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

• Home to Austin Energy
• Consortium Tradition
• Texas Interconnect
Austin’s Mueller Community

- 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
Ensuring Effectiveness:
Clear Goals & Deliverables

• Increase energy retrofit participation through:
  ○ Education
  ○ Communication
  ○ 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
Home Energy Research: Preliminary Findings

• 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