TEXAS Clean Energy Coalition

Guide to the Issues #5: Public Building Energy Use

Reducing the Size of Government through Energy Efficiency

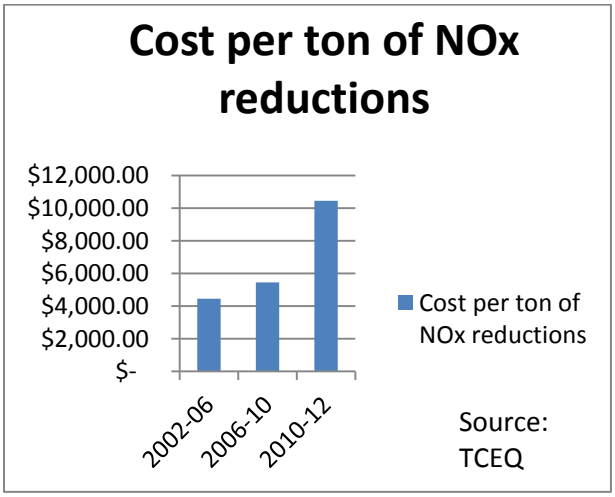
ISSUE SUMMARY:
Public entities spend billions of dollars every year on energy and water. In recognition that efficiency saves taxpayers money, the Legislature has passed three statutes requiring public entities to implement all cost-effective efficiency strategies. Since 2001, state agencies, institutions of higher education, and large cities and counties have been directed by the Legislature to meet an annual 5% energy reduction goal. Unfortunately, very few entities meet the goal or implement all cost-effective energy reduction strategies, and even fewer comply with legislative reporting requirements.

Texas A&M University's Energy Systems Laboratory reports on the savings achieved by public entities under one of the statutes (Health and Safety Ch. 388). Their report shows that less than 10% of entities to which the laws apply submitted reports in 2010 and 2011.

A 5% energy reduction by state agencies alone would equal over $10 million in savings for taxpayers (www.texastransparency.org). Extended to cities, counties, higher education institutions, and school districts, 5% savings per year would easily save hundreds of millions of dollars. Taxpayers would benefit as the size of government spending on energy and water is reduced; harmful air pollutants would also be reduced. In a speech last fall at the Clean Air Through Energy Efficiency conference, House Appropriations Committee Chairman Jim Pitts used the TXDOT Headquarters Building in Austin as an example of how simple energy efficiency upgrades, like automated HVAC, motion-sensing light controls and high-efficiency windows, can save the state money on utility bills.

Buildings account for more than one-third of all air pollution (from power plant emissions), yet Texas' efforts to reduce emissions have focused almost exclusively on mobile sources. There are provisions in the Texas Emissions Reduction Plan (TERP) statute for spending some of the TERP fund on energy efficiency, but it hasn't been done since 2003. TERP's sole purpose is to reduce emissions.

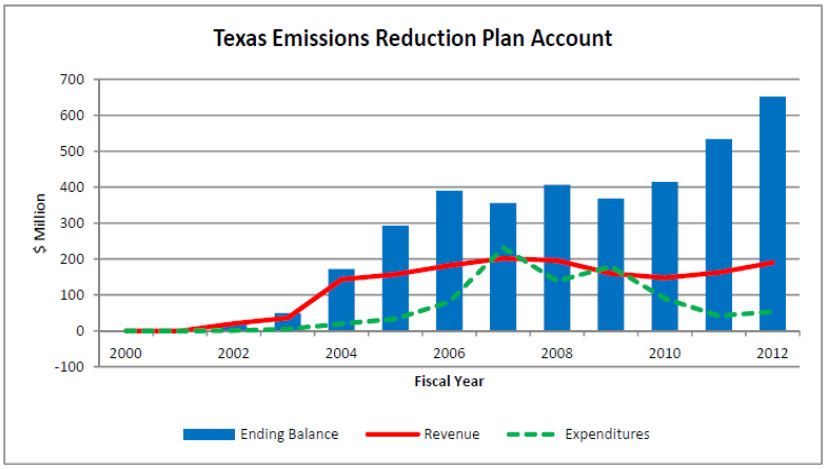
The primary target of TERP spending to date has been on reducing emissions through diesel retrofits and upgrading older diesel vehicles and equipment to cleaner engines. However, the cost of this continues to increase. It now costs more than twice as much to cut a ton of NOx (nitrogen oxides, a common form of air pollution) as it did in 2002-06 (shown below).



The Governor, Lt. Governor, and Speaker have all called for dedicated funds, like TERP, to be used for their intended purposes. Funding levels for TERP should be increased and some of this increase should go to increase energy efficiency in public buildings. If energy efficiency in public buildings reduces emissions and reduces

spending by governmental entities, why wouldn't we use TERP to do both?

Currently, there is a balance of $650 million in the TERP fund, which will balloon as high as $1 billion by the end of the next biennium. Meanwhile, TERP spending has decreased from $338 million in 2008-09 to $114 million in the current biennium, 2012-13 (shown below).



Source: Comptroller of Public Accounts

Policy considerations

- **Diversify TERP spending to fund more energy efficiency projects for public buildings.** The 2010 diesel vehicle standards remove 90% of NOx emissions, so as these fleets turn over naturally, improving air quality through diesel retrofits is a shrinking opportunity. Although electric power generation and natural gas heating are generally less polluting than diesel engines, the potential for reducing power consumption in buildings is huge. **Texas A&M's Energy Systems Lab reports that upgrading an existing building to run at optimal efficiency can save $600,000 for every $100,000 spent,** while reducing four tons of NOx per building. The cost comes to about $26,000/ton of NOx; a TERP incentive of only 25-50% of this fits within TERP program spending guidelines and could be used to encourage public entities to save millions of dollars on their energy bills. Using Portfolio Manager, a free tool that allows different buildings to be compared and assigned an energy score, agencies could be incentivized to prioritize projects and report their progress. Best of all, taxpayers would benefit from both the financial savings and improved air quality.

- **Make energy efficiency requirements clear and consistent.** The public sector energy saving requirements are covered in four different sections of the law and one executive order, causing confusion over which entities must meet which requirements. Some entities must plan, some must report, and some must report on 5% savings achieved. Some requirements cover just electricity, others include water and natural gas. These requirements should be clarified and consistent. The Legislative Budget Board highlighted the need for this in a recommendation about water efficiency in its Government Effectiveness and Efficiency Report.

- **Make energy and water usage reports available to the public online.** Current Texas law requires that energy and water consumption be posted on each entity's website. It would be easier for taxpayers and facility managers to understand public energy and water usage if the reports, and potentially the energy scores and plans for reduced consumption, were all available on one website.

Resources:

Legislative Budget Board (January 2013). "Improve Utility Reporting to Ensure State Entities Are Effectively Managing Water Use." Government Effectiveness and Efficiency Report. http://goo.gl/kp9tn

LBB (January 2013). Options to Reduce Reliance on General Revenue-Dedicated Accounts for Certification of the State Budget. http://goo.gl/JhABR

LBB (July 2012). Overview of the Texas Emissions Reduction Program. http://goo.gl/55C3a

TCEQ. Texas Emissions Reduction Plan Biennial Report (2012-13), A Report to the 83rd Legislature. http://goo.gl/Nh749