6 Months, 5,000 Homes: Making Affordable Housing Energy Efficient

Elizabeth Chant
Ted Trabue
About VEIC

- Over 25 years of reducing economic and environmental costs of energy use
- Comprehensive approaches, high-impact results
- Energy efficiency, renewable energy, and transportation
- National and international clients
- Program design and evaluation
- Transformative policy, advocacy, and research
- Clients: government agencies, regulators, utilities, foundations, and advocates
Who We Are

• **Elizabeth Chant, VEIC**
  - Principal Consultant
  - 20 years in industry
  - Weatherization, utility, public-benefit programming
  - In at start of Efficiency Vermont and DCSEU

• **Ted Trabue, DCSEU**
  - Managing Director
  - 4th generation Washingtonian
  - Former PEPCO executive
The Context in Washington DC

- 640,000 people in 63 square miles
- Ties to wider market / metro area
- Commercial real estate, federal government, hospitality sectors
- Virtually no manufacturing
- Very high- and very low-income residents
The Focus on Equity in DC

• 109,000 DC residents — or almost one in five — lived below the poverty line in 2012 ($19,090 for a family of three)*
  • Top 20% = $259,000/year
  • Bottom 20% = $9,100/year

• Unemployment in DC

• Structural challenges
  • Lack of taxing authority by District
  • Federal government presence
  • Large commuter (in-bound)
  • History of city contracts going outside

The DC Sustainable Energy Utility

• Clean & Affordable Energy Act of 2008
  • A range of goals
• Sustainable Energy Trust Fund
  • Funded by electric and gas ratepayers
• DCSEU Advisory Board
• District Department of the Environment (DDOE)
• Competitively bid RFP for program services
• Performance-based contract
The DCSEU Model

- Electricity Savings
- Gas Savings
- Green Jobs
- Low-Income Spending
- Local Economic Development
- Renewables

6 Months, 5,000 Homes: Making Affordable Housing Energy Efficient
Sprinting Out of the Gates

- 6 months to deliver 12 months of work
- Requirements to launch 3 Quick Start programs
  - Program plans – due 30, 60, 90 days after contract signing
  - Program implementation – due 60, 90, 120 days after contract signing
FY 2011 Quick Start Programs

• Single-family Home Performance
• Small Commercial Direct Install
• Low-Income Multifamily (LIMF) Direct Install

• In addition to…
  • Establishing office
  • Hiring staff
  • Etc.
Quick Start Programs – Why Those?

• Low-Income Multifamily Direct Install
  • Percent of residents who are low income
  • Percent of residents who live in multifamily buildings
  • Underserved by utility programs

• Small Commercial Direct Install
  • Importance of small commerce to the District
  • Importance of energy costs to small commerce
  • Underserved by utility programs

• Single-family Home Performance
  • Market development / lead time
Quick Start Programs – Initial Goals

- Low-Income Multifamily Direct Install
  - Direct installation of product for energy savings
  - Development of relationships with multifamily building owners and managers
  - Contractor development
  - Product sourcing channels
  - Inventory of building systems / opportunities

DCSEU
DISTRICT OF COLUMBIA SUSTAINABLE ENERGY UTILITY

Sorry We Missed You!

We will return to install these FREE products on:

Date:_____________ Time:_____________

Questions? Call:_____________

Don't miss your chance to get FREE energy-saving products installed in your home!

- Energy-saving light bulbs
- New water-saving showerheads
- New water-saving sink faucet aerators
- Energy-saving water heater tank and hot water pipe wraps
- Tips on how to save even more after we leave

DC SEU: 202-479-2222 • toll-free 855-MY-DCSEU (855-693-2738)
WWW.DCSEU.COM

The DC SEU is a project of the Sustainable Energy Partnership under contract to the District Department of the Environment.
Quick Start Programs – Initial Goals

• Small Commercial Direct Install
  • Direct installation of product for energy savings
  • Development of relationships with businesses and their associations
  • Contractor development
  • Product sourcing

• Single-family Home Performance
  • Direct installation of product for energy savings
  • Contractor development
  • Market development
State of the Market at Start

- State of the DC market on day one
  - Huge need and opportunity for savings in low-income communities
  - Shortage of qualified contractors
  - DCSEU unknown
  - Shortage of products – had to work right up to manufacturer level
  - Data limitations
Finding LIMF Projects

- Reaching the market
  - Brand awareness
  - Community outreach
  - Resident letters
  - Resident meetings
- Securing projects
  - Income qualification
- Scheduling projects
  - Pipeline!
Getting LIMF Work Done

• Soliciting / selecting contractors
• Contractor training
• Product sourcing
• Pricing
• Relation between product sourcing & pricing
Continuous Process Improvement

- Product sourcing – the **whole** distribution channel
- Income qualification expansion
- Contractor recruitment of projects
  - Pros and cons
- Training contractors
- Importance of quality assurance – onsite mentoring
Six Months Later

- 4,700 units served (another 1,000 in next 3 months)
- More than 43,000 CFLs installed
- 10,000 low-flow water devices
- 240 ENERGY STAR® refrigerators
- Hot water tank wraps and pipe insulation
- 1,366 MWh + 35,637 therms + 11 M gal of water
2nd Contract Period

- Continue Quick Start direct install programs
- Develop T12 to HPT8 install program using market knowledge from Quick Start
- Food Bank bulb distribution
From 2011 to Today

6 Months, 5,000 Homes: Making Affordable Housing Energy Efficient
Low-Income Solar Installations
Low-Income Single Family

• Low-Income Home Performance with ENERGY STAR
  • Federal Home Loan Bank
  • DC agency collaboration
  • Contractor growth and workforce development
Low-Income Multifamily

- Low-Income Multifamily Comprehensive
  - Rebates and Technical Assistance
    - Lighting
    - HVAC
    - Solar PV and Thermal
Bringing in New Resources and Opportunities

- PJM
- Grants and awards
- Partnership with DDOE, other District agencies
- Financial leveraging for our customers
- Organizations and facilities
Ted Trabue
trrabue@dcseu.com
202-677-4806

Elizabeth Chant
echant@veic.org
802-540-7659

Thanks!