



MEMORANDUM

TO: Electric Utility and Resource Management Commissions

FROM: Debbie Kimberly, Vice President, Distributed Energy Services

DATE: July 12, 2013

SUBJECT: Update on ECAD Processes and Metrics

A key element for realizing the City of Austin's Climate Protection Plan's ambitious long-term goals is the Energy Conservation Audit and Disclosure (ECAD) Ordinance. The ECAD ordinance requires homeowners and commercial/industrial property owners to perform and disclose the results of an energy audit, with the goal of reducing CO₂ emissions by 365,291 metric tons by the year 2020. ECAD also requires high energy usage multifamily housing property owners to undertake cost-effective energy efficiency improvements.

Developed with input from City staff, real estate professionals, commercial property managers, energy efficiency professionals, commercial property managers, the Austin apartment community and consumer advocates, ECAD ensures that the energy efficiency of almost every building in the city will be assessed and reported, increasing owner awareness of what they can do to improve energy efficiency by utilizing a multitude of generous incentives to make improvements.

The ordinance requires:

- Single family home sellers to have and disclose the results of an energy audit to buyers and the City of Austin at the real estate transaction's time of sale.
- Multifamily property owners to have and disclose the results of an energy audit to current and potential tenants and to the City of Austin.
 - Multifamily property owners of high energy use properties must work with City staff toward making energy efficiency improvements.
- Commercial/Industrial property owners to benchmark/rate the energy efficiency of their buildings and disclose the building rating to buyers and the City of Austin.

No other US city has attempted an energy efficiency ordinance for buildings in all three business market classes. Austin's ECAD ordinance has generated an unprecedented, extensive, and growing collection of data about how buildings in the community perform.

Research shows people often underestimate the significance of a building's energy performance on the cost of living. Poorly performing buildings can challenge household budgets. For commercial properties, building energy efficiency could impact the success of businesses operating in those buildings. The ECAD ordinance is based on the idea that information is power and information about building energy

performance will empower better decisions about how to maintain current buildings and what to look for when buying a home, renting an apartment, or managing a commercial business.

Since program implementation in 2009, ECAD energy audits or rating designations have been completed for:

- 58% of applicable home sales
- 76% of applicable commercial facilities
- 66% of applicable multifamily properties

Residential

When ECAD staff noticed that fewer owners than expected were making the audit's recommended upgrades, they took the initiative to examine the process closely. They were able to discern from the data that timing within the real estate transaction process was the likely barrier. ECAD staff recommended changes to the ECAD Administrative Rules that would move the disclosure of the audit results to a point earlier in the process to coincide with the disclosure date, which is when most buyers and sellers are ready to discuss general conditions, repairs, upgrades, and credits. New home owners are now provided with an audit that details specific duct leakage, attic insulation levels and solar shading needs of their new homes. These potential energy improvements make utility bills more affordable and homes more comfortable. While no comprehensive economic impact study has yet been conducted to examine the extent to which energy audits affect sale prices, Austin is among the few real estate markets in the country to upgrade its multiple listing service (MLS) to include green features so that the Austin Board of Realtors could extract valuable data for such a study.

Since 2009, of the 20,841 nonexempt homes sold in Austin, 12,100 (58%) received the energy audit with 97% of these homes receiving energy efficiency improvement recommendations. About 6% of these homes received energy efficiency improvements within one year either before or after the sale. Customer research indicated that many home buyers are interested and are willing to complete energy efficiency improvements. However, they report that they are not prepared to do so in the first 12 months of living in their new home, due competing priorities for time and resources.

Outreach and education continues to the real estate community, potential home sellers and buyers, energy audit professionals, and energy efficiency contractors.

Multifamily

The multifamily sector has seen more success in energy efficiency implementation, with high rates of participation in Austin Energy rebate programs. Prospective Austin tenants receive a disclosure that includes an estimated monthly electric cost. This disclosure provides renters with a point of comparison between similar properties before lease signing.

Aware that the energy efficiency of their properties would be disclosed publicly, huge numbers of owners took advantage of a period of enhanced rebates, which were designed to facilitate upgrades. Any property using energy at 150% above the average would be designated as energy inefficient, and property owners knew that potential renters would find energy efficient rentals more attractive. The 150% number turned out to be a strong analysis and calculation. It generated confidence around the performance of the units and was met with a generally favorable response.

ECAD audits have been performed on 728 of the 1,096 qualifying multifamily properties. Through that process, 30 properties were identified in 2012 as high energy users. As of May 2013, 15 of those high energy use properties have made efficiency improvements.

Outreach and education continues to property management, the apartment Association, tenant organizations, energy audit professionals, and energy efficiency contractors. Most recently, Austin Energy developed a video for the multifamily community to assist them with ECAD understanding and compliance. The video may be accessed at: <https://www3.ci.austin.tx.us/ecad/>. Additionally, Austin Energy staff is developing modifications to the multifamily rebate program to make it more attractive to property owners/managers. We anticipate that these enhancements will be ready for implementation by October, 2013.

Commercial

To improve implementation of the audit requirement in the commercial sector, the focus was placed on the largest buildings first. Because the largest buildings consume greatest amounts of energy, concentrating the initiative’s efforts on the largest first made sense and showed significant results. Information derived from analysis of this data can create a new conversation—changing the way people talk and think—about buildings, energy efficiency, and climate change. With greater resources for analysis and organization, this data can be tremendously useful, with a potential reach well beyond the City of Austin.

Cities such as New York City, Seattle, San Francisco, and Washington, D.C. require a rating by an EPA EnergyStar Portfolio Manager. Only New York City exceeded the reporting rate of Austin’s achievement of 66%. California, Pennsylvania and other states have enacted similar laws requiring annual commercial energy ratings that will become the standard for building owners.

Implementation of the ECAD requirement for commercial facilities is based on building size over a three-year period that began in 2012 and extends to 2014. The table below depicts the staggered adoption of the Commercial ECAD process.

Building Category	Implementation Date
Buildings or Campuses over 75K sqft	June 1, 2012
Buildings or Campuses between 30K and 75K sqft	June 1, 2013
Buildings or Campuses between 10K and 30K sqft	June 1, 2014

Of the 632 applicable large commercial facilities required to report Energy Performance Rating Scores by June 1, 2013, 478 (66%) have submitted their ratings. Additionally, 188 commercial buildings from the other two categories have submitted scores ahead of schedule.

Moving Forward

The first few years of ECAD have been a learning process. Lessons include the importance of adequate staffing, appreciation of the challenges of changing organizational and market cultures, ensuring adequate resources for turning data into information, reacting quickly to unexpected consequences, and

setting realistic goals based on experience and analysis. The implementation of the ECAD ordinance has been the major challenge of the last few years, and foundational to getting to the energy efficiency goals cost effectively and in a manner that provides value to our customers. The long term objective is nothing less than market transformation, and the emphasis, effort, and evaluation will continue to correspond to that objective and to the achievement of the ECAD goals.