



Better Buildings Neighborhood Program Decision Tool

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U.S. Department of Energy

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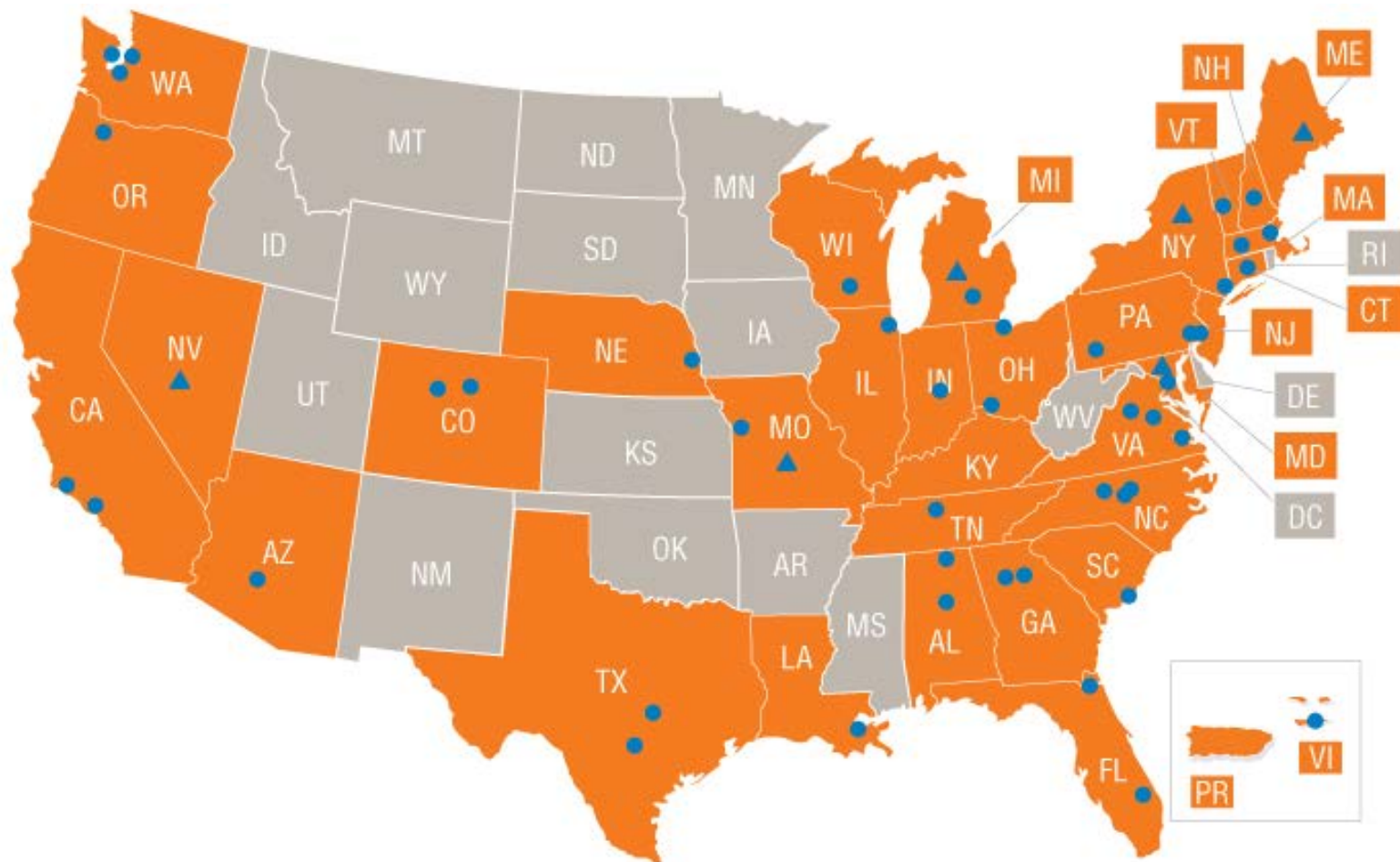
Outline

- Quick background on BBNP
- Vision and goals for Decision Tool
- Where we are now: the framework
- Schedule
- Information sharing and discussion: Activity Map

- Leverage \$508M in ARRA and FY10 funding to spur nationwide energy efficiency program innovation
- Target urban, suburban, and rural environments
- Capitalize on economies of scale
- Encourage industry partnerships and investment
- Emphasize sustainability beyond the grant
- Learn what is effective and replicable

Better Buildings is using federal support to promote program innovation and market investment

Better Buildings Neighborhood Locations



- City/County Level Grant
- ▲ Statewide Grant
- States With Grant Activity

41 grants: \$508 million total
\$1.4M - \$40M each
Timing: mid-2010 through end 2013

Grant Recipient Goals by Late 2013

- Retrofit >100,000 buildings (residential and commercial)
- Use the \$508 million grants to leverage \$1 to \$3 billion in additional resources
- Create or retain 10,000 to 30,000 jobs
- Save consumers approximately \$65 million annually on energy bills

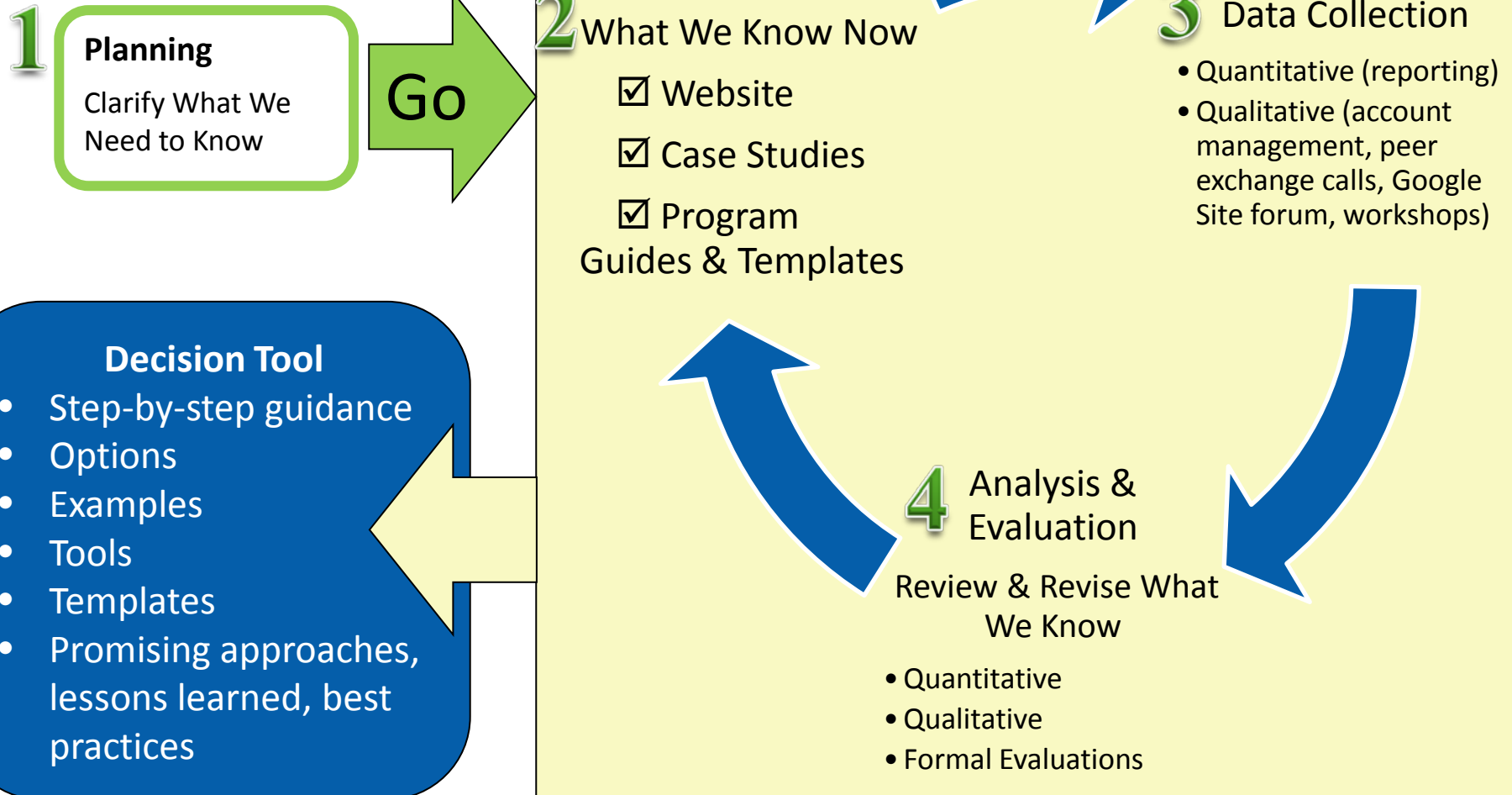
Goals to Leverage Grants for the Market

- Develop sustainable energy efficiency improvement programs
- Reduce the cost of retrofit program delivery by 20% or more
- Achieve 15-30% energy savings from energy efficiency upgrades

Vision

A self-sustaining market for building energy efficiency retrofits that results in economic, environmental, and energy benefits across the United States

Learning Process Cycle



Decision Tool Purpose and Scope

- Share comprehensive lessons for residential energy efficiency programs based on learning from rapid expansion and experimentation in the field through BBNP & HPwES
- Provide an easily-accessed repository for key resources and knowledge
- Help program administrators plan, implement, manage, and evaluate residential energy efficiency programs as effectively as possible

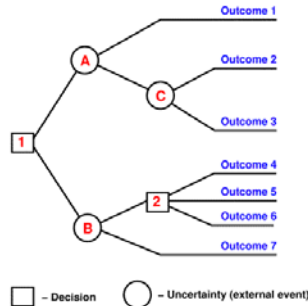
- Intended audiences:
 - 1^o Program Administrators and Implementers
 - utilities, state energy offices, municipal governments, NGOs
 - 2^o Program and Service-Delivery Partners
 - contractors, financial institutions, marketing firms
 - 3^o Program Evaluators



Step-by-step Guidance

- Step #1: [Set Goals and Objectives](#)
- Step #2: [Create an Evaluation Plan](#)
- Step #3: [Conduct Audience Research](#)
- Step #4: [Identify Target Audience and Behavior Change](#)
- Step #5: [Create Effective Messages](#)
- Step #6: [Build Partnerships](#)
- Step #7: [Develop a Marketing Plan](#)
- Step #8: [Implement Your Marketing Plan](#)
- Step #9: [Assess Your Progress](#)

Options



Examples

Charlottesville, VA

LEAP SUCCESS STORY

Wilder and Susan Kruse
1920's Bungalow
1074 sq. ft. 2 BR, 1BA
Heat Pump
Location: Charlottesville, VA

Projected Energy Savings:
40%

Boulder County, CO

with \$1000+
REBATES
& FREE STUFF

WE MAKE YOUR HOME
ENERGY FRUGAL.
GRANDPA WOULD APPROVE.

DEAL ENDS JULY 31 | 303.544.1000 | EnergySmartYES.com

Promising Approaches, Lessons, and Best Practices

Use professional, compelling messaging

- Using behavioral research
- Avoiding “audit” and “retrofit”
- Tapping into social norms
- Attention-grabbing messages

California - Statewide Campaign



Decision Tool Resources

Papers and Guides

Driving Demand for Home Energy Improvements:

Motivating residential customers to invest in comprehensive upgrades that eliminate energy waste, avoid high bills, and spur the economy



Case Studies

BETTER BUILDINGS

Spotlight on Austin, Texas: Best Offer Ever Produces Upgrades in Record Time

Key Takeaways

- Use valuable, short-term incentives to jump-start programs in record time.
- Build on existing energy efficiency efforts to launch quickly and sustain the momentum.
- Plan for contingencies and create a plan.

Launch With a Short-Term Promotional Offer to Jump-Start Participation

Figure 1: Best Offer Ever Promotional Details

April 2011 release | [http://betterbuildings.org/pdfs/BestPractices](#)

Templates

BETTER BUILDINGS

Optional Implementation Plan Template

PROGRAM OR GOAL/GETTING STARTED	Specifications	Milestones Started	Milestones Completed
<p>Assess the Market/Understand Your Community</p> <ul style="list-style-type: none"> • Assess the characteristics of the building stock in your community • Assess current (cheap) energy services offered in your community • Research community demographics • Identify prevailing community applications of energy efficiency 			
<p>Define Program Mission & Vision</p>			
<p>Define Program Goals and Objectives</p>			

Anchored by Lessons Learned

3) Engage trusted messengers

2) Language matters

1) Identify the target audience

Promising Approaches

Promising approaches have been identified based on research and past experience

1 Segment Audiences: Focus resources on key stakeholders and tailor tactics to meet their needs



4 Word of Mouth: Give people something to talk about, point to, and share with their friends and networks.



2 Using the "Right" Words: Use plain language and create messages that resonate with the audience such as cost savings, comfort, health, and convenience



5 Peer-to-Peer Comparisons and Incentive Structures: Use group social behavior to incentivize users to commit and follow through with actions



3 Trusted Messenger: Leverage opinion leaders or trusted members of the community to promote key message s



6 Make it easy. The fewer steps, the more likely someone will follow through.



- Multiple pathways to information:
 1. Searchable resources/content
 2. Comprehensive step-by-step guidance
 3. Combined: decision points with tagged examples
- Information tagged for local market variables:
 - Contractor availability (e.g., nascent vs. mature network of HP contractors)
 - Target market segment (e.g., moderate income, single-family, multi-family)
 - Source of funding & budget (e.g., grant vs. ratepayers vs. market-rate)
 - Policy environment (e.g., EE favorable utility policies, building energy disclosure)
 - Price of energy (e.g., high oil prices in NE vs. low electricity rates in SE)
 - Organization type (e.g., utility vs. NGO vs. state/local government)
 - “Start-ups” vs. mature program
 - Pilot vs. full scale



Accessing: Filter Results

Example: Market Variables “Quiz”

What are your target markets?
 Single family Multi-family Low income Commercial

How mature is your market?
 No/few HP contractors Some HP contractors Robust HP market

What are your primary sources of revenue?
 Grants Utility rate payers Market rates

What type of organization administers the program?
 Government Utility NGO Other

How mature is your program?
 New/start up 1-2 years 3-4 years 5+ years

Example Results:

- ≈ 60% Type A (Blue)
- ≈ 30% Type B (Green)
- ≈ 0% Type C (Yellow)
- ≈ 10% Type D (Purple)

“We anticipate you will find blue examples most relevant and green examples also of interest. Yellow examples are not likely to reflect experiences in your local market.”

WHERE WE ARE NOW

March - April 2012: Framework Development

- DOE program guides
- Literature review
- BBNP workshops and peer calls

June - July 2012: Feedback from Key Partners & Intended Users

- Feedback from EE NGOs and programs
- Identification of complementary work
- REES conference input and ideas

May-June 2012: Initial Review and Consultation

- Federal Agencies

- **Architecture for Step-by-Step Decision Tool:**

Leads different audiences through program strategy, planning, implementation, and evaluation

- Multiple “entry points” for audiences with differing needs
- Range from cross-cutting institutional and service-delivery considerations to very specific program-design choices

- **Cataloging System for Resources:**

All key EE program guidance and lessons will have a home (or multiple tags) within the framework

- Complete, consistent, and clear organizational structure
- Facilitates quick search and access to most useful resources



Innovative Energy Efficiency Projects
Implemented by Local Governments
in the Southwest



The draft
Decision Tool
framework
drew on many
existing guides
and resources



C O W S
Center on Wisconsin Strategy

A SHORT GUIDE TO SETTING UP A CITY-SCALE RETROFIT PROGRAM



HOME
PERFORMANCE
RESOURCE CENTER

BEST PRACTICES FOR ENERGY RETROFIT PROGRAM DESIGN

Driving Demand for Home Energy Improvements:

Motivating residential customers to invest in
comprehensive upgrades that eliminate energy
waste, avoid high bills, and spur the economy



September 2010

Environmental Energy Technologies Division



RECOVERY.GOV



U.S. DEPARTMENT OF
ENERGY | Energy Efficiency &
Renewable Energy

Technical Assistance Program

Residential Retrofit Program Design Guide

Existing Homes Program Guide

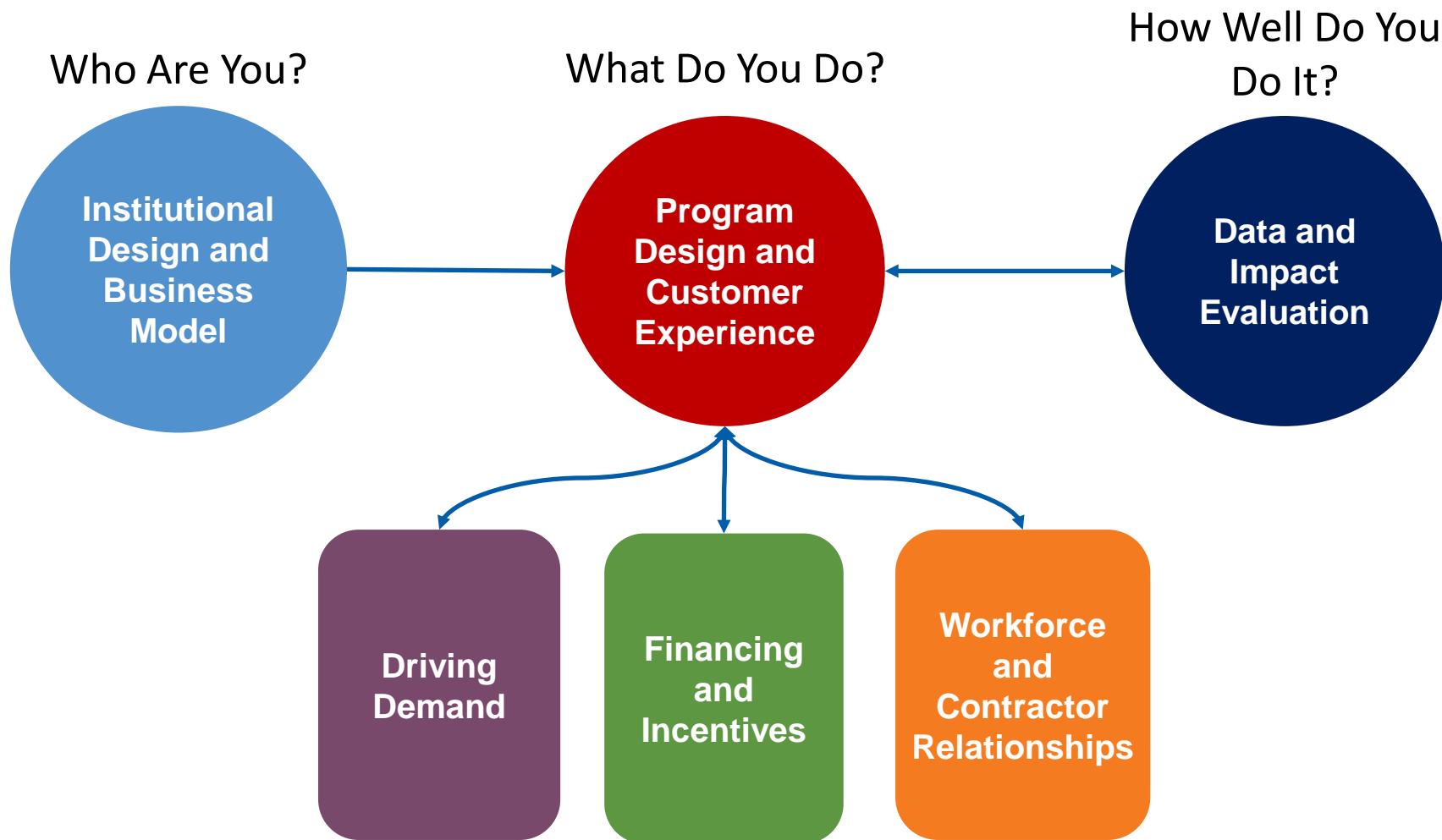
June 2010

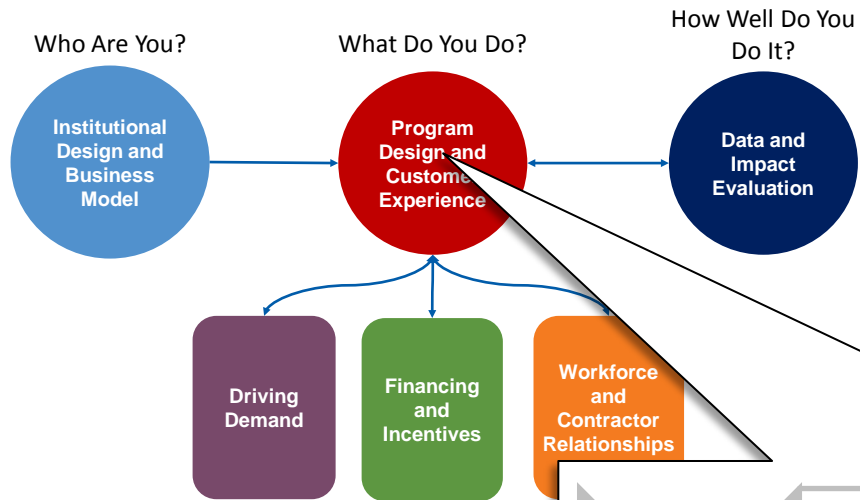


Home Performance with ENERGY STAR[®] Sponsor Guide

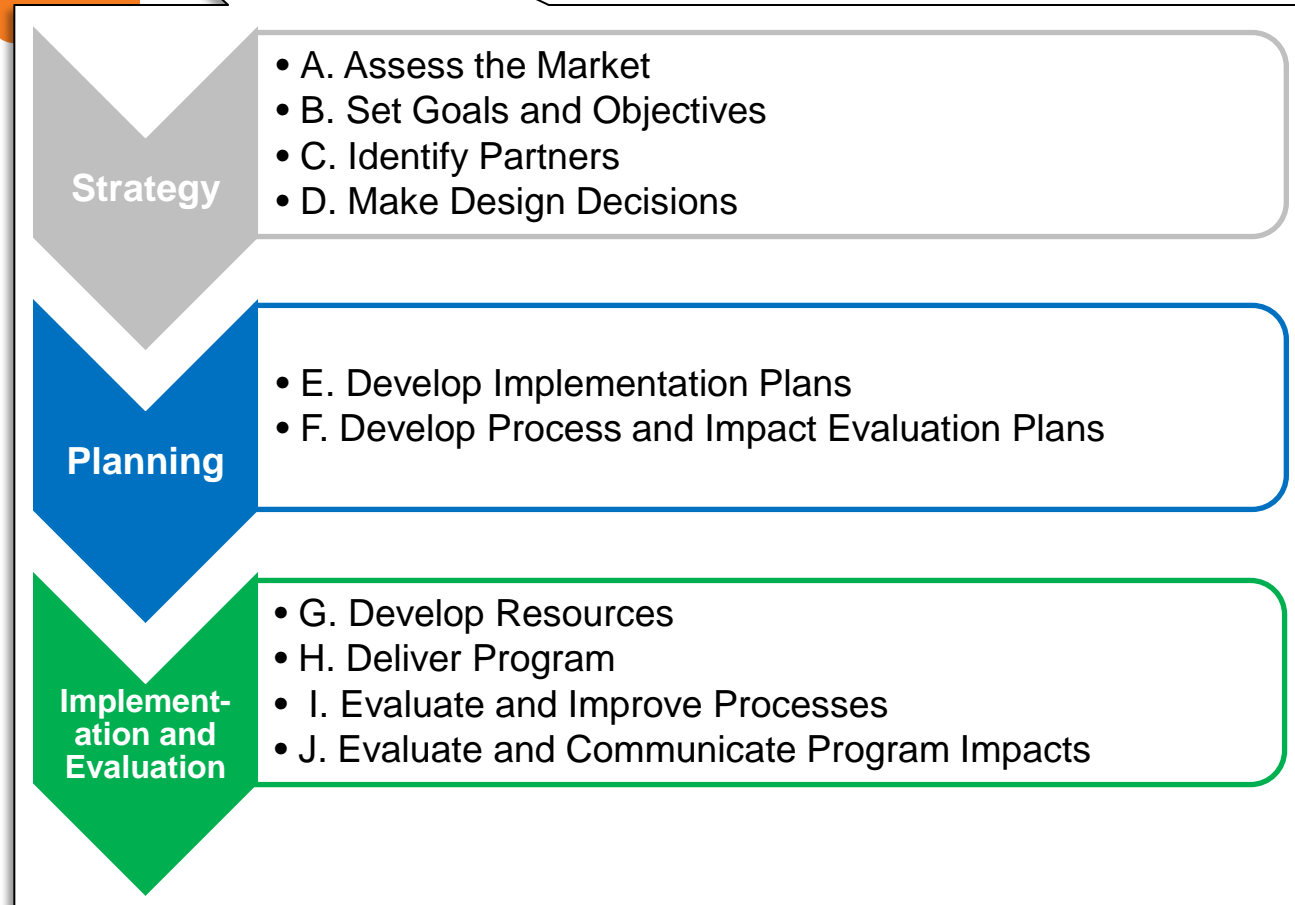


Major Decision Framework Components





Each component is broken down into consistent strategy-planning-implementation & evaluation phases



Decision Tool Architecture: Each Stage in Each Component Contains Guidance & Resources



Components: <i>Move top to bottom, not necessarily left to right Stages:</i>	Institutional Design and Business Model	Program Design and Customer Experience	Driving Demand	Financing and Incentives	Workforce and Contractor Relationships	Data and Impact Evaluation
A. Assess the Market	Assess opportunity space •Customers •Competitors •Funding •...	Program opportunities, barriers, & rationale •Building stock •Current energy service offerings by others •...	Assess potential audiences •...	•... •...	•... •...	•... •...
B. Set Goals and Objectives	Establish mission, vision, goals •...	Program goals •...	Marketing objectives •...	•...	•...	•...
C. Identify Partners	•...	•...	•...	•...	•...	•...
D. Make Design Decisions	•...	•...	•...	•...	•...	•...
E. Develop Implementation Plans	•...	•...	•...	•...	•...	•...
F. Develop Process & Impact Evaluation Plans	•...	•...	•...	•...	•...	•...
G. Develop Resources	•...	•...	•...	•...	•...	•...
H. Deliver Program	•...	•...	•...	•...	•...	•...
I. Evaluate and Improve Processes	•...	•...	•...	•...	•...	•...
J. Evaluate & Communicate Program Impacts	•...	•...	•...	•...	•...	•...

Example: Driving Demand



Strategy

- Assess potential audiences for EE upgrade marketing and outreach
- Establish/refine marketing and outreach goals, objectives, and targets
- Identify and consult with marketing and outreach partners
- Make key decisions about marketing and outreach program design, including target audiences, key messages, and strategies



Planning

- Develop marketing plan
- Develop marketing process evaluation plan and measures



Implementation & Evaluation

- Develop marketing and communications materials
- Implement marketing program delivery activities
- Assess marketing and outreach effectiveness; adapt efforts as needed
- Communicate impact evaluation results to marketing stakeholders

NEXT STEPS

July 9-11, 2012

Feedback from Key Partners & Intended Users

- Feedback from EE NGOs and programs
 - Identification of complementary work
 - REES conference input and ideas

July – Dec. 2012: User Needs and Design Options

- Solicit user needs for decision tool
- Scope tool features & software options
- Contract tool creator
- Continue gathering resources

May – Dec. 2013: Tool Release

- Publicize widely
- Review, refine, ID gaps
- Continue adding resources

Dec. 2012 – May 2013: Tool Development

- Build & populate decision tool

- What initiatives and products have you developed or are you developing now (e.g., reports, case studies, tools, training resources)?
 - What is the scope and focus?
 - Who are the audiences?
 - What is the timing?
- What opportunities do you see for coordinating and collaborating on efforts to support residential energy efficiency program partners with tools and resources?
- Do you have any comments or suggestions for the decision tool / framework itself?

Decision Tool Details
APPENDIX I

Institutional Design and Business Model



Strategy

- Assess opportunity space
- Establish/update institutional mission, vision, and goals
- Affirm/revise institutional partners
- Make/revise key decisions about business model



Planning

- Develop/revise key institutional plans
- Establish plans for continuous improvement



Implementation & Evaluation

- Develop institutional resources
- Assess institutional effectiveness and adapt as needed
- Draw on program impacts and lessons to inform policy development

Program Design and Customer Experience

Strategy

- Assess program opportunities and barriers; develop program rationale
- Establish overall program goals and objectives
- Identify key program administration and delivery partners
- Make key decisions about overall program approach

Planning

- Develop program implementation plan
- Develop plan for evaluating customer experience and overall program delivery

Implementation & Evaluation

- Develop program management resources
- Implement program management activities
- Assess overall program effectiveness and adapt as needed
- Communicate impact evaluation results to program partners

Financing and Incentives

Strategy

- Assess market demand for EE financing; identify potential partners & products
- Establish/refine financing and incentives goals, objectives, and targets
- Identify and consult with financial partners
- Make key decisions about financing and incentive program structure, products, and marketing channels

Planning

- Develop financing plan
- Develop financing process evaluation plan and measures

Implementation & Evaluation

- Develop materials describing financial products and incentives
- Implement financing program delivery activities
- Assess financing/incentives effectiveness and adapt efforts as needed
- Communicate impact evaluation results to financing stakeholders

Workforce and Contractor Relationships



Strategy

- Assess workforce skills and size necessary to meet market needs
- Establish or refine specific workforce goals, objectives, and targets
- Identify and consult with contractors and other workforce partners
- Make key decisions about workforce program and approach



Planning

- Develop workforce plans
- Develop workforce process evaluation plan and measures



Implementation & Evaluation

- Develop workforce materials and resources
- Implement workforce program delivery activities
- Assess workforce strategy effectiveness, motivate continuous improvement, and adapt efforts as needed
- Communicate impact evaluation results to stakeholders and partners

Data and Impact Evaluation

Strategy

- Assess data needs and IT system options
- Establish or refine impact-evaluation goals and objectives
- Identify and consult with data and impact evaluation partners
- Make key decisions about data and impact evaluation approach

Planning

- Develop data collection plan
- Develop impact evaluation plan

Implementation & Evaluation

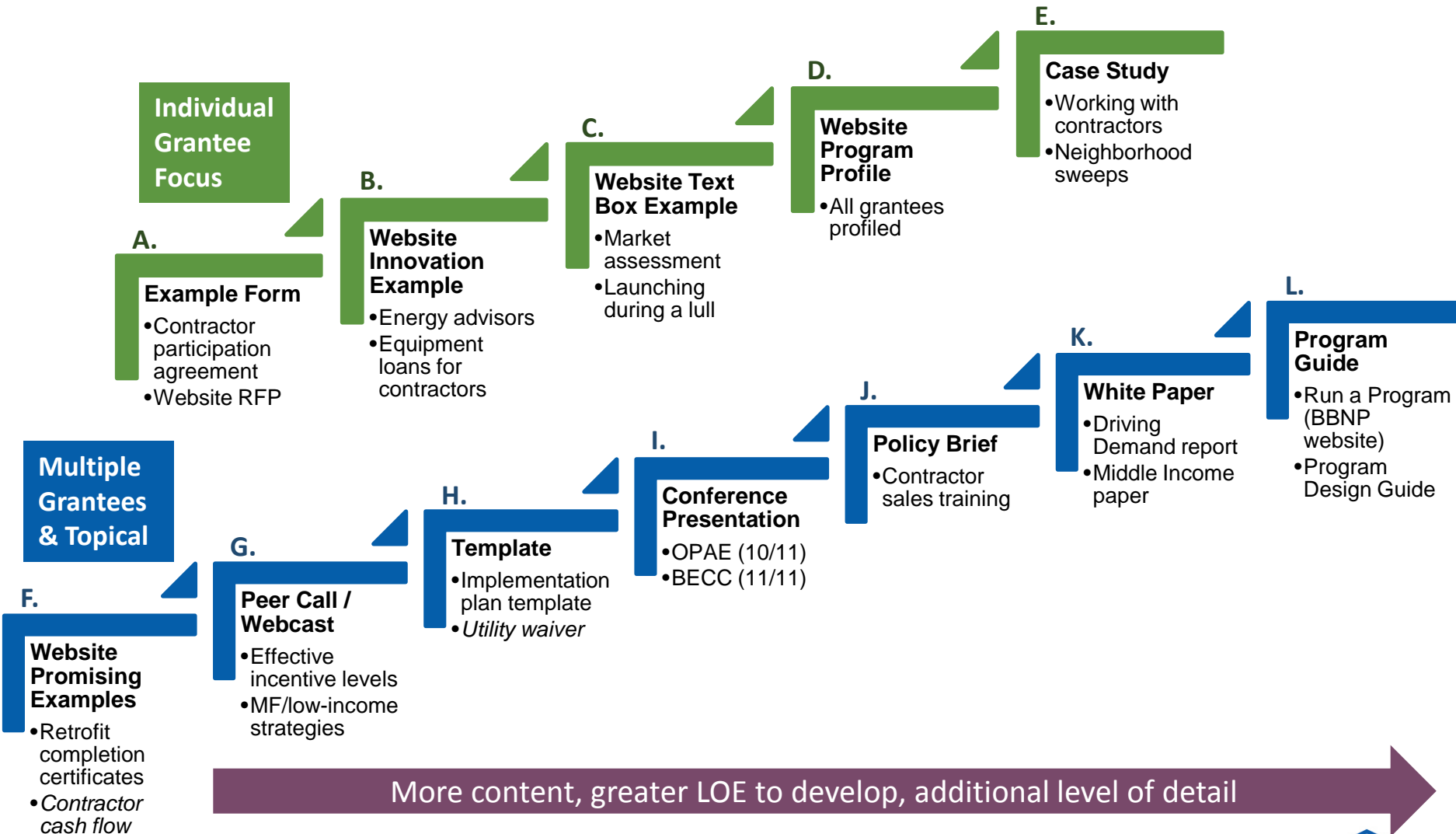
- Develop data and impact evaluation systems, materials, and resources
- Implement data and impact evaluation program activities
- Assess effectiveness of data collection/exchange; adapt as needed
- Conduct overall program impact evaluation and gather/communicate lessons learned

Early Example of Step-by-Step Guidance = Current BBNP website



<u>Getting Started</u>	<u>Driving Demand</u>	<u>Financing</u>	<u>Workforce Development</u>
<p>Understand the basic steps to designing an energy saving building upgrade program in your community.</p>	<p>Better understand the perceptions of consumers in your area, spur consumer demand for building energy efficiency, and provide consumers with the information they need to make informed choices about energy efficiency upgrades.</p>	<p>Create incentives and financial products that help address building owners' concerns about the availability of affordable capital for energy efficiency upgrades.</p>	<p>Build a professional workforce of trained and certified building upgrade professionals to meet the needs of local building owners, and provide them with the confidence that energy efficiency evaluations and upgrades will be done at the highest level.</p>
<ol style="list-style-type: none"> 1. Assess the market 2. Establish goals and objectives 3. Develop plans of action 	<ol style="list-style-type: none"> 1. Set goals and objectives 2. Create an evaluation plan 3. Conduct audience research 4. Identify target audience and behavior change 5. Create effective messages 6. Build partnerships 7. Develop a marketing plan 8. Implement your marketing plan 9. Assess your progress 	<ol style="list-style-type: none"> 1. Assess the market 2. Define finance program objectives 3. Identify and engage financial partners 4. Design the financing program <ol style="list-style-type: none"> a. Credit enhancements b. Revolving loan funds 5. Draft and evaluate RFPs 6. Implement finance program incentives 7. Determine loan marketing channels 8. Evaluate program performance 9. Revise programs and strategies 10. Capture lessons learned 	<ol style="list-style-type: none"> 1. Understand your community 2. Determine how energy professionals fit into your program model 3. Know your existing workforce 4. Establish baseline quality workforce standards 5. Ensure the workforce is trained, certified, and equipped <ol style="list-style-type: none"> a. Partner with existing training and education providers b. Help program contractors obtain the necessary equipment 6. Make your workforce true partners 7. Motivate your workforce for continuous improvement

Full Complement of Document Types



What Do We Call “Lessons Learned”?

BBNP Evidence Progression

