
Citi Energy Efficiency Finance Initiative

An Integrated Approach

Pew BELC
Energy Efficiency Workshop IV:
Sharing Best Practices

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Who – Cities are Leading the Way

Municipal green strategies centered on energy efficiency

- San Jose “Green Vision”
- New York “PLANYC 2030”
- Indianapolis “SustainIndy”
- “Phoenix Sustainability Project”
- “Build San Antonio Green”
- “Miami Going Green”

GREEN VISION GOALS

Within 15 years, the City of San José in tandem with its residents and businesses will:

1. Create 25,000 Clean Tech jobs as the World Center of Clean Tech Innovation
2. Reduce per capita energy use by 50 percent
3. Receive 100 percent of our electrical power from clean renewable sources
4. Build or retrofit 50 million square feet of green buildings
5. Divert 100 percent of the waste from our landfill and convert waste to energy
6. Recycle or beneficially reuse 100 percent of our wastewater (100 million gallons per day)

Why – Convergence of Issues

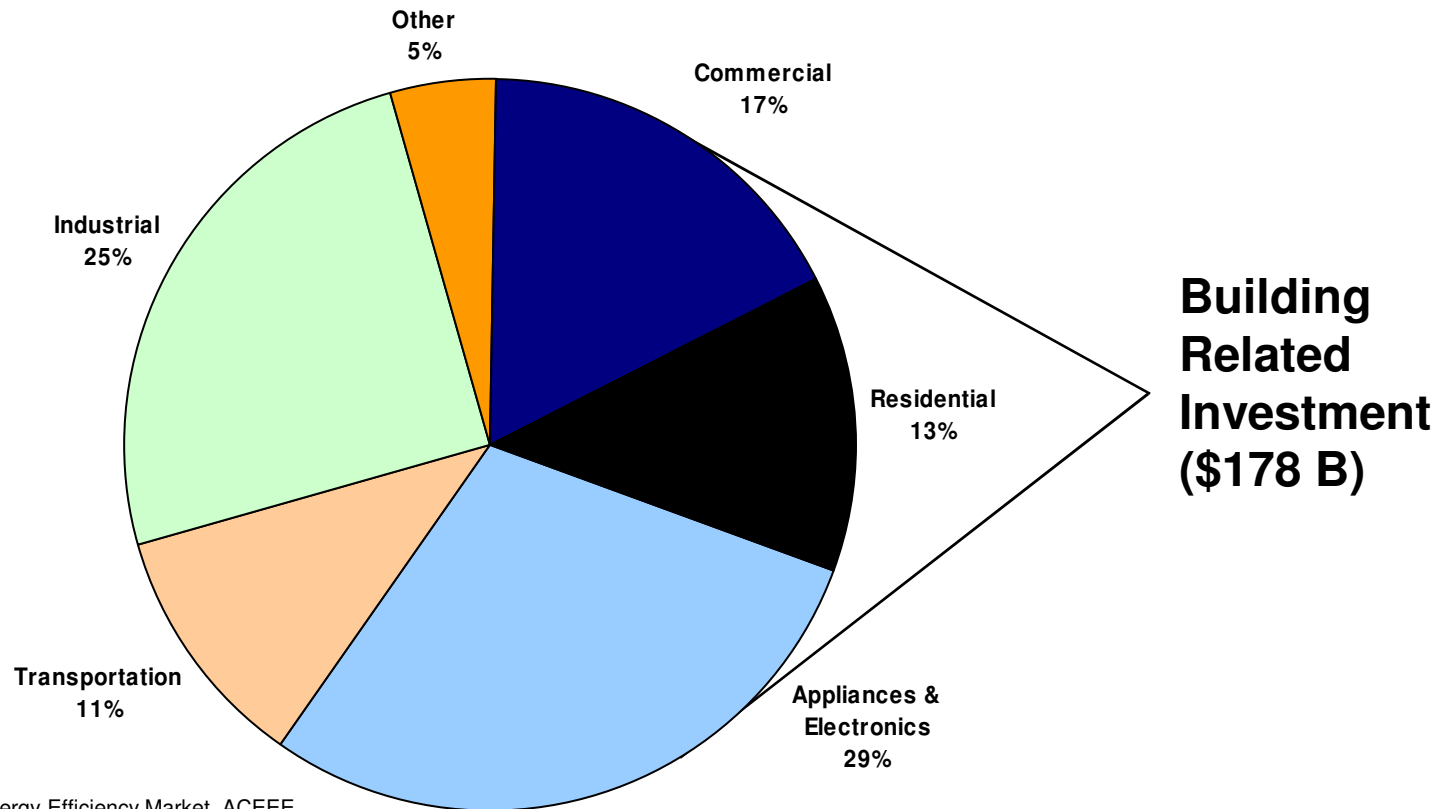
Energy efficiency market drivers

- **Cost savings**
 - **Climate change**
 - **Economic recovery**
 - **Green jobs**
- **O&T realizing 15-20% savings from energy efficiency projects**
 - **The best way to limit CO2 emissions is to not produce them**
 - **\$22.5 billion of stimulus package dedicated to energy efficiency**
 - **Every \$1 million invested in energy efficiency creates 5.6 permanent jobs**

How much – Estimated \$300 Billion Annual Investment U.S. Investment in Energy Efficiency

EE investment is estimated to generate 1.7 quads of energy savings and roughly \$77.4 billion in savings over a four year period

2004EE Investment: Total \$300 billion



Source: The Size of the US Energy Efficiency Market, ACEEE

Multiple Market Segments – Unique Conditions/Needs

Citi Energy Efficiency Working Group

Goal: develop a suite of complementary products and services to help jurisdictions, and their residents, businesses and institutions realize their energy efficiency goals

- **Municipal Securities**
 - **Commercial Finance**
 - **Commercial Real Estate**
 - **CitiCommunity Capital**
 - **CitiMortgage**
- **Corporate Banking**
 - **Operations & Technology**
 - **Export Agency Finance**
 - **Cards**
 - **Financial Education**

Energy Efficiency Finance Hurdles and Solutions

Working with partners to leverage enabling innovations

- **Hurdles**
 - Misaligned incentives
 - Tenor length
 - Asset size/transaction costs
- **Solutions**
 - Tax lien
 - On-bill finance
 - Building codes
 - Operations vs. debt finance
 - Revolving loan funds
 - Credit enhancement
 - Bundling
 - Lease provisions (sub-meter)
 - Simplify process
- **Clients (public entities, utilities, ESCOs)**
- **Federal agencies (Department of Energy)**
- **NGOs (Ceres, Environmental Defense, NRDC, Pew)**
- **Community development partners (Living Cities)**
- **Implementing partners (Clinton Climate Initiative)**

Case 1: Municipal Securities

Delaware Sustainable Energy Utility (SEU): bond issuance

- **Delaware SEU is a non-profit corporation develops end-user markets for energy efficiency and conservation, customer-sited renewable energy, and affordable energy services for LMI families.**
- **\$30MM bond is not guaranteed by the credit of the state; investors will be repaid from a portion of the SEU's shared earnings generated from the customers' energy savings and RECs. The tax-exempt bonds will not add to the State's General Obligation Bonding.**
- **In addition to the issuance of the bond, Delaware's SEU will be funded by a 36 cents per month surcharge on electric bills. No new taxes; no ratepayer impact beyond surcharge.**
- **SEU will invest in voluntary participants energy needs at a rate equal to the full incremental cost of purchasing cost-effective high-efficiency and customer-sited renewables options compared to current market prices (no economic difference for purchaser).**

Case 2: Commercial Banking

NYSERDA interest rate buy-down: training programs

- **New York State Energy Research Development Authority (NYSERDA) offers various incentives for efficiency improvements including interest rate buy-downs for small-medium size enterprise equipment upgrades.**
- **Citi has worked with a range of clients including a wholesale dry cleaner (washing equipment), a supermarkets and an architectural firm (lighting)**
- **Process can be complex and time-consuming; one of the barriers for small and medium size business owners.**
- **Citi designed a two-tiered training program: tier 1) for bankers / branch managers as many inquiries happen at the branch; and, tier 2) for legal and accounting associations – since business owners rely on these services for financial guidance, and to help achieve scale.**

Case 3: Financial Education

Watt Watchers: savings leads to links with financial education

- **Joint program of the Maryland Fuel Fund and The Caroline Center, a nonprofit welfare-to-work program.**
- **Watt Watchers enables individuals and families that rely on the Maryland Fuel Fund for financial assistance to pay their utility bills with the information they need to be knowledgeable consumers.**
- **The program teaches how to analyze utility bills and how to employ energy conservation methods.**
- **Watt Watchers participants, as a result of realized cost-savings, had disposable income – many for the first time in their lives.**
- **Program leaders joined with Citi to link their EE education with a financial education provider, and help participants effectively manage the gains.**