



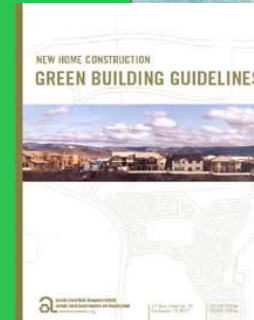
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# GLOBAL GREEN USA

- Founded in 1994
- Environmental non-profit
- Based in Los Angeles
- Programs in green building/green affordable housing, renewable energy, climate protection



- Education and Outreach
- Policy Development
- Advocacy
- Technical Assistance
- Workshops
- Design Charrettes
- Green Building Resource Center



*"When one tugs at a single thing in nature,  
he finds it attached to the rest of the  
world."*

*-John Muir*



# GG USA Energy Efficiency Policy Initiatives and Related Policy Efforts: Today's Discussion

## EE Policy:

- Energy Policy Act of 2005 - language on HUD/Energy Efficiency
- Energy Efficiency Codes Coalition 2008
- Net Zero Buildings 2008

## Related Efforts

- QAP's
- Development of City Green Building Programs

## Resources

- Technical Assistance
- Publications/Fact Sheets



# Energy Policy Act of 2005



# Energy Efficiency in Public Housing

## Why public housing?

- Over 1.2 million Public Housing Authority units
- DOE spending over \$3 billion annually to pay utility bills for over 4 million PHA residents. Energy costs represent approx. 3/4 of that total cost (~\$2.2b)
- DOE analysis showed that simple changes impacting energy usage in PHAs had the potential to save up to \$1 billion annually in energy costs.
- 9 states at that time with no energy code at all

# Energy Policy Act of 2005

## Section 151: Public Housing Capital Fund

- Required integration of capital budgets with operations and maintenance (O&M) budgets to “maximize energy conservation and efficiency measures”
  - Allows PHAs to establish better energy planning processes
- Extended ESCO contracting period from 12-20 years



# Energy Policy Act

## Section 152: Energy Efficient Appliances

Required PHA's to purchase EE appliances (Energy Star or FEMP designated) unless they are not cost effective.

## Sect. 153: Energy Efficiency Standards

- Required all housing constructed or re-habbed with HUD money to meet the 2000 International Energy and Conservation Code.
- Required HUD to report publicly on its progress on energy conservation and efficiency allowing for greater transparency.





# Energy Policy Act of 2005

## Sect. 154: Energy Strategy for HUD

This section required the HUD Secretary to develop an energy strategy for the department in public and assisted housing that includes energy reduction goals and incentives for public housing agencies. It requires the Secretary to submit a progress report one year from date of enactment of this legislation and then every two years after that.



# Energy Policy Act of 2005

## Where are we now?

- HUD drafting proposal for changes to 24 CFR 965 that allows integrated utility management and capital planning to maximize energy conservation and efficiency measures
- Extends term allowable for ESCO contracts to 20 years
- Draft regs for CFR 965 that incorporate IECC 2006
- Status report on Energy Action Plan presented to Congress in 2006, update expected this August



# Energy Efficient Codes Coalition



# Energy Efficient Codes Coalition (EECC)

“30 % Solution”

The Energy Efficient Codes Coalition is a broad alliance of energy efficiency advocates united to achieve the goal of a 30% improvement in residential energy efficiency in the 2009 International Codes published by the International Code Council (ICC).



# Coalition Members

2020 Vision · Alliance to Save Energy · American Council for an Energy Efficient Economy · Business Council for Sustainable Energy (BCSE) · Cardinal Glass · Current Energy · Edison Electric Institute · Environment America · Extruded Polystyrene Foam Association (XPFA) · **Global Green USA** · Midwest Energy Efficiency Alliance (MEEA) · National Association of State Energy Officials (NASEO) · Natural Resources Defense Council (NRDC) · New Building Institute · North American Insulation Manufacturers Association (NAIMA) · Northeast Energy Efficiency Partnership (NEEP) · Northwest Energy Codes Group · Polyisocyanurate Insulation Manufacturers Association (PIMA) · Southeast Energy Efficiency Association (SEEA) · Southwest Energy Efficiency Project (SWEEP) · Structural Insulated Panel Association (SIPA) · United Nations Foundation



# EECC Campaign

Brought diverse group of stakeholders/supporters to International Code Council Development Committee meeting in Palm Springs in February 2008

Supporters included:

- DOE
- Mayor Will Wynn, Austin, TX
- Edison Electric Institute
- National Association of State Energy Officials (NASEO)
- Regional energy efficiency organizations, environmental organizations, affordable housing developers, and national energy security experts



# EECC Campaign

Status: Advocates successful in getting ICC Development Committee to adopt significant portion of 30% Solution proposal resulting in approximately 20% efficiency improvements

Next Steps: Attending the annual ICC meeting to advocate for adoption by the full ICC in September 2008



# EECC Campaign

Majority of improvements resulting in 20% better efficiency will come from:

- 1) tightening of the envelope through the thermal bypass checklist,
- 2) duct sealing and testing requirements;
- 3) inclusion of efficient residential lighting;
- 4) better performing windows in the Southern climate zones;
- 5) increased insulation requirements and
- 6) tightening of the "performance path" requirements





# EECC Campaign

Additional measures adopted include:

- Increases in wall, basement and floor insulation in selected climate zones
- R-3 insulation for all residential mechanical system piping
- Elimination of HVAC trade-offs that reduce insulation

# EECC Campaign

For technical questions about the 30% Solution and the EECC Campaign, please contact:

Harry Misuriello - Alliance to Save Energy

[Misuriello@comcast.net](mailto:Misuriello@comcast.net) or 703-477-4781

For questions about the campaign and becoming a supporter please contact:

David Fink: - Global Green USA

[dfink@globalgreen.org](mailto:dfink@globalgreen.org) or 310-581-2700 x116



# Net Zero Buildings



# Net Zero Buildings - CA

## AB 2112 - Net Zero Residential Buildings

- 2008 CA Legislative Session
- Introduced by Assembly Member Lori Saldaña (D-San Diego)
- Sponsored by Global Green USA
- Requires all new construction residential sector buildings to be Net Zero by 2020.



# Net Zero Buildings - CA

## Definition for Net Zero Buildings:

Zero net energy buildings combine energy efficient building designs with distributed generation so that a building produces as much energy and power as it uses, as measured on an annual basis.



# Net Zero Buildings - CA

## AB 2030 - Net Zero Commercial Buildings

- 2008 CA Legislative Session
- Introduced by Assembly Member Ted Lieu (D-Torrance)
- No Sponsor
- Supported by Global Green USA
- Requires all new construction commercial sector buildings to be Net Zero by 2030.



# Net Zero Buildings - CA

## Why Net Zero?

- Effective way to combat global warming; buildings account for 40% of global energy consumption
- CA Energy Commission Integrated Energy Policy Report 2007 update identified net zero buildings as a goal goals. Also endorsed by CA Public Utilities Commission.
- We know it is possible!



# Solara

The first solar-powered AH development in the country!





# Solara Facts

- 56-unit, low income housing development in Poway, CA
- Built by Community Housing Works of San Diego, a non-profit community development corporation.
- Using a combination of loans, grants and the federal low income housing tax credit they were able to purchase the solar array (over 150kw) at only \$100,000 additional cost to the entire project (close to \$2 million dollar project).



# Net Zero Buildings - CA

## Who supports them?

CEC and CPUC both endorse net zero buildings as a goal.

AB 2112 supported by:

- Global Green (Sponsor)
- East Bay Municipal Utility District
- Sierra Club
- Environmental Defense
- Planning and Conservation League
- Environment CA
- Coalition for Clean Air



# Net Zero Buildings - CA

AB 2112 Supporters (continued)

- CA League of Conservation Voters
- American Lung Assoc.
- Health Officers Assoc. of CA
- Oerlikon Solar
- U.S. Green Building Council Los Angeles
- Clean Power Campaign
- Modern Earth Finance
- The Better World Group Inc.



# Net Zero Buildings - CA

AB 2112 and AB 2030 Opposed by:

- CA Business Properties Association
- Associated General Contractors Association
- Building Owners and Managers Assn. of CA
- CA Apartment Assn.
- CA Assn. of REALTORS
- CA Chamber of Commerce
- CA Building Industry Assn.



# Net Zero Buildings - CA

## Status:

- Both AB 2112 and AB 2030 were approved by the CA Assembly Natural Resources Committee.
- Both are pending before the Assembly Appropriations Committee - deadline for a vote is Friday, May 23.



# Related Policy Efforts



# Related Policy Efforts

## Greening the QAP Campaign

- Federal Low Income Housing Tax Credit - largest federal financing mechanism for low income housing
- Allocated to each state on a per capita basis. Each state given discretion for determine how to allocate tax credits.
- Use the Qualified Allocation Plan - point system to determine awards.
- Global Green began making recommendations for greening CA's QAP in 2000.



# Related Policy Efforts

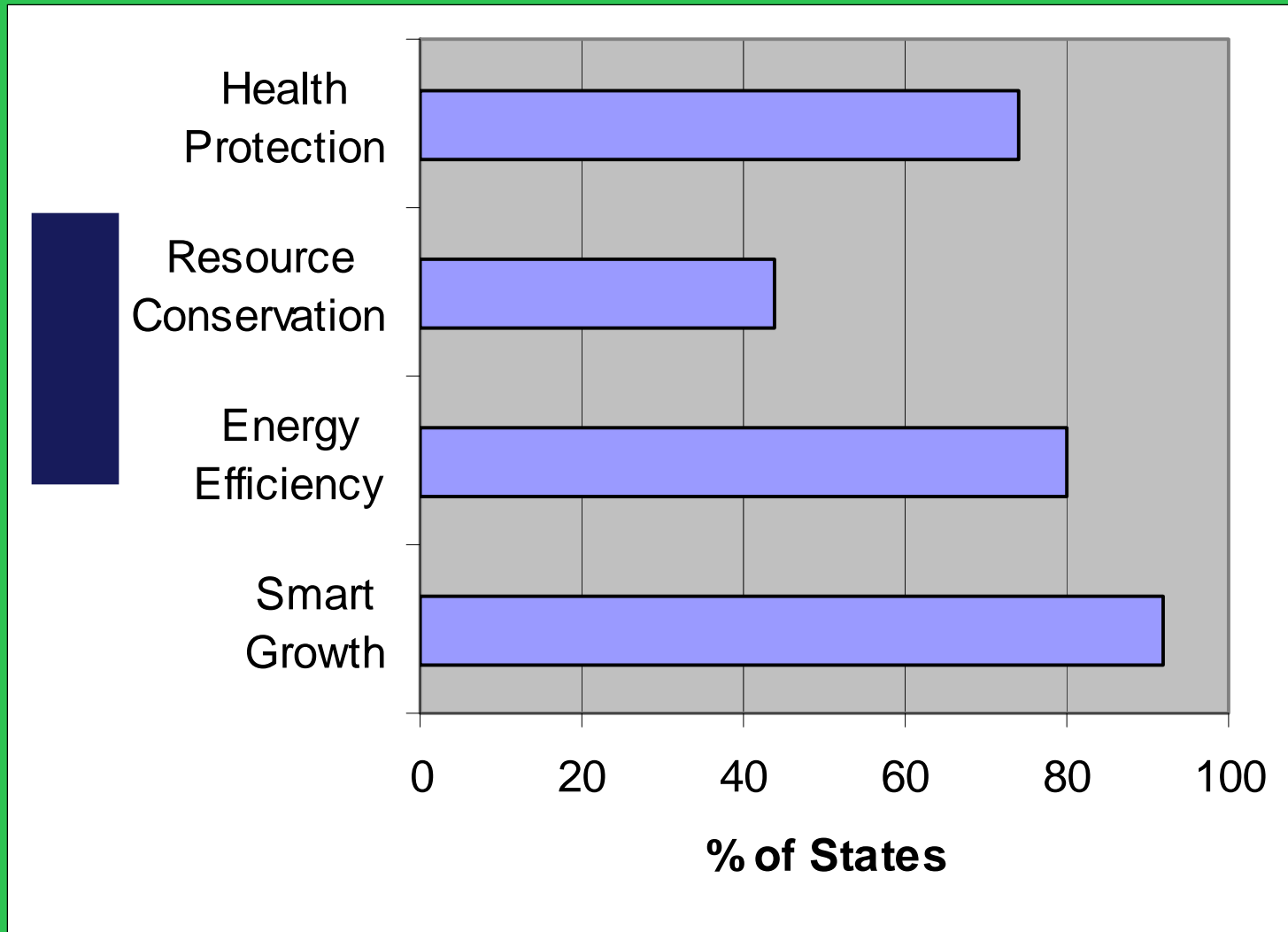
- In 2006, Global Green analyzed green building-related requirements used to allocate Federal Low-Income Housing Tax Credits (LIHTC) nation-wide based on 4 categories:
  1. *Smart Growth*
  2. *Energy Efficiency*
  3. *Resource Conservation*
  4. *Health Protection*



# Related Policy Efforts



- Percent of State QAPs with Green Building Requirements



# Related Policy Efforts

Updated national QAP analysis in 2007 and 2008.

Launched advocacy initiatives to improve the “bad actors”

Advocacy work in:

- Louisiana - adopted green guidelines
- New York State/NYC - adopted in NY State, NYC in process
- Texas - currently in process



# Related Policy Efforts

## Municipal Green Building Programs

- Global Green began advising cities on development of Green Building Programs over 8 years ago.
- Have worked directly with:  
Cities of Los Angeles, West Hollywood, Long Beach, Irvine, Pasadena, Santa Clarita. Energy efficiency a core part of each of these programs.
- Provided guidance and advice to other cities nationally



# Resources



# Resources

Global Green creates partnerships with cities, developers and non-profit organizations to provide green building support in the form of:

- Workshops
- Green building guideline or program development
- Policy guidance
- Tools: Fact Sheets, “How-to” literature
- Green Building Resource Centers - Santa Monica, Louisiana



# RESOURCES

## Louisiana Developer Fact Sheets



### Green Building Developer Fact Sheets

#### High Efficiency Energy Star Kitchen Appliances & Clothes Washers

Products & Practices Sheets



2218 Main Street  
Santa Monica, CA 90405  
310.452.7677

841 Carondelet Street  
New Orleans, LA 70130  
Phone (504) 525-2121  
Fax (504) 525-2122

[www.globalgreen.org/gbrf](http://www.globalgreen.org/gbrf)

**Why is it Important?** High efficiency kitchen appliances, such as Energy Star® certified products, can significantly cut the cost of utility bills. This savings can be significant, especially for low-income residents. Often, the products pay for themselves in a very short period of time. In rental properties, this reduction in operating costs can be passed along to the owner/operator. Although there may be other options available nationwide, to the greatest extent possible, this sheet lists local and regional manufacturers and retailers.

#### REFRIGERATORS & FREEZERS

In most households, the refrigerator is the single biggest energy consuming kitchen appliance. Replacing a refrigerator bought in 1990 with a new Energy Star® qualified model would save enough energy to light the average household for more than four and a half months. Energy Star® refrigerators use 15% less energy than current federal standards and 40% less than a conventional 2001 model.

MANUFACTURER	APPLIANCE	COST
<b>Frigidaire</b> Electrolux Home Products P.O. Box 212378 Martinez, GA, 30917 <a href="http://www.frigidaire.com">www.frigidaire.com</a>	Side-by-side models, upright freezers, and top freezers that are from 10% to 28% more efficient than federal standards.	\$829 - \$2,029 varying by model
<b>General Electric</b> 1-800-626-2005 <a href="http://www.geappliances.com">www.geappliances.com</a>	Refrigerators, side-by-side models, top and bottom freezers, and single-door r/f models that are 15% to 20% more efficient than federal standards.	\$1,099 - \$6,949 varying by model
<b>Kenmore</b> Contact Sears at <a href="http://www.sears.com">www.sears.com</a> under "Find a Store" <a href="http://www.kenmore.com">www.kenmore.com</a>	Chest, upright, top and bottom freezers, refrigerators, and side-by-side models that are 10% to 26% more efficient than federal standards.	\$475 - \$6,400 varying by model

#### DISHWASHERS

Energy Star® qualified dishwashers use 25% less energy than the federal minimum standard for energy consumption. They also use substantially less water than conventional models. The savings can be realized through a reduction in utility bills.

MANUFACTURER	APPLIANCE	COST
<b>Frigidaire</b> Electrolux Home Products P.O. Box 212378 Martinez, GA, 30917 <a href="http://www.frigidaire.com">www.frigidaire.com</a>	Multiple models that are 26% to 57% more efficient than federal standards. Utilize between 309 and 374 kWh/year.	\$229 - \$799 varying by model
<b>General Electric</b> 1-800-626-2005 <a href="http://www.geappliances.com">www.geappliances.com</a>	Manufactures models that are 26% to 65% more efficient than mandated federal standards. Styles utilize between 282 and 384 kWh/year.	\$329 - \$1,429 varying by model
<b>Kenmore</b> Contact local Sears at 7300 Read Blvd New Orleans, LA 70127 (504) 240-3173 <a href="http://www.kenmore.com">www.kenmore.com</a>	<b>384 kWh/year.</b> Offers models that are 26% to 41% more efficient than the federal standards, and that utilize between 328 and 374 kWh/year.	\$329 - \$1,189 varying by model



# Resources

## Blueprint for Greening Affordable Housing

- All new text
- 12 new case studies

For a copy:

Visit [amazon.com](http://amazon.com) or email

[blueprint@globalgree](mailto:blueprint@globalgree)

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