

## City of San Antonio: Mission Verde Sustainability Plan

### Strategy #3: Sustainable Buildings

#### **Initiative #5: Adopt a green, high-performance building code for new residential and commercial construction.**

Any strategy for significant electricity savings must address buildings. Buildings represent almost 75% of the electricity consumption in the country, and over 90% in San Antonio. Different approaches apply when dealing with new construction as opposed to existing buildings. The best way to address new construction is to develop a code that meets the specific needs of San Antonio by combining minimum standards, voluntary standards, and incentives.



To achieve this, in July 2008 Mayor Hardberger appointed the Mayor's Task Force on Sustainable Buildings. It is chaired by Ed Kelley, the former head of real estate at USAA and currently an advisor to the Pearl Brewery development. The Task Force has over 40 members from the community represented on its Executive and Advisory Committees. The membership is diverse, with elected officials, city staff, architects, builders, engineers, developers, and environmentalists. Stakeholders include the City of San Antonio, CPS, SAWS, the Real Estate Council, the Greater San Antonio Builders Association, the San Antonio Apartment Association, the AIA, the U.S. Green Building Council, and the Sierra Club. Technical support is provided by Lockheed Martin, the Energy Systems Lab at Texas A & M, Build San Antonio Green, AACOG, and the City's departments of Environmental Policy and Development Services.

After months of work, this comprehensive group has made the following recommendations for a new green, high performance building code in San Antonio:

- New residential/commercial construction must achieve overall energy savings of 15% over current San Antonio energy codes.
- The improved code will take effect on January 1, 2010.
- Builders have flexibility to meet this new standard by using several different methods of measurement or certification.

- In 2012, the interim goal is a code that produces 30% savings over current energy codes.
- In 2030, the goal is new buildings that are net-zero carbon.
- CPS will provide incentives to provide 30% or more savings over current code, with greater incentives for greater energy savings.

These recommendations represent a smart, stepped approach to energy efficiency and new construction. As builders adjust to a new standard, they can use incentives to reach a higher voluntary standard. As more homes and buildings are built to this new voluntary standard, it will become easier to move to a new higher minimum standard. This process can continue in a measured, continuous way until the City achieves the ultimate goal in 2030 of a net-zero carbon building.

### **Action**

*The San Antonio City Council should adopt the recommendations of the Mayor's Task Force and create a new green, high performance building code for new construction.*

### **Timetable**

March 2009: Adoption of recommendations by City Council  
Jan. 1, 2010: Effective date of new code

### **Related documents:**

Recommendations of Executive Committee of the Mayor's Task Force on Sustainable Buildings, January 2009

List of members of the Executive and Advisory Committees of the Mayor's Task Force on Sustainable Buildings

## **Initiative #6: Build a Green Retrofit Program for existing homes and buildings.**

The largest electricity use in San Antonio is in existing homes and buildings. The challenge is how to make these homes and buildings more energy efficient without mandating retrofitting. CPS Energy already has extensive incentives, and is developing more, for the retrofitting of homes and buildings. But CPS Energy cannot do it alone. To take advantage of CPS's incentives, owners and residents must have access to the capital needed to retrofit their homes and businesses. But often San Antonians do not have access to this capital, particularly in these hard times.

To address this issue, Mayor Hardberger commissioned Sustainable Systems (Oakland, CA), Strategic Development Solutions (Los Angeles, CA), and Economic Innovation International (Boston, MA), to develop a business model for large-scale green retrofits in San Antonio's buildings and homes. Later, the Environmental Defense Fund provided a \$25,000 grant to assess the feasibility of the Pay As You Save® (PAYS®) platform, developed by the Energy Efficiency Institute (Vermont), as a business model for retrofits in San Antonio.

The two teams combined their efforts and recommended a two-prong approach to retrofitting in San Antonio. First, use a free weatherization program for retrofitting of low and mixed income neighborhoods. While San Antonio already has a limited amount of free weatherization, these programs could be consolidated and expanded, and take advantage of additional federal support for weatherization.

The second approach, for government, institutional, commercial, and higher income homeowners, is to use the PAYS (Pay As You Save) system. This system has several benefits:

- It requires no upfront payments.
- Retrofitting costs are paid through a surcharge on the CPS bill.
- The surcharge is less than the estimated energy savings from the retrofitting.
- The surcharge lasts for a specific time, but no longer than the useful life of the measures.
- Available incentives, such as from CPS or the manufacturer, can lower the retrofitting costs.

The Retrofitting team recommended that the City start a pilot program, using City buildings and possibly one commercial and multi-family building, and a few homes, to test the PAYS system. Lessons from the pilot can then be used to expand the system throughout the City. This system has the potential, working in tandem with the free weatherization program, to dramatically increase the energy efficiency of our existing building stock and create another essential part of a 21<sup>st</sup> Century sustainable economy in San Antonio.

### **Action**

*Consolidate and expand the weatherization programs in San Antonio and begin a pilot program to test the PAYS system.*

**Timetable**

Spring 2009: Begin design and implementation of pilot program and consolidate and expand weatherization programs.

**Related documents:**

Report on Formation of a Green Retrofit Program, January 2009