

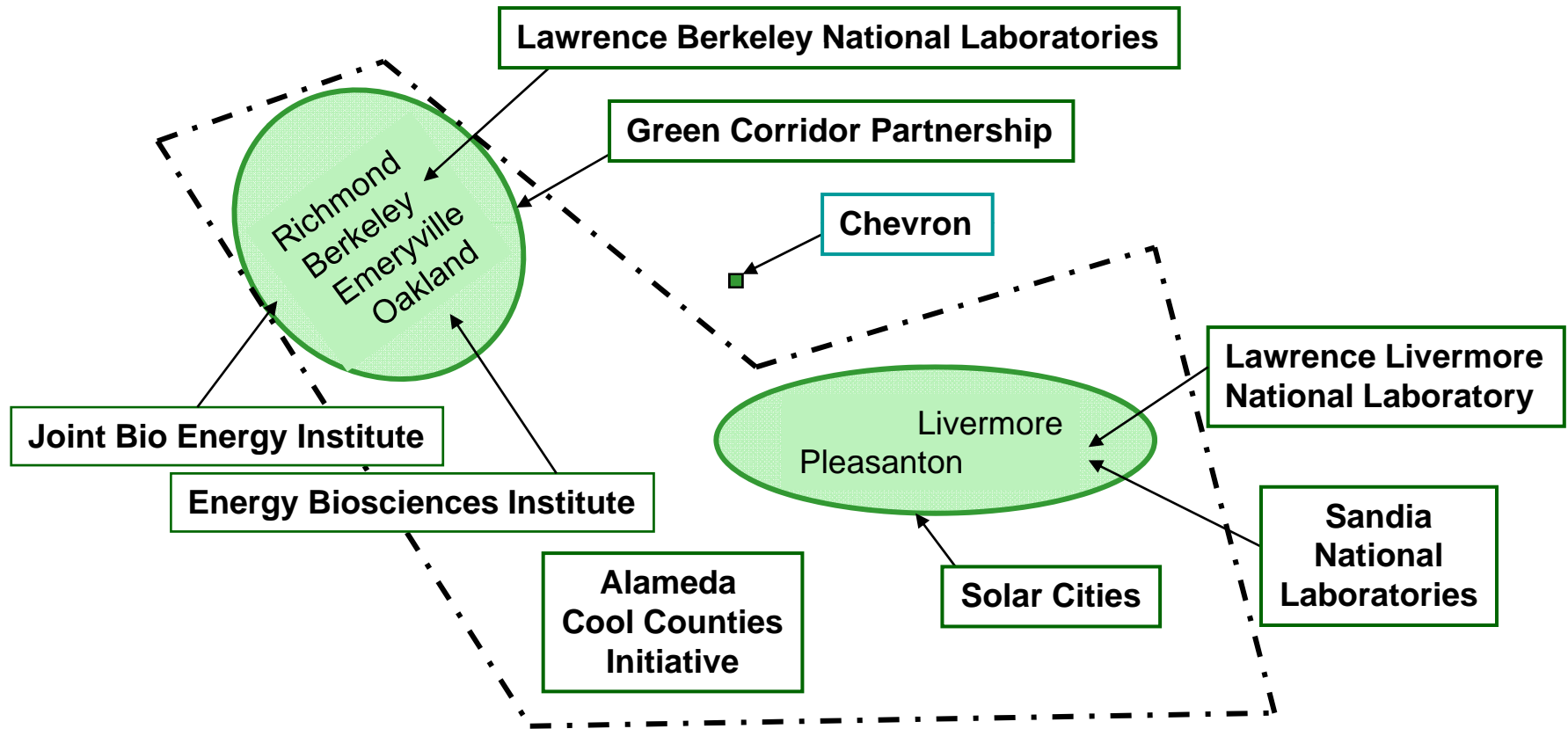


Preliminary

The Case For

An Alternative Energy Workforce

East Bay: Alternative Energy Innovation





East Bay:
Basic Research in Alternative Energy

\$920M

Cumulative investments to date in:

Energy Biosciences Institute
Joint Bio Energy Institute



Investment in the East Bay Second Quarter 2008

\$283M

in alternative energy venture capital

51.5%

of all alternative energy venture capital

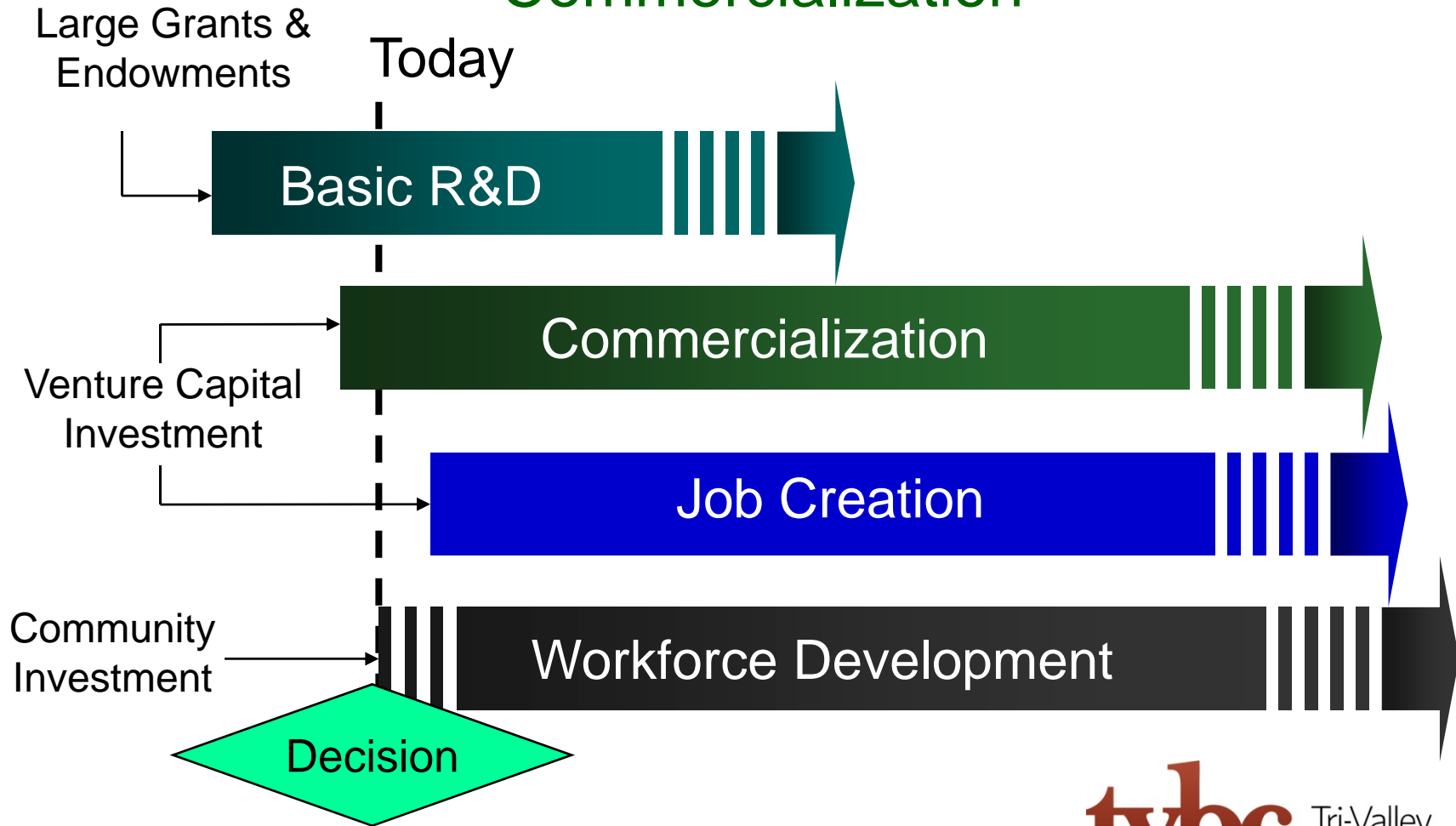
Nationally



Workforce Drivers

- Investment East Bay #1 nationally (2Q08)
- Commercialization Investment spawns jobs
- Demographics Boomer retirements (i.e. PG&E)
- Sustainability #1 challenge to next generation
- Quality of Life For our children

Workforce Development Is Lagging Commercialization





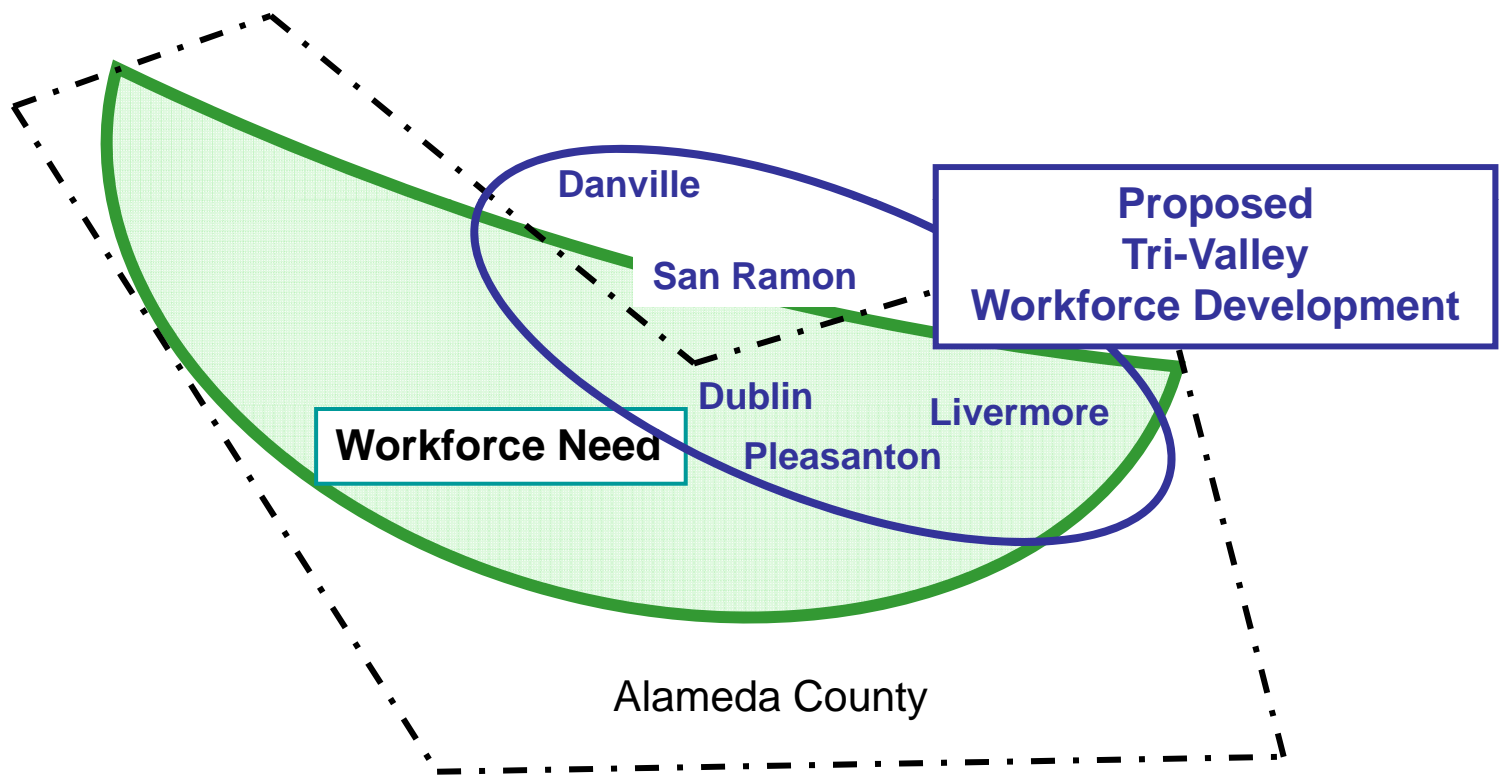
Today's Decisions

Workforce support for commercialization?

Attract investment and jobs into the Tri-Valley?



Matching the Workforce to the Need





Proven Workforce Models

Green For All

The Apollo Alliance

The Ella Baker Center

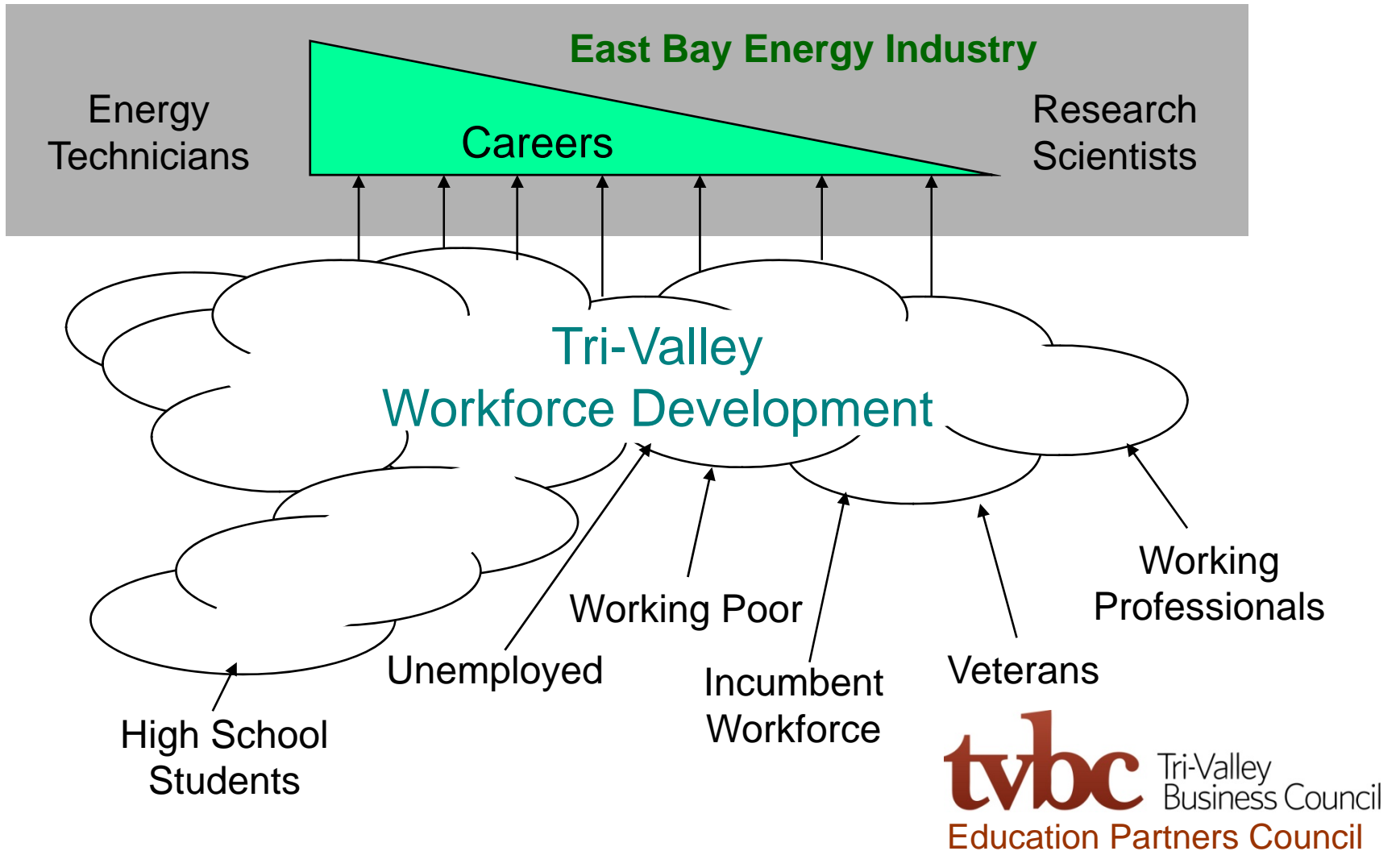
James Irvine Foundation

Bill & Melinda Gates Foundation

State of California Career Pathways Model



Tri-Valley Workforce Development Model





Tri-Valley

Workforce Development Launch

Event: TVBC Workforce Development Summit - August 13, 2008

Participants: 104

Volunteers: 39

Standard Bearers:

Dr. Mo Qayoumi, President – CSU East Bay

Dr. Joel Kinnamon, Chancellor – Chabot Las Positas Community College District

Dr. DeRionne Pollard, President – Las Positas College

Dr. Andy McIlroy, Director – Sandia Combustion Research Facility

Diane Centoni, Superintendent – Tri-Valley ROP

Roman Stearns, Director – ConnectEd (James Irvine Foundation)

Patricia Clark, Manager – UC Berkeley School of Education (CASN)

Panel of 5 executives from the State of California

Representatives from PG&E and Chevron Energy Solutions



Regional Strategy Alternative Energy Workforce Partners

CSU East Bay
Chabot Las Positas Community College District
Las Positas College
Dublin Unified School District
Livermore Joint Unified School District
Pleasanton Unified School District
Tri-Valley Regional Occupational Program
Alameda County Workforce Investment Board
State of California – EDD / LMID / LWDA
Sandia Laboratories
PG&E
Tri-Valley Business Council
Tri-Valley Education Collaborative



Workforce Strategy Creation The Core Team

CSU East Bay	1	(Dean of Science)
Community Colleges	4	(LPC, Ohlone, CCSF, CLPCCD)
City	2	(Pleasanton & Livermore)
County	3	(ACOE & WIB)
K-12 School Districts	5	(LVJUSD, DUSD, PUSD & TVROP)
Industry	16	
Nonprofit	2	
State of California	2	(EDD-LMI & WDLA)
US Congress District 11	1	



Program Elements

- Clear pathway map for each cohort & career field
- Capacity to meet specific industry needs
- Well-defined education outcomes (skills & knowledge)
- Motivated pipeline entrants
- Partnership agreements – *education, industry, government*
- Funding
 - Faculty development*
 - Curriculum development*
 - Facilities & equipment*
 - Research, marketing, and project management*



Preliminary

Program Goals

Tri-Valley / CSU East Bay

Workforce Goals	June 2010	June 2011	June 2012
High School Pipeline Students ¹	60	120	180
Certificates Awarded ²	40	60	80
AA Degrees Awarded ²	20	40	60
Baccalaureates Awarded ²	20	40	60
Post-Grad Degrees Awarded ²	10	20	30

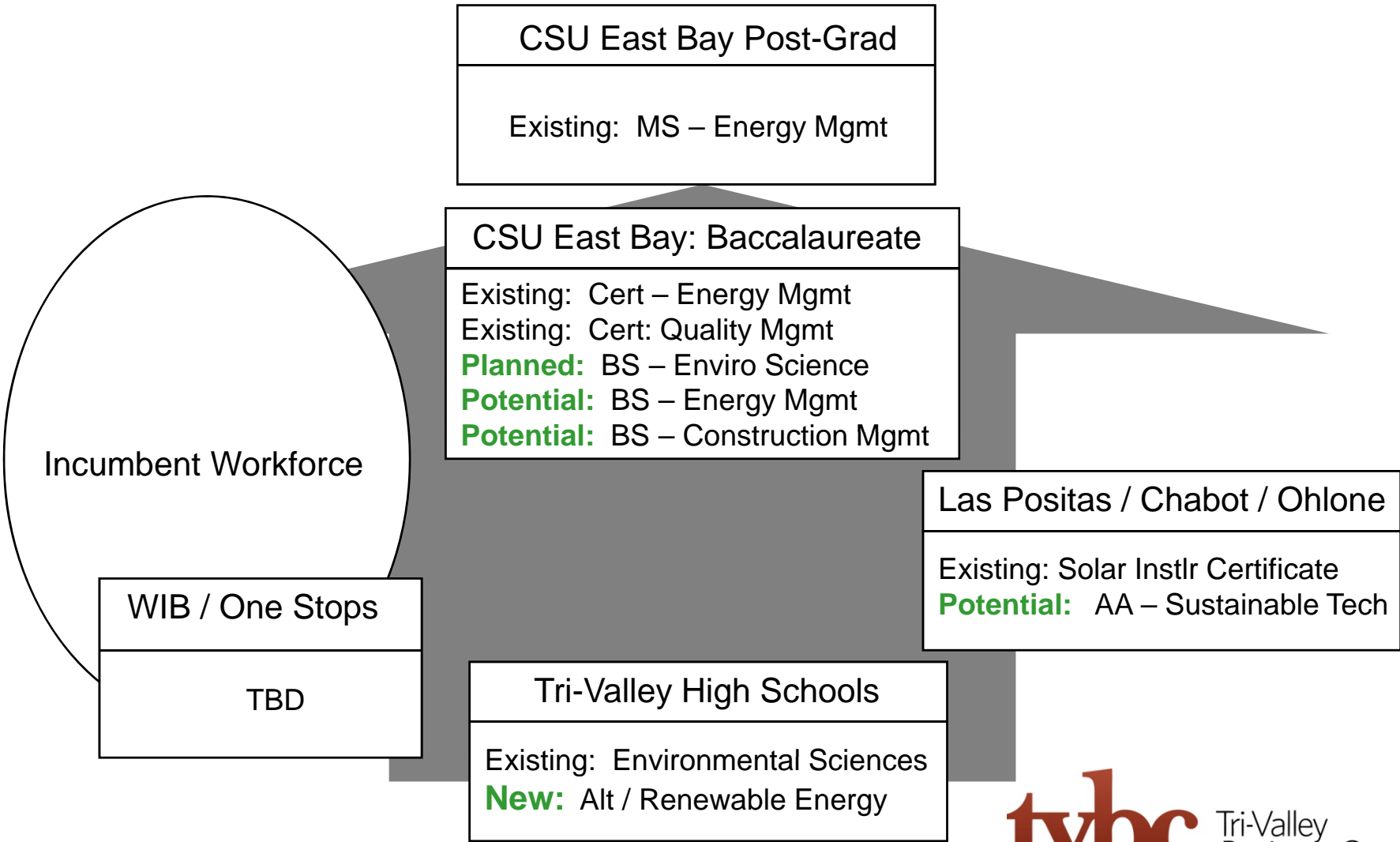
¹ Entry into post-secondary or apprenticeship programs

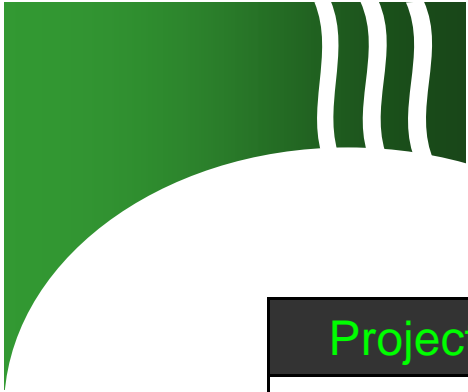
² Job placement in East Bay Alternative Energy firms



Pathways Planning Model

Preliminary





Funding & Deliverables

Preliminary

Project Phase	Dollars	Deliverables
Discovery Sept – Dec, 2008	\$ 65,000	Definition of Workforce Needs Inventory of current workforce programs Map of sustainable funding options Identification of advocacy needs
Program Planning Jan – Mar, 2009	\$230,000	Regional Workforce Plan Definition of pathways Creation of programs Commitments by industry Formalized partnerships Plan for sustainable funding
Execution Apr – Sept, 2009	\$530,000	Execution Curriculum Articulation agreements Teacher professional development Outreach
Total	\$825,000	

Preliminary

Investment Analysis

Tri-Valley Workforce Development Program

360 High School Graduates
480 Post-Secondary Graduates

Proposed Investment to Launch New Alternative Energy Career Pathways

Investor	Investment*	Workforce Development Cost per Graduate	
		High School	Post-Secondary
Corporations	\$ 240,000		\$1,083
Colleges / Schools	\$ 5,000	\$847	
Tri-Valley Cities	\$ 65,000		\$1,083
Alameda County	\$ 65,000		\$1,083
Foundations	\$ 150,000	\$847	
State / Federal	\$ 300,000		\$1,083
	<u>\$ 825,000</u>		

* Excludes prior and proposed in-kind investments

Prior Investment: \$20,000 Tri-Valley ROP
 \$75,000 Workforce Incubator
 \$10,000 Tri-Valley Business Council

Above investment allocation to high school and post-secondary is preliminary. Actual will depend on final funding strategy.

Post-secondary applies to degree and certificate programs.



We're Committed to an Alternative Energy Workforce

The Plan

Successful launch event completed
Framework plan completed
Funding easily justified

The Team

Standard-bearers and project team engaged
Task groups now detailing plans for discovery phase

Implementation

Discovery and regional strategy	December '08
Comprehensive program plan	March '09
New pathways in place	September '09



May we have your commitment?



Thank You

Jim Caldwell
Chair – Education Partners Council
Tri-Valley Business Council
(925) 292-2308
jcaldwell@workforceincubator.org





Supplemental Information



Funding Proposal

Discovery Phase – Source of Funds

Investor	Dollars	Deliverables
Corporations	30,000	Definition of Workforce Needs Job Titles Skills Degree / certificate requirements Inventory of current education paths Inventory of current workforce programs Map of sustainable funding options Identification of advocacy needs
Colleges/Schools	5,000	
Tri-Valley Cities	15,000	
Alameda County	15,000	
Total	\$65,000	

Plus in-kind funding



Funding Proposal

Discovery Phase – Use of Funds

Project Element	Scope	Cost
Workforce Needs	50 companies x 2 hours @ \$120 / hour	\$12,000
Inventory of Current Programs	4 school districts + 3 colleges + WIB x 2 hours @ \$80 / hour	\$1,440
Education Models	20 hours @ \$80 / hour	\$1,600
Legislative Threats & Opportunities	20 hours @\$120 / hour	\$2,400
Map of Funding Options	40 hours @ \$80 / hour	\$3,200
Project Management	13 weeks x 20 hours @ \$120 / hour	\$31,200
Coordination & Administration	20% overhead	\$12,000
Total		\$63,840

September – December 2008



Funding Strategy

Preliminary

Program Planning Phase – Source of Funds

Investor	Dollars	Deliverables
Corporations	80,000	Regional Workforce Strategy Definition of pathways Creation of programs Commitments by industry Formalized partnerships Plan for sustainable funding
Tri-Valley Cities	25,000	
Alameda County	25,000	
Foundation Grants	100,000	
Total	\$220,000	

Plus in-kind funding



Funding Proposal

Preliminary

Program Planning Phase – Use of Funds

Project Element	Scope	Cost
Definition of Pathways	5 weeks @ \$80 / hour 5 weeks @\$120 / hour	\$40,000
Creation of Educational Programs	13 weeks @ \$80 / hour 6 weeks @ \$120 / hour	\$70,400
Commitments by Industry	50 hours @\$120 / hour	\$6,000
Formalized Partnerships	20 hours @ \$120 / hour plus \$5,000 legal fees	\$7,400
Plan for Sustainable Funding	6 weeks @ \$80 / hour	\$19,200
Advocacy Campaign	4 weeks @ \$120 / hour plus \$10,000 marketing expense	\$29,200
Project Management	13 weeks x 10 hours per week @ \$120 / hour	\$15,600
Coordination & Administration	20% overhead	\$40,000
Total		\$217,800

January – March 2009



Funding Strategy

Preliminary

Execution Phase – Source of Funds

Investor	Dollars	Deliverables
Corporations	130,000	Execution Curriculum Articulation agreements Teacher professional development Outreach Advocacy Facilities & Equipment
Tri-Valley Cities	25,000	
Alameda County	25,000	
Foundation Grants	50,000	
State / Federal Grants	300,000	
Total	\$530,000	

Plus in-kind funding



Funding Proposal

Preliminary

Execution Phase – Use of Funds

Project Element	Scope	Cost
Curriculum Development	5 months x 3 teachers @ \$80 / hour	\$192,000
Articulation Agreements	2 weeks x 3 teachers @ \$80 / hour	\$19,200
Teacher Professional Development	6 weeks x 2 trainers @ \$80 / hour plus stipend for 10 teachers @ \$500 plus materials @ \$2,000	\$45,400
Outreach Campaign	6 weeks x 2 marketers @\$80 / hour plus Summer Academy @ \$10,000 plus materials @ \$5,000	\$53,400
Advocacy Campaign	4 weeks @\$120 per hour plus \$10,000 marketing expense	\$29,200
Facilities & Equipment	Estimate \$100,000	\$100,000
Project Management	5 months x 40 hours per month @ \$120 / hour	\$24,000
Coordination & Administration	15% overhead (not including facilities & equipment)	\$65,000
Total		\$528,200

April – August 2009



East Bay Alternative Energy Investments

Recipient	\$	Investor	Year
Energy Biosciences Institute	\$500M	British Petroleum	2007
Joint Bio Energy Institute	\$125M	US Department of Energy	2007
UC Berkeley	\$10M	Dow Chemical	2007
OptiSolar	\$132M	Venture Capital	2008
Bright Source	\$115M	Venture Capital	2008

Partial List