

# Sustainable Energy Roadmap

#### Advancing Resilient Valley Communities

03/24/15

Program Informational Webinar

















# Agenda

- Sustainable Energy Roadmap Overview
- Municipal Participant Benefits & Process
- SER Core Implementation Team
- City of Visalia Comments
- Q & A / Next Steps















# Sponsored by Strategic Growth Council under the Sustainable Communities Planning Grant

- Proposition 84 state funding.
- Help local governments integrate strategies to reduce greenhouse gas emissions.
- Promote equity by bringing environmental justice communities into public planning.















# Program Objectives

- Leverage an intentional process and set of tools to support Valley public agencies adopt and pursue clean energy and sustainable development goals.
  - o Baseline and benchmark existing policies, standards & programs.
  - o Identify local, relevant goals related to
    - Energy efficiency/ conservation
    - Solar/ renewable energy
    - Transportation and land use.
  - o Design a <u>roadmap for action</u> that promotes long-term emissions reductions.
  - o Provide a voice for EJ communities in planning and program adoption.















### Municipal Partner Opportunity

- Jump-start the process to plan, adopt and launch critically needed policies and supportive programs.
- Leverage a proven approach and team of experts to design an action plan that can be addressed over time.
- Facilitate critical community dialog and active engagement.



















### **SER Key Elements**

- Environmental & energy benchmarking
- Tailored roadmaps that serve as action plans
- Goal setting tied to regional/ national best practices
- Policy, program and project resources and tailored assistance
- EJ community engagement and services
- Partnerships with regional industry and workforce development organizations
- Online Roadmap platform and recognition
- Municipal partner \$5K program stipend (available to first 18 sign-ups)

















#### **SER Process\***

- 1. Complete a baseline/ benchmark survey of existing municipal policies, processes and practices.
- 2. Identify local goals tied to best practices and informed by community input.
- 3. Obtain municipal commitments then codify goals in a roadmap that is publicly accessible.
- 4. Provide for updates and recognition on how participating agencies are advancing on goals.
- \* Local agencies to expend approximately 60 hours of staff time to engage in SER.















# Building on a Tested Model



A Smart Energy Planning
Framework for Communities

The Clean Energy Roadmap enables local governments and utilities to identify and pursue cost-effective policies and programs to encourage smart approaches to energy use.







Renewable Energy



Clean Transportation















### Roadmap Framework

Roadmap Goals
4 categories, 6 focus areas

**Local Customization** 

Select relevant goals to pursue

Customized Roadmap **Tools, Templates, Case Studies**Supported by 240 targeted resources



**Technical Support** 

Webinars, on-site trainings, program dev.



**Impact Assessment & Recognition** 

























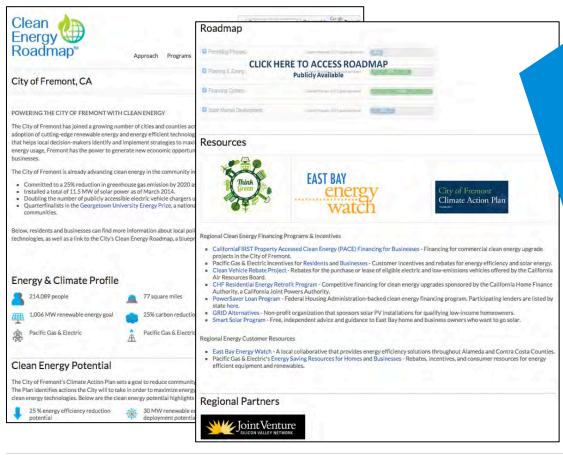








# Community Landing Page





















# Roadmap & Categories

#### back to summary Roadmap Goals and Progress The template roadmap displayed below contains an illustrative sample of objectives that San Joaquin Valley communities may elect to pursue. For up-to-date information about policies and programs in your community, please visit your city or town's customized landing page on the Sustainable Energy Roadmap. Energy Efficiency Doing more with less energy means cost savings, increased comfort, and a more secure electricity grid. Energy efficiency is the most cost-effective strategy for commercial building owners to reduce energy usage and associated operating expenses, while also increasing occupant comfort and employee productivity. When bined with on-site renewable energy generation, demand side management, and energy storage, commercial ulidings can achieve deep reductions in grid energy usage. Renewable Energy Generating clean power from renewable energy sources comes with many economic and environmental benefits. Once building energy efficiency measures have been implemented, the remaining energy consumption needs can be satisfied using a portfolio of on-site renewable energy technologies, such as solar PV, solar water heating, small wind turbines, geothermal heat pumps, and bioenergy. The economic viability of renewable energy projects will depend on external factors, such as utility rate schedules and local market conditions, Transportation & Land Use Transportation is critical to the movement of people and goods, as well as providing access to services. However, the transportation sector constitutes one of the primary end-uses of energy in communities across the country. Finding creative ways to reduce vehicle miles traveled (VMT) is proving to be a significant challenge, but also fosters an environment for new innovative solutions. By decreasing the environmental impact of their transportation systems cities can improve regional air quality and reduce their carbon footprint. Social Equity Social equity is a crucial component of sustainable development. The Sustainable Energy Roadmap aims to develop smart energy and sustainable development policies and programs at the local level that reflect the needs and priorities of target communities, reduce its businesses' and residents' energy prices and environmental Impacts, improve the economy and generate new Johs.

#### Energy Efficiency

 Building envelope, lighting, HVAC, demand side management

#### Renewable Energy

 Solar PV, solar water heating, wind, geothermal, bioenergy, energy storage

#### Transportation

 Public transit, active transportation, fleet mgmt., controls measures, smart growth strategies

#### Social Equity







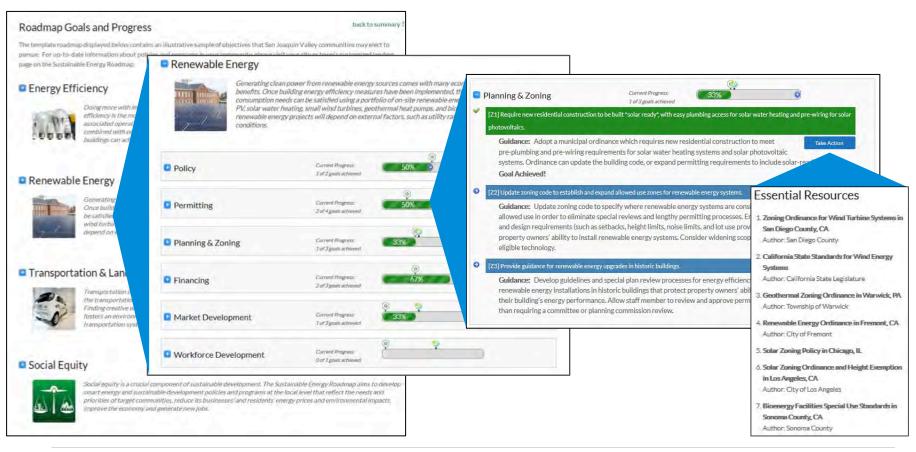








# Goal Setting, Guidance, & Resources

















# Targeted Resources

#### Essential Resources

#### 1 Zoning Ordinance for Wind Turbine Syste

The San Diego County Zoning Ordinance defines wind turb requirement, minimum parcel size, development standary turbines) for each size wind turbine are provided. Prior financial surety for removal. The County created the d

#### Click to Download

Source: San Diego County, Ordinance No. 10073, Amendin Large Wind Turbine System. Published 9/15/10. Available at /search?g=Ordinance+No.+10073+-+Amendmenb+to+San+D. nd+Large+Wind+Turbine+System@ie=utf+8&io=utf-8&f.

### Roadmap Goal: [Z2] Update zoning code to establish and expand allowed use zones for renewable energy systems.

**Description**: Zoning code updates and ordinances that specify where renewable energy systems are considered an allowed use eliminate potentially lengthy zoning permitting processes that may deter property owners from considering on-site renewables. Clearly defined zoning and use regulations enable local governments to better manage renewable energy market development and minimize negative impacts, while also eliminating uncertainty for project developers.

#### 2. California State Standards for Wind Energy Systems

California's 2001 Assembly Bill 1207 established statewide standard provisions related to the permitting and use of small wind, energy systems, in order to promote their use and remove any significant obstacles. Local ordinances may not impose conditions on the installation of small wind energy systems that are more restrictive than the requirements and conditions outlined in the law.

Source: California State Legislature. Californa Assembly Bill No. 1207. Available at http://www.leginfo.ca.gov/pub/01-02 /bil/vsm/ab 1201-1250/ab 1207 bill 20011007 chaptered.html.

#### 3. Geothermal Zoning Ordinance in Warwick, PA

This prefinance from the Township of Warwick in Pennsylvania amends its zoning code to allow for closed-loop geothermal systems in certain zones.

#### Click to Download

Source: Township of Warwick: Ordinance No. 263. Available at http://www.warwicktownship.org/sites/warwickpa/files/file/file/ordinance\_263.pdf.

#### 4. Renewable Energy Ordinance in Fremont, CA

In 2012, the City passed a Renewable Energy Ordinance, now codified in Chapter 18.185 of the Municipal Code, to implement policies of the General Plan to facilitate renewable energy production, energy conservation, and greenhouse gas emissions reductions. In particular, the Renewable Energy Ordinance provides specific use allowances and flexibility in permitting for solar and wind energy systems, as well as other emerging technologies.

Source: City of Fremont: Fremont Municipal Code Chapter 18.185. Available at http://www.codepublishing.com/CA/Fremont /?Fremont18/Fremont18185.html.

#### ORDINANCE NO. 10073 (NEW SERIES)

#### AN ORDINANCE AMENDING THE SAN DIEGO COUNTY ZONING ORDINANCE RELATED TO SMALL, MEDIUM AND LARGE WIND TURBINE SYSTEMS

The Board of Supervisors of the County of San Diego ordains as follows:

Section 1. The Board of Supervisors finds and determines that wind power is an important renewable source of energy and the Zoning Ordinance should be amended to revise references to State law, allow additional turbines under the Medium Wind Turbine System regulations and add findings for approving Medium Wind Turbine Systems. The ordinance is consistent with existing State laws that encourage the construction of wind energy systems to conserve energy. The amendments made by this ordinance are intended to set forth reasonable standards and procedures for the installation and operation of Wind Turbine Systems to improve and enhance public welfare and safety, and to implement the Energy Element of the San Diego County General Plan.















### Resource Library

The Clean Energy Roadmap offers the first comprehensive, publicly-accessible resource library that will help transform your local clean energy market. The library is composed of hundreds of resources and tools from a variety of respected public and private industry sources, which are organized by focus area and fully indexed to search by keyword. Residents, businesses, governments, utilities, and industry stakeholders can easily find information on relevant policies, programs, case studies and best practices.

Search for resources in our comprehensive Resource Library.

OI.

#### Search for resources by energy type:



#### Features & Contents

- Searchable by energy technology type and keyword
- Permitting and inspection checklists
- Renewable energy-friendly ordinances and zoning codes
- Solar-ready/green building guidelines
- Financing resources & incentives
- Consumer education & awareness
- Case studies and action toolkits







www.sustainableenergyroadmap.com



Solar Water Heating





Electric Vehicles









### Simple Sign-up







Participant Agreement Benchmarking Survey

www.sustainableenergyroadmap.com

**Goal Setting** 

**Technical Assistance & Support** 









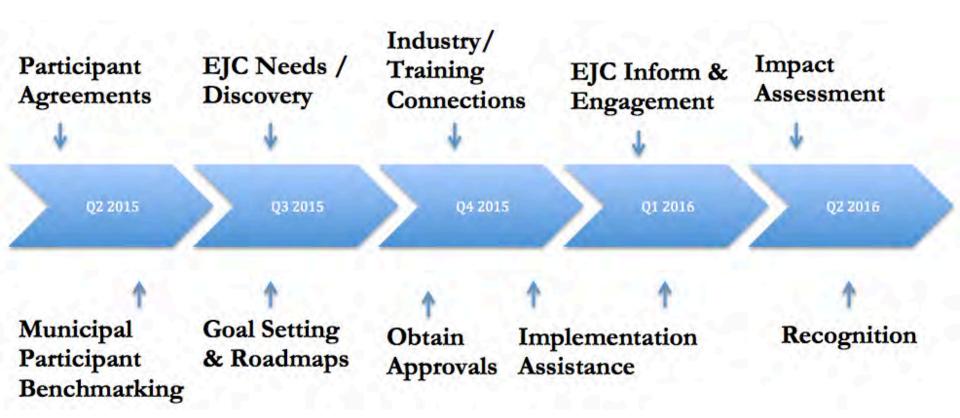








#### **SER Timeline**

















# SOCIAL EQUITY AND ENVIRONMENTAL JUSTICE CONNECTIONS















# SOCIAL EQUITY FOCUS

	Municipalities	EJCs
GOALS & OBJECTIVES	How to address clean energy and sustainable development goal setting, policy and program adoption?	How to have a voice in the planning process, to access critical information, resources?
NEEDS & CHALLENGES	Local agencies are being required by law, natural and economic realities interest to take action.	<b>EJC communities</b> are the most vulnerable to climate and economic shocks (e.g.: water, air, jobs).
	Municipal staff face time, budget and information barriers to engage in a best practice informed, public participatory planning process.	Residents and business often lack information, champions and pathways for contributing to the public discourse and the access to resources for taking action.













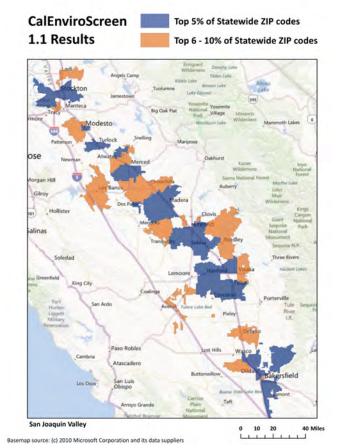






# Connections with EJ Communities

- Partnering with key local/regional EJ community stakeholders
- EJ community education and vetting of proposed new policies
- Access to resources for compliance
- Partnerships with green employers and regional workforce development











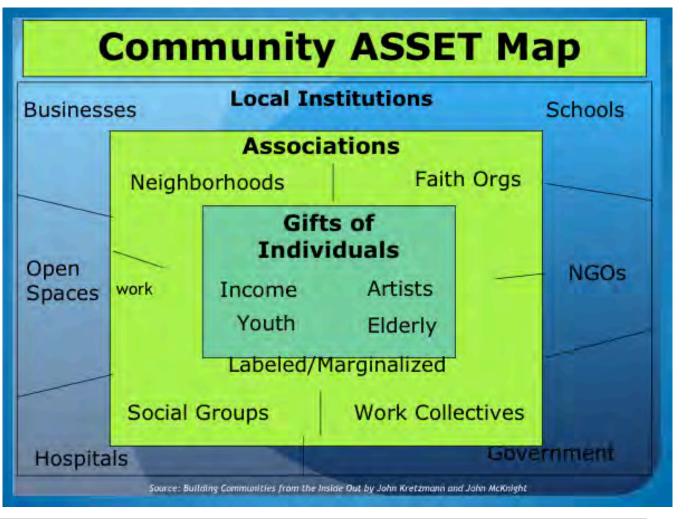








### Asset Based Community Development



















### **SER CORE TEAM**















# Strategic Energy Innovations

SEI develops and delivers solutions customized to help communities accomplish their sustainability goals through green building, clean energy, resource efficiency and support of a local and qualified green workforce. We're a certified green business, community-based nonprofit organization committed to empowering under-served markets:



- Local governments;
- Small and rural communities;
- Affordable housing providers and residents;
- Small businesses;
- Schools, colleges, and universities



www.seiinc.org















# SJV Regional Policy Council

- The San Joaquin Valley Regional Policy Council builds regional consensus on issues of Valley importance. The Council is positioned to have a unique and potentially pivotal position to further Valley collaborative efforts and to improve the quality of life for all Valley residents.
- The Policy Council provides guidance on common interregional policy issues and also represents the San Joaquin Valley at public forums such as the California Transportation Commission, with the Governor and his administration, as well as the State and Federal legislative bodies that require a common voice from the San Joaquin Valley.

#### www.sjvcogs.org















#### **MCTC**

• The Madera County Transportation Commission (MCTC) and each of its member agencies (Cities of Chowchilla and Madera and Madera County) are considering long-term County-wide housing, transportation, and land use alternatives; taking a big picture look at how Madera County can grow over time in a way that uses natural resources wisely, protects existing communities and the environment, conserves farmland and open space, and supports the Madera County economy.

#### www.maderactc.org















# Optony, Inc.

Optony develops and deploys clean energy best practices across the entire project lifecycle for government agencies, schools, banks and commercial organizations. Optony has been involved in over 3GW of project activity globally from strategy to project commissioning.

Optony creates and manages national-scale projects for clean energy market transformation including a variety of projects for the Department of Energy under the SunShot Initiative.



Award Winning Pubic Sector Project



Award Winning
Pubic Sector Project



Multiple Grant-Winner for Solar Market Transformation



Best of Silicon Valley Recognition for Energy Services

"Optony's consulting service is a must-have for any organization considering an investment in solar. Based on Optony's comprehensive analysis and recommendations, we now have a low-risk, high-return solar strategy."















#### **NARC**

- The National Association of Regional Councils (NARC) serves as the national voice for regionalism by advocating for regional cooperation as the most effective way to address a variety of community planning and development opportunities and issues.
- NARC's member organizations are composed of multiple local governments that work together to serve American communities large and small, urban and rural. NARC's agenda includes, but is not limited to, transportation, economic and community development, environment, homeland security and regional preparedness, and a variety of community issues undertaken by its member organizations.

www.narc.org















#### **CEG**

• The Colorado Energy Group, Inc. (CEG) facilitates solutions to complicated energy-related sustainability issues via best practice integration, exhaustive stakeholder analysis, human asset mapping and strategy development. CEG is known for community-focused clean energy technology market analyses, especially in the Western United States. CEG's President George Burmeister has provided clean energy policy advice to private and public sector leaders for more than two decades, concentrating his efforts on the optimum combinations of energy efficiency and renewable energy technologies, practices and policies. CEG is headquartered in Boulder, Colorado and also has offices in Dallas, Texas and San Francisco and Stockton, California and Washington, D.C. CEG was founded in 1997.

#### www.coloradoenergygroup.com

















Participant Experience:

### THE CITY OF VISALIA

LEE JOHNSON
NATURAL RESOURCE CONSERVATION ANALYST















### The City of Visalia

The City of Visalia is the oldest San Joaquin Valley town between Los Angeles and San Francisco. Visalia staff and elected officials have demonstrated significant leadership in the areas of energy and resource conservation. Serving as a key member of the Valley Energy Watch Partnership with SCE, Visalia staff continue to set an example for the region through municipal actions to support solar energy, resource efficiency and smart land use. The City has adopted a climate action plan that incorporates a host of measures and strategies designed to meet ambitious greenhouse gas emissions reduction targets.

www.ci.visalia.ca.us















### Next Steps

- Follow-up to learn more
- Complete SER participation agreement & benchmarking survey
- Select and implement goals



Sustainable Energy Roadmap (SER)

Municipal Partner Agreement















# **Q&A DISCUSSION**















#### **SER Contacts**

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