
Advanced Building Guidelines

***ACEEE Market Transformation Symposium
March 2002***

A not-for-profit public benefits corporation helping to
make buildings better for people and the environment

<http://www.newbuildings.org>



New Buildings Institute, Inc.

- ◆ Formed in December 1997 as 501(c)3
- ◆ Offices in CA and NW
- ◆ Working with partners in:
 - California
 - Northwest
 - Northeast
 - Midwest
- ◆ Annual revenues of over \$2 million plus



Sponsors

- California Energy Commission
- Energy Foundation
- Efficiency Vermont
- Iowa Energy Center
- National Grid, USA
- New York State Energy Research and Development Authority
- Northeast Energy Efficiency Partnerships, Inc.
- Northwest Energy Efficiency Alliance
- Pacific Gas and Electric Company
- Sacramento Municipal Utility District
- San Diego Gas and Electric Company
- Southern California Edison
- US Environmental Protection Agency



Background

- ◆ New construction practices can be transformed in two interrelated ways:
 - Changing baseline practices based on benefits of improved design (more difficult to do but in some cases only option available)
 - Code upgrades (effective but can be politically difficult and not appropriate for all measures)



Tools used to Transform Practice

Resource Acquisition

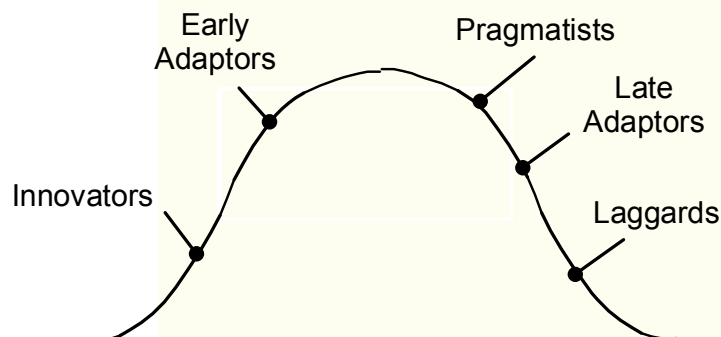
- One-time Transaction
- Spillover and free-ridership are issues
- Guidelines based on resource cost
- Defined baseline based on code, current practice or negotiated
- Defined target based on program criteria
- Sectors matter but É

Market Transformation

- Transactions over time
- Spillover is the issue
- Guidelines based on providing value in marketplace
- Minimum Code or current practice
- Defined target based on value in marketplace
- Value varies by sector



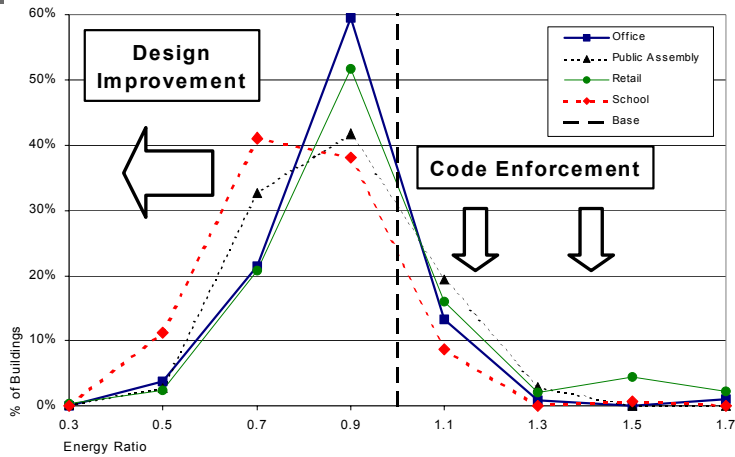
Technology Adoption Curve



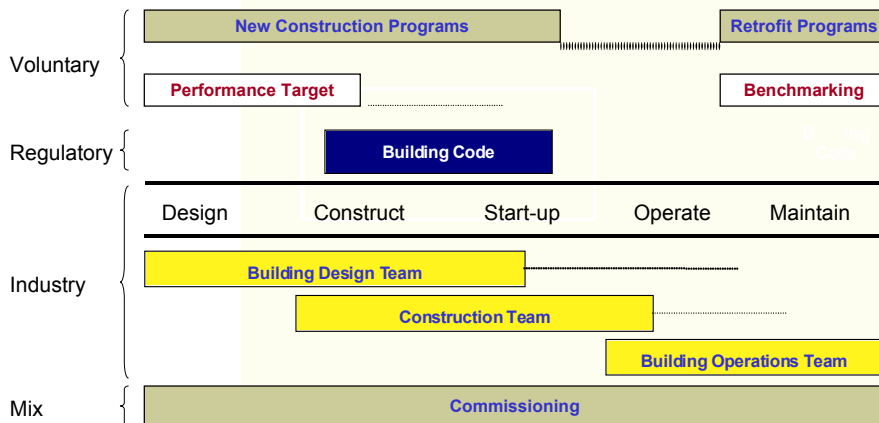
Source: Harry Beckworth, The Invisible Touch



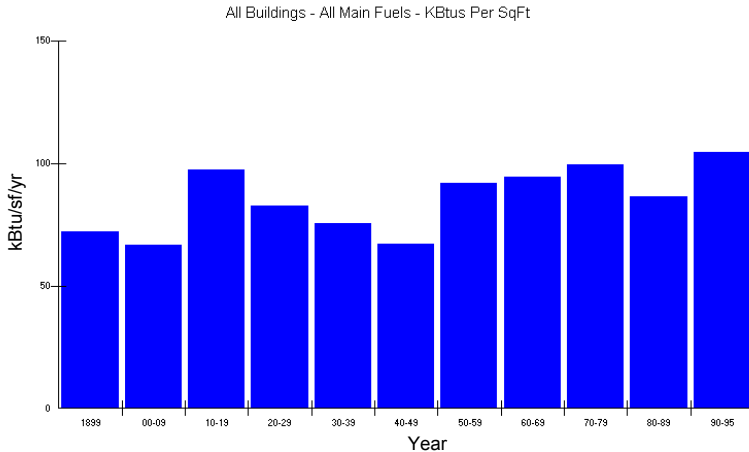
Example - California



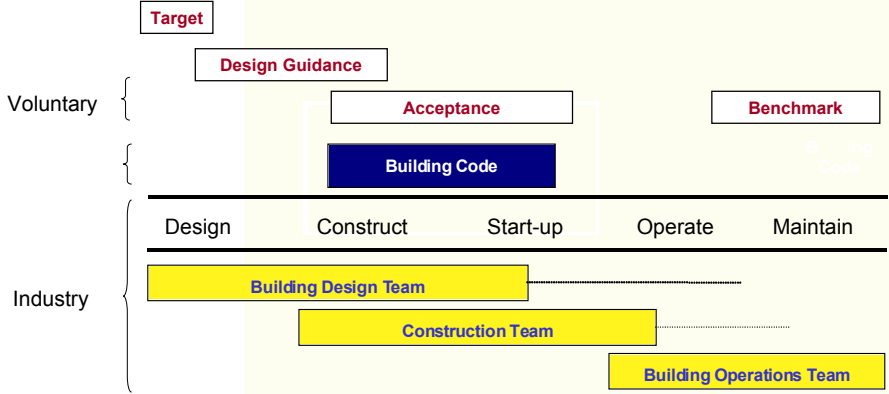
Programmatic Path



Building Energy Trends



Target Setting and Benchmarking



Advanced Building Guidelines

- ◆ Target Setting
 - Prescriptive
 - Performance
- ◆ Design Guidance
 - Depth of Information
 - Web-based access plus local, state, regional delivery
- ◆ Planning Guidance
 - Sector-based marketing information



Project Details

- ◆ Project Team
 - Eley Associates
 - PECl
 - CEE
 - NEEP
- ◆ Initial Sponsor
 - Energy Foundation
- ◆ Potential Sponsors
 - Northwest Energy Efficiency Alliance
 - National Grid
 - NYSERDA
 - Minnesota Dept. of Commerce
 - California
- ◆ Timeline
 - Draft Outline - 11/01
 - Draft Guidelines -6/02
 - Review Cycle - 9/02
 - Final Draft - 10/02
 - Final Review - 11/02
 - Final Guidelines - 1/03
- ◆ Review Process
 - Consensus
 - Balanced Committee
- ◆ Audience
 - Utilities
 - States
 - Green Building Programs
 - Tax Credit Programs



Code Upgrade Activities

- ◆ **National Building Codes**
 - IECC
 - Chapter 8 Upgrades and coordination
 - ASHRAE
 - Code Interaction Subcommittee
- ◆ **State and Local Government**
 - Active areas shown in blue
- ◆ **Regional Code Planning**
 - Developing state work plans and regional work plan for Northwest Energy Efficiency Alliance and Northeast Energy Efficiency Partnerships

