



What we do

- Smart.Clean.Energy R&D
- Industry standards testing and evaluation
- Home Energy Analysis
- Economic analysis
- Pricing model development and testing



Values and focus

- Customer benefit
- Replicable, scalable across market types
- Environmental progress
- Promote innovation and opportunity
- Data and fact-driven



Major programs

- Smart grid demonstration project (DOE)
- Home energy research (Doris Duke Charitable Foundation)
- Economic sector analysis (EDA)



Major programs

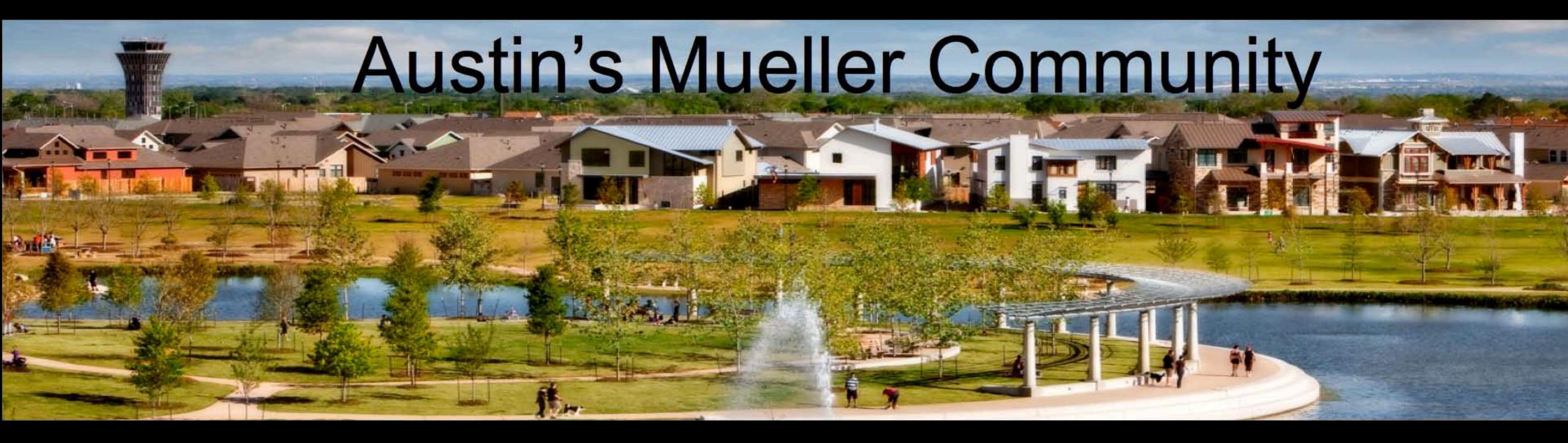
- Home Research Lab
- Industry Standards
 Consortium
- Smart Grid Education





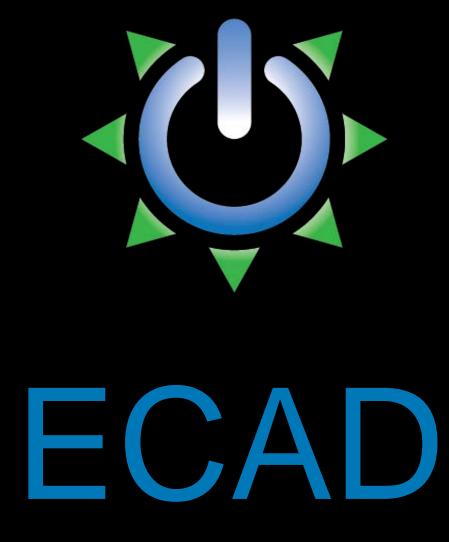
- University of Texas
- Tech Industry
- Environmental Focus
 Texas Interconnect

- Home to Austin Energy
- Consortium Tradition



- •711 acre mixed use
- 2 miles from Capitol
- All green-built
- •world's first LEED platinum hospital
- reclaimed water system

- native landscaping
- •25% affordable housing
- senior housing
- •CHP gas microturbine
- Chilled water loop



Energy Conservation & Disclosure Ordinance

- Creates a market for energy efficiency
- Educates homeowners on retrofit needs
- Establishes robust energy industry
- Several thousand audits performed

Home Energy Research



- Two-year study
- •Funding from Doris Duke Charitable Foundation
- Leveraging DOE funding
- •Goal: Increase effectiveness of the ECAD Ordinance and energy audit process



- Increase energy retrofit participation through:
 - o Education
 - o Communication
 - o Value
- Recommend standards
- Compare performance of older vs. new green homes



Ensuring Effectiveness: Partnerships















Ensuring Effectiveness: Valid Data

- "Data Team:" University researchers, AE staff, Pecan St staff
- Consensus- based Research Methodology & Data Analysis
 Plan
- Periodic review of findings
- Adjust & Adapt



Ensuring Effectiveness: Implementable Recommendations

- Translate data into clear recommendations and implementable solutions
- Agency ownership of findings
- Frequent check-Ins (no surprises)
- Avoid political rhetoric



Home Energy Research: Data

- Analysis of over 5,000
 ECAD audit results
- Original research:
 - Enhanced Energy Audits
 - Appliance-level monitoring of energy and water usage in 15' increments



- General need for education:
 - home performance
 - home maintenance
 - energy retrofits
- Lack of industry standards on testing and terminology
- Confusion about audit results



Using Data to Impact the Program

Summary

- Clear project goals & deliverables
- Strong team
- Review, analyze and revise
- Establish a valid data set
- Emphasize positive communication
- Go the extra mile