



Getting to Clean and Green:

5 Practical First Steps to “Solar”¹ in Your Community

1. **Meet with your department heads.** Find out if they incorporate “clean, green” energy considerations in their routine operations. If not, find out why. Ascertain what procedures need to be changed in order to improve the situation. For example:
 - *Planning:* Is energy included among your community’s infrastructure elements? Do you require developers to pay impact fees for the energy requirements associated with their projects? Are streets in new residential districts laid out to permit passive solar orientation? Do you use land-use planning as a tool to minimize transportation requirements (maximizing urban in-fill, creating pedestrian malls, laying out bicycle- and pedestrian-friendly streets and shopping districts, etc.)?
 - *Zoning:* Do you have ordinances or covenants that create barriers to rooftop solar or other on-site or distributed energy technologies?
 - *Transportation:* Do you offer clean, convenient, affordable mass transit, as an incentive for citizens to leave their one-person cars? Do you encourage bicycle and pedestrian traffic? Do you facilitate car- and vanpooling?
 - *Government Leadership:* Is your government leading by example? Do you procure “clean, green” products for your own operations? Have you incorporated life cycle costing in your procurement operations (or are you stuck in the dinosaur days of lowest first cost, regardless of projected operating costs)? Have you installed solar water heating in governmental facilities where this makes economic sense (e.g., prisons, hospitals, shelters, community centers)?
2. **Meet with private citizens.** Ascertain opportunities for public-private partnership. Identify local champions who have resources or expertise to assist government in becoming clean and green. Find out about energy performance contracts, through which private-sector firms pay the capital costs of energy-saving equipment and take payment from the stream of savings that result. How much is the private sector willing to donate? Are there local businesspersons that are willing to marshal local resources for projects to benefit their community and local government? Are there citizen groups interested in carrying the “clean, green” message, and extending it beyond government? What strategic (and perhaps unlikely) alliances can you forge?
3. **If your municipality owns its electric utility, build a clean, green power plant.** Substitute programs and policies for bricks and boilers. The City of Austin built a 500-megawatt “conservation power plant” in the 1980s. The municipal utility used energy efficiency building codes and mortgages, low-interest loans for lighting change-outs and high-efficiency air conditioning, and an array of policies and programs that resulted in hard, predictable, technology-based energy savings. (It is important that “power plant” savings not be dependent on the

¹ Plus energy efficiency and other renewable energy technologies

vicissitudes of behavior, even though conservation behavior always should be encouraged.) Solar energy technologies can be key “equipment” in such a power plant.

4. **If your municipality is an important customer of an investor-owned electric utility, use the power of your franchise as leverage to persuade the utility to invest in economical clean, green technologies and programs.** If your community is in a growth mode, these technologies plus load-management programs can shave peak demand, thus saving the utility (and its customers) the cost of investing in added peaking power. Consider “partial municipalization” – that is, municipal government taking over demand-side management and renewable energy programs that customarily would be the purview of the utility, without acquiring the utility’s distribution system or other hardware.
5. **Take it to the people.** Involve senior citizens, teen-agers, and other civic-minded groups. Perhaps put it to a vote. Get the citizens on record as supporting “clean and green” in principle. Make “clean and green” a hallmark of your administration and a key part of your legacy.

WHY SHOULD YOU DO THIS?

Energy assuredness. As the blackout of Aug. 14, 2003 demonstrated, our nation’s central transmission system is vulnerable to a variety of failures. Upgrading it to secure levels promises to be a prohibitively expensive and long process. Decreasing our need for centralized electricity will minimize our vulnerability to future catastrophic events. We can achieve this through aggressive energy efficiency and conservation, plus supplements or offsets to local distribution networks through on-site or distributed renewable energy resources.

Economic development. Jobs related to energy efficiency and renewable energy technologies tend to be local, high quality and dispersed. The industries themselves tend to be clean. Money spent on these products and technologies stays in local economies, where it is spent and re-spent (the multiplier effect). This is in contrast to conventional electricity bills, which usually are paid to utilities outside the community, and often in another state. The city of Osage, Iowa, documented this phenomenon and identified a multiplier of \$2.23 for energy efficiency purchases.

Risk management. Diversifying the electricity-generating portfolio and reducing the need for electricity through energy efficiency provide a hedge against future price spikes, particularly in natural gas. Energy can be a significant operating cost for both businesses and residents. Risks associated with it should be managed like any other.

Environment. While clean, green energy cannot supply all of our needs, it can reduce the amount of energy that must be generated from fossil fuels.

HOW CAN YOU GET STARTED?

Model requests for proposal (RFPs), model energy-saving performance contracts, and other useful documents can be found at the following websites:

<http://www.MillionSolarRoofs.com>

<http://www.irecusa.org>

<http://www.dsireusa.org>

<http://www.nrel.gov>