



The Story of eScore

TVA's Home Energy Efficiency Scorecard

January 24, 2012

Consortium for Energy Efficiency Winter Meeting
San Diego, CA – The US Grant Hotel

The Need

Objectives

Explore the feasibility of a home energy scorecard to...


- Motivate single family homeowners to reduce energy consumption by creating an ongoing engagement
- Incorporating behavior change into the Customer's perception of energy efficiency

Energy Efficiency is viewed as a "One Time" effort...

- Overcome less aggressive utilization of energy efficiency as a resource in the South
- Change energy efficiency message from kWh to \$\$\$s

So how do we motivate homeowners to participate in energy efficiency?

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

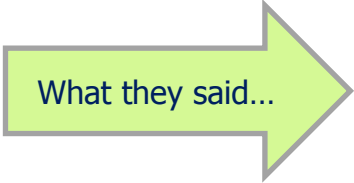
Who We Talked To

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

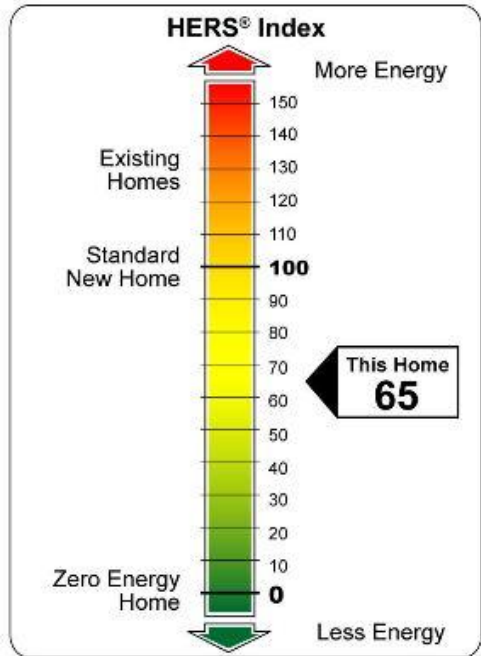
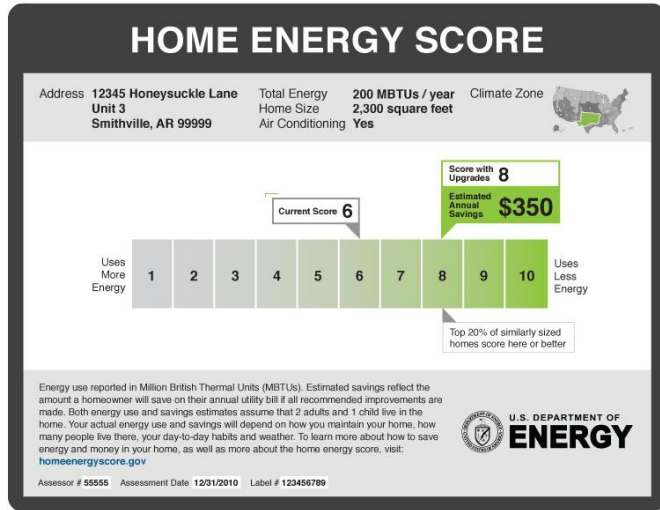


The Story of eScore - Existing Home Energy Scorecards

Feasibility Study

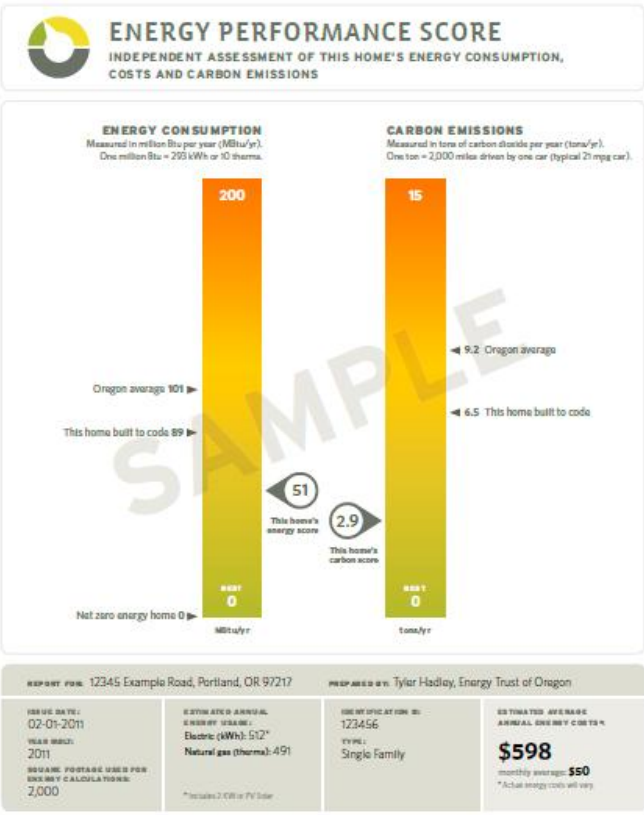
Home Energy Score Label

Roll over the label to learn more about its different features.



Energy Efficiency Rating

	Current	Potential
Very energy efficient - lower running costs		
(92-100) A		
(81-91) B		
(69-80) C		70
(55-68) D		70
(39-54) E	52	
(21-38) F		
(1-20) G		
Not energy efficient - higher running costs		
UK 2005		
Directive 2002/91/EC		



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

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.”

eScore Criteria – Easy, Possible and Meaningful

Make it Personal: Customers want a “personal and accurate” comparison

Clearly defined goal: Be clear in what the intended goal is

“Tell me how much an EE activity will reduce MY costs”

Show the “path”: Give specific instruction on how to achieve the intended goal

“What do I do first, then second and then after that?”

Make it “opt-out”: Integrate it into an existing process or require the user to indicate they don’t want to participate to achieve higher participation rates

“Please don’t make me think about it”

eScore Criteria – Easy, Possible and Meaningful

Focus on "now": Communicate reductions that can happen today rather than in the future

"Are there things I can do right now?"

Give "hope": Articulate the benefits of what will be achieved if they achieve the intended goal

"Will I have to wait for over 10 years to see my return (ROI)?"

Sense of "we": Communicate to the recipient that they are part of something bigger

"How does what I do fit into a larger effort?"

Make it visual: Use graphics that inspire action

"if it looks attractive, I'll be more inclined to read it"

Energy Conservation: Energy conservation is seen as saving money

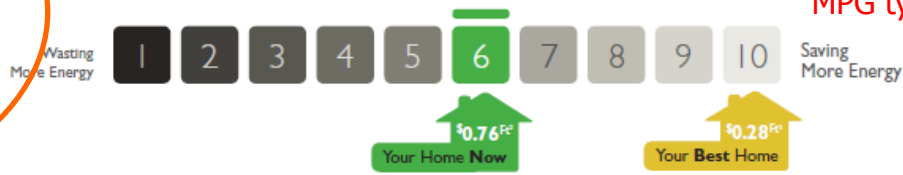
"Energy Efficiency is more abstract, Conservation is real"

Based on energy efficient upgrade suggestions to be completed



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

MPG type cost comparison



SCORE CARD

		Individual eScores
Saving More Energy	● Heating / Cooling Systems	8
	● Water Heating	7
	● Insulation	6
	● Duct Improvements	6
	● Air Sealing	4
Wasting More Energy	● Appliances	3
	● Lighting	2
	● Windows & Doors	2
	● Home Electronics	1



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

<p>SAVE MONEY</p> <p>\$1500 annually</p> <p>Pay approx. \$0.48 less a square foot</p>	<p>SAVE ENERGY</p> <p>15,000 kWh</p> <p>Approx. amount your home uses in 2 months</p>	<p>SAVE PLANET</p> <p>1000lbs CO₂</p> <p>Equivalent of taking 200 cars off the road</p>
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eScore – V1

ROI, kWh and \$ savings

GET STARTED

WITH THE "BIGGEST BANG FOR YOUR BUCK" UPGRADES



Duct Improvement

18 months 1000 kWh \$1000 annually

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.

Rebate: \$200 off the equipment price. www.energyright.com/rebates



Insulation

5 years 1000 kWh \$1000 annually

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.

Rebate: \$100 off installation fees. www.energyright.com/rebates



Heating / Cooling Systems

6 years 1000 kWh \$1000 annually

Install a programmable thermostat: Save 15% to 25% on cooling costs by letting your home automatically adjust the temperature for you.

Rebate: \$500 off installation fees. www.energyright.com/rebates

Your return on investment calculation is based on the difference in cost of energy efficient equipment over standard equipment, minus the rebate amount.



GROW YOUR eScore

Complete all 3 suggested upgrades listed to the left and your score will improve to a 7. TVA will help you track your progress through the rebate program and will continue to send you easy to manage steps that will get you to a 10!

CONTRACTORS

Finding the right contractor can be overwhelming. Visit our website to find a list of certified contractors and read reviews from other homeowners about these service professionals.

www.energyright.com/contractors

Nielsen Residence
6222 Mockingbird Lane
Nashville, TN 37201

CLIENT

Home Size: 3000 ft²
Architecture Style: Colonial
Date of Construction: 1923
Heating / Cooling Method: Electric

HOME

Logo

Nashville Energy Services
Completed: 02/14/11
Technician: Mark Scheffeld
1.800.555.5555

AUDIT

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.energyright.com/diyouyourself



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 lacinia quis, vehicula non magna. Curabitur consectetur lacus non lacus rhoncus in.

Coupon: Lorem ipsum dolor sit amet, consectetur adipiscing. Reference code: 468290

The 1st three steps of the path to a 10

Changed from MPG



GET A **10**^{AND}
SAVE 15%-20%
based on state averages - savings may vary



Reduced Categories

SCORE CARD

	Individual eScores
Duct Sealing	8
Air Sealing	4
Ceiling Insulation	2
Water Heating	9
Heating / Cooling Systems	4
Windows & Doors	5
Wall Insulation	7
eScore: 6	



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, and how to get the biggest bang for your buck!

 SAVE MONEY	 SAVE ENERGY	 SAVE VALLEY
Reduced Utility Bills <small>You can save up to 20% on your utility bills</small>	Up to 15,000 kWh <small>Approx. amount your home uses in 2 months</small>	Up to 1000lbs CO₂ <small>Equivalent of taking 200 cars off the road</small>



eScore – V2

GET STARTED

WITH THE “BIGGEST BANG FOR YOUR BUCK” UPGRADES

Complete all 3 suggested upgrades listed below and your score will improve to a 7. TVA will help you track your progress through the rebate program and will continue to send you easy to manage steps that will get you to a 10!

Changed Orientation

6 current eScore	#1 Duct Improvement	#2 Ceiling Insulation	#3 Heating and Cooling	7 new eScore
	<p>Seal and insulate your attic duct</p> <p>You are currently losing up to 60% of your heating and cooling efficiency.</p> <p> Return on Investment: 18 months</p> <p>Rebate: \$200 off the equipment price.</p>	<p>Increase the attic insulation</p> <p>Upgrade from R-19 (6" of insulation) to R-30 (12" of insulation) for more comfort and lower bills.</p> <p> Return on Investment: 24 months</p> <p>Rebate: \$100 off installation fees.</p>	<p>Install programmable thermostat</p> <p>Save 15% to 25% on cooling costs by letting your home automatically adjust the temperature for you.</p> <p> Return on Investment: 3 years</p> <p>Rebate: \$500 off installation fees.</p>	5% - 8% SAVINGS

*Your return on investment calculation is based on the difference in cost of energy efficient equipment over standard equipment, minus the rebate amount.

JOIN THE VALLEY

Valley residents are working together to conserve energy and keep the Valley beautiful. Since 2009, this program has saved over:

13 Million kWh
Enough to power 860 homes for a year

Help us meet our 2012 goal of reaching **19 million kWh**
Updated 02/07/12

FIND REBATES

Absorb some of the cost of upgrading your home by taking advantage of the rebates being offered by Tennessee Valley Authority. Visit our website to learn more and sign up.

www.energyright.com/rebates



HIRE CONTRACTORS

Finding the right contractor can be overwhelming. Visit our website to find a list of certified contractors and read reviews from other homeowners about these service professionals.

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Smartphone Interface

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AUDIT

Expanded Objective

Energy Reduction through Customer Engagement



Next Steps

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

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<http://tearp.efi.org/>



http://energyrightpartners.com/tradeally/jsp/Contractor_Search/ContractorSearch.jsp