

Building STAR

Retrofitting Commercial and Multi-Family Buildings
to Create Jobs, Reduce Energy Use, and Save Money





Rebuilding America

- Goal: Retrofit 40% of America's commercial and residential buildings – 50 million buildings – by 2020
- Initial gatherings in late 2008
- How to get the most out of the stimulus package with energy efficiency and how to keep improving efficiency after ARRA.



Rebuilding America

- Unique effort to unite all with a stake in energy efficiency through retrofits:
 - Builder and contractor associations
 - Manufacturers
 - Labor union members
 - Consumer groups
 - Financial institutions
 - Energy and environmental advocates



What is Building STAR?

- A two-part package of incentives to drive energy efficiency retrofits of commercial and multi-family buildings in 2010 and 2011.
- Creating jobs
 - \$6 billion for *Building STAR* would create at least 150,000 jobs
- Helping small businesses
 - 91% of the retrofit construction firms employ fewer than 20 employees
 - Large retrofit construction firms typically hire many smaller subcontractors
 - 63% of efficiency materials and equipment manufacturers employ less than 20 people
 - Cutting restaurant energy costs by 20% can increase profits 30% or more and would save \$1.6 billion/ year if done industry-wide
- Targets a sector that accounts for 46% of building energy use.



Building STAR

- Developed as part of the Rebuilding America initiative.
 - Endorsed by more than 80 unions, efficiency advocates, financial institutions, consumer groups, contractors and manufacturers.
- Building STAR also includes the input of a diverse array of technical experts.
 - Endorsed by Rebuilding America, Associated General Contractors, National Restaurant Association and 17 other groups.



Building STAR Impacts

ACEEE conducted an analysis of jobs and energy savings benefits of Building STAR

By the end of 2011:

- **187,000 jobs** created
- **\$3.3 billion** in annual energy bill savings
- Avoided emissions equivalent to nearly **4 million cars**.

If Building STAR were combined with residential and industrial retrofit programs, the package would save \$9.8 billion per year, create over 500,000 jobs and avoid emissions equivalent to nearly 13 million cars.



Design Principles

- **Fast-Acting**
 - Target technologies and actions that can create jobs in 2010.
 - Rebates and tax incentives that are easy for building owners to use. Rebates are modeled on existing programs.
- **Clear, Specific, and Simple**
 - Detailed legislation to avoid writing new regulations and rules
- **Supplement Existing Rebate Programs**
- **Leverage public investment with 2X to 3X private investment.**
- **Consistent with HOME STAR, but different to capture the needs of commercial and multi-family residential buildings owners.**



Rebate: What Qualifies

Qualifying equipment and services:

- Building envelope insulation
- Mechanical insulation
- Windows, window films and doors
- Low-slope roofing
- HVAC equipment, chillers, water heaters, and boilers
- Duct testing and sealing
- Variable speed motors
- Interior and exterior lighting
- Building energy audits, commissioning, tune-ups, and training
- Energy management and monitoring systems



Rebate: Clear Steps

- **Plan** – Building owners work with contractors to determine what upgrades they should do
- **Apply** – Building owners apply electronically to find out if rebate money is available
- **Confirm** – Government provides confirmation that the money is available, and work is completed
- **Certify** – Building owner certifies that work was done in accordance with application
- **Pay** – Application is reviewed for accuracy. Rebate money released within 30 days
- **Verify** – Third party verifiers audit to confirm work was done in accordance with application



Tax Incentives

- **Performance:** Portions of S. 1637/ H.R. 4226 provide a meaningful reward to building owners that deliver verified savings.
 - Increase the Energy Efficient Commercial Building Tax Deduction from \$1.80 to \$3.00 per square foot.
 - Simplify and streamline the administration of the partial deductions
- **Recommended:** Extend the usefulness of tax incentives to Real Estate Investment Trusts – a key real estate constituency that currently cannot take advantage of them.



Tax Incentives

- **Tech-Specific Tax Incentives:** A package of tax incentives that targets big ticket items that are typically gateways to much broader retrofitting activity
 - Chillers/Variable Speed Drives (S. 1639)
 - Roof Replacements
- Building owners can take a tax incentive or a rebate but not both.