The Story of eScore

TVA's Home Energy Efficiency Scorecard

December 2, 2011
The Story of eScore

The Need

The Tennessee Valley’s load is projected to grow close to 1% a year, every year through 2030. Energy Efficiency and Demand Response is the cleanest, lowest cost, long-term expansion option available to TVA to meet this demand.

→ 1/3 of our savings will come from residential sector

So how do we motivate homeowners to participate in energy efficiency?
The Story of eScore

Where We Started

Best Practice Review

Criteria
- Simple to understand
- Built with End-User input
- Provides a clear path
- Focuses on attainability
- Reinforced through follow up
- Opt out
The Story of eScore - Existing Home Energy Scorecards

Feasibility Study
Who We Talked To

Focus Groups
Knoxville – Nashville – Memphis – Dalton - Hopkinsville

7 Previously Audited Groups

5 Non-Audited Groups

What they said...

- Lower bills and more comfort
- Return on investment is important
- Very helpful to know what to do
- I think people would do it if they could see the savings
- Loved the audit
- Saving money is the most important
- Looks like a good idea
- I don’t want to be compared to some house in Oregon
- 1 – 10 scale is best
The Story of eScore

Primary Motivators for Change

Cost Savings and Simple Action

“Saving money is most important to me.”

“I can get a 10!”

“I need to know the payback on my investment.”

“My home is the best it can be.”
Based on energy efficient upgrade suggestions to be completed

**eScore**

**MPG type cost comparison**

### SCORE CARD

<table>
<thead>
<tr>
<th>Individual eScores</th>
<th>Heating / Cooling Systems</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Water Heating</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Insulation</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Duct Improvements</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Air Sealing</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Appliances</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lighting</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Windows &amp; Doors</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Home Electronics</td>
<td>1</td>
</tr>
</tbody>
</table>

**eScore:** 6

**YOUR SCORE IN $** $0.76 Ft² Annual Cost

### HOW TO GET A 10

Complete the entire list of changes that we have provided within 5 years, and your home can score a 10. Scoring a 10 means that your home is as energy efficient as it can be. Take advantage of all the rebates out there to help absorb some of the cost and get started today. Turn the page over to see the changes we suggest, starting with to get the biggest bang for your buck!

### WHY GET A 10

- **SAVE MONEY**: $1500 annually
  - Dry approx. $0.40 less a square foot
  - Approximate amount your home uses in 2 months
  - Equivvalent of taking 300 cars off the road
GET STARTED
WITH THE “BIGGEST BANG FOR YOUR BUCK” UPGRADES

**Duct Improvement**
Seal and insulate your attic duct: You are currently losing up to 60% of your current heating and cooling efficiency due to “leaky” ductwork. Review report for details.
- 18 months
- 000 kWh
- $000 annually

**Insulation**
Increase the attic insulation: Upgrade from R-19 (6” of insulation) to R-30 (12” of insulation) to make your home more comfortable and lower your energy bills. Review report for details.
- 5 years
- 000 kWh
- $000 annually

**Heating / Cooling Systems**
Install a programmable thermostat: Save 15% to 25% on cooling costs by letting your home automatically adjust the temperature for you.
- 6 years
- 000 kWh
- $000 annually

**WEEKEND PROJECTS**
Some improvements don’t require a certified contractor to complete. To the right are two energy saving things you can do yourself. Use the coupons and save even more!
- Learn about more: www.energycare.com/diyyourself

**Weatherstripping**
Weatherstripping, using foam, rubber or plastic on doors and windows is an inexpensive solution to sealing the drafts in your home. The results can save you up to 15% in heating and cooling costs.
- **Coupon:** Save 35% on weatherstripping supplies at Home Depot. Reference code: 183455C

**Window Glazing**
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec est ipsum, pulvinar sagittis lacus quis, vehicula non magna. Curabitur consectetur lacinus non lacus rhoncus in.
- **Coupon:** Lorem ipsum dolor sit amet, consectetur adipiscing. Reference code: 468290

---

**ROI, kWh and $ savings**

The 1st three steps of the path to a 10.
How This is Different

It’s a Personal Best

Existing Scorecards

- Make your home better than national average home
- Score based on home’s actual energy performance
- A perfect score requires significant investment
- Must re-audit to continue to improve score - No automatic follow up

Not a Competition

eScore

- Make your home the best it can be
- Score based on number of improvements completed
- Any home can get a 10, regardless of age
- Follow up with positive reinforcement after every action taken
Expanded Objective

Energy Reduction through Customer Engagement

1. Audit and eScore
   “Biggest Bang for Your Buck” energy saving upgrade suggestions

2. Upgrade
   Certified contractor performs work to specification

3. Rebate
   Signifies completion of upgrade and activation of new eScore

4. New eScore
   Quarterly “statement” shows homeowner return on investment through eScore, energy bill reductions
Next Steps

- Finalize Design
- Secure backend software implementer
- Pilot test eScore Pro via staggered rollout
- Launch eScore Self web version
- Full launch 2013
Contact

Frank Rapley
fmrapley@tva.gov

Julie Hayes
julie@milepostconsulting.com