



Energy Efficiency in Connecticut 2012: Where We Are What Lies Ahead

EBC of New England – Connecticut Chapter
Energy Efficiency Seminar

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Introducing the Energy Efficiency Board



- **Created 1998 in conjunction with deregulation of public utilities to oversee ratepayer funded CT Energy Efficiency Fund programs administered by electric distribution companies**
- **Public Act 11-80 introduced notable changes:**
 - **Now chaired by DEEP Commissioner**
 - **Board comprised of 9 voting members and 5 now non-voting representatives of electric and gas utilities**
 - **Voting members represent DEEP, Office of Consumer Counsel, Attorney General, CBIA, Manufacturing Alliance of CT, Retail Merchants, Chambers of Commerce, Residential Customers, and Environment Northeast**
 - **Represented utilities include CL&P, UI, CMEEC, CNG/SCG, Yankee Gas**

Introducing the Energy Efficiency Board



- **By statute EEB (aka Energy Conservation Management Board) –**
 - **Advises and assists utilities’ development and implementation of Conservation & Load Management Plans**
 - **Coordinates with Clean Energy Finance & Investment Authority (CEFIA) on joint program offerings**
 - **Is responsible for independent program evaluations to determine cost-effectiveness, energy savings, and system benefits such as reduction of federally mandated congestion charges.**
 - **Employs consultants with technical expertise in relevant areas to provide independent advice and support to the board, the companies’ program administrators, and policy makers**

CEEF Programs – High Level Overview*

**Ron Araujo, CL&P's C&LM Manager comes next to talk about programs.*

- EDCs (CL&P and UI) primary program administrators – Programs also available through CMEEC members and gas companies.
- CEEF supports wide range of EE programs for –
 - Commercial & industrial customers
 - State, municipal, educational, & large nonprofit institutions
 - Residential & small business customers
 - Education and outreach
- Program details and budgets spelled out in annual Conservation & Load Management Plan approved by DEEP and Public Utilities Regulatory Authority

Where the money comes from * -

* Talking here about the “base budget” – more to come on the ramped up “increased savings scenario” budget...

- Bulk of funds – approximately 80% - raised by surcharges on all ratepayers’ bills –
 - Electric Systems Benefit Charge – 3 mil per kWh
 - Gas Conservation Adjustment Mechanism - \$.0167 per CCF
- Balance raised from –
 - ISO-NE Other Demand Resources & Forward Capacity Market programs
 - Auction of Class III Renewable Energy Credits
 - Regional Greenhouse Gas Initiative

CT Administration & Legislature: High Goals, High Expectations



- **Governor Malloy and Commissioner Esty**
 - **Reduce energy consumption by 15% or more**
 - **Make Connecticut No. 1 in energy efficiency**
 - **Leverage significant private capital investment**
- **State legislation (PA 11-80)**
 - **Meet energy resource needs first through –**
 - **All available & cost-effective energy efficiency**
 - **Demand reduction measures – Demand Response, CHP, Strategic Energy Management, etc.**
 - **Weatherize 80% of state's residential units by 2030**
 - **Reduce energy use in state facilities – 10% by 2013**
 - **Promote market transformation**

The Case for Energy Efficiency



- **Energy savings**
 - **Environmental impacts –**
 - **Reduced GHG emissions and pollution**
 - **Enhanced public health and environmental quality**
 - **Reduced reliance on imported energy resources & enhanced energy security**
 - **Reduced need to invest in construction & upkeep of generation, transmission and distribution infrastructure**
- **Economic and financial benefits**
 - **For customers – financial savings can be redirected to meet other needs**
 - **Savings not expended on imported fuel or out-of-state generation and transmission can be reinvested in-state**

The Case for Energy Efficiency



- **Economic Development**
 - **Supports growth of CT-based businesses**
 - **Expansion of home performance industry**
 - **Opportunities for HVAC, electrical, construction & renovation contractors, and related trades & suppliers**
 - **Green job creation – positive impacts for unemployed & dislocated workers and recent graduates**
 - **Multiplier effect of dollars expended in-state circulating through state economy**
 - **Positive impact on state and municipal tax revenues**

Strong Foundation to Build On



- **Very good EE programs in Connecticut**
 - **Award-winning programs, many are best practices**
 - **New and enhanced programs or elements**
- **Commitment to acquire all cost-effective EE**
- **Prior efforts to achieve much higher savings**
 - **Previously developed several plans (IRPs and others) to achieve several times the historical level of EE savings**
- **EEB focused on performance and committed to continuous improvement**

But There is Work to do: CT Rankings in Energy Efficiency



Downward trend in recent years in ACEEE rankings ...

	2007	2008	2009	2010
Overall EE Rank	1st (tied)	3rd	3rd	8th
Rank on Utility & Public Benefits Programs/Policies	4th (1 st in targets)	2nd	3rd	14th

Returning CT to a Number 1 Ranking



ACEEE 2010

Top 10

- 1) California
- 2) Massachusetts
- 3) Oregon
- 4) New York
- 5) Vermont
- 6) Washington
- 7) Rhode Island
- 8) *Connecticut*
- 9) Minnesota
- 10) Maine

Challenge: Others have leapfrogged ahead

- Returning to No. 1 ranking will require –
 - Clear focus by policy makers and regulators
 - High performance implementation
- Getting back on track means –
 - Renewed commitment to all cost-effective EE (included in PA 11-80)
 - Ambitious goals & accelerated efforts
 - Policies that support higher savings –
 - Deeper measures
 - Market transformation
 - Outreach and education
 - Innovative financing

Where are we now in terms of process?



- **2012 Conservation & Load Management Plan filed with DEEP & PURA October 1, 2011**
 - Includes Electric and Gas plans – Two Scenarios

Scenarios:	Base Budget	Increased Savings (ISS)
Electric	\$105.6 million	\$218.9 million
Gas	\$ 19.1 million	\$ 34.2 million
COMBINED	\$ 124.7 million	\$253.1 million

- Gas Plan reviewed by PURA – Approved with ISS Jan 4, 2012
- Electric base plan reviewed by DEEP – Bureau of Energy and Technology Policy – currently at PURA – decision expected soon
- Electric ISS plan folded into Integrated Resource Planning process – included in draft IRP – after comments will go to PURA for review and approval by June

2012 C&LM Plan: Increased Savings Scenario



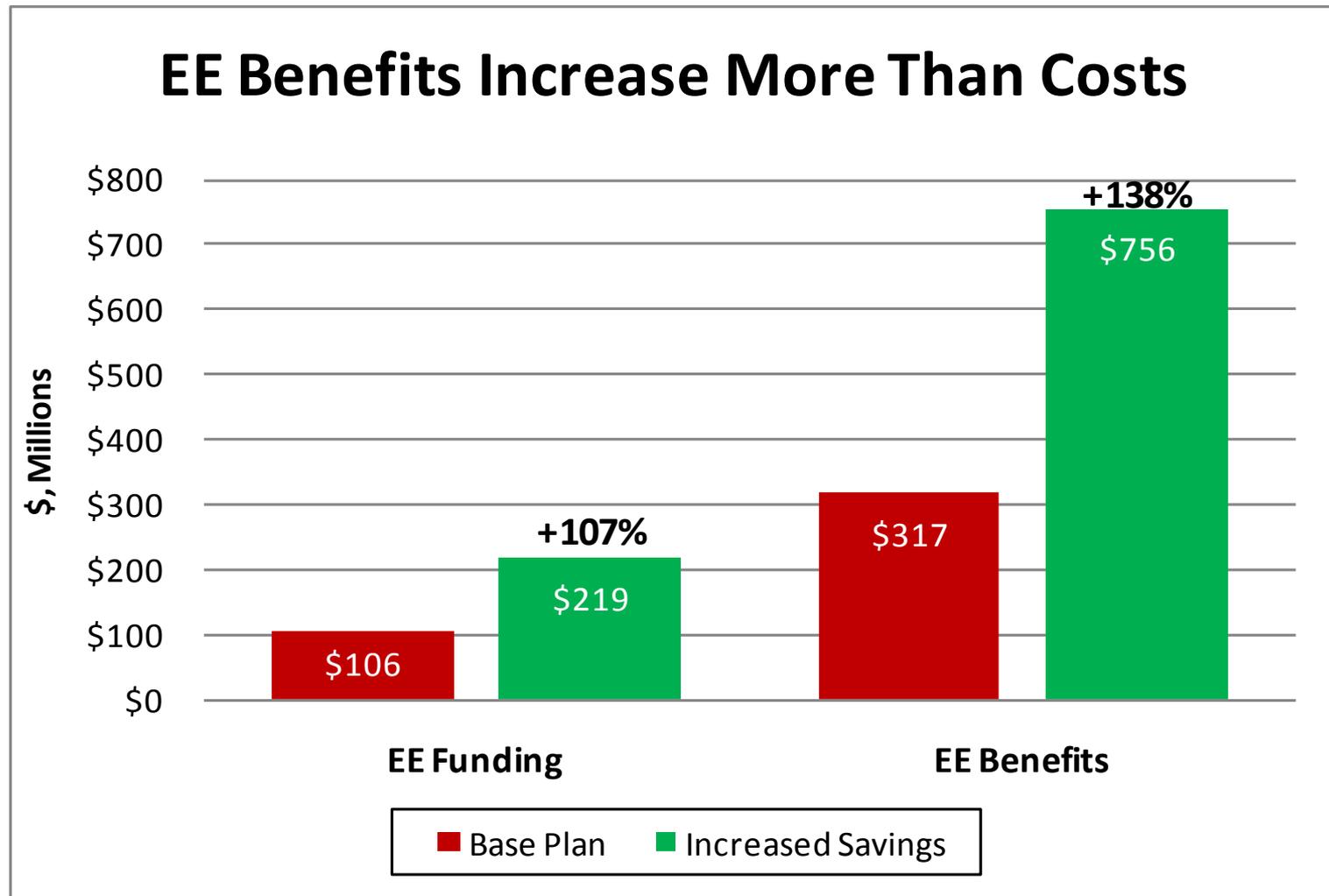
Goal: to achieve annual electric savings equivalent to 2.1% of retail sales, natural gas savings equivalent to 0.7% of retail sales, additional fuel oil and other fuel savings, and over \$800 million in benefits.

2012 Plan	Base Savings as a % of Annual Energy Sales	Increased Savings as a % of Annual Energy Sales	% Increase
Electric	0.80%	2.13%	166%
Gas	0.35%	0.70%	100%
	Benefits for Customers (\$, millions)		% Increase
Electric	\$317 M	\$756 M	138%
Gas	\$27 M	\$53 M	96%
Total	\$344 M	\$809 M	135%
	2012 Base Budget	2012 Increased Savings Budget	% Increase
Electric*	\$105,561,749	\$218,896,200*	107%
Gas	\$19,127,475	\$34,203,989	79%
Total	\$124,689,224	\$253,100,189	103%

* The Increased Savings budget includes \$17 million in proposed oil funding in the amount above.

2012 C&LM Plan: Increased Savings Scenario

Focus on increasing benefits for customers



2012 C&LM Plan: Increased Savings Scenario



Expanded EE Would Support In-State Jobs

Category of Spending	Change in Jobs (FTE/year)	Change in state GDP (million/year)
Expanded EE Spending	1,553	193
Lower Cost of Electricity	4,207	776
Reduced spending on in-state renewables	-253	-32
Estimated Net Effect Relative to Base Case	5,507	938

2012 C&LM Plan: Increased Savings Scenario



How to fund the increased EE investment?

Possible approaches include:

- **Additional collections from ratepayers (e.g., a Conservation Adjustment Mechanism or CAM)**
- **Capitalize/amortize the investment over time (e.g., rate basing)**
- **Have ratepayers who receive the benefits (i.e., those who participate in the EE programs) pay for a larger share of the costs (generally linked to attractive financing)**
- **Other policy strategies that could be used to achieve the savings (e.g., codes and standards)**

Getting to the Goal: All Cost Effective Energy Efficiency



Comprehensiveness

- ***Deeper Energy Savings*** is the mantra –
 - In every home, every business, every project
 - New building design & construction in all market segments –
 - Enhanced business competitiveness –
 - Comprehensive business energy solutions
 - Facilities, lighting, manufacturing processes
 - Operations and Maintenance
 - Technology – promote adoption of state of the art –
 - Equipment
 - Appliances
 - Lighting
 - Controls

Getting to the Goal: All Cost Effective Energy Efficiency



Behavior and culture change

- Promote adoption of sustainable energy management practices as core consumer and business values
- Coordinate with community partners –
 - Retailers & suppliers
 - Neighborhood & local business groups
 - Faith communities
 - Schools and youth organizations
- Outreach and Education – reach all market segments
 - Small business
 - Underserved communities – urban and rural populations, small towns

Getting to the Goal: All Cost Effective Energy Efficiency



Behavior and culture change

- **Build on successful brands – HES, HES-IE, SBEA, ECB, EO, eeCommunities, eeSmarts curriculum ... etc.**
- **Achieve sustainability by promoting optimal engagement and performance by all market participants**
 - **Vendors and contractors**
 - **Service providers**
 - **Design community – architects and engineers**
 - **End-users – Owners, occupants, facility/building managers**

Getting to the Goal: All Cost Effective Energy Efficiency



Market Transformation

- **Enhanced Marketing strategy – Joint with DEEP & CEFIA – in coordination with DECD**
 - **Engage high-profile stakeholders and leaders –**
 - **Governor & Commissioner**
 - **Business and community leaders**
 - **Advocates**
 - **Media personalities**
 - **Innovative marketing approaches – effective use of –**
 - **the web**
 - **social media**
 - **events**

Getting to the Goal: All Cost Effective Energy Efficiency



Financing

- **Innovative financing and project brokering –**
 - **Coordination with CEFIA & “Green Bank” – leverage private capital**
 - **Expansion of existing financing programs and revolving loan funds**
 - **Encourage adoption of Performance Contracting by public, education, and nonprofit institutions**
- **Secure funding from additional sources –**
 - **Surcharge on deliverable fuels to achieve “fuel-blind” funding for all customers and programs**

Getting to the Goal: All Cost Effective Energy Efficiency



Challenges for Program Implementation

- **Raise private capital and bring to scale**
- **Stabilize revenue streams and policy requirements**
- **Manage process of “standing up” expanded industry**
- **Overcome current resistance to borrowing**
- **Address fuel-blind issue**

For More Information Visit:
www.ctenergyinfo.com

QUESTIONS?

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