

**SUBJECT:** Encouraging energy-saving measures to reduce air contaminant emissions

**COMMITTEE:** Environmental Regulation — committee substitute recommended

**VOTE:** 7 ayes — Bonnen, Howard, Driver, Homer, T. King, Kuempel, W. Smith  
0 nays

**WITNESSES:** For — Ann Culver, Greater Houston Partnership; Tom “Smitty” Smith, Public Citizen; Michael Vasquez, Texas Clean Air Working Group  
Against — None

**BACKGROUND:** The federal Clean Air Act of 1990 authorizes the U.S. Environmental Protection Agency (EPA) to establish standards for maximum allowable concentrations of air pollutants. Areas where pollutants do not meet the standards are designated as nonattainment areas. Texas has four nonattainment areas — Houston-Galveston, Dallas-Fort Worth, Beaumont-Port Arthur, and El Paso. If these areas do not comply with the standards by 2007, Texas faces a variety of consequences, including loss of federal highway funds and a federally imposed compliance plan.

The State Implementation Plan (SIP) is Texas’ plan for complying with federal air-quality standards in the nonattainment areas. In the SIP, the state agrees to implement specific measures or strategies to reduce ozone-producing emissions enough to meet EPA standards for emissions of ground-level ozone. Much of the SIP focuses on reducing emissions of nitrogen oxide (NO<sub>x</sub>), a precursor to ozone formation. In the SIP, ozone-producing emissions are measured in tons per day of NO<sub>x</sub>. For each ozone nonattainment area, the state must reduce NO<sub>x</sub> emissions to a specific number of tons per day to comply with EPA standards.

Health and Safety Code, ch. 388 establishes energy-efficient building codes for single-family residential construction, commercial, and industrial construction. It authorizes the Energy Systems Laboratory (ESL) at the Texas Engineering Experiment Station of the Texas A&M University System to determine the impact of proposals to amend the codes, as long as they are not less stringent, and recommend modifications.

Under Government Code, ch. 447, the State Energy Conservation Office is authorized to develop and provide energy and water conservation information for the state, establish design standards for new state buildings, and assist state agencies with energy and water management planning.

DIGEST:

CSHB 2129 would direct the Energy Systems Laboratory, the State Energy Conservation Office, and certain utilities to research new consumer-oriented efficiency and air quality improvement methods. The bill would amend Health and Safety ch. 388 to require the ESL to develop at least three alternative methods for achieving an additional 15 percent increase in energy savings for residential, commercial, and industrial construction. Alternative methods could include prescriptive and performance-based approaches, such as the EPA's Energy Star qualified new-home labeling program, and each method would include an estimate of the costs and savings to consumers and the related emissions reductions.

The bill also would amend Government Code, ch. 447 to require the State Energy Conservation Office to determine the feasibility and cost-benefit to consumers of setting standards for appliances that currently are not regulated for energy efficiency, if it could be determined the new standards would reduce emissions of air contaminants. The office would not consider air conditioning systems under this requirement.

CSHB 2129 would amend Utilities Code, ch. 31 to require certain utilities to consider customer-option programs that encourage the reduction of air contaminant emissions. These programs could focus on such measures as appliance retirement and recycling, solar water heating, air conditioner tune-ups, on-site energy storage, deployment of advanced electricity meters, installation of cool roofing materials, high-efficiency building distribution transformers and variable air volume fan controls, and the establishment of lighting limits. This section would apply to:

- a municipally owned electric utility;
- an electric cooperative;
- an electric utility;
- a power marketer;
- a retail electric provider; and
- a transmission and distribution utility.

The bill would take effect September 1, 2005.

**SUPPORTERS  
SAY:**

CSSB 2129 would help maximize the potential for emissions reductions through residential and commercial energy efficiency programs. So far, most efforts to improve air quality have focused on industry. However, homes and small businesses also can help reduce air pollution. If new energy saving methods were found, builders could adopt them to promote environmentally sound construction. Energy efficiency not only reduces pollution, it lowers costs to consumers. In fact, such measures actually cost less to implement than they will save consumers in reduced electric costs.

Nonattainment areas, including Houston, do not have enough control measures to meet the emission reduction targets. The use of new energy saving methods that were proven to reduce emissions could help these areas attain compliance by the mandated deadlines. The ESL already has performed an analysis for the Dallas-Fort Worth area and found that in the residential sector alone a 15 percent increase in building code energy savings translates into NOx reductions of 7.5 tons per day by 2008. This is two tons more of a reduction than what otherwise would be achieved under the existing code.

The state should be able to set energy standards for non-federally regulated appliances, such as ceiling fan lights, commercial clothes washers, commercial ice-makers, commercial refrigerators and freezers, external power supplies, traffic signals, digital cable and satellite boxes, and television converter boxes. Appliance standards have been enacted in California, Connecticut and Maryland, and soon are expected to be introduced in New Jersey and Pennsylvania. Evidence suggests that the implementation of appliance standards in Texas could save about 430 gigawatt hours of electricity per year and more than 400 million cubic feet in natural gas use per year between now and 2020.

Concerns that the bill would require electric utilities to implement certain customer-option programs are unfounded. CSHB 2129 would not require electric entities to do anything other than consider ways to improve air quality in Texas and suggest potential programs for implementation.

**OPPONENTS  
SAY:**

This bill is unnecessary because electric utilities already are implementing energy savings programs. The 76th Legislature in 1999 enacted SB 7 by Sibley, which restructured the electric utility industry and requires

transmission and distribution utilities to offer their customers energy efficient programs that reduce the utility's annual growth in demand by at least 10 percent. Further, many utilities have implemented additional cost-effective energy savings on their own because they recognize that reducing energy usage is more economical than generating electricity. Most municipally owned electric utilities and electric cooperatives, which are governed by local boards or city councils elected by the voters, already have established cost-effective energy savings programs and have been successful in implementing them.

**OTHER  
OPPONENTS  
SAY:**

Power marketers should not be included in the list of entities that must consider establishing customer-option programs. These entities essentially are power brokers and, as such, do not have customers.

**NOTES:**

The committee substitute differs from the original bill in that it would prohibit the State Energy Conservation Office from considering the feasibility and cost-benefit to consumers of setting appliance standards for air-conditioning systems. The substitute also would amend the list of customer-option programs to include high-efficiency building distribution transformers rather than lighting transformers.