



Brown to Green: Make the Connection to Renewable Energy

Santa Fe 12-10 & 11 2008

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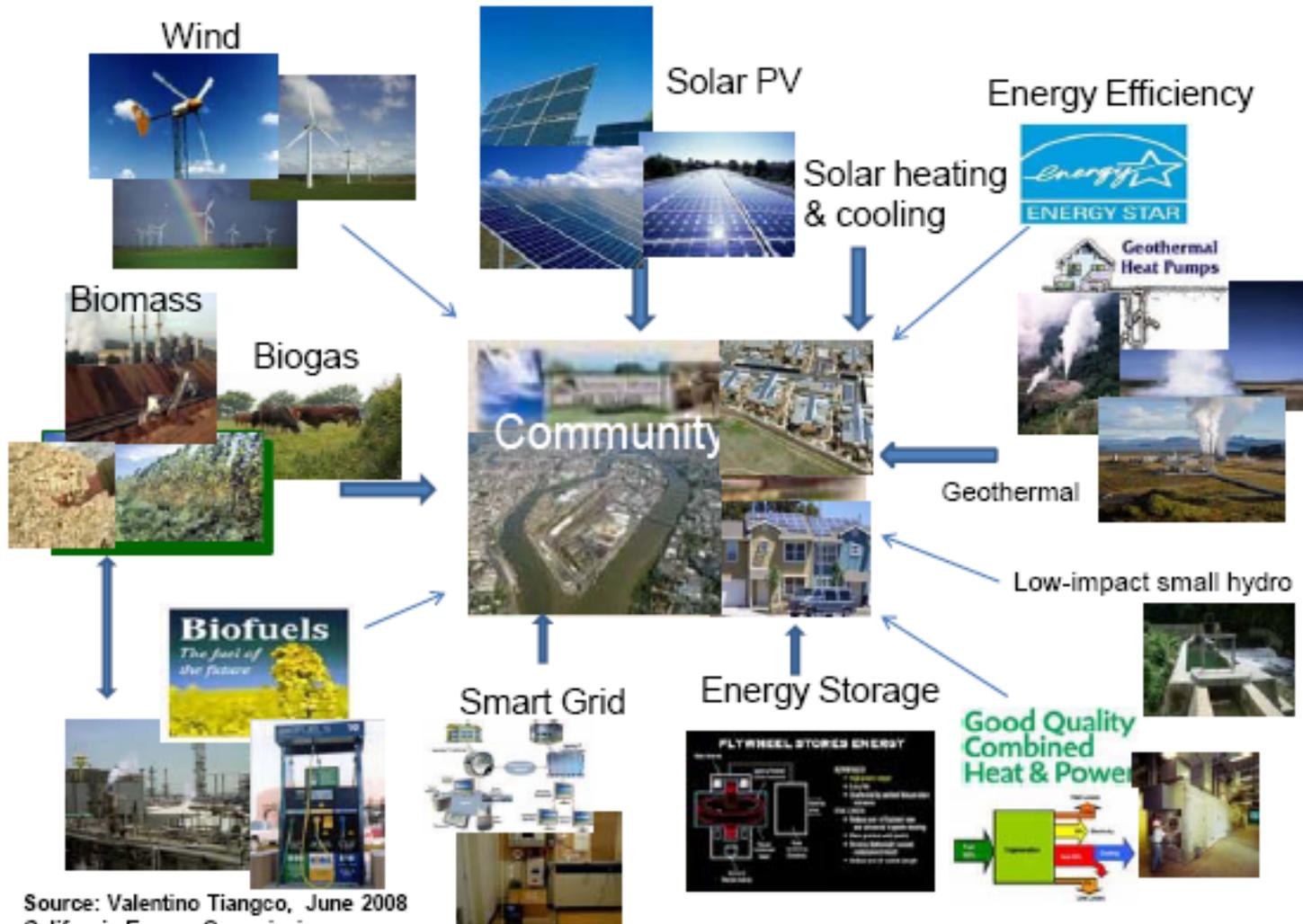
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Why Renewable Energy at Contaminated Sites?

- Productive use of contaminated lands
- Employment in mining communities
- Long term stewardship of contaminated lands

Vision for Renewable-based Energy Secure Communities (RESCO)

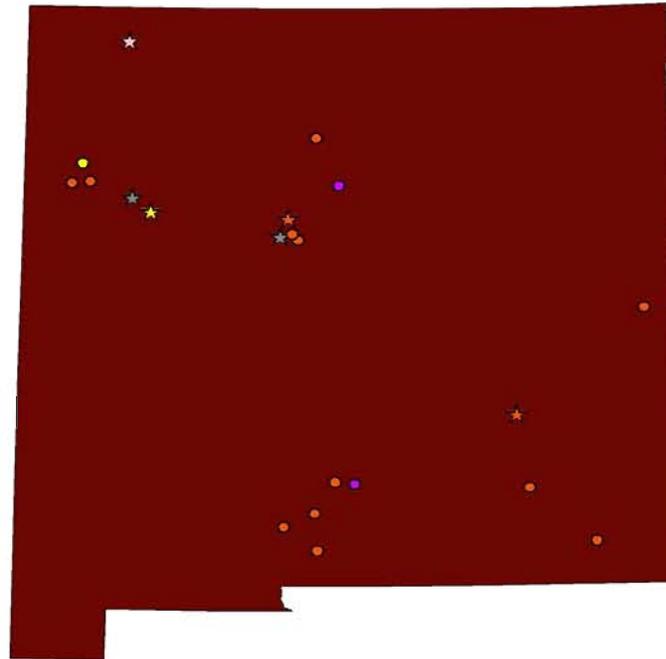


Graphic courtesy of: Notice of Staff Workshop on the California Energy Commission's Public Interest Energy Research (PIER) Renewables Program Research, Development and Demonstration Initiative for Renewable-based Energy Secure Communities

Priorities for RE development

1. Renewable resource assessment
 1. NREL solar and wind maps and:
<http://www.epa.gov/renewableenergyland/>
 2. Utility wind must be class 4 or higher. IF wind is promising need 1 year of met tower data with at least 50M tower
2. Land Access
3. Transmission access – involves interconnection study
– ISO and/or utility involvement – State can help prioritize
4. Permitting – big issue if federal land – NEPA, EIS, etc.
– State may be able to expedite for Brownfield RE
5. PPA with utility or owner
6. financing based on all above.

EPA Tracked Sites in New Mexico with Utility Scale Concentrating Solar Power (CSP) Energy Generation Potential



Solar Resource kWh/m ² /day	Resource Potential
< 4	Moderate
> 4 - 5	Good
> 5 - 6	Very Good
> 6	Excellent

EPA Tracked Sites

- Abandoned Mine Land
- Brownfield
- RCRA
- Federal Superfund
- Non-Federal Superfund
- ☆ Stirling Engine System
- Stirling Engine System and Trough and Power Tower System

Screening Criteria

- Direct normal solar resource availability of greater than 6 kWh/m²/day
- Distance to electric transmission lines of 10 miles or less
- Stirling engine system: property size of 40 acres or more
- Trough and power tower system: property size of 250 acres or more
- Distance to graded roads of 25 miles or less



This map was developed by SRA International for the U.S. Environmental Protection Agency (EPA) OSWER Center for Program Analysis. Results are based on site screening criteria adapted from National Renewable Energy Laboratory (NREL) criteria and GIS data provided by NREL and EPA. This map and its associated data are intended to provide a general understanding of the renewable energy potential of EPA tracked sites; additional site specific analysis is required to determine the actual energy generation potential of EPA tracked sites. For further information, please see the accompanying Data Guidelines document, or contact cleanenergy@epa.gov.



U.S. EPA OSWER
CENTER FOR PROGRAM ANALYSIS



PV as a cap



Malagrotta landfill - Italy - 998 kW



PV as a cap

