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A Service of GeoPraxis, Inc.

Energy: Another Negotiating Tool



HERS Ratings For Inspectors & REALTORS®

Thomas P. Conlon – Principal, VP Business Development



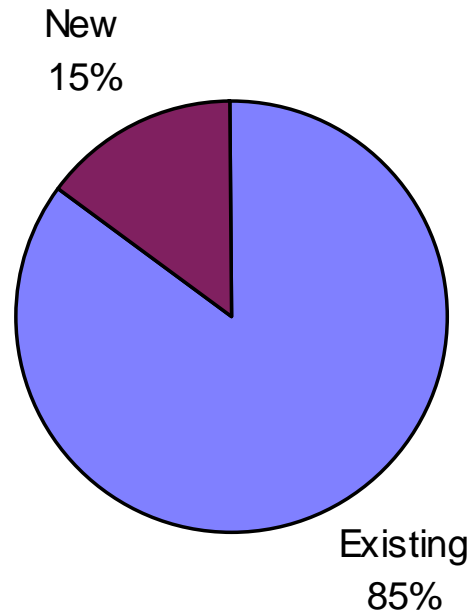
Overview

- Time-of-Sale HERS Market Assessment
- EnergyCheckup Program Overview
- Accomplishments & Market Effects





Why Existing Homes?



National Association of Realtors; National Association of Home Builders 2002



Time-of-Sale Market Potential

Existing Home Sales 2002 (SF, Apts, Condos, Coops)					
	Northeast	Midwest	South	West	Total
Single-family	656,000	1,217,000	2,203,000	1,490,000	5,566,000
Multi-family	130,000	95,000	373,000	219,000	817,000
Total	786,000	1,312,000	2,576,000	1,709,000	6,383,000
Inspections ¹	605,220	1,010,240	1,983,520	1,315,930	4,914,910

National Association of Realtors 2002

([www.realtor.org/Research.nsf/files/CurrentEHS.pdf/\\$FILE/CurrentEHS.pdf](http://www.realtor.org/Research.nsf/files/CurrentEHS.pdf/$FILE/CurrentEHS.pdf))

¹ Inspection rate of 77%, (NAR/ASHI 2001 Home Inspection Survey)

(<http://www.ashi.org/media/press/release001.htm>)



Key Market Statistics*

- 99% of Realtors recommend that a buyer get a home inspection
- 97% of home buyers believe that the home inspection was a good value for the price paid
- 79% of home buyers attend and participate in the home inspection
- 69% of home buyers chose inspector based on recommendation of real estate agent

*Source: [National Association of Realtors/ ASHI Surveys 2/2001](#)



Carrots or Sticks?

- Except in a few localities, energy inspections at the time-of-sale are totally voluntary in CA
- However since 2001, a buyer or seller may request an energy inspection prior to sale of a Single Family home
- AB 549 exploring “mandatory measures” in CA existing home sector





California Law

- Business & Professions Code 7195
 - a home inspection may include an inspection of energy efficiency
 - “unfair business practice” for a home inspector to:
 - Perform any repairs for 12 months
 - Inspect own property
 - Do any inspection involving *Quid Pro Quo*
- CA Public Resources Code 25401.7
 - A home inspector shall provide contact information for entities that provide home energy information





Program Rationale

- Existing homes contain vast amounts of untapped energy savings
- Time-of-sale is the “Golden Hour” to influence energy improvements
- Home inspectors and Realtors need a streamlined energy audit to add value to their existing services





What is an EnergyCheckup?

- Quick!
 - Not significantly more time than a regular home inspection
 - Collected by same inspector
- Accurate
 - EnergyCheckup™ Certified Energy Inspector
 - HERS Server web service
- Comprehensive
 - Action-oriented
 - Easy-to-read





EnergyCheckup – HERS Server

The screenshot shows three overlapping Microsoft Internet Explorer windows from the early 2000s. The top window is titled "EnergyCheckUp | Homeowner | Save \$6 And The Planet - Microsoft Internet Explorer". The middle window is titled "EnergyCheckUp | Homeowner | Energy Calculators - Microsoft Internet Explorer". The bottom window is titled "EnergyCheckUp | Homeowner | Lowest Utility Bills - Microsoft Internet Explorer".

The bottom window displays a comprehensive energy audit tool. It includes a sidebar with various links such as "Home Improvement", "Energy Checkup", and "Interactive Tools". The main content area contains a form titled "Hojeada Rápida de Su Inspección del Consumo de Energía" (Quick Look at Your Energy Consumption Inspection). This form collects user information and provides a summary of energy usage and recommendations.

Hojeada Rápida de Su Inspección del Consumo de Energía							
CLIENTE		Lisa Tamayo		FECHA DEL REPORTE		February 5, 2003	
DIRECCION		300 Boyce street Santa Rosa		ESTADO		CA	
				CÓDIGO POSTAL		95401	
AUDITADO POR		John Kennedy, GeoPaxis		ID DE AUDITORIA DEL CONSUMO DE ENERGÍA		49000003	
AÑO DE CONSTRUCCIÓN		1906		CUARTOS		2	
				PISOS		1	
				TAMAÑO		900 pies cuadrados	
SERVICIOS PUBLICOS		ELECTRICIDAD		COMBUSTIBLE		AGUA	
		Pacific Gas & Electric		NA		NA	
RESULTADOS DE LA AUDITORIA DEL CONSUMO DE ENERGÍA							
				COMO AUDITADO		SI EFECTUADAS TODAS LAS RECOMENDACIONES	
COSTO ESTIMADO ANUAL DEL CONSUMO DE ENERGÍA				\$1472		\$1312	
COSTO ESTIMADO DE TODAS LAS MEJORAS Y REEMPLAZOS RECOMENDADOS				-		\$1605	
AHORRO ESTIMADO ANUAL POR EL CONSUMO DE ENERGÍA				+		\$160	
CALIDAD EN EL CONSUMO DE ENERGÍA DA LA CASA				B5 falta de 100		B7 falta de 100	
				★★★★★		★★★★★	
				BENEFICIOS		COSTOS Y AHORROS ESTIMADOS	
LÍNEA VALOR			BORRER DINERO		BORRER CONTAMINACIÓN		
			LÍNEA SEGURIDAD		LÍNEA COMODIDAD		
			BORRER ANUAL		BORRER COSTO		
			BORRER SI FINANCIADO		BORRER CUPONACIÓN (AÑOS)		
			BORRER INTERGOS				

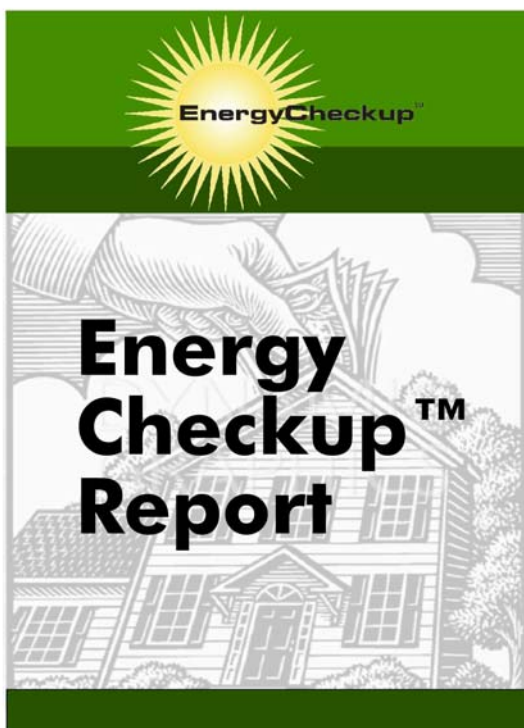
Below the table, there is a paragraph of text:



Although your Water & Sewage bill appears to fall at or below the average you still may have an opportunity to save money as well as make your home more comfortable.

- Time-of-Sale Home Energy Rating
 - Streamlined process coupled with home inspection
 - Automated HERS reporting system
 - DOE-2.2 simulation engine
 - RESNET-accredited (BESTEST)
 - Quick links to rebates, financing, etc.
 - Benchmarking (HUD AHS)
 - Bilingual (English / Spanish)



Sample EnergyCheckup Report



YOUR ENERGYCHECKUP™ AT-A-GLANCE												
CLIENT		Joe Brown				REPORT DATE		30th June 2003				
ADDRESS		123 Oak Street, Vacaville				STATE		Ca		ZIP CODE 95687		
AUDIT BY		Margie Stein, GeoPraxis, Inc.				ENERGY AUDIT ID		4030005				
YEAR BUILT		1973		BEDROOMS 3		STORIES 1		SIZE		1,200 Sq ft		
UTILITIES		ELECTRIC		FUEL		WATER						
		Pacific Gas & Electric		Pacific Gas & Electric								
ENERGY AUDIT RESULTS												
						AS AUDITED		IF ALL RECOMMENDATIONS COMPLETED				
ESTIMATED ANNUAL ENERGY COSTS						\$2833		\$1854				
ESTIMATED COST OF ALL RECOMMENDED IMPROVEMENTS & UPGRADES								\$6245				
ESTIMATED ANNUAL ENERGY SAVINGS						-		\$979				
HOME ENERGY RATING						69 out of 100		★★★		79 out of 100 ★★★★★		
<div></div>	BENEFITS					ESTIMATED COSTS & SAVINGS						
	SAVE MONEY	LESS POLLUTION	HEALTH/SAFETY	MORE COMFORT		ANNUAL SAVINGS	COST	COST IF FINANCED	PAYBACK (YEARS)	REBATES		
	RECOMMENDED IMPROVEMENTS					Costs include full purchase cost and installation.						
	1	Replace Incandescent Light Bulbs With Screw-in Compact Fluorescent Lights	✓	✓			\$52	\$35	\$3	0.7	✓	
	2	Install Low-Flow Showerheads	✓	✓			\$15	\$15	\$1	1.0		
	3	Insulate Water Heater Pipes	✓	✓			\$6	\$6	\$1	1.0		
	4	Install a Programmable Thermostat			✓	✓	\$93	\$162	\$14	1.7	✓	
	5	Get an Advanced HVAC (Heating, Ventilation and Air Conditioning) Diagnosis & Tune-Up	✓	✓	✓	✓	\$313	\$780	\$67	2.5	✓	
	6	Install Kitchen Fluorescent Light Fixtures					\$30	\$92	\$8	3.1	✓	
	7	Reduce Air Infiltration and Drafts	✓	✓	✓	✓	\$152	\$650	\$52	3.9	✓	
8	Install Compact Fluorescent Light Fixtures					\$22	\$135	\$12	6.1	✓		
9	Install Insulation Package: Attic (R-30) + Wall (R-13)	✓	✓	✓	✓	\$217	\$2,864	\$246	13.2	✓		
RECOMMENDED UPGRADES					Costs include only upgrade cost of choosing an energy efficient product over a standard product.							
1	Upgrade to an Energy Star Dishwasher	✓	✓			\$29	\$1	\$0	0.0	✓		
2	Upgrade to an Energy Star Refrigerator	✓	✓			\$87	\$75	\$6	0.9			
3	Upgrade to a High Efficiency Gas Water Heater	✓	✓			\$62	\$129	\$11	2.1			
4	Upgrade to an Energy Star Gas Furnace	✓	✓			\$343	\$730	\$63	2.1	✓		
5	Upgrade to Energy Star Windows & Skylights	✓	✓	✓	✓	\$184	\$471	\$40	2.6	✓		
6	Upgrade to an Energy Star Clothes Washer	✓	✓			\$38	\$150	\$13	3.9	✓		

Funded by the California taxpayers under the auspices of the California Public Utilities Commission



What is the Fee?



- Inspectors set pricing
 - Usually \$55 – \$150, depending on the size of the home, etc.
 - Some inspectors include the energy audit in their regular fee.
- Inspectors willing to collect data for just \$35.



Program History

- 1999: Launched program in So Cal Gas Area
 - \$35 incentive paid to inspectors
- 2000-2001: Extended program to SCE Area
 - 130+ inspectors trained
 - 27,000 HERS inspections
- 2002-2003: Program redesigned for PG&E Area
 - No inspector incentives
 - 140+ inspectors trained
 - Only 150 HERS inspections to date, but...
 - Significant market effects achieved



Key Program Elements

- Program Localization & Launch
 - Codes, costs, rebates, local program coordination
- Inspector Outreach & Training
 - HERS infrastructure development
- Marketing & Sales Support
 - Sales training for inspectors & real estate agents
 - Advertising and public relations
- Graduated Incentives
 - Incentives for inspectors (\$35: 1999 – 2001)
 - “Free” low cost measures for consumers (~\$18: 2002 – 2003)
 - Rebates for consumers (\$30: 2004 - 2 month pilot)



Program Model Comparison

	EnergyCheckup Program	Traditional HERS Program
Channel Partners	Independent, market-engaged home inspectors, cross-trained to collect energy efficiency data	Specialty energy efficiency consultants; home performance contractors
Primary Clients of Partners	Real estate agents, buyers & sellers of homes	Utility DSM or PGC programs, state energy offices, energy-related non-profit organizations
Delivery Method	Piggy-back energy-related data collection alongside client-paid TOS home inspection to encourage energy efficiency retrofits.	Perform ratepayer or government-subsidized HERS ratings as loss leader to encourage energy efficiency retrofits.



Program Model Comparison

	EnergyCheckup Program	Traditional HERS Program
Training	2 day “Certified Energy Inspector” (includes bldg. science, diagnostics & sales)	4 or 5 day Certified “Home Energy Rater”
Software	HERS Server (Web-based DOE-2; gbXML-compliant)	REM/RATE; EnergyGauge; CHEERS; etc.
Cost of Software to Inspector	\$19.95 per use; \$125 annual membership fee ¹	\$15- \$60 per use; annual software license fees (\$300-\$750+)

¹Fees are current for CA market, without sponsorship; may vary based on demand and volume discounts.



Program Model Comparison

	EnergyCheckup Program	Traditional HERS Program
Cost to Consumer	\$55-150 (Inspector sets pricing)	\$250-\$850, usually subsidized (Source: NREL ¹)
Cost to Program Administrator	\$25- \$40 per inspection (until market transformed)	\$105-\$300 (no apparent exit strategy)
Year 2000 Market Share (Nationwide) ²	39% (Southern CA only)	61% (all other HERS providers in nation)

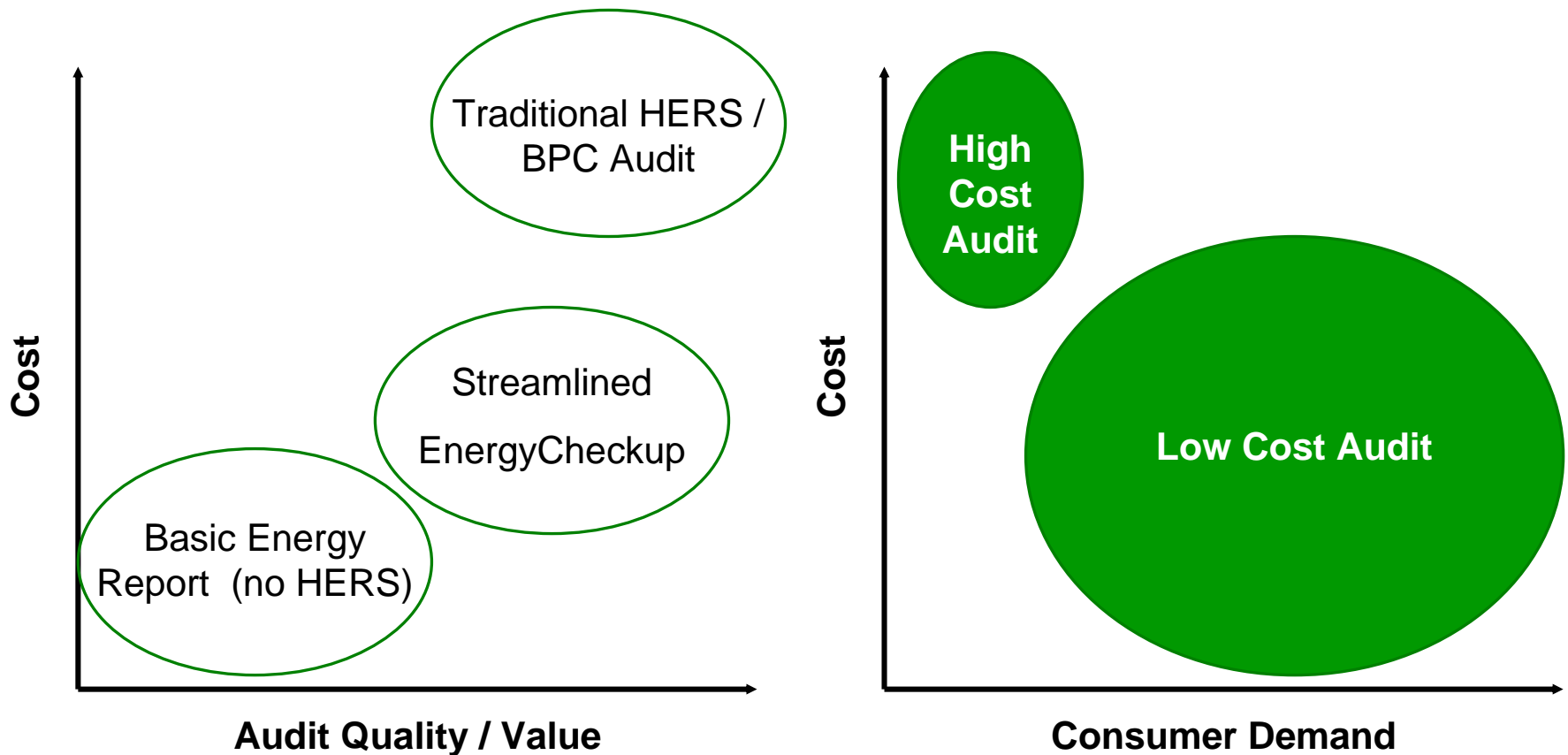
¹National Renewable Energy Laboratory (NREL) Pilot HERS Study 1999.

²National Total 2000 = 33,000 Source:

www.natresnet.org/conference/2002/presentations/Baden_hers.pdf



Audit Products & Market Demand





Market Effects



- Trained over 340 professional home inspectors to deliver a RESNET-accredited HERS rating at Time-of-Sale
- Leading home inspection firms now offering energy inspection products
- “Energy checkup and report” added to Realtor’s “Standard Authorization Form”
- Real estate training program (CAR & DRE)
- PG&E sending audit leads to EnergyCheckup



An Energy Checkup Can Help You Close

Add some
“Good News” to your
next
home inspection

