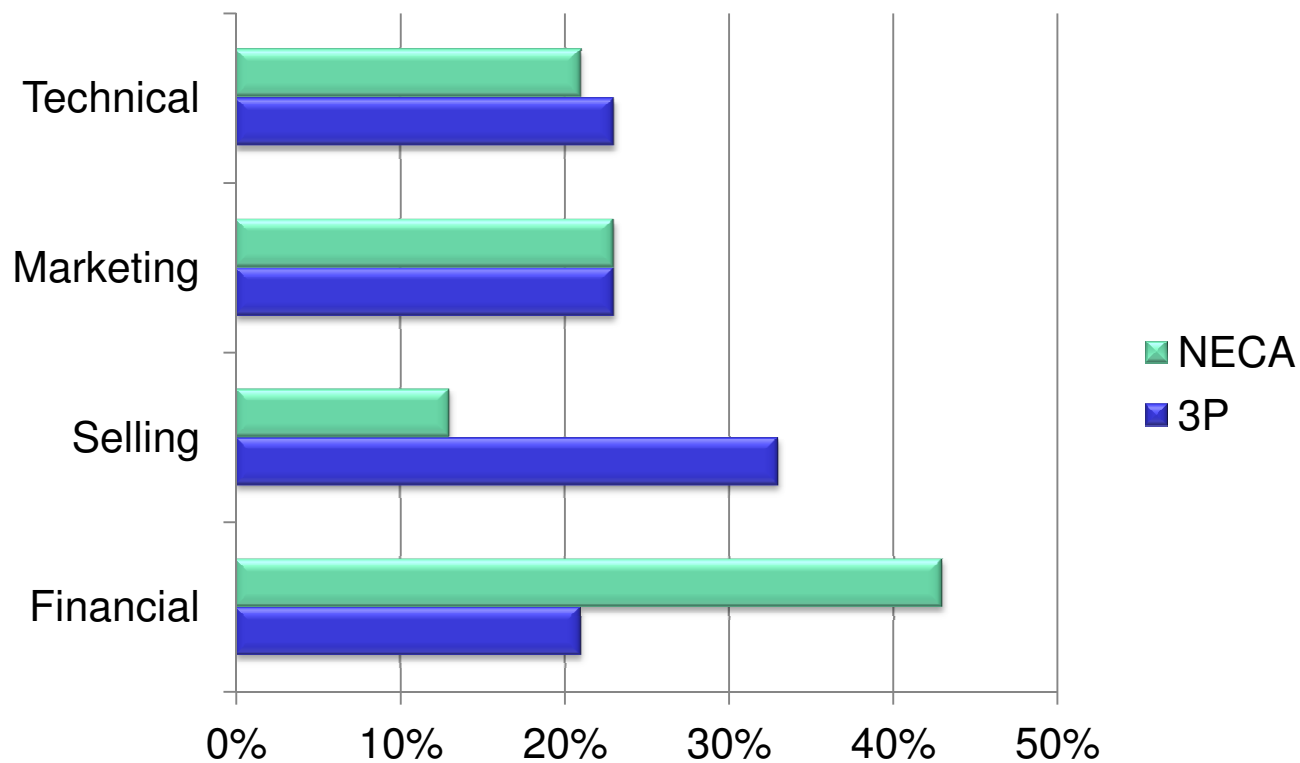


2013 Plan

Key Deliverables

- Business Development Course
 - *Address barriers to market adoption*
- Career Pathway Development
 - *Expand pipeline for recruiting*
- Resource Portal
 - *Education & training programs*
 - *Recruiting source*
- Integration with Other Initiatives
 - *IOUs' HVAC strategy*
 - *CALCTP / Western Cooling Center*

Business Development Course



CSU Programs

Highest Relevance to Energy Efficiency

Cal State Chico

- Civil Engineering
- Electrical & Electronic Engineering
- Mechanical Engineering
- General Construction

San Francisco State

- Civil Engineering
- Mechanical Engineering
- Electrical & Electronic Engineering

CSU East Bay

- General Engineering
- General Construction

San Jose State

- Civil Engineering
- Electrical & Electronic Engineering
- General Engineering
- Mechanical Engineering

Sacramento State

- Mechanical Engineering
- Civil Engineering
- Electrical & Electronic Engineering
- General Construction

Fresno State

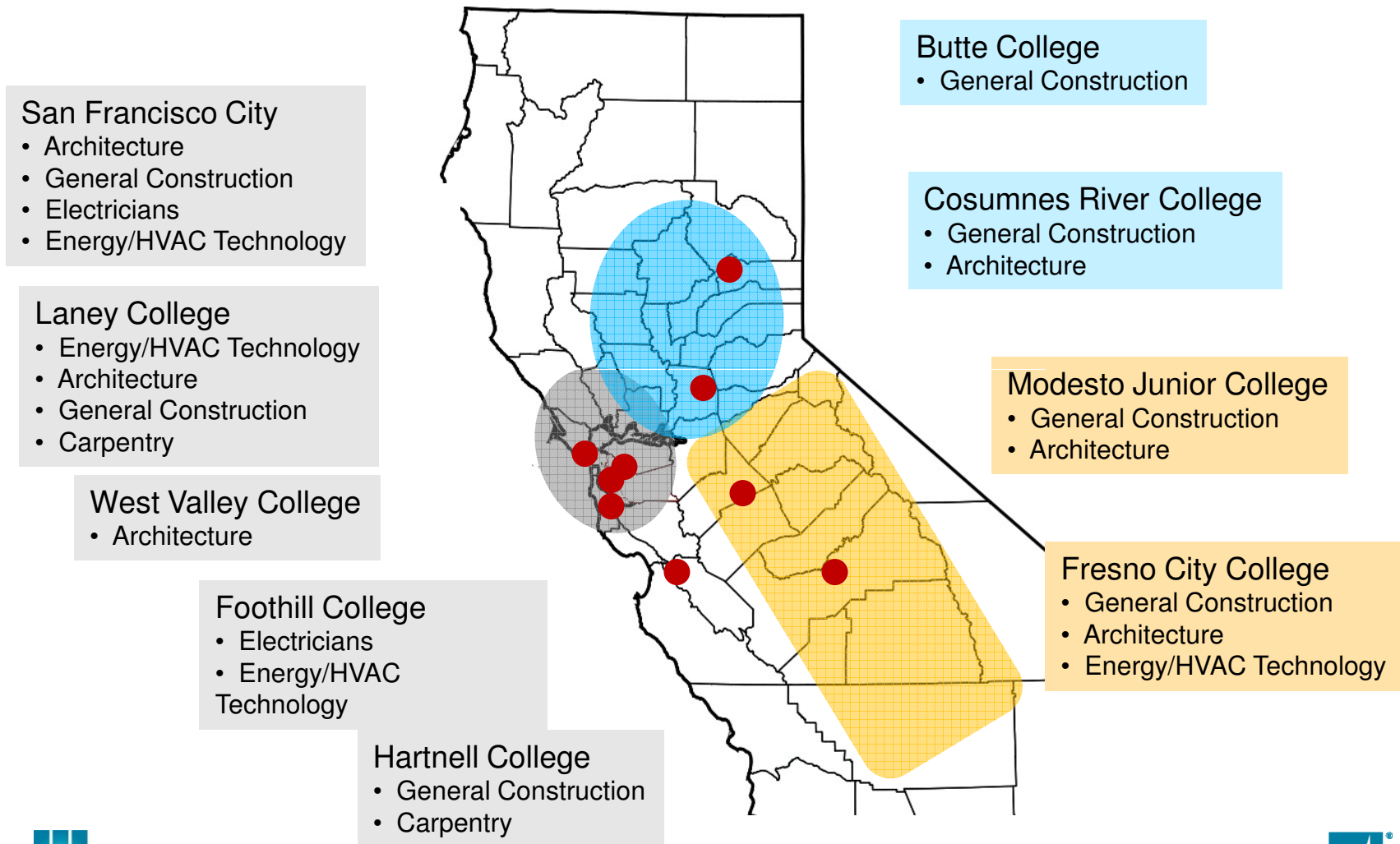
- Electrical & Electronic Engineering
- Mechanical Engineering
- Civil Engineering
- General Construction

Cal Poly San Luis Obispo

- Architecture
- Mechanical Engineering
- Civil Engineering
- Environmental Health Engineering
- Electrical & Electronic Engineering
- General Engineering
- General Construction

Community College Programs

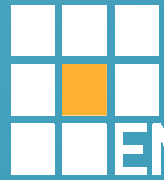
Highest Relevance to Energy Efficiency



New Portal Content

- Career Pathways
 - *Tier 1 Colleges – programs and pathways*
 - *Education & training schedules*
 - *Opportunities for industry engagement*
- Recruiting Source
 - *Class graduation schedules*
 - *Link to resumes of graduates*
- Links to Other Programs
 - *IOU HVAC Strategy*
 - *CALCTP*
 - *Western Cooling Center*

www.eesectorstrategy.com

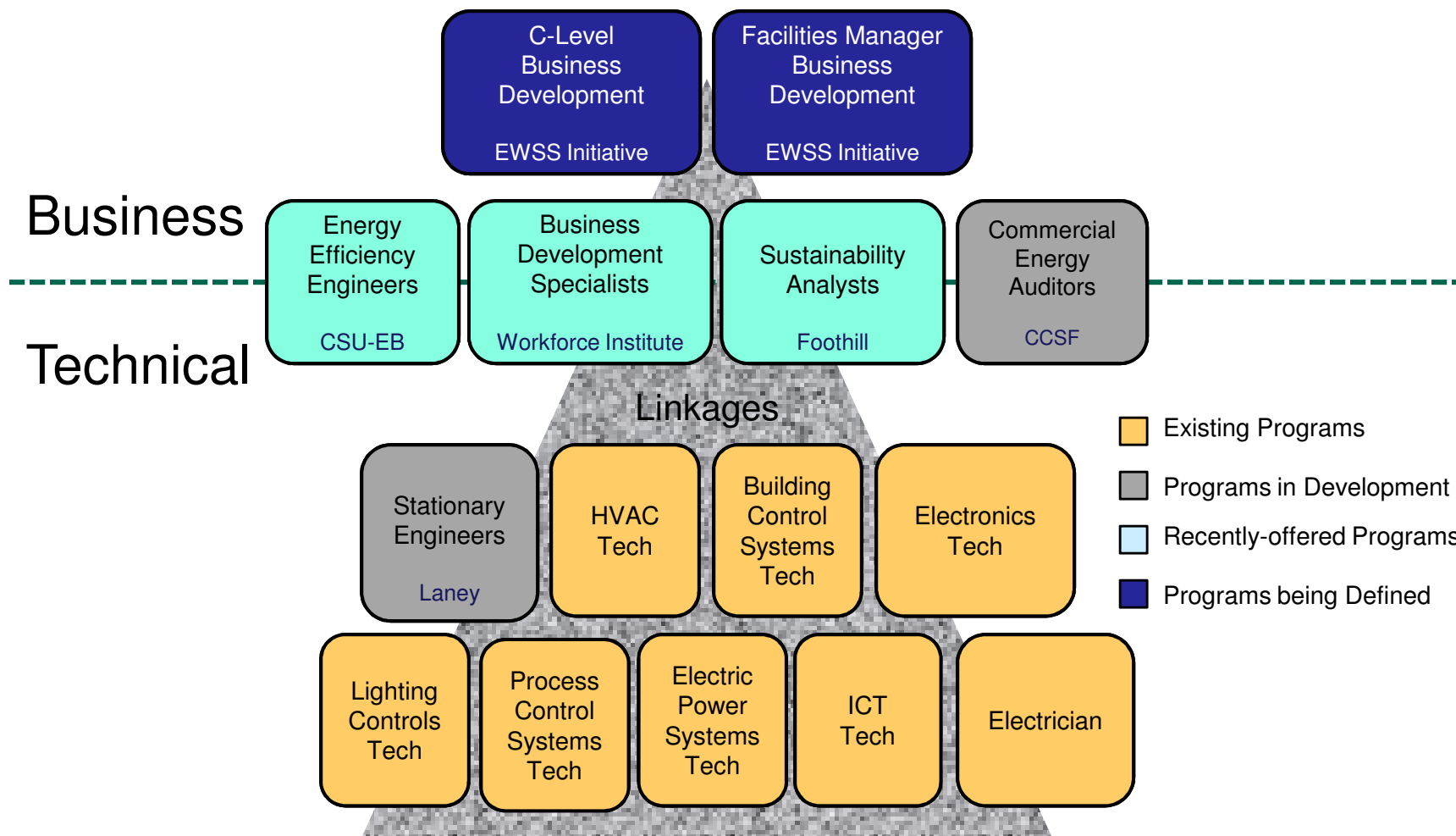


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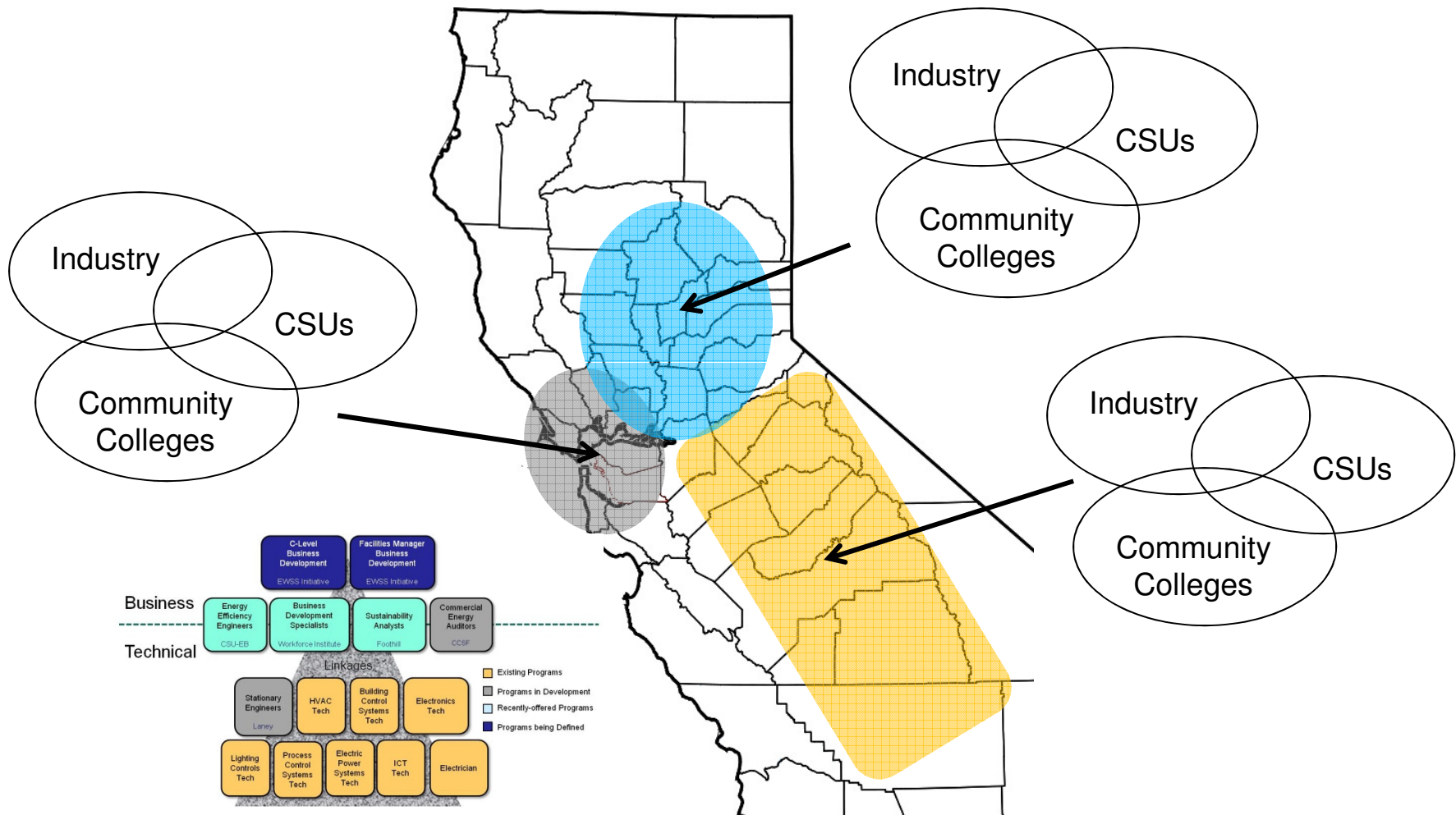


Guidance for Advisory Council

Energy Efficiency Training Portfolio



Regional Alignment



Regional Prioritization

- Drive Market Growth
 - *Addressing Barriers*
 - *Capacity in Critical Jobs*
- Define Workforce Needs
 - *Incumbent Worker Up-skilling*
 - *New Employee Pipeline*
- Address Gaps
 - *Programs*
 - *Pathways*
 - *Subject Matter Expertise*
 - *Instruction*

Promote Regional Training



Professional Categories

Civil Engineers	318
Architects	225
General and Operations Managers	80
Construction Managers	79
Mechanical Engineers	64
Engineers, all other	62
Accountants & Auditors	31
Management Analysts	26
Environmental Engineers	25

CTE Categories

Electricians	309
Plumbers, Pipefitters, & Steamfitters	179
Carpenters	161
First Line Supervisors	129
Managers, all other	107
Cost Estimators	69
HVAC/R Mechanics & Installers	60
Construction & Building Inspectors	55
Sheet Metal Workers	45

Economic Modeling Specialists Inc., 2012

Propose New Training Courses

Curriculum Available

- Integrated Energy Solutions
 - *120 hour course for engineers (CSU East Bay)*
- Commercial Energy Auditor
 - *Flexible course design for multiple applications (CCSF)*
- Energy Efficiency in Building Solutions
 - *80 hour course for Sustainability Analysts (Foothill)*

Regional Portal Updates

Create Broad Access to Information



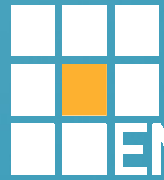
Advisory Council Proposed Agenda

- Recap of 2012 Accomplishments
- Review 2013 Plan
- Executive Committee Guidance Needed
 - *Regional Working Groups*
 - *Recruitment*

2013 Theme: Building Momentum

Executive Committee “Asks”

- Guide/Inform Advisory Committee Agenda
- Evaluate Overall Project/Team Progress
- Assist in Identifying Resources (non-monetary) for Projects
- Cheerlead!



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Thank You