

Energy Independence via Conservation and Renewables: the New Orleans Example

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“The key to most rapidly and cost-effectively achieving US Energy Independence and a low-carbon footprint is to reduce the consumption of traditional energy sources within buildings by first implementing energy conservation and then adding renewable energy as well, ” says Dr Myron Katz.

What Energy Really Costs in ¢/kwh

■ Switch from Incandescent to Fluorescent lamps	-1.0 ¢
■ Shade your windows	1.5 ¢
■ Fix HVAC duct leakage	1.5 ¢
■ Weather-strip your home	4.4 ¢
■ Average \$10,000 Energy Efficiency Upgrade	8.7 ¢
■ PV Electricity (via La & US subsidies)	10 ¢
■ US Average Electricity price (subsidized)	11 ¢
■ PV Electricity (unsubsidized)	40 ¢
■ US Average Electricity Price (unsubsidized)	130 ¢

www.theRegenGroup.com/images/NolaSolar-NOCX-GreenTariff-Proposal.PDF

www.eia.doe.gov/cneaf/electricity/epm/table5_6_a.html

However, the marketplace is lacking focus and guidance to rapidly implement energy conservation, efficiency and renewable energy in buildings — our largest energy consumption sector. (www.eia.doe.gov/emeu/aer/pdf/pages/sec2_4.pdf)

New Orleans initiatives:

- Spring 2005: City Council passed the *New Orleans Energy Efficiency Programs* (NOEEP) ordinance to promote energy efficiency and conservation upgrades in residential and commercial buildings (two of us were on the team selected to implement that program).
- Summer 2005: Following Katrina, most homes were being rebuilt without adequate consideration for durability, survivability or energy efficiency. In response, we helped lead the following two initiatives: (www.TheRegenGroup.com).
 - Fall 2006: We introduced a functional, performance-based, residential building *standard of sustainability* (SOS) and a City ordinance. Included is a certification attesting to a home's ability to protect itself and its occupants. An SOS home can withstand hurricanes, tornadoes, floods, termites, subsidence, torrential rain and excessive humidity — while providing a healthy, comfortable and *Net-Zero Energy* home.
 - Spring 2007: City Council encouraged a volunteer-led, Energy Policy Task Force (EPTF) to empower a "*Sustainable Energy Future*" plan. More than 100 citizens, commercial firms, federal agencies and environmental organizations participated. NOLA Solar provided technical leadership and a major percentage of the content. Among over 100 of EPTF's recommendations one finds enhanced incentives for commercial and residential construction that achieve "Net-Zero Energy" and the creation of a regional building science institute.

Summer 2008: EPTF led to the City Council's adoption of the *Energy Smart Initiative* (similar to NOEEP)

NOLA SOLAR focuses upon energy conservation within buildings. We lead the design of:

- New homes that save 40% of the energy use of a conventional home — at no additional construction cost.
- Upgrades of existing homes to rapidly reduce their energy consumption by 60% via five-year paybacks.
- SOS homes which employ solar collectors and a bevy of energy-conserving strategies to reach "Net-Zero Energy". (An SOS home costs more to build, but this is completely off set by reductions in energy, insurance and other monthly costs.)

Moreover, in 2007, the Louisiana legislature enacted a 50% state tax credit for any resident (*not just homeowners*) who installs solar energy systems, and, in 2008, encouraged the biofuels industry to invest in commercial plants. NOLA Solar is involved in both of these industries.

We at NOLA Solar appreciate the encouragement of the City of New Orleans and of the State of Louisiana in our *Energy Conservation* endeavors to improve the lives and the financial well-being of our fellow citizens.