

California Building Performance
Contractors Association

cbpca



Home Energy Retrofit Programs

The Next Big Thing



Bob Knight, BKi President

What I'm Covering...

- Carbon emission reduction is getting serious
- What's wrong with existing retrofit programs?
- What's a "whole house" energy retrofit?
- The Home Performance with ENERGY STAR program
- What's the CBPCA and what does it do?
- Pressing need for much larger scale of effort

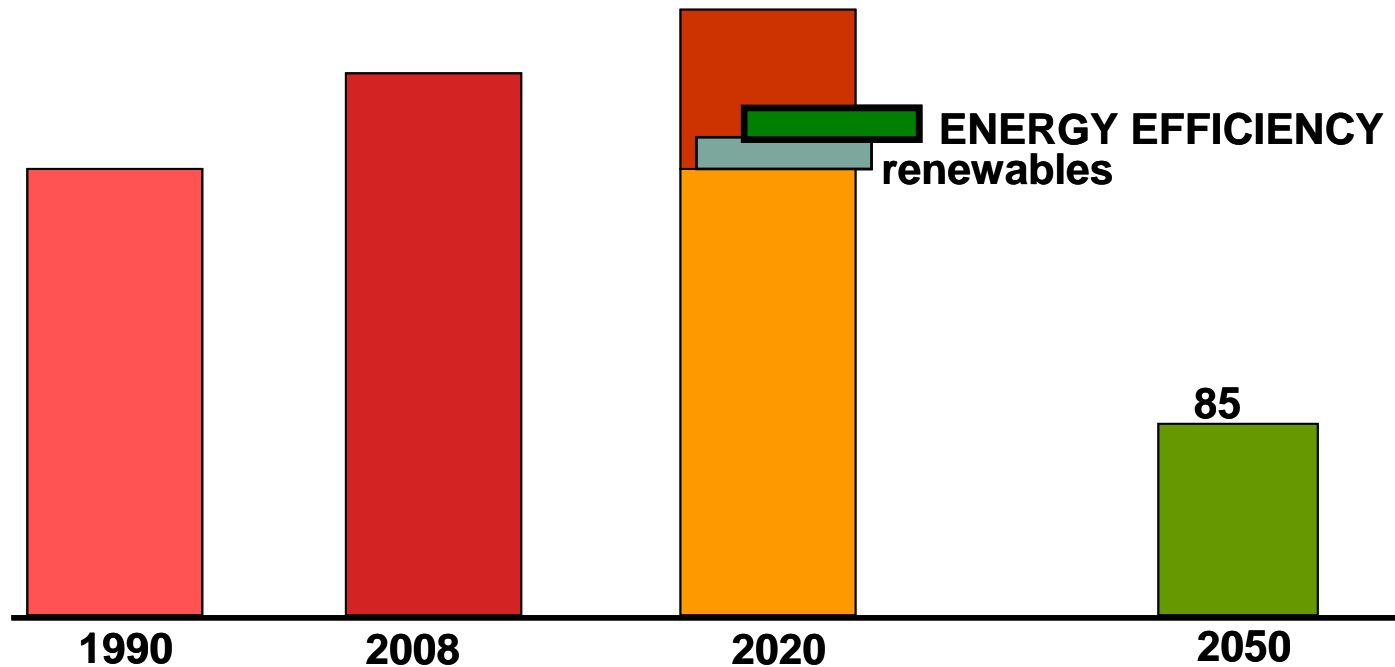
***Brian Gitt of BKi will say more later
about the future...***



The Carbon Challenge

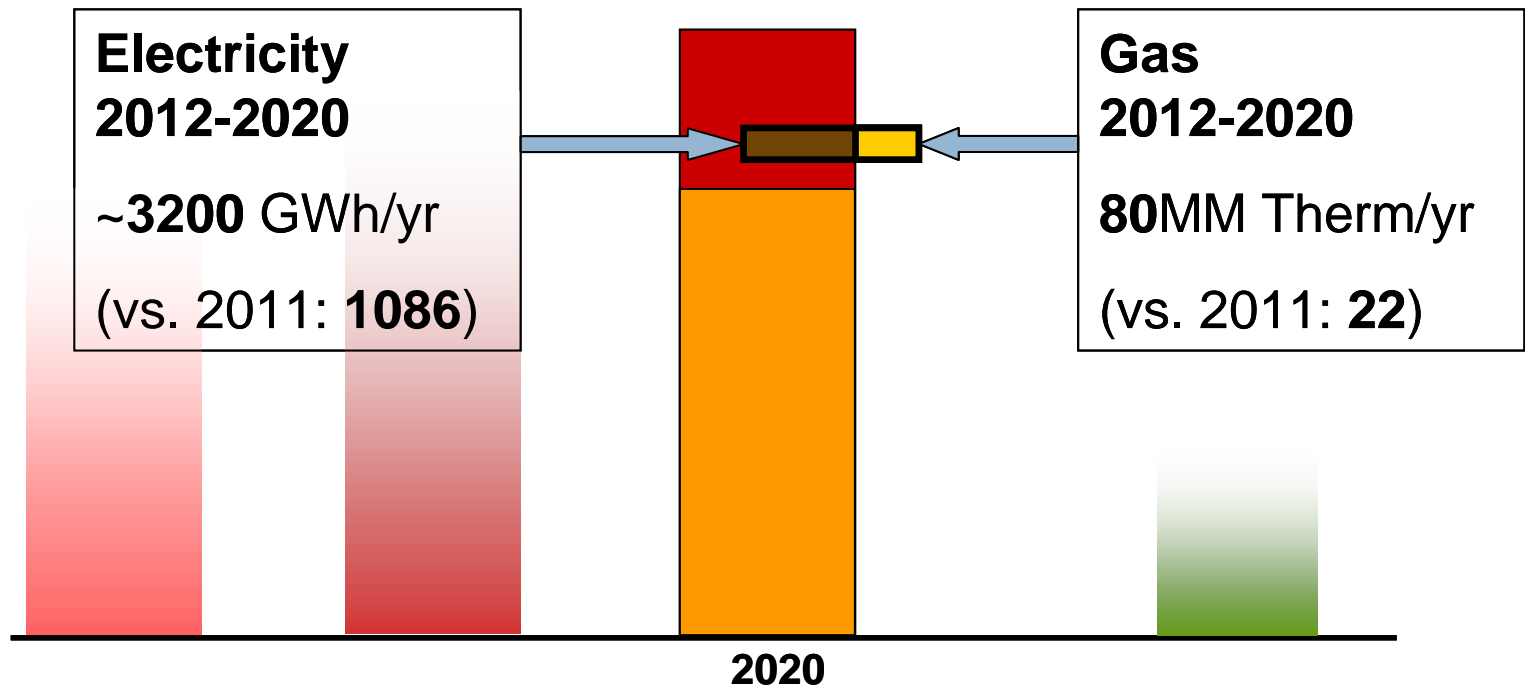
Renewables cover about 15% of the 2020 goal

Energy Efficiency is about the same, but separate



Future vs. Present Carbon Goals

2011 Targets: only 1/3 of 2012-20 average annual needs



...and the goals *DOUBLE* for 2021-2050

Can existing programs do it?

You just can't get there on this road.

...Conventional measures can't save enough per site (40-80%) or engage enough homeowners

Conventional Programs Flunk

You just can't get there on this road.

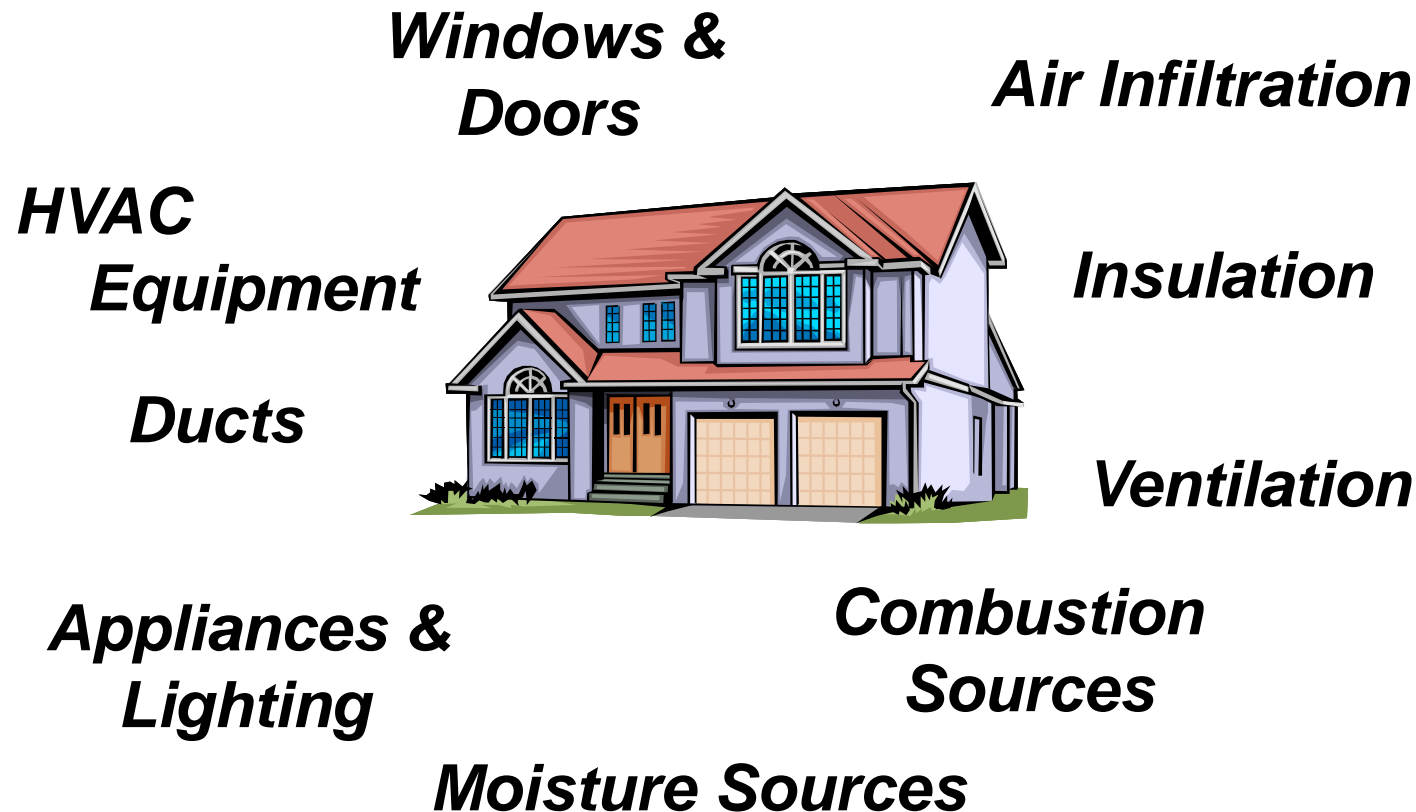
...Conventional measures can't save enough per site (40-80%) or engage enough homeowners

- In homes, 20% savings is rare with single measures
- Each home actually needs many improvements
- Separate additive programs would be slow + wasteful

Must have comprehensive upgrading programs

The House: An Integrated System

It All Works Together...for better or worse!



The Whole House Alternative

A National Initiative by EPA and DOE

- ❑ **Comprehensive home assessment**
- ❑ **Home performance upgrade recommendations**
- ❑ **Qualified contractor fixes everything**
- ❑ **Financing and utility rebates**
- ❑ **Independent quality verification**
- ❑ **Utility programs increasing in US**



Whole House Building Science

◆ **Diagnostic Testing**

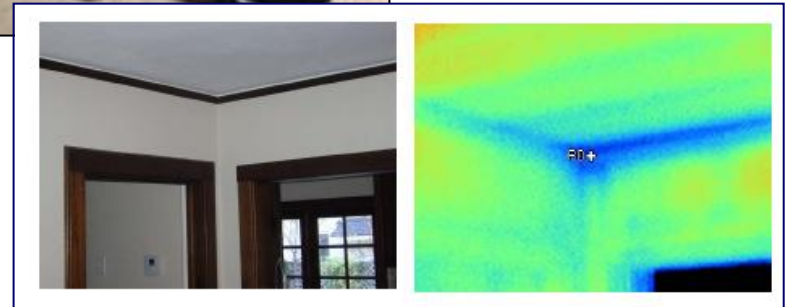
- ❑ Air & moisture infiltration
- ❑ Duct leakage
- ❑ Insulation
- ❑ Combustion safety

◆ **Best Practice Installation**

- ❑ HVAC system upgrading
- ❑ Insulation & air sealing
- ❑ Windows, shading, etc.
- ❑ Moisture control

◆ **Performance Test-Out**

- ❑ Contractor's own testing
- ❑ Independent verifications



Rescuing the Contracting Industry

Getting Started

- Training
- Equipment
- Business Model
- Motivation

Getting Jobs

- Marketing
- Lead Handling
- Sales

Doing the Work

- Staff Skills
- Customer Relations
- Verification & QA/QC



The Growth Industry We Need!

Year 1



Performance Systems Contracting, Inc.

Year 3





The ENERGY STAR Partner in California

- ❑ **Formed to advance whole-house energy retrofits**
- ❑ **Partner with Energy Star for home performance**
- ❑ **Programs for SCE/SCG, PG&E, and SMUD**
- ❑ **Trains & supports contractors**
- ❑ **About 600 trained personnel here so far**
- ❑ **Also California HERS training provider**

www.cbpca.org

Contractor Training and Support

Primarily HVAC & Remodeling Contractors

Extensive Technical Training

Business & Marketing Instruction

BPI Certification

Extensive Field Mentoring

Continuing Tech Support

We just need more of it!



Meeting a Growing Demand

We will need thousands more trained contractors...

- Federal, state, and utility incentives can explode the market
- Variety of new training programs and providers
- Will need a transition path for untrained contractors
- Plans and proposals already in place for 2009-11

Stay tuned for Brian's talk on new strategies

A Few Concluding Points...

- **We need millions of deep energy retrofits**
- **There is a national Energy Star retrofit program**
- **California utilities and CPUC are supporting it**
- **But...We need thousands of contractors**
- **A huge step-up in this industry is coming**



Thanks! For More Information...

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