

# “FAST” Center for Innovation Strategy

## Fremont **Advanced & Sustainable Technology**

The “FAST” Center for Innovation strategy outlines the beginning of a proactive public-private partnership to encourage Clean Technology and Advanced Manufacturing growth in Fremont, and designates a new Innovation Center in Warm Springs to help grow and support this important industry cluster.



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*Last updated: January 2013*

## ***Introduction***

Supporting innovation industries, including clean technology, is an extremely important piece of Fremont's multi-pronged strategy for economic vitality. These industries represent rapidly growing segments of the economy and have the potential to generate significant employment and revenues. The clustering of these businesses helps promote investment in Fremont's business parks which lowers vacancy rates and maintains property values.

Fremont's clean technology sector is thriving. It includes some industry leaders and exciting, promising start-ups such as Tesla, Solaria, Redwood Systems, and Intematix. These firms represent an array of exciting technologies including solar, electric vehicles, fuel cells, and building automation. Fremont is uniquely positioned within the Bay Area, and the State, to help these industry sectors to grow and thrive based on access to a talented workforce, quality facilities, and competitive lease rates.

Additionally, building on the momentum of technology growth is an important element of the City's strategy for promoting development activity in South Fremont/Warm Springs. This area of the City is being showcased, on both a regional and national level, as a potential home to employment-focused transit oriented development with an emphasis on advanced manufacturing and innovation.

## ***Definition of Innovation***

Innovation is the catalyst to growth. Innovative companies develop new methods of commercializing products, create new technology, and increases productivity. Innovation can happen at Start-up Company or a major multi-national company with large research and development capability. Fremont is uniquely positioned to capture innovative companies because of our location in Silicon Valley, our highly educated work force, and our vicinity to large research institutions such as Stanford University, CA University at Berkeley , and CA University at San Francisco.

## ***Background***

The Warm Springs/South Fremont area is critically important to the City because of a unique convergence of forces. The new BART Station, located just northeast of the Tesla Factory, is scheduled to open in 2015. The Station will enhance intermodal access to local bike routes and bus lines that serve the entire Bay Area (VTA and AC Transit). Between 2016 and 2018, BART will extend an additional 10 miles to San Jose, connecting Fremont to the rest of Silicon Valley for the first time.

Immediately north and south of that facility is 160 acres of land owned by Union Pacific Railroad (UP). The City and UP have developed a strong partnership and UP is now marketing this property for sale, acknowledging the significant development potential for this area. Additionally, there are other vacant and under-utilized parcels in the study area that are poised for transition.

When the closure of NUMMI occurred, the City was granted \$333,000 by the U.S. Economic Development Administration (E.D.A.) to complete a Jobs Recovery Strategy. The City Council adopted Guiding Principles to serve as an underlying foundation for this strategy, emphasizing the creation of jobs, density, leveraging transit, and creating a more urban sense of place. After the completion of the E.D.A. studies, the Urban Land Institute (ULI) conducted an Advisory Services Panel in Fremont to help advance implementation of the Warm Springs strategy. The ULI Panel was comprised of a full spectrum of public and private sector land use/real estate development disciplines. The ULI analysis contains valuable recommendations for creating a 21<sup>st</sup> century workplace, including phasing, urban design guidelines, critical public improvements and associated costs. This analysis provides the foundation for implementing Fremont’s Advanced and Sustainable Technology Strategy by creating opportunities to attract these industries and leveraging the potential for Fremont, and South Fremont/Warm Springs in particular, as a showcase for advanced manufacturing and clean technology.

## ***Participants***

This effort represents a public-private partnership involving the voluntary participation of the following organizations and people:

- a. City of Fremont – Kelly Kline, Christina Briggs, Jennifer Chen – E.D. Staff  
Selected EDAC (Economic Development Advisory Commission) Members
- b. Chamber of Commerce – Raj Salwan (Chairman of the Board), Nina Moore (Director of Community & Government Affairs)
- c. State of California – E.D. Commissioner Henry Yin
- d. California-China Green Technology Center – Affiliated Members - 3
- e. Business/Corporate - Chevron, Oorja Protronics, CentroSolar
- f. Finance – (Wells Fargo Bank, East West Bank, Fremont Bank)
- g. Property Owners - Prologis, Sand Hill Advisors

## ***Objective***

As the City prepares for the future development of Warm Springs as a 21<sup>st</sup> century employment center, it seeks to lay the groundwork for what will ultimately be a true Innovation District in the heart of Warm Springs by implementing a multi-faceted strategy to support the growth of the clean technology cluster in Fremont. This strategy relies heavily on branding the City as the clean tech capital of Silicon Valley, and specifically branding Warm Springs and Bayside, as an Innovation District,

that features the City's largest concentration of clean technology companies. This district may evolve and even shift geographically over time, especially as Warm Springs develops. (See Appendix A-1, A-1)

## ***Program***

There are several key components to the FAST Initiative including the following:

### a. Innovation District

While Fremont's overall industrial area is vast, clean technology companies are predominantly clustered in South Fremont with a large share of these businesses residing in or near Baylands and Warm Springs. Discussions are currently being scheduled with property owners, including Prologis and Sand Hill Advisors, about how we can work together to brand these areas as an Innovation District. Specific ideas include:

- Signage (including banners) and gateways to Identify FAST Innovation District
- Proactive marketing/branding through traditional and social media, printed materials, events, and programming.
- Co-Branding by partnering with brokers and landlords to have the use terminology in their own marketing materials.

### b. Innovation Center

As articulated in the Urban Land Institute's analysis of Warm Springs, the vision for this area includes development of an Innovation Center. A primary objective of this center is the creation of modern, flexible meeting space or a place for people to come together to share ideas and information. Whether it's in the form of conferences, lectures, or meetings, research shows that innovation industries, like clean technology, depend on the convergence of business, academia, government, and the investment community.

An innovation center provides physical space which can facilitate this intersection of key stakeholders. Fremont currently lacks such a facility and it is increasingly seen as a critical component in a successful clean technology hub. While the ultimate vision of this center may take some time to achieve, this strategy seeks to leverage existing relationships and resources to create this environment in the near term.

There are many innovation models to choose from, however, it should be noted that the idea is not a traditional "incubator" with physical space, equipment and support staff to house start-up

companies. Although there are models where a locality supports an incubator by providing space at low or no cost, the success of the programs have been mixed, especially in the context of cost/benefit analysis, return on investment, job growth, and company retention. Additionally, there are several private companies who are providing “incubation” through leasing shared, short-term, small, flexible office and conference space as well as facilitating collaboration, venture capital, and networking events.

Because there are private entities that can provide the real estate space, the FAST Strategy will focus more on the educational programming and networking opportunities that will provide clustering benefits. Research on relevant examples and their various formats, components, tools and strategies is currently underway and includes the following potential case studies:

- Boston Innovation Center
- Singapore
- Montgomery County, MD

It is envisioned that because of Fremont’s strong international ties, particularly with Asia, that a strong component of an Innovation Center would be a way to facilitate foreign trade, and encouragement for foreign-based corporations to locate in the innovation district.

c. Demonstration Projects

Besides meeting space, another component of an Innovation Center could be demonstration space to highlight the innovations of Fremont Clean Tech companies. Fremont already has a head start in developing this component through its efforts partner with companies on demonstration projects that provide evidence of market functionality.

**Fremont Demonstration Project Case Study:**

Recognizing that many emerging technology companies have a long lead time to market, which includes significant R&D and testing of a product, government agencies are well positioned to serve as test markets for these businesses. The City of Fremont is currently commissioning two demonstration projects with clean tech companies, Oorja Protonics and Centro Solar.

Oorja Protonics – The City and Oorja are in discussions for Oorja to demonstrate its fuel cell technology in a variety of City fleet vehicles. Public fleets are viewed as one of the major opportunities for fuel cell and electric vehicles. Many sources of federal funding are prioritizing companies who have demonstrated their technology in this environment.

CentroSolar – The City and CentroSolar (CS) are in discussions for CS to install their solar technology at Lake Elizabeth.

In an effort to support Fremont’s existing clean technology sector and to attract new companies to this community, the City has implemented specific incentives targeted at innovation industries.

- **Clean Technology Business Tax Exemption**

A 5-year exemption for new qualified businesses and a 2-year exemption for existing qualified businesses. In addition to supporting business attraction and retention, this exemption has also been a powerful marketing tool, not only because it is a tangible incentive the City can offer, but also because it is specific to these technology communities, which are growth sectors, and important to maintaining our tenant diversity.

- **Impact Fee Reduction for LEED Platinum Buildings**

The City Council will consider a proposal in September to offer a 25% reduction in impact fees for commercial buildings, which are certified as LEED Platinum. According to the Urban Land Institute’s recent analysis of Warm Springs and others in the investment/business community, the development of high-efficiency, LEED Platinum commercial buildings in Fremont will serve to advance the Warm Springs development strategy by attracting the attention of other emerging technology businesses looking to locate in the City or region. Taiwanese company Delta Products, which produces a variety of clean technologies, will soon be constructing a LEED Platinum, U.S. Headquarters facility in Baylands.

- **Other general City incentives include:**

No Utility User Tax, Site Selection and Permitting Assistance, and Hazardous Materials expertise.

e. Education and Training

Companies in Fremont can take advantage of training for new and existing employees, and tap into research assistance through new technology transfer programs at the national labs – a strategy that has been embraced by the Department of Energy. Additionally, there are other local academic partnerships that can be pursued.

- Workforce Programs

The 1-Stop Center at Ohlone College maintains a database of qualified workers, can assist with job fairs and recruitment strategies, and can assist with re-

training efforts for new employees who need skill enhancement for specialized positions. Additionally, other local vocationally training centers, such as Unitek and Laney College, are available to help train specialized workers.

- Technology Transfer / Commercialization Strategy

New opportunities are available for technology companies to collaborate with Research Institutions such as Lawrence Berkeley Lab and SLAC, to explore commercialization opportunities.

- Academic Partnerships

A key component to an innovation center is having an academic partner or partners identified to provide educational programming . Targeted outreach can include the following prospects: University of Phoenix, U.C. Davis, Ohlone College (biotechnology certificate), and others to be identified.

### ***Milestones/Deliverables***

This strategy should both provide short-term deliverables, with an eye to long-term and sustainable wins that will not only enhance the environment for Innovation companies in Fremont, but will also establish Bayside/Warm Springs as a new kind of technology park. This 21<sup>st</sup> Century workplace will have broader boundaries and multiple landlords. It will be a place where like-minded companies can cluster around an Innovation Center that provides tools and networking opportunities that create a stimulating environment for success.

The following milestones have been identified for

#### Short-term

- Present draft strategy to EDAC at the January 10<sup>th</sup> meeting
- Further develop list of working group participants
- Conduct brainstorming session and strategy plan review with larger group of stakeholders
- Complete “Innovation Scorecard” to help identify areas for further support of emerging technology sector
- Solidify boundaries for Innovation District

- Identify small, medium and large event venues within Innovation District
- Develop an event schedule

- Identify strategy and funds to create functional meeting venues and scheduling capabilities
- Create “FAST Center for Innovation” Brand, including logo
- Identify key areas for signage opportunities
- Create tools to market the brand to existing landlords and commercial real estate brokers
- Debut brand at Industrial Broker Event
- Schedule quarterly events that are relevant for clean tech, advanced tech, and innovation companies
- Identify education/academic partner
- Recruit business center/co-working facility to locate in the district to help smaller companies launch in the area

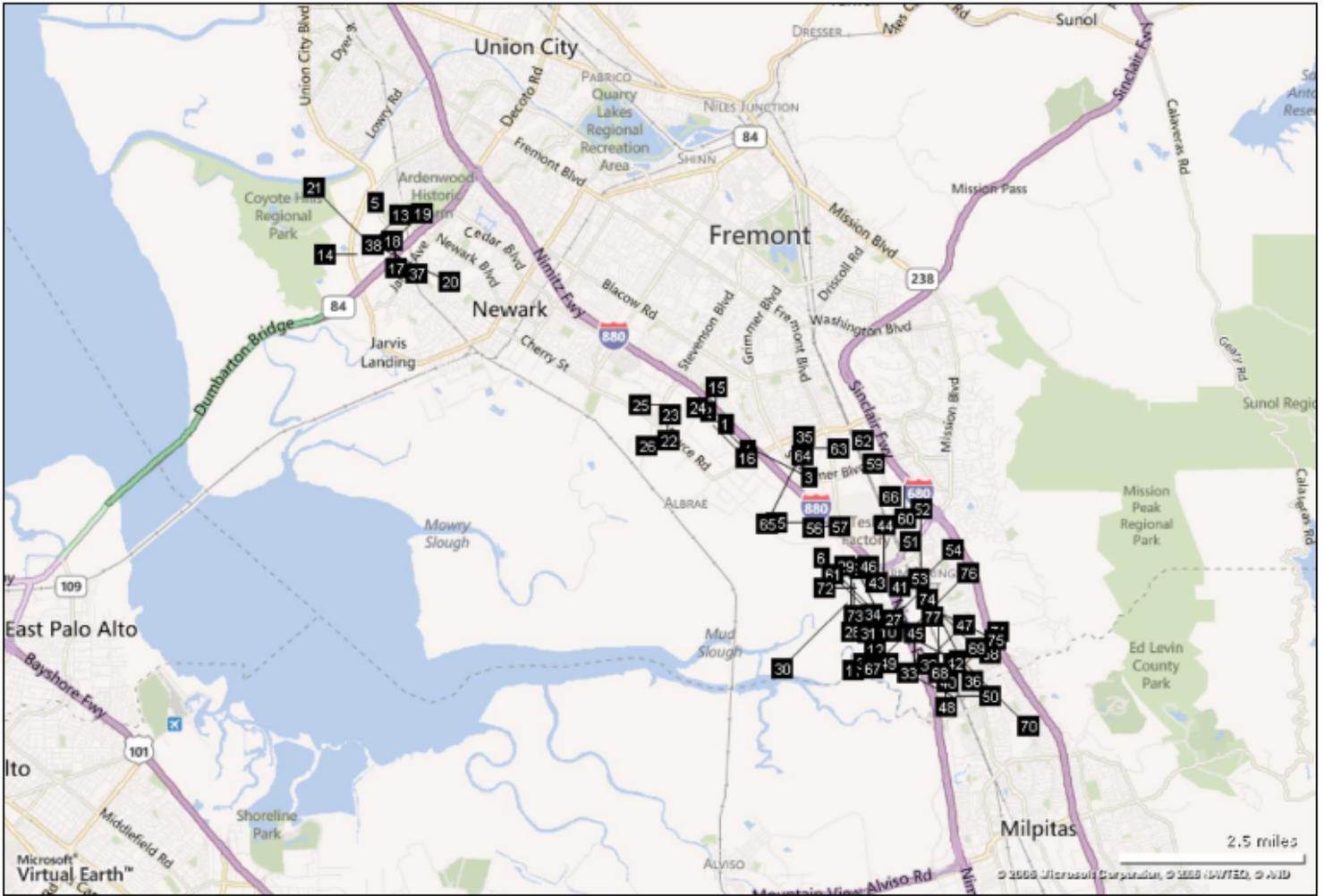
#### Long-term

- Establish a “Warm Springs Welcome Center” that showcases the plans for the area, and begins to serve as a “pre-innovation center” location
- Find office space for California-China Green Technology Center to establish an international component of the innovation center district and center
- Begin plans and identify partners for permanent Innovation Center facility in proximity to Warm Springs BART Station

Appendix A-1: Fremont Clean Technology Firms w/ Solar Breakout -- September 2011

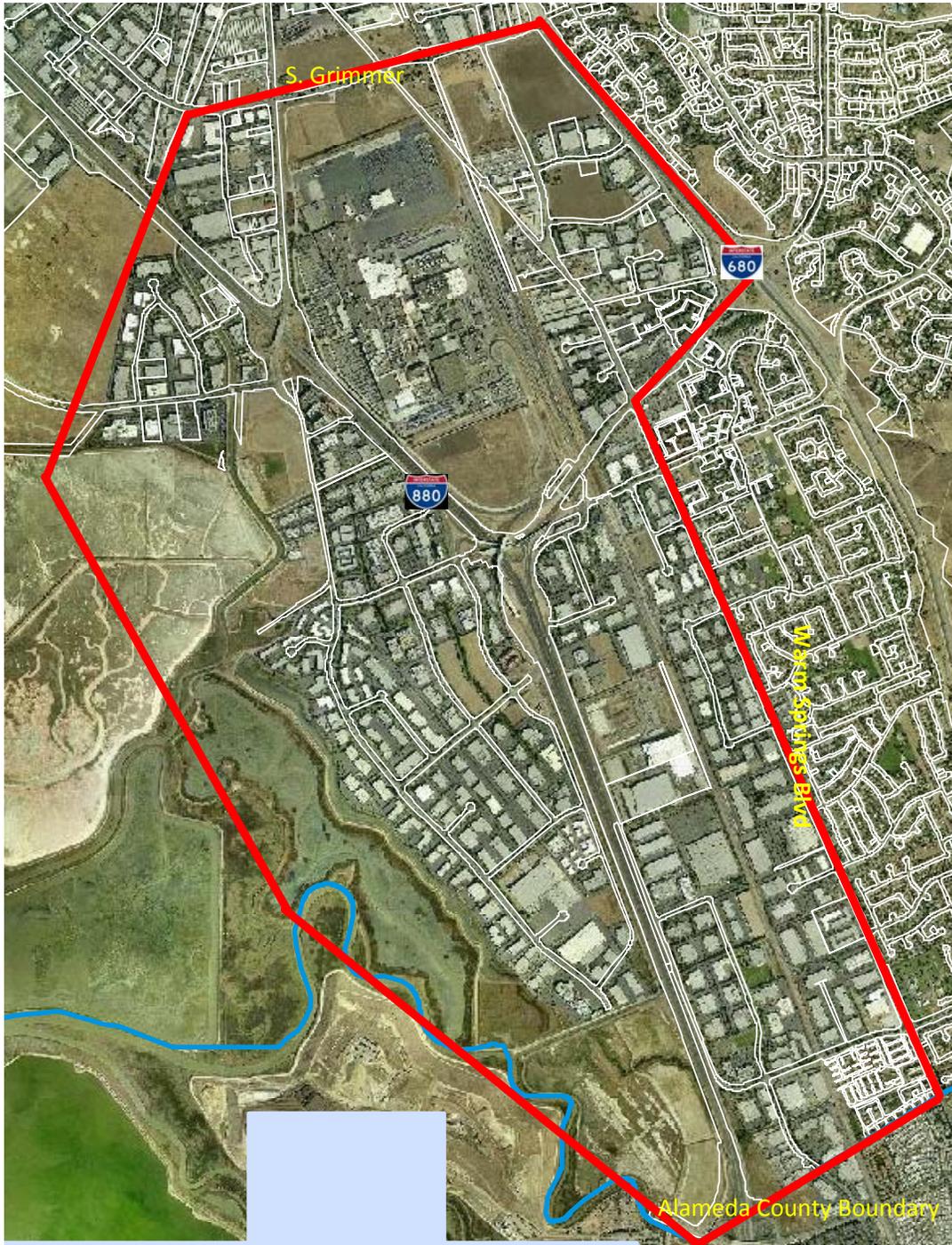
<b>Business</b>	<b>Address</b>	<b>Description</b>
Amber Kinetics	47338 Fremont Blvd.	Cleantech energy storage
Centrosolar America Inc.	47273 Fremont Blvd.	Solar panels
Deeya Energy Inc.	48611 Warm Springs Blvd.	GreenEnergy Storage Platform
Delta Products	4405 Cushing Pkwy	solar, LED, wind, EV charging
EchoFirst Inc.	34760 Campus Dr.	Solar panels
Encore Solar Inc.	3501 W Warren Ave.	Solar electric Research & Dev
Everbright Solar	44802 Osgood Rd.	Wholesaler of Solar Cells
GlassPoint Solar	46485 Landing Pkwy.	Green power generation
Green Volts	46400 Fremont Blvd.	Solar Research & Dev
Intematix Corp.	46410 Fremont Blvd.	Fuel Cells
Leyden Energy (Mobius)	46840 Lakeview Blvd.	Battery Research & Dev
Lunera	48550 Fremont Blvd	LED manufacturing
Oorja Protonics Inc.	40923 Encyclopedia Ci.	Methanol Fuel Cells
Pacific Solar Tech	44843 Fremont Blvd.	Solar panels
PlasmaSi	3754 Spinnaker Ct.	Manufacturing
Redwood Systems	3839 Spinnaker Court	LED, smart lighting/ buildings
RETC	46457 Landing Pkwy.	Testing
Satcon Power Systems	2925 Bayview Dr.	Utility scale power distribution
Sierra Solar Power Inc.	45645 Northport Loop	Green power generation
Solaria Corporation	6200 Paseo Padre Pkwy	Solar panels
Soraa	6500 Kaiser Dr.	Batteries
Sun Hydrogen	39812 Mission Blvd.	Solar R&D
Sun Innovations	43241 Osgood Rd.	R&D Optics & photonics
Tesla	3500 Deer Creek	Electric Vehicle Manufacturing
TUV SUD America	46457 Landing Pkwy.	solar testing and certification
Xcell Power	Residential Location	
		<b>TOTAL= 25</b>
<b>Solar Breakout</b>	<b>Function in Fremont</b>	
Centrosolar America Inc.	Distribution (Manufac. in AZ)	
EchoFirst Inc.	R & D	
Encore Solar Inc.	R&D	
Everbright Solar	Wholesale, Distributors	
GlassPoint Solar	HQ (Manufacture possibly)	
Green Volts	R&D	
Oorja Protonics Inc.	R&D	
Pacific Solar Tech	Wholesale, Distributors	
RETC	Testing	
Sierra Solar Power Inc.	R&D	
Solaria Corporation	Manufacturing and R&D	
Sun Hydrogen	R&D	
TUV SUD America	Testing	
		<b>TOTAL= 13</b>

# A-1 Fremont's Clean Technology Companies



The City of Fremont does not guarantee the accuracy of the information contained herein. Property information is obtained by a 3rd party. Please contact listing contact for more information.  
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### A-3 Proposed Innovation District Boundary



Additional Resources TBD

Appendix Information:

- Assessment of Incubator Program – SJRA, June 2009  
[http://www3.sanjoseca.gov/clerk/CommitteeAgenda/CED/20110926/CED20110926\\_d4att2.pdf](http://www3.sanjoseca.gov/clerk/CommitteeAgenda/CED/20110926/CED20110926_d4att2.pdf)

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