The Residential Integration Program accelerates energy improvements in existing and new residential buildings by reducing technical and market barriers to spur investment and achieve high performance homes.

External Influences: DOE budget, Construction industry, Energy prices, Real estate market, Market incentives, State/local policies, Regulation

Objectives

Activities / Partners

Outputs

Short Term Outcome

Mid-Term Outcome



Long Term Outcome

Demonstrate & integrate energy efficient technologies & practices in representative homes

Prove energy

solutions &

programmatic

designs on a

national scale

with market

partners

Accelerate

market adoption

understanding of

effective energy

saving solutions

by increasing

saving

focused on demo, testing & validation by Building America & national lab researchers in field homes

Competitive R&D funding

Resources development with national labs for building prof. & service providers

Support business model demo to upgrade or construct high perf. homes with market partners across climates

Outreach to stakeholders on a national scale to increase adoption of energy efficiency solutions in common transactions.

Tool development & demo of the value of energy efficiency in the market with market partners

Educational support to promote quality workforce

Space conditioning, water heating & IAQ focused Building America upgrade packages & techniques for existing & new homes across climates

Guidance for energy savings beyond recent building energy codes & industry standards for stakeholders

Best practice online Better Buildings & Buildings America Solution Centers

Demonstrated home upgrades & new construction in HPwES & ZER Homes

Peer sharing via Better Building Residential Network

Targeted campaigns to propel adoption of low cost home upgrade improvements

Home Energy Score tool

Building science curriculum, student competitions & workforce development Innovator building professionals equipped with validated energy saving solutions for integrating highly energy efficient tech or practices into homes

Industry standard orgs. & voluntary programs equipped with validated technical specs & guidelines to make homes highly efficient

Energy efficiency programs & building professionals have access to resources & model business practices to increase scale of energy efficiency investments

Wide array of industry stakeholders & building professionals aware of strategies to increase energy efficiency Leading building professionals improve or construct high performance homes above model energy codes

Industry standard orgs adopt technical specs to accelerate new tech & practices in building energy codes

Energy efficiency programs facilitate market demand for energy efficiency & foster markets that value energy efficiency

Building professionals install proven energy saving solutions in the broader market

Industry stakeholders widely promote value of energy efficiency in products, services, & typical market transactions with homeowners The building industry regularly constructs high performance homes that are ready for renewable energy systems or significantly improves the energy efficiency of existing homes across climates.

Homeowners are motivated to invest in more energy efficient homes spurred by increased value in the residential market.

40% savings in existing homes demo'd 60% savings in new homes demo'd 10% savings thru individual measures

Proved in 1 million existing homes & 50K ZER new homes Market Partnerships reach 90% of homes
5% savings thru individual

measures with partners

Reduce the energy used for space conditioning & water heating in single family homes by 40% by 2025 from 2010 levels

Reduce avg. EUI in all bldgs. 30% by 2030

mpact

Residential Buildings Integration Program Logic Model

OBJECTIVE	ACTIVITIES	KEY OUTPUT	SHORT-TERM OUTCOME	MID-TERM OUTCOME	LONG-TERM OUTCOME
Demo tech & solutions	Demo, test, & validate energy efficient practices in field	Tech integration solutions Industry guidance	Industry- validated	Solutions standard in	New & existing homes highly energy efficient on
	homes	7 0	solutions	industry	
Prove savings at scale	Develop tools & resources	Solution centers and forums	Proven savings & reduced program cost	Increased market demand	
	Demo program business models	Home upgrades & new construction			
		VA/: al a a ra ra a al	Industry	\\\\'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	national scale
Accelerate market adoption	National outreach	Widespread staged upgrades	aware of efficiency	Widespread adoption of	of
	Develop tools that value efficiency	Energy assessment tool	value & strategies	efficiency strategies	
	Improve building workforce	Curriculum and competitions	EXTERNAL INFLUENCES • DOE Budget • Legislation / Regulation		
			• Construction Industry • Energy Prices		

• Real Estate Market

Market Incentives