



Energy Upgrade California In Los Angeles County

Improve your home. Get rebates. Save money.



Agenda

- Introductions
- Overview Energy Upgrade California
- Workforce Development
- Questions

Introductions

- David Cohen, Program Manager
 - The Energy Coalition
- David Myers, Regional Manager
 - Build It Green
- Lauren Rank
 - LA County Office of Sustainability

Energy Upgrade California Overview

David Cohen, Lauren Rank

What is Energy Upgrade California?

A program that provides **rebates and incentives** to property owners for **home energy upgrades** that can:



- Increase energy efficiency
- Conserve resources
- Enhance home comfort
- Lower utility bills
- Create jobs in the home performance industry

Who runs Energy Upgrade in LA County?

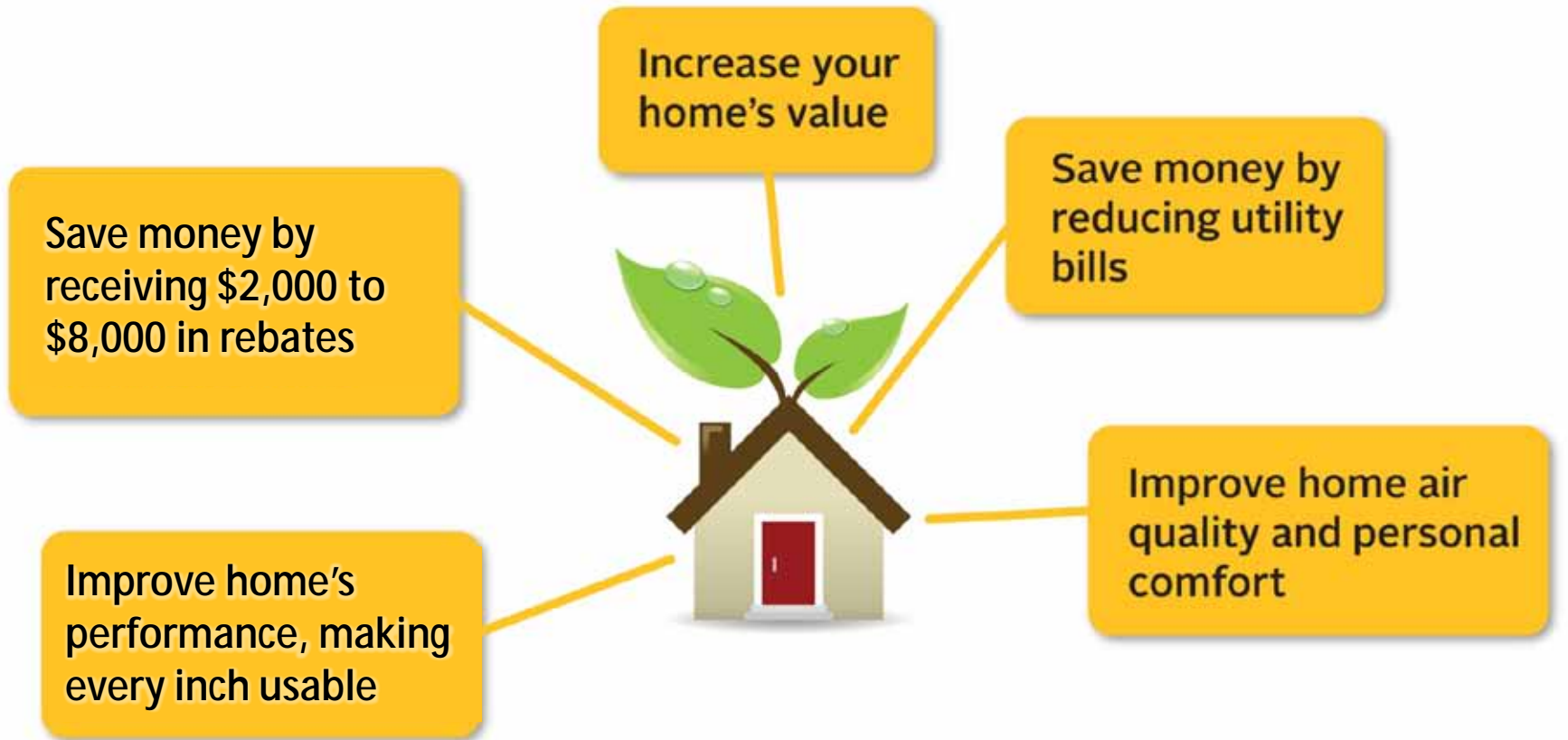
This program is an alliance of:



- Los Angeles County
- State and Local Governments
- Utility Companies
- U.S. Department of Energy

And YOU!

Benefits to Homeowners



An Energy Upgrade for your home is like a tune-up for your car



1. Work with an expert
2. Use the latest diagnostic tests
3. Replace parts that cause poor performance
4. Diagnostic test again after work to check your home's energy savings!

Assessment is the key

- Learn from your contractor...
- Define a construction scope, and determine expected rebate amount and projected energy savings
- Know that these Participating Contractors are experts in this field



How Property Owners Can Participate

Two entry paths for participation

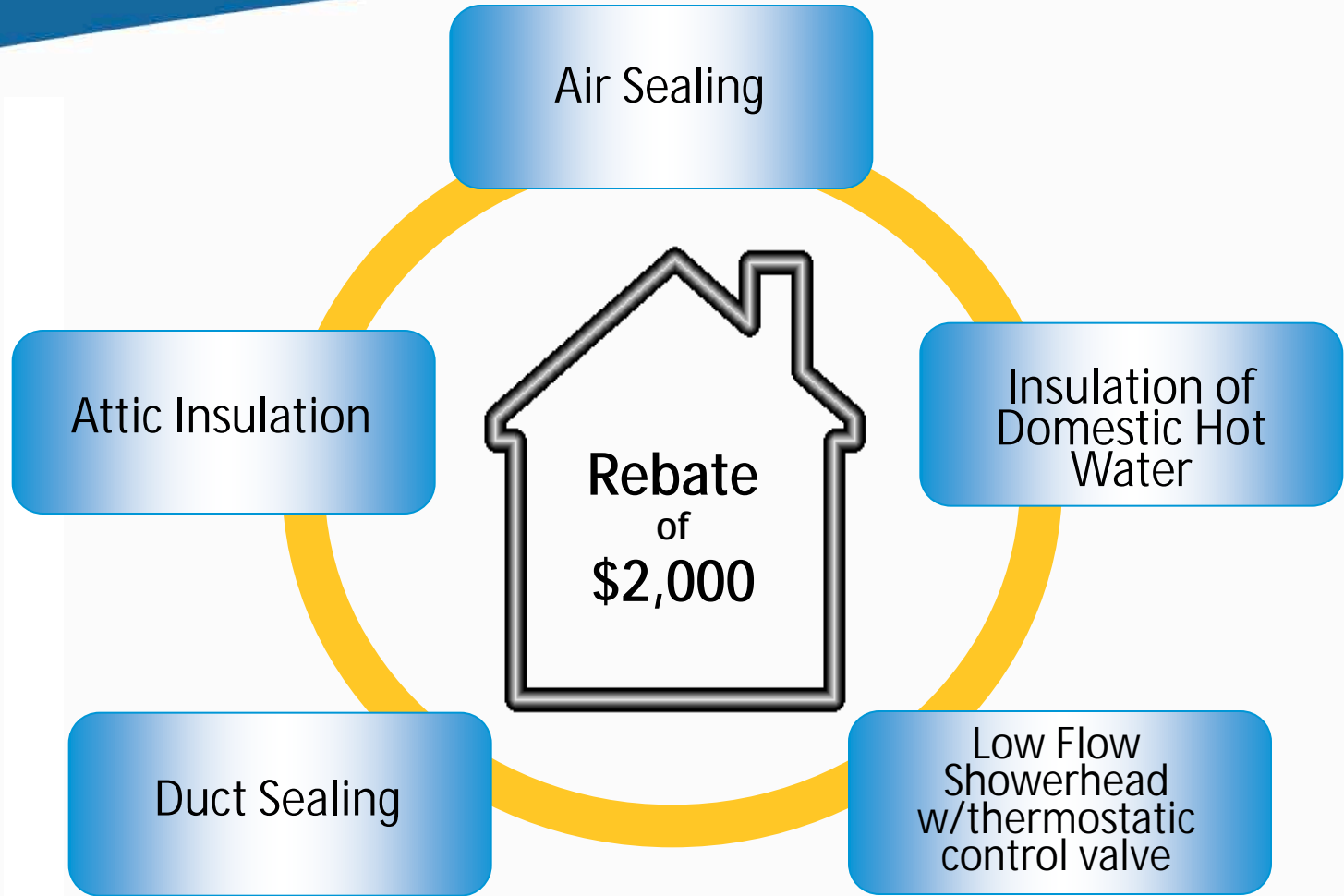
Basic
(\$2,000 rebate)

Advanced
(\$2,500 to \$8,000 rebate)

* Basic path rebate in Gas only territory is \$320. Advanced starts at \$400 and up.

** Advanced path includes a combined SCE/SCG Incentive plus an LA County tiered rebate. Non-combined territory homeowners will receive a portion of the total utility incentive and all of the LA County rebate amount.

Basic Upgrade Package



Combustion Safety Test
Required

Taking the Advanced Path



Your **plan** with your **contractor** will determine your **projected energy savings**...The bigger the **savings %**, the more **cash** you get!

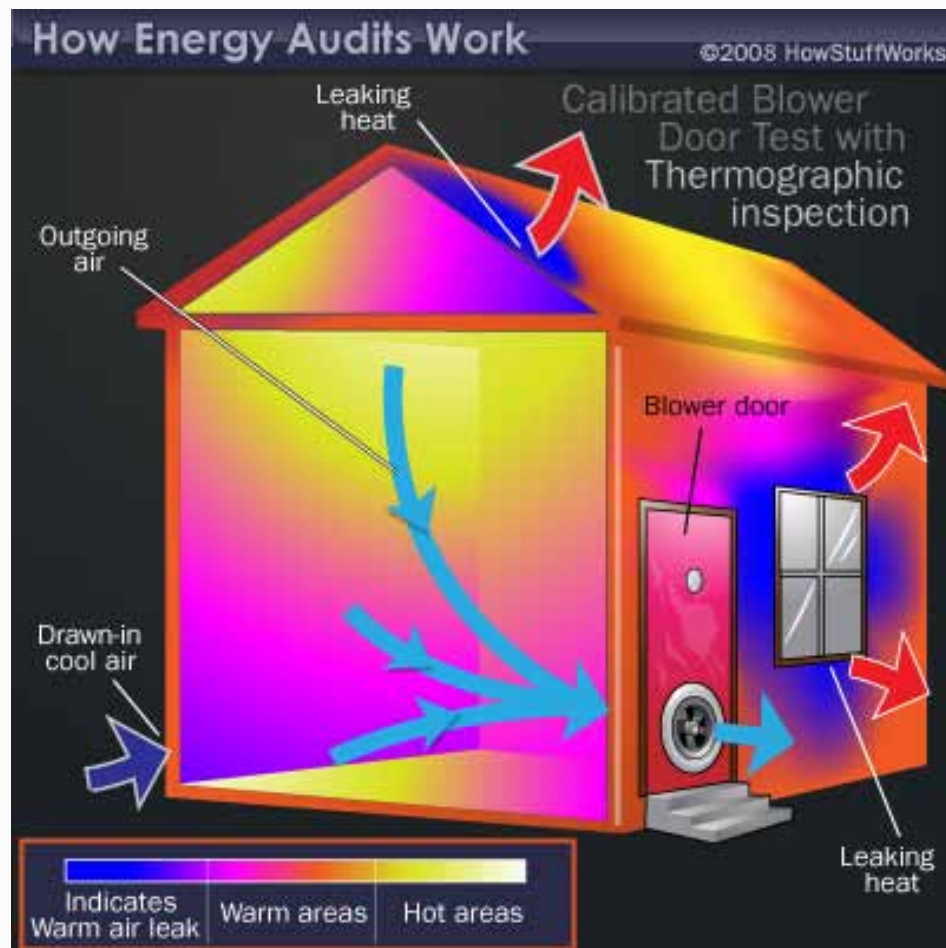
.....It starts with an Energy Assessment, like diagnostics for a car tune-up.

What is an Energy Assessment?

It is a complete evaluation of home energy use:

- Usually takes 4-6 hours
- Expensive diagnostic tools
- Highly skilled contractors
- Valuable information about your home's performance
- Costs vary by Participating Contractor

The first critical step is learning about your home from your contractor during the assessment.



The Assessment is the key

BPI Participating Contractors follow stringent guidelines for diagnostic testing:

- Blower Door Test
- Duct Blaster
- Combustion Safety Test
- Infrared Camera



Energy Assessments will help to determine and validate your rebate amount

Advanced Upgrade \$\$

Homeowner Rebate:

\$1,250 - \$4,000

LA County Rebate*:

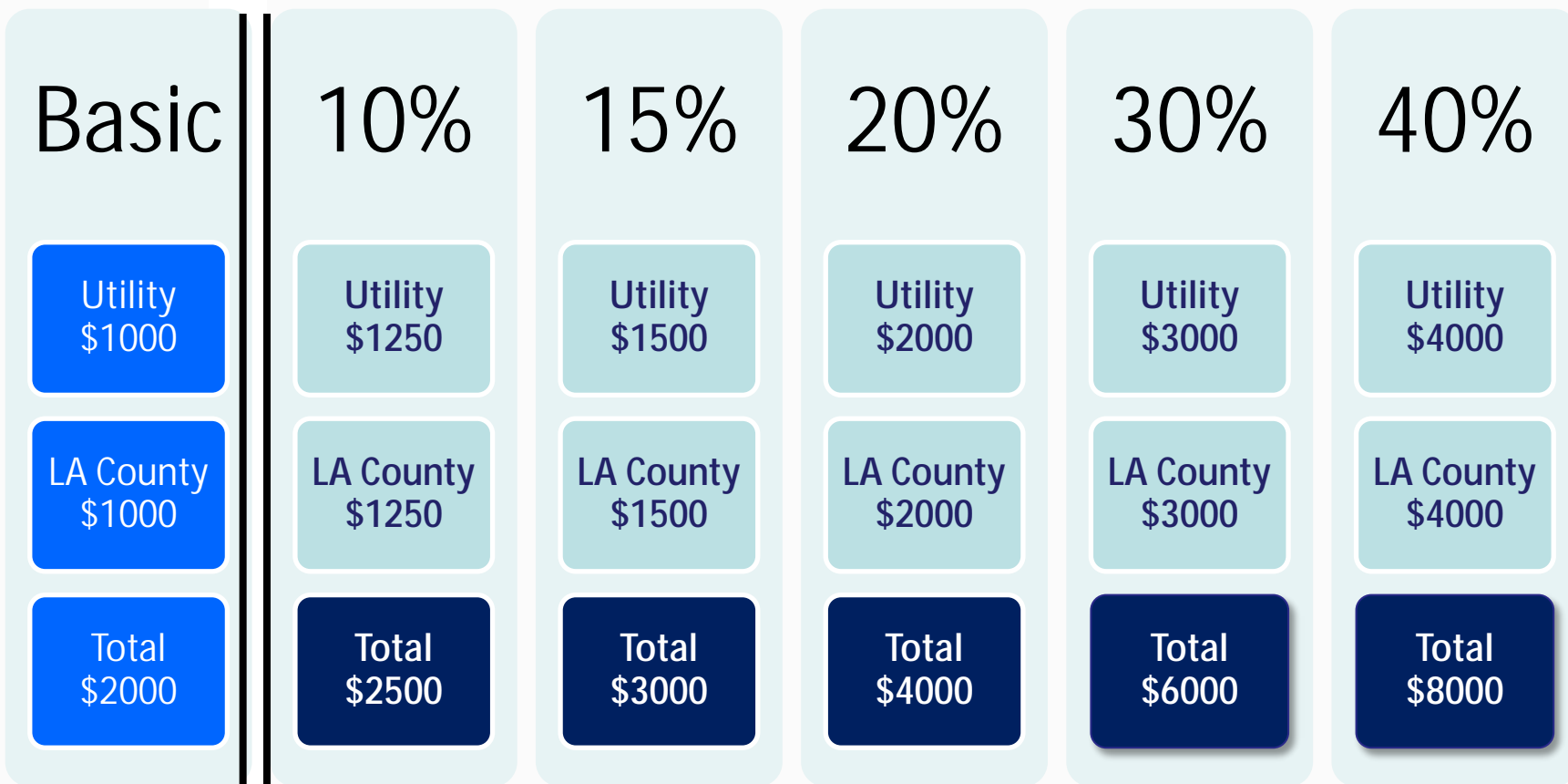
\$1,250 - \$4,000

Average Energy Savings:

10% - 40%+



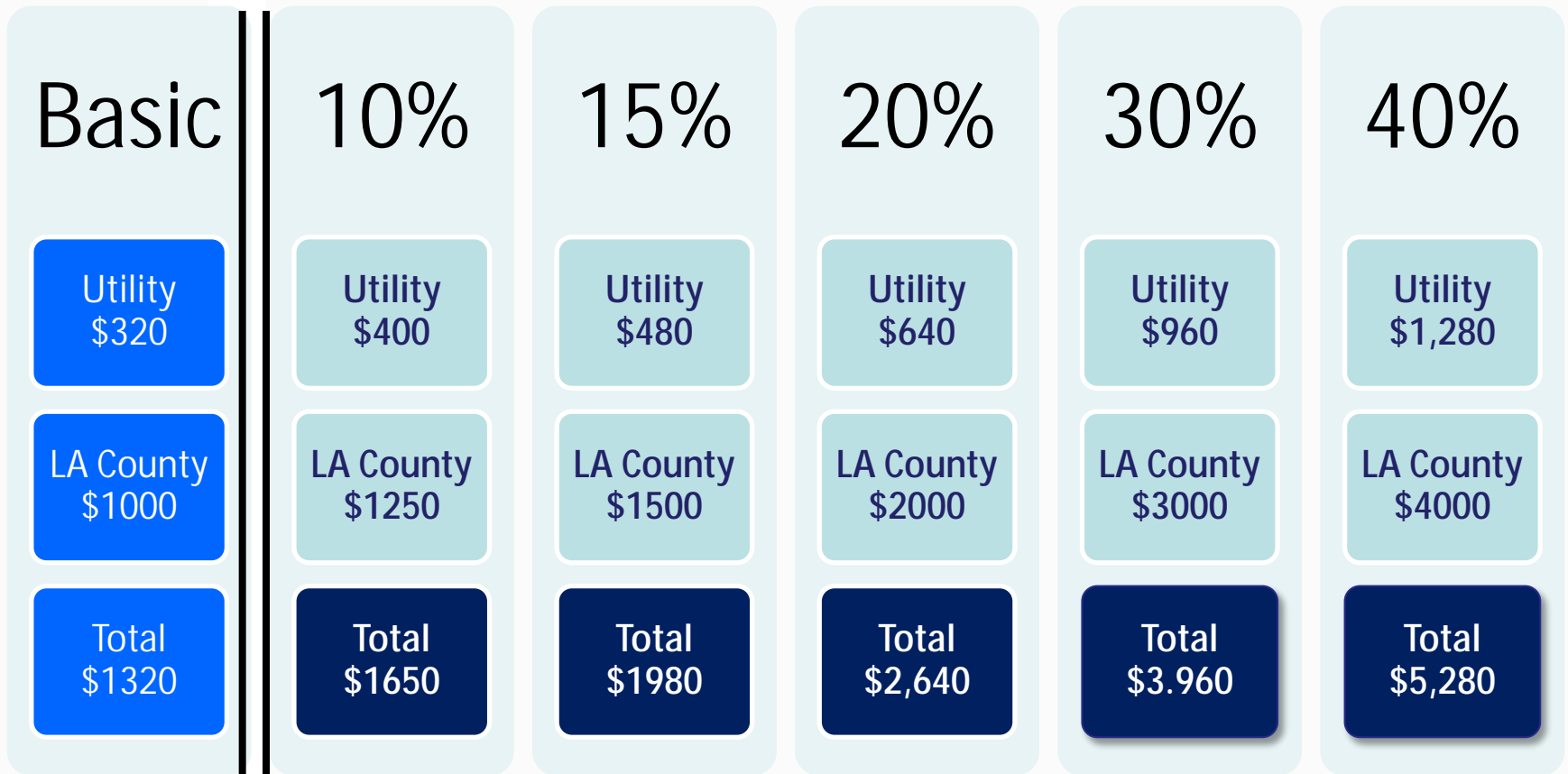
More energy savings, more rebate dollars



* Utility rebates currently for SCE and SCG customers. Hybrid programs include Gas Only rebate + LA County rebate amount for customers of municipal utility programs.



Energy Upgrade in Municipal Utilities



- Contractor should add municipal utility individual measure incentives to Energy Upgrade Gas Company incentive amounts

Who is the Basic Package for?

- People not ready to replace major home systems
- People who want to see results without a big investment
- Note: if you've already made some "envelope" improvements, you may not be able to do the basic path



A basic package, before the rebate, runs about \$3,500 depending on size and age of home

Who is the Advanced Package for?

- Have already installed energy efficiency measures like air and duct sealing and insulation, and you're ready for the next step
- Have heating and cooling systems that need replacement
- Want to renovate, and see the benefits of efficiency
- Buying a home soon and making repairs before moving in
- Not planning to move for a while

An advanced package, before the rebate, runs about \$8,000 to \$17,000, depending on the upgrades chosen

The Participating Contractor is Key

- The contractor will figure out which path is best suited for your needs.
- Not all homes qualify for the Basic Upgrade only
- All homes qualify for the Advanced Upgrade.



“Running your furnace without proper insulation is like turning up the heat in your car and driving with the windows rolled down.”

– Dvir Brakha,
Advanced Home
Energy

What we know



- The need for fossil fuels is escalating
- **Energy Efficiency** is the easiest, cheapest and most practical way to **lower our dependence on foreign oil**
- Lowering energy consumption means **reducing future need to build power plants.**
- Making homes more energy efficient is a way to **stimulate the growth of the green economy** – including new jobs

Most of us want to be friendly to our environment... It's time to appreciate the significance of each of our actions to the whole!

Getting started: It all starts here!



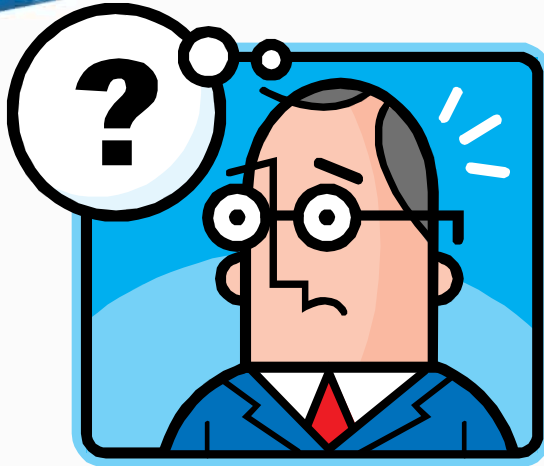
www.energyupgradeCA.org/LACounty



Workforce Development

David Myers

So what does this all mean?



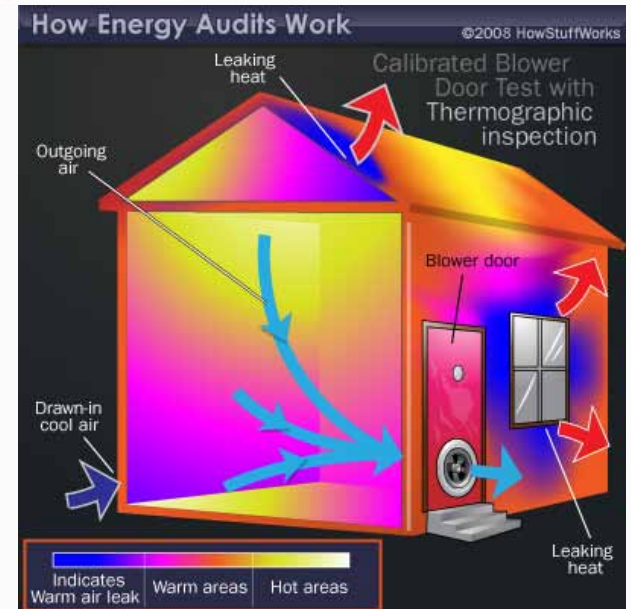
- New era for construction in CA
 - Long-term state policy initiative
- New approach needed by contractors
 - Build workforce capacity
- New skills to meet future demand
 - Much training and education needed!

Education Needs

- Technical Training
- Business Skills
- Software Training
- Looking to the future

Technical Training

- Highly trained workforce needed
 - Homes are complex systems
 - Building *science!*
- Everyone needs to be trained
 - Contractors
 - Crew leads
 - Installers
 - Admin staff



Technical Training

- Building Performance Institute (BPI) Building Analyst
 - National Standard
 - Building science and home performance basics
 - Installation and testing procedures
 - Rigorous testing to achieve certification
 - Excellent for contractors and crew leads
 - Only the beginning!
 - Opportunity for community colleges
 - BPI approves training affiliates
 - www.bpi.org



AFFILIATE
ORGANIZATION

Technical Training

- Home Energy Rating System Phase II (HERS II)
 - Addresses existing homes
 - Diagnostic analysis to produce energy efficiency rating
 - Extensive training required
 - Administered by the California Energy Commission
 - Being combined with BPI training

Technical Training

- Hands-on training
 - Immense need only now being addressed
 - Certified, but need more experience
 - Accurate work
 - Employable
 - Good for everyone, but particularly installers
 - Practical
 - Specific
 - Shorter training commitment



Business Skills



- Current and future need
 - Highly competitive market
- Areas include...
 - Business planning
 - Sales & marketing
 - Human resources
 - Accounting
 - Soft skills
- Lots of different types of jobs at these companies!

Software Training

- Highly specialized
- Energy modeling part of all programs
 - Energy Upgrade California
 - HERS
 - EnergyPro
- Not a traditional skill for residential construction industry
- Can be job unto itself



Training Providers

- Who has/is providing training?
 - Focus on technical training for contractors
 - Nonprofit trainers
 - Workforce Investment Boards
 - Clean Energy Workforce Training Program
 - For profit trainers
 - Community colleges!!
 - Everything under one roof
 - LA Trade Tech
- Other types of training not heavily accessed...yet

LA County's Efforts

- How is LA County helping meet the workforce need?
- Outreach
- Collaboration
- Education



Outreach & Collaboration

- Presentations and meetings
 - That's why we're here today!
 - Inform the community
 - Contractors, educators, homeowners
- Workforce Development Advisory Committee
 - Advises on County workforce efforts
 - Regional collaboration
 - Next Meeting Dec. 15
- Regional hub for information
 - www.energyupgradeca.org



Education



- Direct training delivery
 - BPI Building Analyst
 - Field mentoring
 - Software training
 - Marketing webinars
 - Other business training
- Training support
 - Training lists
 - Scholarship program
 - Central job board

Looking to Tomorrow

- LA County Pilot Programs
 - DOE Funded
 - Additional support and incentives
 - Requires additional training
 - Expanding beyond energy, general contractors
- Green Building Labeling
- Multifamily
- HVAC



Green Building Labeling

- Context of Pilot
 - People are interested in green certified homes
 - This interest can be used to gain more energy upgrades and value
 - Encourage people to go beyond energy
 - If you do an Energy Upgrade your most of the way to a label!
 - GreenPoint Rated, LEED



Elements of a Green Home



There's an added \$500 to \$1000 rebate to help with these expenses

Green Building Labeling

- Two target audiences: real estate professionals and contractors
 - Real Estate
 - Time of sale as trigger event
 - Outreach to real estate community
 - Greening of the MLS
 - Training
 - Contractors
 - Training
 - Connect with real estate pros
 - Website - www.energyupgradegreenlabel.org



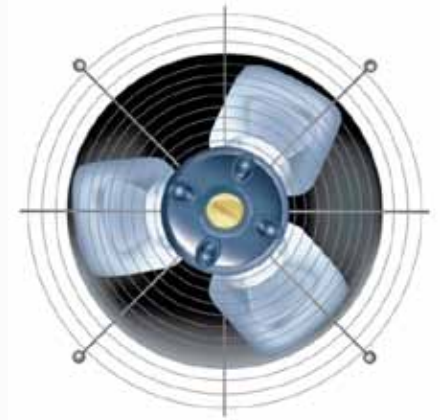
Multifamily Buildings

- One of five pilots throughout the state
- Performance based program targeting whole building energy upgrades
- Incentives
 - Free design and technical assistance'
 - Assessment incentive for investment grade energy audit
 - Improvement incentive
 - Can also pursue Green Building Labeling incentive



HVAC

- HVAC
 - HVAC change-outs are an important trigger event
 - Encourage HVAC industry to incorporate home performance
 - Encourage proper calculations and sizing
 - Specialized field that requires lots of training!



You are on the front line of 21st
century education!



Thank you for your time...



Together we are transforming how we think about saving energy and building the economy

Questions?





REBATES for RENOVATIONS!
energy upgrade CALIFORNIA

energy upgrade CALIFORNIA