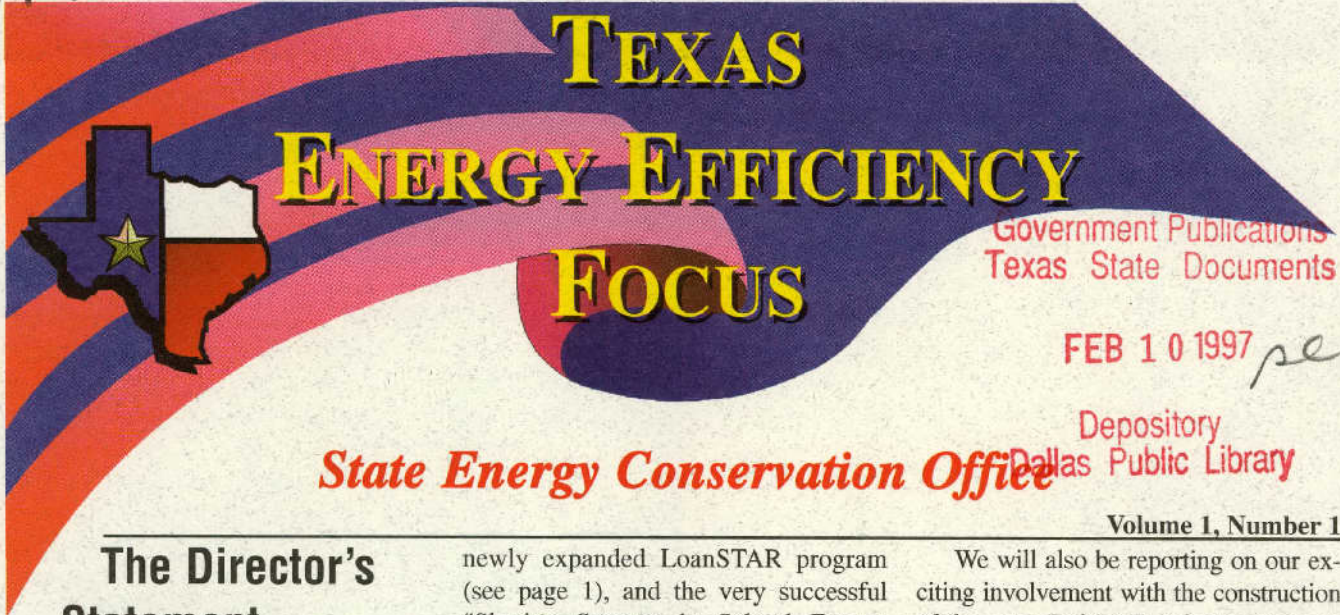


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# TEXAS

# ENERGY EFFICIENCY

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## State Energy Conservation Office

Volume 1, Number 1

### The Director's Statement

*As we near the close of the Twentieth Century, energy conservation and efficiency will become critical in the daily lives of all Texans. Our mission is to help show the way.*

The first half of 1996 has been a busy and productive period for the State Energy Conservation Office (SECO). We continue to face the challenge of helping fellow Texans to conserve energy and become more efficient in our use of energy resources. SECO has instituted a number of new initiatives this year such as the

newly expanded LoanSTAR program (see page 1), and the very successful "Sharing Success in School Energy Management" workshops (see page 2). This marks the first issue of *Texas Energy Efficiency Focus* — a bi-monthly newsletter designed to deliver the important message of energy efficiency and to update Texans on our latest and ongoing projects.

We are also embarking on a very significant effort in the region along the border with Mexico in the low-income residential areas commonly referred to as "Colonias." Other important projects to be covered in subsequent issues include the unprecedented creation of the "Utility Data Repository" which will electronically house comprehensive utility billing information for all state agencies.

We will also be reporting on our exciting involvement with the construction of the new Robert E. Johnson state office building. This building will incorporate significant sustainability features, including practical renewable energy technology. The result will showcase sustainable building design and operational efficiency. SECO is also working closely with the Texas Department of Criminal Justice to enable Texas prisons to become more efficient in their energy usage.

As we near the close of the Twentieth Century, energy conservation and efficiency will become critical in the daily lives of all Texans. Our mission is to help show the way.

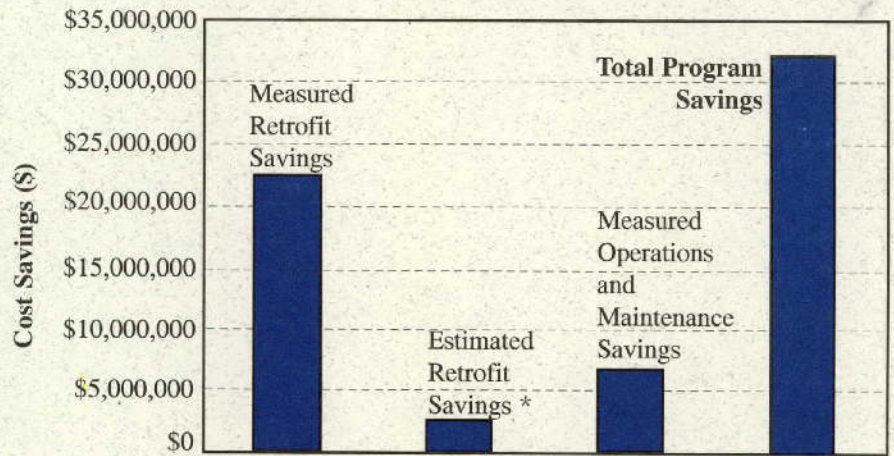
*Tobin K. Harvey, Director*

### Texas Expands LoanSTAR Program

*Texas taxpayers are now enjoying a documented savings of over \$1,000,000 a month due to these improvements.*

The nationally recognized Texas LoanSTAR (Loans to Save Taxes and Resources) Revolving Loan Program, which provides low-interest loans to finance energy-efficient retrofits of public buildings, is expanding its sphere of influence to include some new areas. LoanSTAR will continue to loan funds to public entities for energy improvements, but with a renewed emphasis on secondary schools and rural hospitals. *Continued on page 4.*

Cumulative LoanSTAR Savings as of May 1996  
Total Program Savings: \$32,059,000



\* Estimated Retrofit Savings include savings from 65 LoanSTAR Sites where savings are estimated from monthly utility bills.



## Texas LoanSTAR Program - How to Apply

The Texas LoanSTAR (Loans to Save Taxes and Resources) Program finances energy efficient retrofits for state, public school, hospital and industrial facilities at a current interest rate of 4.04% APR. The program's revolving loan mechanism allows borrowers to repay loans through the stream of cost savings realized from the projects. Retrofits financed through the program include, but are not limited to:

- energy efficient lighting systems
- higher efficiency heating, ventilation and cooling systems
- energy management systems
- boiler efficiency improvements
- energy recovery systems
- building shell improvements
- load management projects

In identifying potential projects, engineering auditors are encouraged to evaluate renewable energy technologies as well as more traditional energy retrofits. Such projects may include rooftop solar water and space heating systems or electric generation with photovoltaics or small wind systems.

All LoanSTAR projects must be analyzed by a Professional Engineer who meets the criteria outlined in the "Technical Guidelines and Format" manual. The analyst is selected by the prospective borrower. Project descriptions and

calculations are presented in an Energy Assessment Report following a prescribed format. The Energy Assessment Report is reviewed and approved by SECO technical staff before financing is authorized.

Projects financed by LoanSTAR must have a simple payback of eight years or less. Borrowers do, however, have the option of buying down paybacks to meet the composite eight year limit.

Projects are monitored during the construction phase and at project completion, and post-retrofit energy savings are monitored to ensure that energy cost savings are being realized. The level of energy monitoring may range from utility bill analysis to individual system or whole building metering, depending on the size and types of retrofits installed.

To receive a loan application and "Technical Guidelines and Format" manual, phone or write SECO at the following address:

State Energy Conservation Office  
P.O. Box 13047  
Austin, TX 78711-3047  
512-463-1931

All applications are funded on a "first come, first served" basis.

### State Energy Conservation Office Programs

#### *Agricultural Energy Efficiency Program*

Jerry Johnson  
512-463-1931

#### *Alternative Energy Program*

Jane Pulaski  
512-463-1796

#### *Alternative Fuels Program*

Holly Fritsch  
512-463-1947

#### *Clean Cities Program*

Holly Fritsch  
512-463-1947

#### *Energy Education Outreach for Texas Schools Program*

Glenda Baldwin  
512-463-1731

#### *Energy Management Program for Texas Schools*

Mel Roberts, Lee Gros,  
Richard Taylor,  
Robin Bailey  
512-463-1757

#### *Industrial Energy Program*

Renee Conley  
512-463-1770

#### *Housing Partnership Program*

Renee Conley  
512-463-1770

#### *LoanSTAR Hospitals/Health Care Facilities Program*

Holly Fritsch  
512-463-1947

#### *LoanSTAR Industrial Program*

Marvin Barr  
512-463-1860

#### *LoanSTAR Schools Program*

Mel Roberts, Lee Gros,  
Richard Taylor,  
Robin Bailey  
512-463-1757

## Alternative Energy Program

The Alternative Energy Program (AEP) is designed to accelerate the acceptance of renewable energy resources and technologies in Texas by increasing public awareness of these resources, demonstrating new technologies, and developing the infrastructure to escalate their use in existing state programs. Renewable resources, coupled with efficiency and conservation measures, have the potential to sustain Texas indefinitely, providing both environmental and economic benefits and maintaining for Texas consumers its position as a global leader.

The AEP has recently entered into a partnership with the Texas Department of Commerce to target development and trade participation in the renewable energy and energy efficiency industries. This will be done by identifying and responding to renewable energy and energy efficiency businesses interested

in locating or expanding their operations in Texas, increasing industry awareness of domestic and international trade opportunities, and expanding export markets for renewable energy products in Texas.

We are also working with the General Services Commission to aggressively promote sustainability in the new Robert E. Johnson Building, beginning in the design phase. This office building will include renewable energy technologies as well as explore performance-based fee structures.

Another valuable effort of the AEP is the Daylighting Demonstration Project at the State Support Center. This demonstration project has installed eleven state-of-the-art skylights which actually track the sun as the Earth rotates. Now because electric light is rarely necessary inside the building, energy consumption has been reduced considerably.



## Sharing Success in School Energy Management

**S**ECO in partnership with the Texas Association of School Business Officials is hosting a series of two-day workshops conducted by ten successful Texas school energy managers and energy professionals from May through October 1996. We will showcase successful Texas school energy management programs and the people who run them to instruct participants in establishing and maintaining locally controlled energy management programs.

The workshops will focus on the following:

- identifying and applying the critical elements of school energy management.
- state-of-the-art energy management technologies
- energy retrofit financing options including performance contracting, legislative procurement guidelines and their application to energy efficiency projects
- new issues affecting energy efficiency including refrigerant phase-out and indoor air quality
- the importance of designing energy-efficient facilities from the ground up
- continuing the school energy management learning process through regional networking.

Topics will include:

- setting up an energy program/avoiding the traps
- energy accounting
- financing energy projects/procuring contractors
- energy education - involving teachers and students
- understanding building energy use, lighting systems, heating-ventilation-air conditioning

- energy management controls
- the building shell
- energy-efficient building design

The target audience consists of superintendents, board members, business managers, new or experienced energy managers, directors of maintenance or facilities, staff members responsible for building operation and maintenance, and all persons interested in more effective energy management.

To accommodate maximum participation, convenience and attendance, these workshops will be held in various geographic areas of the state:

**June 5 - 6 Corpus Christi**, Calallen ISD, Wood River Elementary, 15118 Dry Creek Dr.

**June 19 - 20 Irving**, Irving ISD, Service Center, 3620 Valley View

**July 10 - 11 Houston**, Pasadena ISD Board Room, 1515 Cherrybrook Ln., Pasadena

**July 24 - 25 Edinburg**, Edinburg ISD, Transportation Annex, 1015 E. Schunior St.

**September 11 - 12 Lubbock**, Region XVII ESC, 1111 W. Loop 289

**October 9 - 10 Tyler**, UT Tyler, University Center, Room 118, University Blvd.

**October 16 - 17 Round Rock**, Round Rock ISD, location to be announced.

The fee is \$175. Contact Mel Roberts or Richard Taylor at 512-463-1931.

### SECO Programs continued

*LoanSTAR State Agencies,  
Local Government &  
Universities Program*

Theresa Sifuentes  
512-463-1896

*Mass Transit Energy  
Program*

Robert Otto  
512-463-1876

*Recycling Program*

Holly Fritsch  
512-463-1947

*Regional Transportation  
Center Program*

Robert Otto  
512-463-1876

*State Agencies Program*  
Robert Otto, Felix Lopez  
512-463-1876

*State Agencies  
Telecommuting Program*

Robert Otto,  
Mary-Jo Woodall  
512-463-1876

*State Energy Conservation  
Office Administration  
Program*

Karen Raven,  
Blanche Saldivar,  
David Schiller, Judy  
Garibay  
512-463-1931

*State Energy Conservation  
Office Administration  
Program/Monitoring*

Marvin Barr  
512-463-1860

*Superconducting Magnetic  
Energy Storage Program*

Rence Conley  
512-463-1770

*Water System Energy  
Efficiency Program*

Jerry Johnson  
512-463-1931

## SECO is on the World Wide Web

Check out SECO's homepage at

<http://www.gsc.state.tx.us/energy.html>

These web pages have more information on SECO's programs and links to other energy efficiency web sites. To contact SECO electronically, write to [sallyj.richards@notes.gsc.state.tx.us](mailto:sallyj.richards@notes.gsc.state.tx.us)



# Texas Energy Efficiency Focus

## Texas Expands. . .

*continued from page 1.*

Since LoanSTAR's inception, approximately \$84.3 million dollars have been loaned to 65 retrofit projects at state agencies, cities and school districts. As of March 1996, measured results were available for 157 buildings, constituting over 15 million square feet where retrofits have been completed at a cost of \$21.5 million. The loans are repaid with cost savings generated by the retrofits, and because of the revolving loan mechanism, we are able to loan the money over and over again. Due to these improvements, Texas taxpayers are now enjoying a documented savings of over \$1,000,000 a month.

SECO also plans to vigorously market the industrial sector of the LoanSTAR Program. LoanSTAR will form partnerships with existing industrial programs such as the Industrial Assessment Centers (IAC) at Texas

A&M University - Kingsville and College Station campuses. The goal of this sector is to conserve energy and promote technology transfer to enable Texas industrial companies to be more competitive and profitable.

The Industrial Assessment Centers at Texas A&M University will provide up to sixty no-cost energy and water management assessments for small to medium size manufacturing firms each year. Several utility companies also provide free energy assessments for their customers. SECO is targeting the seafood processing industry in one of the pilot programs.

Another aspect of this effort is to provide financial incentives to the industrial sector through LoanSTAR's low-interest revolving loan fund. SECO, a utility, or an IAC will perform an energy assessment for an interested company. SECO will then loan money to the company to install energy conservation measures based on the

assessment report. As the company repays the loan, the funds then become available to finance other industrial retrofit projects.

Contact:

*Theresa Sifuentes* - State Agencies, Universities, and Local Governments.

*Marvin Barr* - Industrial Program.

*Mel Roberts* or *Richard Taylor* - Schools.

*Holly Fritsch* - Hospitals.

(512) 463-1931

### Texas Energy Efficiency Focus

The Texas Energy Efficiency Focus is published bi-monthly by SECO in coordination with the Energy Systems Laboratory at Texas A&M University.

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