



# Building Technologies Program Multi-Year Work Plan 2011-2015

U.S. Department of Energy

# Mission, Vision, and Goal

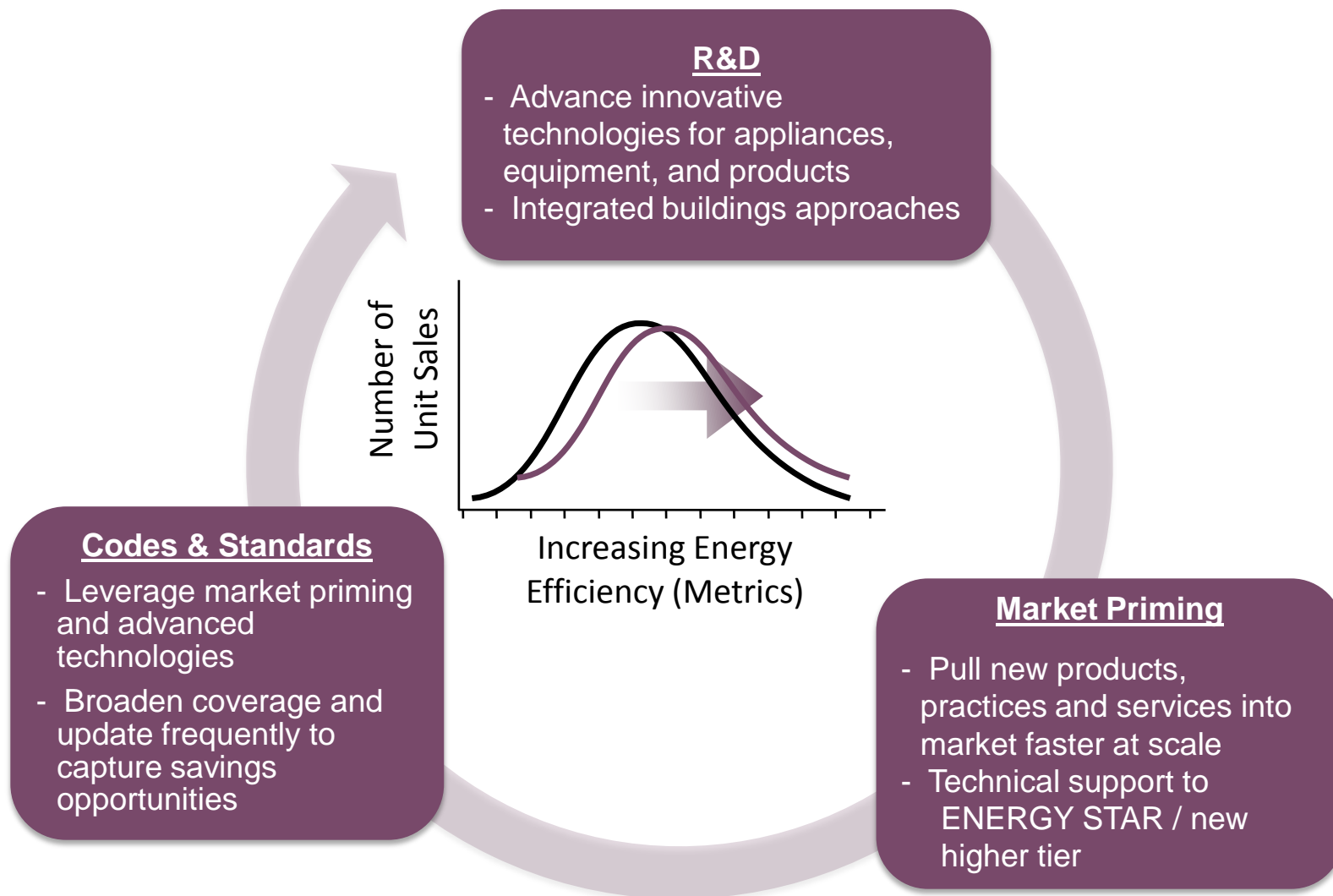
**Mission:** Develop and promote efficient and affordable, environmentally friendly, technologies, systems, and practices for our nation's residential and commercial buildings that will foster economic prosperity, lower greenhouse gas emissions, and increase national energy security while providing the energy-related services and performance expected from our buildings

**Vision:** Reduce the energy demand growth of U.S. buildings, by focusing on:

- High Impact Innovation: Strategically Focusing on High Opportunity Technologies
- Speed and Scale: Deploying Innovative New Programs, Quickly at Scale
- Capture Hearts and Minds: Increasing Focus on Energy Users
- Talent: Expanding Organizational Capability

**Goal:** Deploy building technologies and practices that can reduce U.S. energy use

# Strategies



# Residential and Commercial Integration

**Goals:** Create a self-sustaining market for building energy efficiency retrofits. Achieve 1 million home energy retrofits by 2013; 5 million retrofits by 2015. Achieve 3 billion square feet of commercial space retrofitted by 2015.

## Strategies:

1. Develop sustainable energy efficiency retrofit programs, such as Better Buildings, and develop into a national program
2. Use data to create a building energy score, providing homeowners and building managers information on energy efficiency
3. Create financial business models to encourage home and building owners to request and service providers to deliver cost effective energy efficiency as a component of all retrofits
4. Provide technical assistance and supporting research for the Better Buildings Program
5. Focus on key end uses and building types



# Emerging Technologies

**Goals:** Innovate the development and deployment of energy efficient technologies and practices.

## **Strategies:**

1. Develop and implement technology roadmaps that drive market transformations
2. Increase private sector collaboration in developing new technologies
3. Perform more open solicitations and cooperative research agreements
4. Focus on cost reduction and market opportunity, making the product more attractive to the market
5. Develop innovations in key technology areas such as solid state lighting, HVAC, working fluids and sensors/controls

# Regulatory

**Goals:** Accelerate the speed and increase the breadth of building codes and appliance standards and equipment savings opportunities. Fulfill standards requirements and maximize energy savings. Propose 50% code reduction in commercial by 2014; residential by 2015.

## **Strategies:**

1. Develop Appliance and Equipment Efficiency Standards
2. Develop energy efficiency test procedures
3. Perform product certification, enforcement, and verification
4. Develop and update ENERGY STAR test procedures for products
5. Work with EPA on certification and product verification
6. Support and participate in upgrading ASHRAE 90.1 and the IECC model energy code
7. Determine within one year of the publication of an updated model code whether the code will improve energy efficiency over the previous code version
8. Provide financial and technical assistance to states to upgrade, implement, and increase compliance with their building energy codes
9. Promulgate, enforce, and upgrade the manufactured housing energy efficiency standards by 12/11