

Key Action Plan Components



- Form a Partnership
- Identify Responsibilities and Resources
- Set Priorities and Goals
- Implementation
- Monitoring, Evaluation and Reporting
- Promotion and Expansion



“On the Path to Sustainability”

Energy Sustainability and Climate Change Planning

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Rebuild America



■ Five Building Sectors

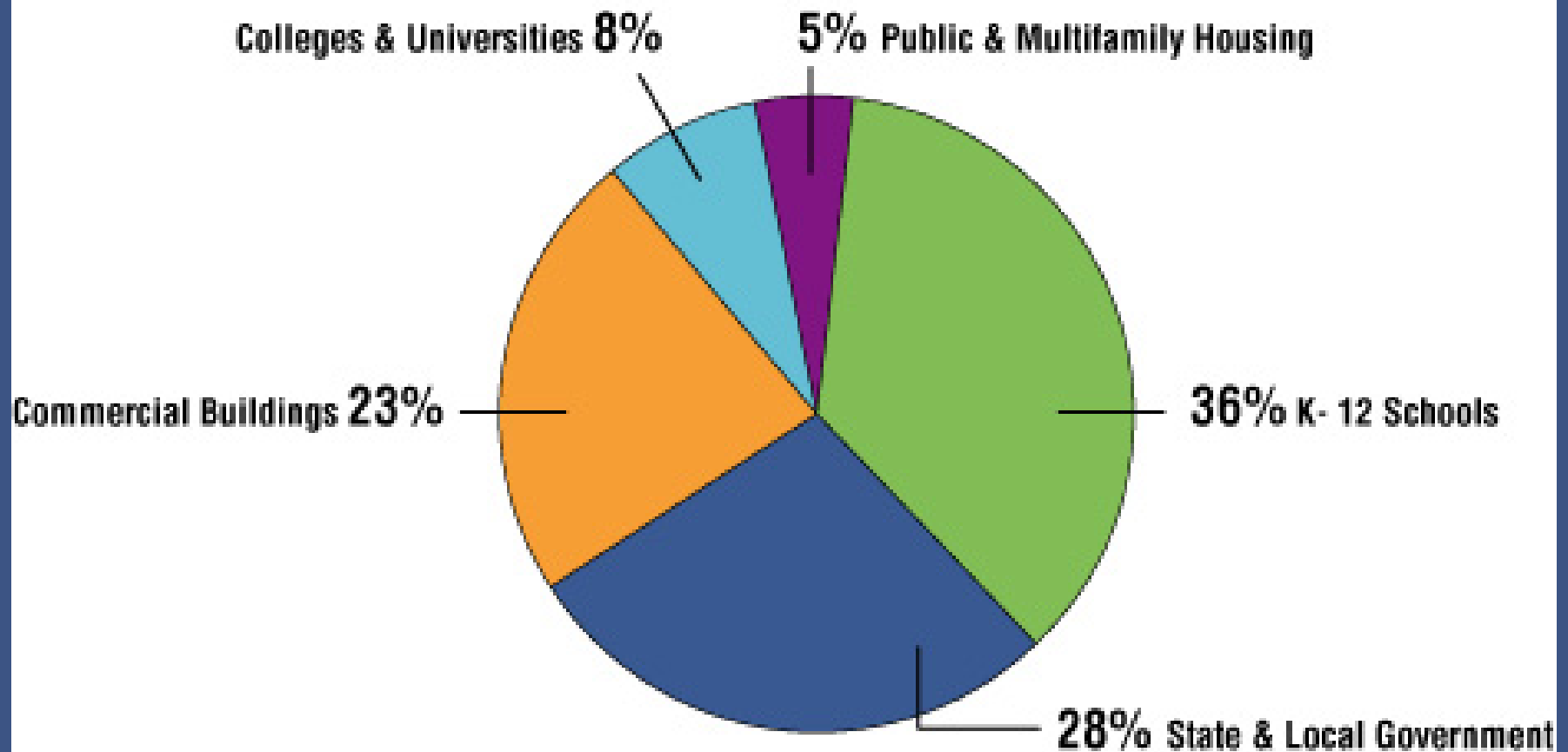
- K-12 Schools
- Higher Education
- Local and State Government
- Commercial
- Public/Multi-family Housing

■ Customized Assistance as Appropriate

- Facilitates technical expertise from the National Labs, business and utility partners, consultants, EPA, and other DOE Programs
- Delivers customized, in-depth and on-site assistance as appropriate



Rebuild America Retrofit Activity by Market Sector



Partnerships Chart Their Own Course

- Choose buildings to improve
- Select project team
- Set goals
- Identify technologies to apply
- Determine financing
- Make improvements
- Report findings and results



Program Offerings



- DOE/Lab/other expertise on energy systems, energy technologies, and efficiency/ renewable options
- Assistance on design for new construction and retrofits, commissioning, and systems configuration for wide range of space quality and energy options
- Expertise with a range of energy tools, project development methods, and financing options
- Access to peers and their expertise gained from improving building performance (550+ Partnerships)

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- Pre-Project Planning
 - Support in developing the A/E service provider selection criteria
- Project Definition
 - Assist in designing and conducting project level design charrettes
- Design Phase/Building Evaluation
 - Conduct design review with goal of ensuring system integration and whole building design
- Contracts & Financing
 - Review draft language of RFP/RFQ for selecting an energy service company (EE retrofit)
- Technologies and Systems Design
 - Conduct brief feasibility study to determine the appropriateness of a certain technology or system

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❑ Construction

- Review change orders to determine if the project objectives are still achieved from the technical perspective

❑ Building Commissioning

- Support in developing the scope and definition of the project's commissioning activities

❑ Facilities Management

- Conduct technical seminars for facility staff to train them on operations and maintenance (O&M) best practices

❑ Marketing & Communications

- Create printed "Success Stories" or Partnership "Close-Up's"
- Assist with outreach, media and planning of special events

K-12 Schools



The 118,000 public and private K-12 schools nationwide:

- ✓ *Spend \$6 billion on energy each year - the largest budget item after salaries*
- ✓ *Pay more for energy than they do for computers and textbooks combined*
- ✓ *Can reduce energy costs by 25% - 30% on average*
- ✓ *Can redirect those savings to address pressing needs (such as hiring 30,000 new teachers)*



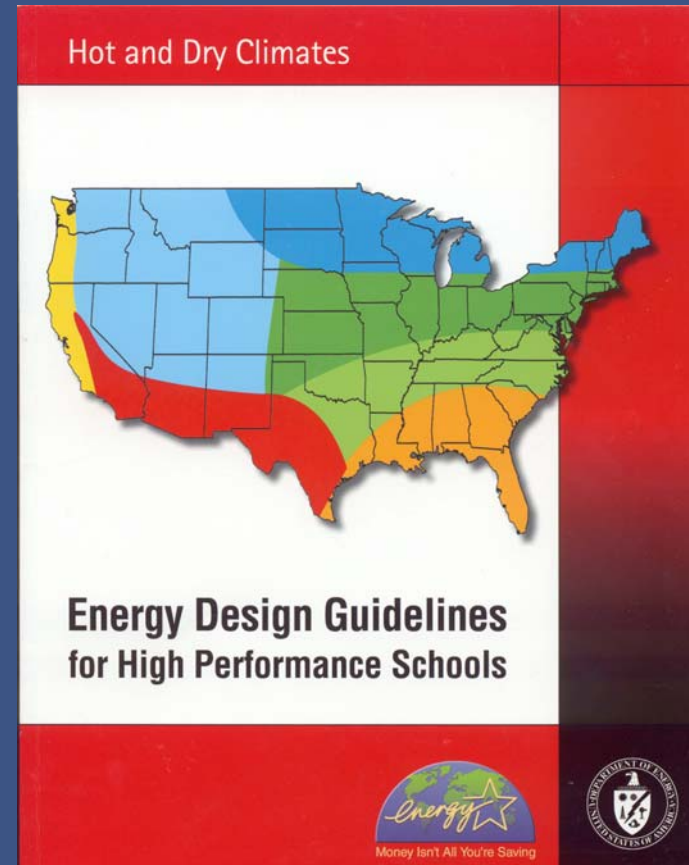
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PROVIDE DOCUMENTS

Energy Design Guidelines
Addressing HP Elements

- ✓ SITE DESIGN, DAYLIGHTING & WINDOWS
- ✓ BUILDING SHELL
- ✓ LIGHTING AND ELECTRICAL SYSTEMS
- ✓ HVAC
- ✓ RENEWABLE ENERGY SYSTEMS
- ✓ WATER CONSERVATION
- ✓ RECYCLING & WASTE MANAGEMENT
- ✓ TRANSPORTATION
- ✓ RESOURCE – EFFICIENT BUILDING MATERIALS



The Potential is High



- Over 3,600 accredited colleges and universities
- 17 million students, faculty and staff
- 4 billion square feet in more than 280,000 buildings
- Total primary energy use is about 1 quad per year
 - Same as the amount of energy used in the entire world every 23 hours
 - Same as 8 billion gallons of gasoline (over 20 days of total use for the country)
- Total energy savings is about 25% of this amount

University of Utah - Rebuild Utah



- 294-building campus
 - aging buildings with inefficient systems
- Committed to \$44 million in energy-efficiency improvements in four phases
- Saving \$1.6 million in annual energy costs with two of four phases completed
- Energy savings are paying for new hot water and chilled water plant

Technical Assistance in Action



- UNH Lighting Retrofit
- Design assistance for Harvard University & MIT
- City of Boston, MA
- Heritage Harbor Museum

Rebuild Web Site



WWW.REBUILD.ORG

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