Segmenting a Market Segment: New Ideas for Capturing Multi-Family Energy Savings

Linda Dethman and Eric Rambo

BECC Conference, November 13, 2012

Genesis

- California's Statewide Multi-Family Energy Efficiency Rebate Program evaluation
- Combined quantitative and qualitative approaches
  - Literature, census data, RASS, program materials review
  - 6 Focus groups with buildings owners/managers (n = 53)
  - 16 Interviews with staff and implementers
  - Interviews with 9 of California's largest property operators
  - Survey of program participants (n = 210)
  - General population survey (n=360, akAB analysis)

Special Thanks

- Eric Rambo, Cadmus
- Caroline Chen, SCE
- Andy Fessel, PG&E
- Jane Peters, Research Into Action
- Kathy Randazzo, Opinion Dynamics Corporation

Today's Talk

- What is the Multi-Family "sector"
- Some tools to deconstruct the sector
  - Market characterization
  - Social psychological underpinnings of decisions (akAB)
  - Relationships between akAB and business characteristics

The Multifamily "Sector"

"Energy efficiency improvements of 15% for electricity and 30% for natural gas would create annual utility bill savings of $3.4 billion for the multi-family sector nationwide."

— *Engaging as Partners in Energy Efficiency*, CNT Energy and ACEEE, 2012
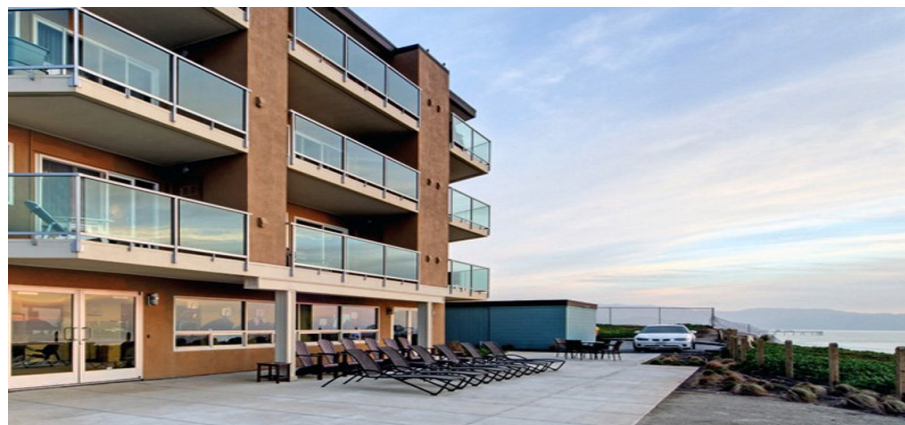
"Sector" Highlights

- Notoriously hard to reach
- Both residential and commercial audiences
- Heterogeneous
  - Mom and pop to large corporations
  - 4 units on the ocean to thousand-unit campuses
  - Subsidized housing to luxury homes
  - Retrofits – normal to historic requirements
  - Diverse motivations, priorities, decision-making
- All want to "keep tenants happy"
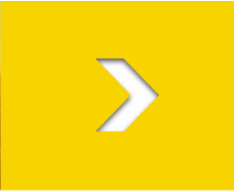- All feel brunt of rising utility costs (water, energy)
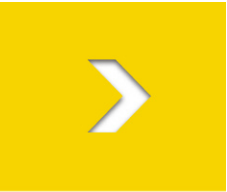
Market Characterization: Some Questions to Ask

- Are the savings there?

- What are useful MF sub-segments to understand?

- Who to target and how?

Are the Savings There?

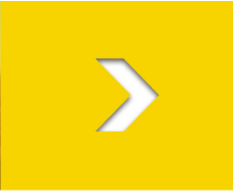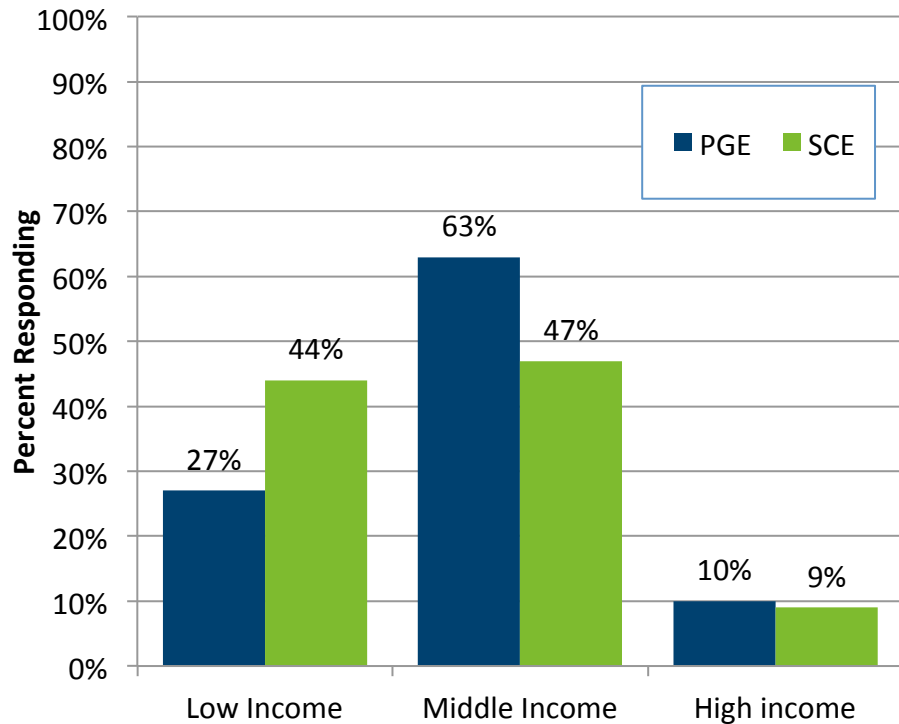| In California: 8,500,000 MWh consumed in units | Does not include common areas | **PLENTY** |

Who to Target?

PG&E: 46% of units housed in 9% of properties

SCE: 54% of units housed in 14% of properties

Efficient to target fewer but larger property owners

Tenant Incomes Influence Owner Perspectives

- **Low**: Safety, protect/grow investment, may be green oriented

- **Medium**: Keep tenants happy, reduce problems, increase rents

- **High**: ROI and curb appeal

Insights: Market Characterization

- Target big property owners
  - Top-down and bottom-up approaches needed
  - Support internal green policy building
  - Peer influence, market leadership
- Vary approaches and messages for audiences
  - For owners: lead conversation with "benefits" and "ROI"
  - For property managers: lead with aesthetics, low maintenance, few complaints
  - Big operators want/expect personal attention
  - Tenant income may also flavor messaging
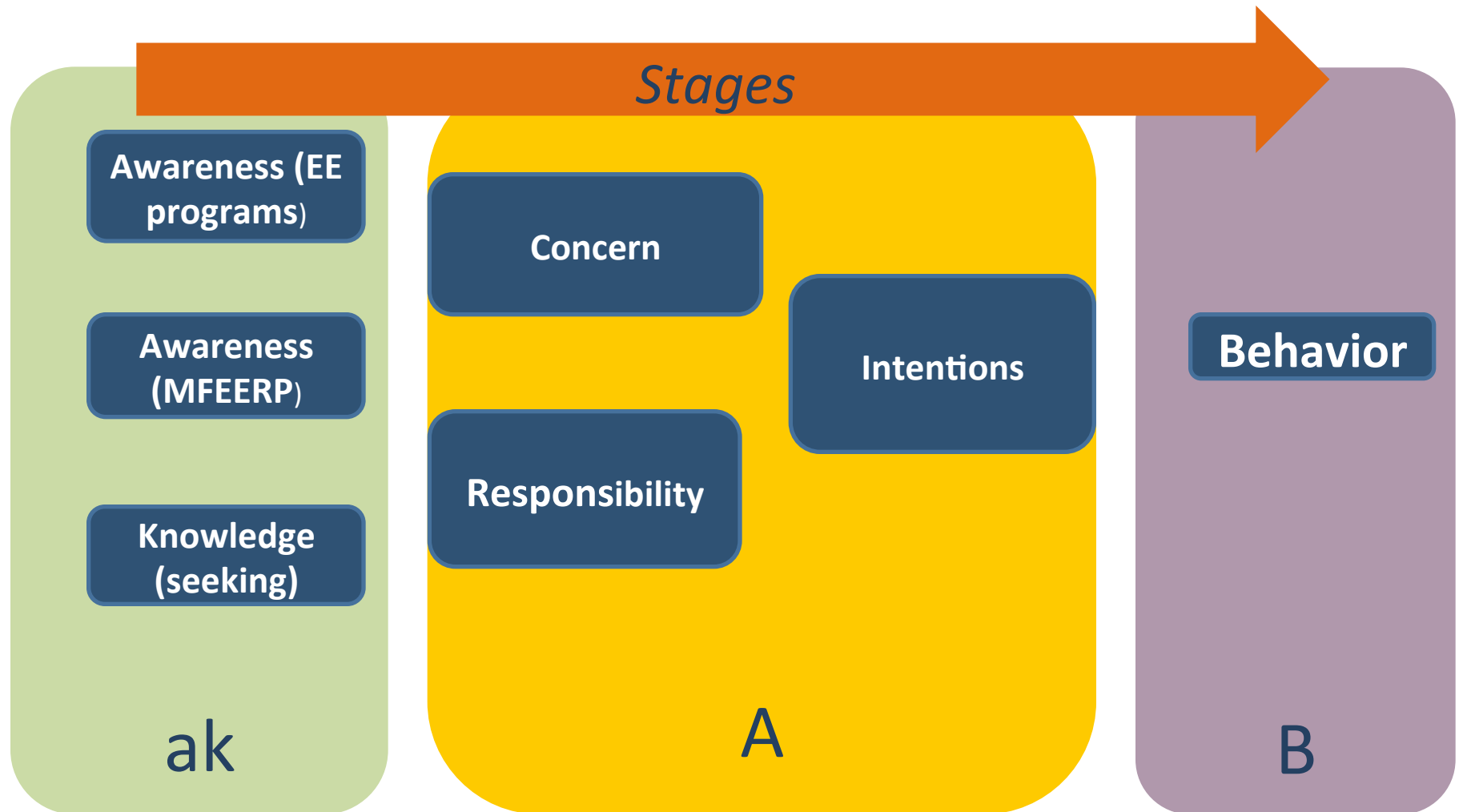
akAB Segmentation

- **Basic construct**: A set of distinct, structured, and measurable social psychological dispositions lead decision-makers toward desired behaviors, such as adopting energy-efficiency improvements
- Based on Randazzo and Peters, 2011: *"Reconsidering What We Measure: A White Paper"*

akAB – a 'Staged' Model

- Awareness and knowledge are the first steps (ak)
- Attitudes (A) may dispose person toward behavior
  - Concerns – motivational attitudes, define what is good to do
  - Responsibility – YOU are the one who needs to act
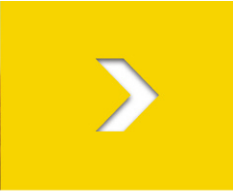- ak+A = Intention to act
- Behave! (B)

akAB – Creating Indices for Decision-making

Stages

Awareness (EE programs)

Awareness (MFEERP)

Knowledge (seeking)

Concern

Responsibility

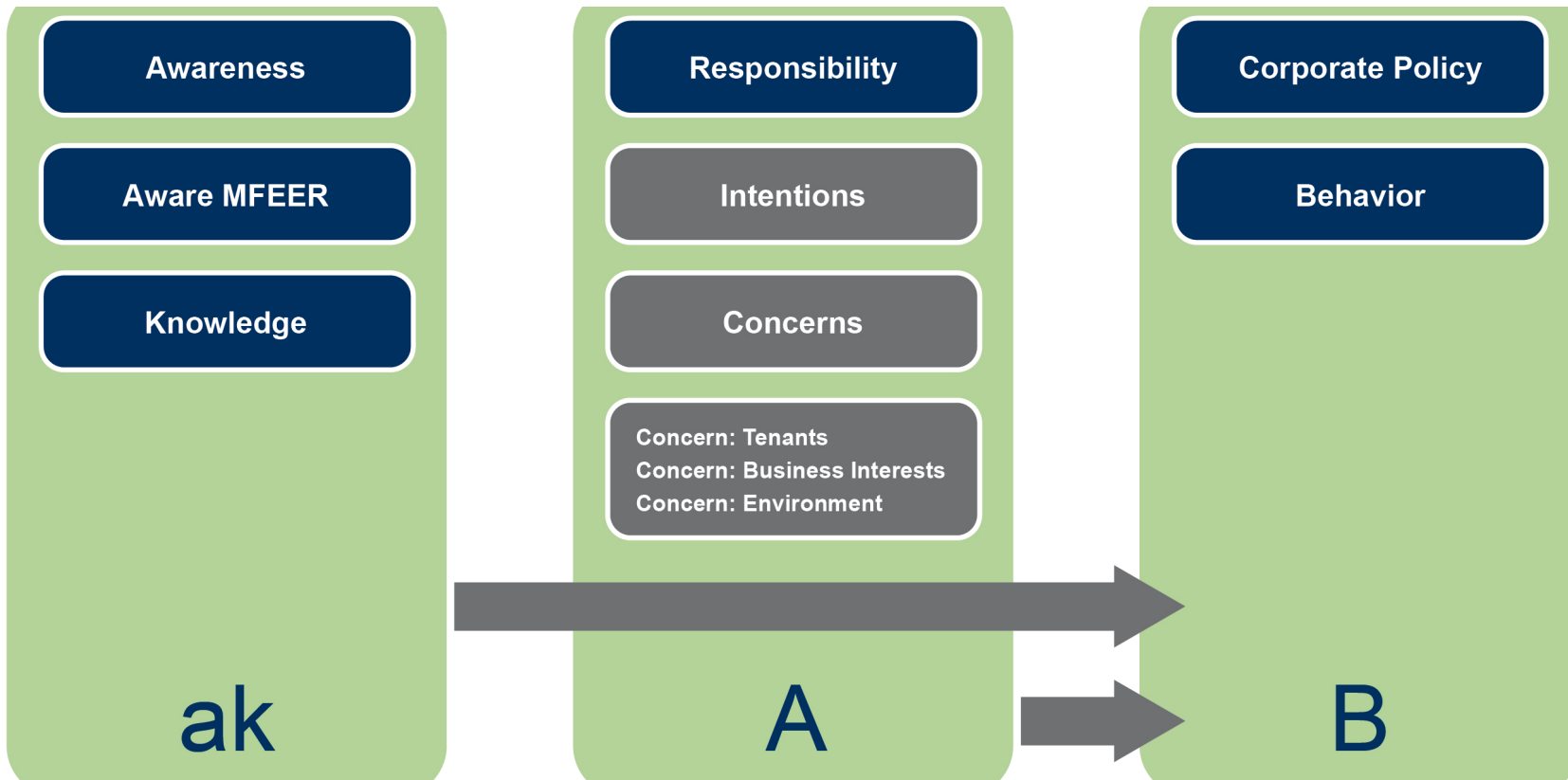**Intentions**

Behavior

ak

A

B

Application

- **2009 CPUC requirement for Program Performance Metrics**
  - Indicate market transformation
  - Address awareness, knowledge, and attitude
    - akAB = potential Performance Metrics
- **Randazzo and Peters geared to residential**
  - Introduced MF akAB
- **2012 PG&E/SCE survey: 363 MF property owners/managers**
  - Battery of akAB
  - Structural variables – company size, tenant SES, decisions, policy

Overall Results

ak	A	B
Awareness	**Responsibility**	**Corporate Policy**
Aware MFEER	**Intentions**	**Behavior**
Knowledge	**Concerns**	
	Concern: Tenants **Concern: Business Interests** **Concern: Environment**	

Regression Model Results

Awareness (.25)
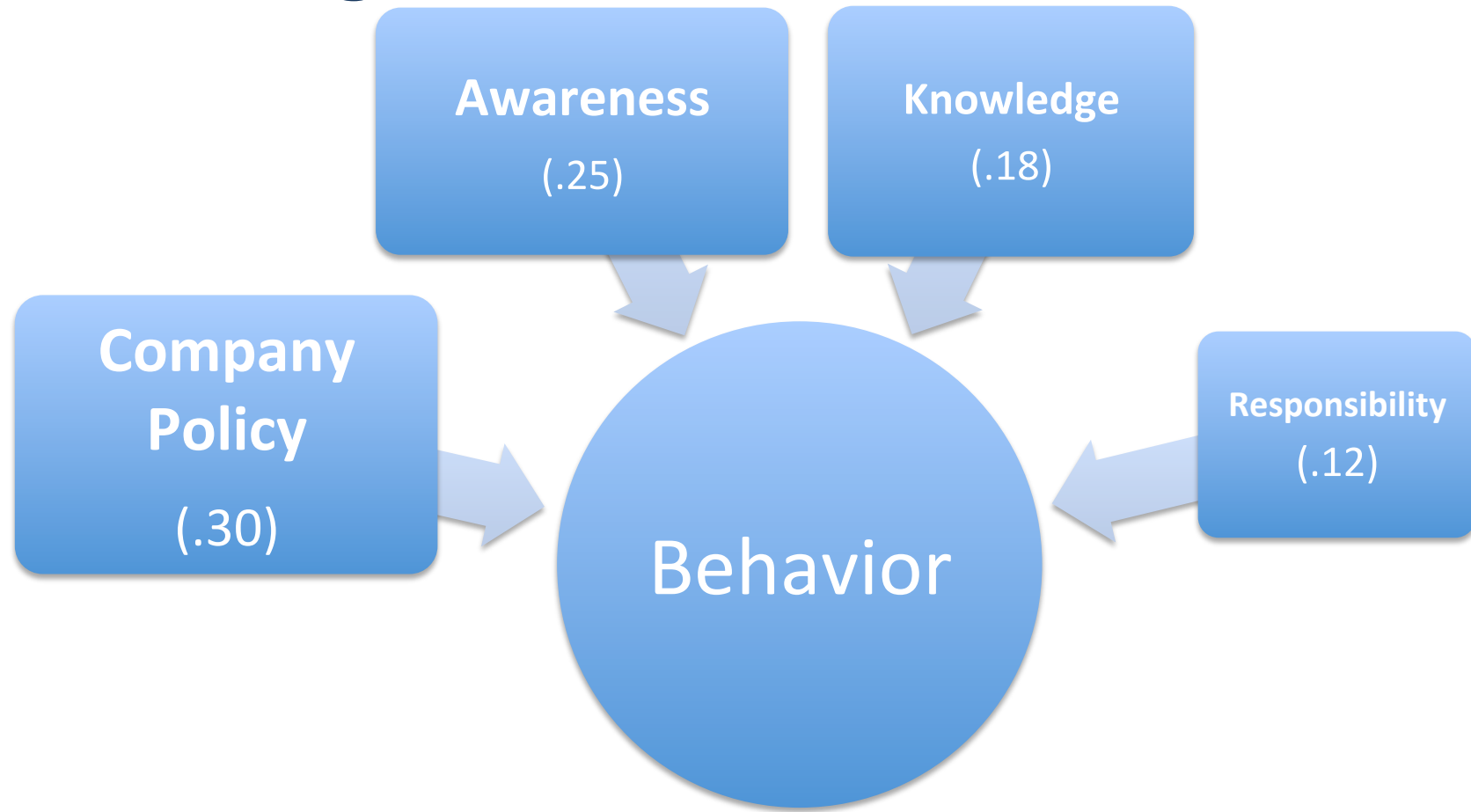
Knowledge (.18)

Company Policy (.30)

Responsibility (.12)

Behavior

Key Pre-Cursors to Taking Action

- Decision-maker
  - Is **aware**

  - Has **actively sought information**

  - Feels **responsible**

  - Has **company policy** related to efficiency

Capitalizing on Findings

- Ensure awareness – ongoing, but varied
- Encourage active information seeking
  - Engage decision-makers (websites, marketing, personal)
  - Reinforce information seeking (revisit program participants)
- Build responsibility
  - Economic viability, keep tenants happy
- Leverage company policy
  - Big players most likely to have policies in place
  - Smaller players follow big players lead (community of influence)

Thanks!

Questions?

Feel free to contact us:

- Linda Dethman(503) 247-7146
- Eric Rambo (503) 545-4570