

Energy Upgrade California™ *Retrofit Bay Area*

American Planning Association
California Chapter

Michele Rodriguez,
Bevilacqua-Knight, Inc



What Is Energy Upgrade California™?

- Statewide program to improve energy efficiency of single-family, multifamily, and commercial buildings and promote renewable generation
www.energyupgradecalifornia.com
- One-stop resource for information:
 - Innovative financing and rebates
 - Green workforce development
 - Advanced outreach and marketing
 - Implementation and delivery

About Energy Upgrade Partners in Nor-Cal

- Collaboration among local governments, state agencies, and utilities:
 - California Energy Commission
 - California Public Utilities Commission
 - Pacific Gas & Electric
 - Association of Bay Area Governments
 - Bay Area Counties

Bay Area County Partners

- Partners in the ***Retrofit Bay Area*** grant include:
 - Alameda County
 - Contra Costa County
 - Marin County
 - San Francisco City/County
 - San Mateo County
 - Santa Clara County
 - Solano County
 - Sonoma County

Retrofit Bay Area Program Goals

- Retrofit 15,000 single family homes by 2012
- Retrofit 2,000 multifamily homes by 2012
- Create 1,700+ local home energy retrofit jobs
- Reduce energy consumption by 390 billion BTUs
- Save energy costs by \$6.7 million

Leveraging Federal Stimulus Dollars

- ***Retrofit Bay Area***, State Energy Program for residential energy retrofits
- ***Retrofit California***, U.S. Dept. of Energy funding for energy retrofit pilot programs: whole-neighborhood approach, on-water-bill financing
- ***County Retrofit Programs, Energy Efficiency and Community Block Grants***

Targets and Incentives

State – Utility Targets

- CPUC EE Strategic Plan (2009-2020) zero energy for new residential buildings by 2020.
- Air Resources Board minimum of 15% reduction in greenhouse gas emission for local government below current levels by 2020.
- Title 24 zero energy efficiency standards
- Global Warming Solutions Act (AB 32), 30% below 2020 emissions.
- Renewable Portfolio Standard of 20% by 2012

Financial Incentives

- EECBG \$9.6M
- SEP \$9.8M
- Workforce \$2M
- Utility \$15M
- Private Capital \$160M

Program Design

Why Should Municipalities Participate?

- Energy reduction
- Help to meet your carbon reduction goals
- Create jobs
- Take advantage of the rebates, tax savings, and overall cost savings.

Municipal Energy 101

- Assess Your Community
- Local Energy Resources
- Link Energy & Land Use
- Use “Whole Building”
- Leverage Partners
- Neighborhood Level
- Energy Manager



Energy Planning Done Right

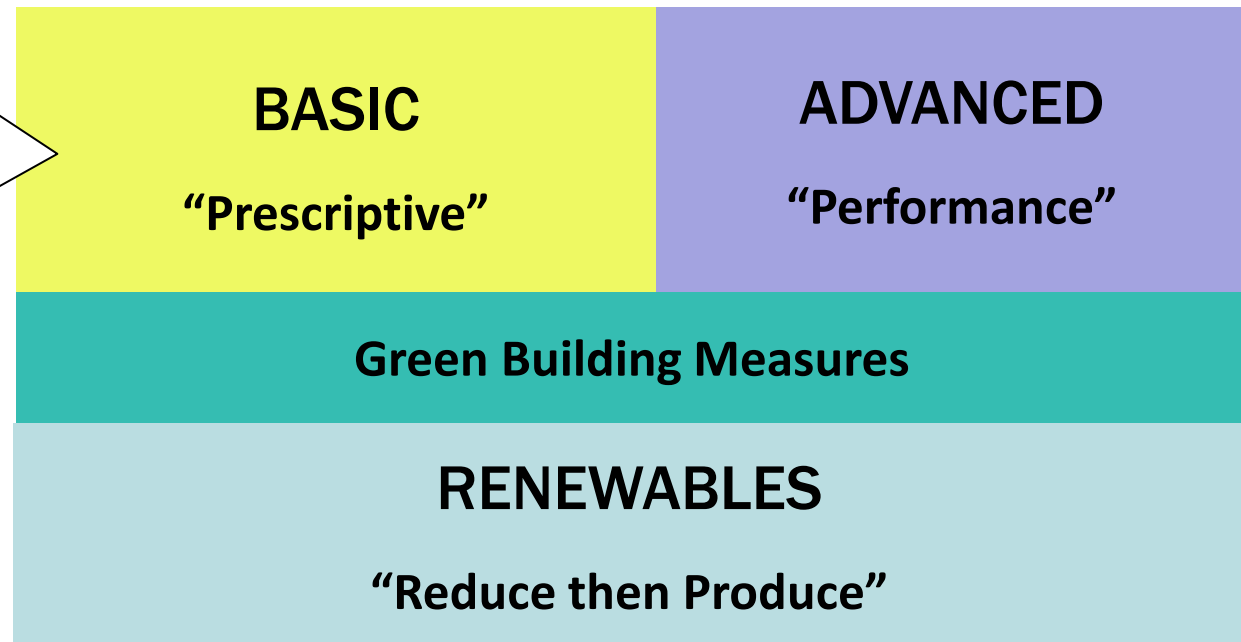
- Include in energy planning:
 - Energy demand
 - Energy supply
 - On-site production energy
 - Use energy and efficient design
 - Climate Action Plans
- Planning
 - Municipalities should outreach and partner with utilities
 - Participate in SB 375
 - Identify energy issues
 - Identify unique aspects of a jurisdiction
 - Prioritize energy issues that will guide future policy
 - Recognize co-benefits of energy policy

Single-Family Upgrade Packages

“On-ramp to home performance industry.”
Cash incentives for whole-house energy upgrades

*Basic =
\$1,000
Incentive*

*Advanced =
\$2,000 to
\$4,000
Incentive*



Guiding Principles



- **Loading Order**
 - Reduce and produce
 - Efficiency and demand response
 - Maximize renewable generation
 - State Energy Plan best practice
- **Building-as-a-System**
 - US EPA Home Performance with Energy Star
 - Stop air leaks
 - Upgrade insulation
 - Improve space heating/cooling equipment efficiency

Local Government Contribution

- Program Design
 - Loading Order
 - Eligibility Measures
- Workforce Gap Analysis
 - Job classification
 - Demand
 - Training output
- Marketing
 - People who most likely opt'd in
 - EUC brand
- Incentives
 - Audit cost-payment
 - Workforce pay for certification and mentorship

How Many Workers Will We Need?

- Workforce Gap Analysis
 - How many workers now?
 - How many needed to retrofit 15,000+ homes?
 - What types of jobs are needed?
 - What types of training are needed?
 - *Build It Green/Statewide collaboration*

Trainers (BPI/Software)	QA Evaluators
BPI Building Analysts	Sales/Marketing
HERS II Raters	Administrative
GreenPoint Raters	Financing Specialists
Basic Retrofit Crew	Rebate/Incentive Processors
Skilled Retrofit Crew	Manufacturing

What Type of Training Will We Need?

- Workforce Development Plan
 - Develop with key stakeholders
 - Design/implement workforce training and job placement plan
 - Inventory existing training providers
 - Identify training scholarships/subsidies
 - Coordination with local economic development efforts
 - Identify career-pathway opportunities for youth/underserved communities

Utility Contribution

- Data capture
- ARRA Reporting
- Contractor Credential Verification
- Eligible Contractor list
- Quality Assurance
- Rebates

Hurdles to overcome

High upfront cost

Long term sustainability

Program design
completion

Tracking and reporting



How Cities Can Participate

- Hot Spots Maps
- Identify contractors eligible for participation
- Identify partners
- Identify all rebates and incentives
- Adopt land use policy
- Adopt ordinances
- Leverage partnerships

Policy or Ordinances

- Adopt Energy Efficiency Standards
- Provide Public Information and Education
- Reduce Energy Use in County Facilities
- Adopt Energy Efficiency Standards for
- New and Remodeled Buildings
- Residential Energy Conservation Ordinance (RECO)
- City of Austin: Energy & Disclosure Ordinance
- Nevada Real Estate Sales Audit Requirement

Market Transformation

Energy Resources

Partnership



American Planning Association

Resources

- Energy and Climate Database
- Case studies
- Reports
- Resources
- Climate Change Reader
- Energy surveys
- Policy Guides

APA Energy Database

Climate Action Plans

Federal / State Resources

- CEC IEPR
- EPA Guide to State and Climate Energy Program
- Energy Star
- Solar America Initiative

Organizations

- Green Power Network
- Global Green USA
- Go Solar
- USGBC

Programs

- Green Building Programs
- Marin Countywide Plan
- Sustainability
- Energy Plans

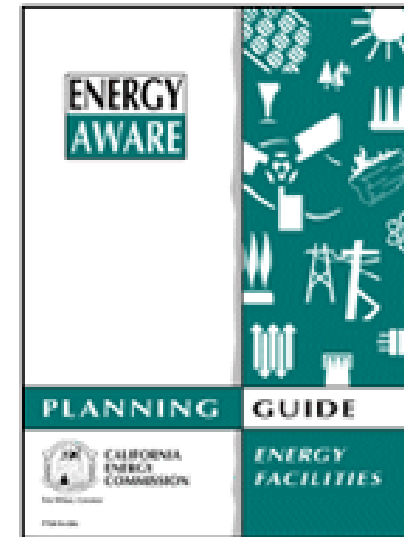
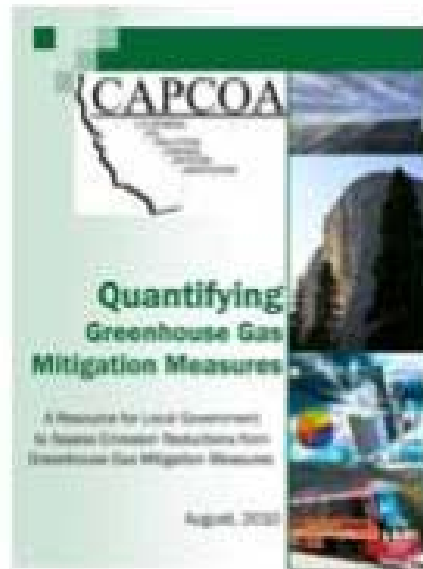
Tools

- PlaceMatters
- I-Places3s

Data

- Wind Energy Facts: Costs and Prices

Other Resources



APA Energy Policy Guide and Energy Survey

- Policy Guide on Energy
 - Ratified by APA 2004
 - Policy statements
 - Initiatives
 - Opportunities
- Energy Survey 2005 & 2007
 - 2005 Survey
 - Planners understand connections.
 - Planners need more education on energy technologies
 - 2007 Survey
 - Planners responsible for energy plans and policies.
 - Energy plans growing.

APA Planning Advisory Service

- Planning and Zoning for Renewable Energy (2/2008)
- Articles and Reports
- Energy Plans and Policies
- Model Ordinances
- Incentives
- On-line Resources
- Wind Power
- Solar Energy
- Renewable Energy

Retrofit Bay Area Launch

October – December 2010

- Implementation Plan
- Marketing Plan
- Workforce Development Plan
- Program Design complete

December 2010 – March 2012

- Full Bay Area implementation
- Variety of pilot programs: Whole Neighborhood, On-Water Bill

For more program information...

- **Michele Rodriguez**
 - Program Manager
 - (510) 463-6111
 - michele@bki.com
 - www.energyupgradecalifornia.com