

How We Identified Our Regional Industry Clusters of Opportunity

The purpose of this element is to demonstrate how diagnostic information helped you choose your clusters of opportunity and set you on the path to employer engagement and the development of a cluster action plan.

New industry clusters of opportunity in the greater East Bay (Alameda, Contra Costa, and Solano counties), associated with the region's emerging green economy, were identified by several studies in 2008 and 2009. Green industry sectors in clean energy and water technology were identified through an extensive diagnostic process that led to the creation of a database with 124 companies employing more than 4,100 workers. The concentration of clean energy companies, major research institutions, and existing infrastructure provided many of the components for an industry cluster that had the potential to drive the region's economy in the 21st century.^{1, 2}

Innovation infrastructure in the tri-county region includes two UC campuses, a CSU, 8 community colleges, 3 national labs, ten leading research institutions, several corporate research centers, and a concentration of both young innovative firms and established companies focused on renewable energy and water technology. In addition, there is an extensive base of specialized suppliers and service providers including engineering and environmental consultants. The region's labor market also provides a shared talent pool with a highly educated and skilled workforce.

Although national and state policies create a platform for innovation, the locus of innovative activities is at the regional level where workers, companies, universities, and government interface most directly. Regions are the building blocks of national innovation capacity because they offer proximity and can provide specialized assets that foster firm-level differentiation.³ The tri-county region has world-class research institutions conducting cutting edge research in renewable energy and water technologies that have the potential to create new businesses and jobs. Due to the presence of these research labs and universities, the greater East Bay has attracted and will continue to attract a significant amount of research funding resulting in technologies that can be commercialized creating high-wage jobs at all levels for local residents.

The diagnostic phase of the RICOG process allowed us to document regional assets that would drive industry cluster growth and conduct a SWOT analysis. While the focus was on identifying the core companies, the complete value chain of vendors, equipment suppliers, specialized service providers, and related businesses generate a significant amount of employment that has not been fully defined.

¹ Craft Consulting Group, "East Bay Green Economy Industry Cluster Study: Building a Sustainable Economy Based on Clean Technology", July 2008

² Collaborative Economics, "Solano County's Energy Cluster Profile", September 2009

³ Council on Competitiveness, "Measuring Regional Innovation: A Guidebook for Conducting Regional Innovation Assessments", prepared for the U.S. Department of Commerce, Economic Development Administration, October 2005

How We Engaged Employers to Develop Cluster Action Plans

The purpose of this element is to describe the ways you engaged employers—how you worked with them to identify opportunities and requirements for growth, and then develop priority economic and workforce strategies that serve as the basis of a cluster action plan.

As a result of the RICO process a core leadership group consisting of the economic development organizations within the tri-county region including the Contra Costa Economic Partnership, Tri-Valley Business Council, Solano Economic Development Corporation, and the East Bay Economic Development Alliance came together with the purpose of unifying action around a common set of initiatives to strengthen and build on the region's clean energy and water technology industry clusters and to capitalize on the region's existing assets and competitive advantages. This core group held meetings and executed a memorandum of understanding outlining how they would work together to advance the region's common interest. Workforce development and education partners also participated and provided input into the development of the regional strategy and action plan that was industry driven and led by industry employers.

The diagnostic phase provided the basis for employer engagement. During the diagnostic phase clean energy and water technology companies in the region were identified and a database developed with company contact information (see cluster database). A letter was initially sent to all the employers announcing the RICO grant and inviting them to participate in the development of an industry-driven regional action plan for their industry cluster. Follow up emails and telephone calls were made in order to expand the size of the employer group (see appendix for list of participants).

By identifying these emerging industry clusters and regional assets early in the process employers were able to see how they could advance the competitive position of their industry by participating in the development of a regional strategy. Following an initial kick-off meeting a series of eight monthly meetings were held that included a SWOT analysis, identification of opportunities, goal setting, development of action items, and establishment of priorities which culminated in a regional strategy and action plan.

Employer led groups were convened monthly for both the clean energy and water technology clusters with participants from the core industries as well as related and supporting sectors. A workforce group consisting of the community colleges and workforce development agencies in the region meet quarterly to develop the workforce training component based on industry input. The regional strategy and action items were industry driven to meet the needs of employers. A copy of the regional action plan is attached. This document was printed and is being distributed to all participants, plus other governmental, business, and education partners.

How We Are Leveraging Implementation Resources and Commitments

The purpose of this element is to demonstrate that the initial RICO grant was an investment that successfully leveraged implementation funding and other commitments.

Money was set aside from the grant to help fund the formation of a sustainable organization, development of a website for marketing the region, and community engagement. Additional commitments have been made to help fund these initial efforts. The Contra Costa County Workforce Development Board has set aside money in their budget; the Contra Costa Economic Partnership has committed to providing staff support and in-kind services; and several private sector companies have expressed interest in supporting various initiatives identified in the regional action plan. Members of the Contra Costa Council are working on implementing various action items including the development of an aggregated solar purchasing program for the public sector which will help expand the market opportunities for local clean energy companies. We have also been exploring various state and federal grants to implement various measures. Contra Costa Council staff attended a funding fair held by the California Financing Coordinating Committee which brought various state and federal agencies together to present grant, loan, and bond programs. As we roll-out the plan, engage stakeholders, and develop support for the various programs we expect to attract additional stakeholders and commitments from a variety of sources to support the implementation of various action items identified in the regional plan.

We are currently in the process of rolling out the plan, identifying regional champions, mobilizing stakeholders, and securing funding commitments that will lead to a sustainable organization with capacity to implement the various initiatives identified in the regional strategy and action plan. To date, the Contra Costa Economic Partnership and the Contra Costa Council Boards of Directors have approved the regional strategy and action plan and are moving forward with implementation. The chair of the Contra Costa Economic Partnership has met with industry employers to develop implementation strategies and tactics. A press conference has been scheduled for late June with Congressman John Garamendi speaking about the importance of regional collaboration and innovation clusters in driving economic growth and job creation.

Other related efforts are beginning to coalesce around the plan. For example, promotion of STEM education (i.e. science, technology, engineering, and math) programs have been funded by private sector grants unrelated to the RICOG process, but will help implement key education and workforce training action items in our regional plan.

How We Are Achieving Sustainable Systems Change

The purpose of this element is to demonstrate that the RICO process has helped change the overall approach to workforce and economic development in your region.

The RICO process enabled us to commence a process that recognizes the greater East Bay as a region with significant assets and common labor market, engages stakeholders in a way that takes them outside of their normal silo's, and ultimately fosters the formation of a sustainable program for regional economic growth and job creation. A multi-step process beginning with the diagnostic phase which identified regional assets helped to create a new perception of the region. A common vision for the region which is industry driven will provide stakeholders in education, workforce development, and economic development a focus for individual initiatives. As we roll-out the plan and engage various stakeholders it will involve breaking down existing silos and mindsets to get individual organizations to support a larger regional collaborative effort. The economic development partners are engaged in discussions about the appropriate governing structures and ways to work together in marketing the region. We anticipate that through the collaborative efforts that are being developed as a result of the RICO process the various stakeholders will begin to change the way they do business expanding their networks as they realize the benefits associated with regional collaboration.

In order to achieve the region's vision of becoming a leading global center for clean energy and water technology goals and objectives were identified in five areas that will require commitment and collaboration from a broad coalition of companies, economic and workforce development organizations, and educational institutions. The action plan established action steps, responsible parties, implementation timeframes and resources. Key strategies to accelerate market adoption and expansion have been identified as priorities for industry along with workforce development and marketing the region. Programs include:

- Development of an Aggregated Solar Purchasing Program for public agencies that will help expand market opportunities for locally based companies. This program is modeled after Joint Venture Silicon Valley's initiative. Initial meetings have been held (including presentations by Joint Venture Silicon Valley) and an informational meeting for public sector agencies is being planned for later this summer.
- A Solar Installation Fee Reduction and Permit Streamlining Program will involve collaborating with multiple local governments in the region to develop a uniform process for a common set of requirements for installing solar systems in residential and commercial buildings, parking lots, or on vacant sites.
- Establishment of a coalition of business, government, education, and industry leaders to address the gap between current higher education programs and the needs of the region's emerging green economy.
- Ongoing efforts to expand STEM curriculum programs throughout the education spectrum.
- Development of industry driven workforce training programs.
- Development and execution of a strategy to accelerate technology transfer from the research labs into the marketplace.
- Advancing the region as a competitive location for clean energy and water.

APPENDIX

Participating Organizations

Economic Development Organizations

Contra Costa Economic Partnership
East Bay Economic Development Alliance
Solano Economic Development Corporation
Tri-Valley Business Council

Education

Contra Costa College
Diablo Valley College
Las Positas College
Los Mendanos College
Solano Community College

Public Utilities

Central Contra Costa Sanitary District
Central Contra Costa Solid Waste Authority
Contra Costa Water District
Delta Diablo Sanitation District
Dublin San Ramon Services District
East Bay Municipal Utility District
West County Wastewater District

Workforce Development

Alameda County Workforce Investment Board
Contra Costa County Workforce Development Board
Richmond Workforce Investment Board
Solano County Workforce Investment Board

Industry Participants

Company

Ben Foster	Optony
Bert Michalczyk	Dublin San Ramon Services District
Bill Brobeck	Brobeck Solar Energy
Bob Holt	GE Power & Water
Bob Spitzka	Water & Energy Management Co.
Bob Whitley	Whitley Burchett & Associates
Bobby Ram	SunPower Corp.
Brant Knopp	Compliance Systems Management, LLC
Brian Sipp	First Source Solar Systems
Cliff Bowen	California Department of Health
Clifford Chan	East Bay Municipal Utility District
Darshini Sheth	BrightSource Energy
Dave Requa	Dublin San Ramon Services District
Dave Richardson	RMC Water & Environment
David Sowels	Exsolarent Energy Group, Inc.
Deborah Mann	Solano Community College
Duane Nelsen	GWF Energy, LLC
Ernesto Montenero	Sustainable Technologies
Gary Craft	Craft Consulting Group
Gary Darling	Delta Diablo Sanitation District
George Chao	Green Tech Power Group
Glen Laughton	EcoNexus
Ian Kaye	UltraCell Corporation
James Tong	Acro Energy Technologies
Janet Fazio	Janet Fazio Advertising
Jarred Miyamoto-Mills	Central Contra Costa Sanitary District
Jill Sideman	CH2M Hill
Jim Brandt	Morgan Stanley Smith Barney
Jim Caldwell	Workforce Incubator
Jim Good	Veolia Water
John Howard	MFC
Jonathan Whelan	Optony
Kevin Stichter	Craft Consulting Group
Kim Schenk	Diablo Valley College
Kurt Ladensack	Contra Costa Water District
Linda Best	Contra Costa Council
Lois Courchaine	Central Contra Costa Solid Waste Authority
Louis Rigaud	Halus Power Systems
Lourdes Sampayo	Contra Costa Community College District
Mike McGill	Central Contra Costa Sanitary District

Molly A. Walker
Peter McGaw
Peter O'Brien
Raya Zion
Regina Gilligan
Sarah Madsen
Stephen Baiter
Stephen Clarke
Terry Shoaff
Tom Waller
Tracey Nicks

Walker Communications
Archer Norris
Cool Earth Solar
Alameda County Workforce Investment Board
SESCO Electrical, Inc.
HelioPower, Inc.
Contra Costa Workforce Development Board
Applied Intellectual Capital
Contra Costa Council
Contra Costa Workforce Development Board
Contra Costa Workforce Development Board