

Rebuild Michigan

Regional Technical Assistants (RTA) Program

2012 RTA Kickoff Webinar

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Agenda

- ⚡ Rebuild Program Overview
- ⚡ RTA Guideline Review
- ⚡ IEE Template & Process Review
- ⚡ Question and Answer

Program Overview

Goal: Increase Energy Efficiency & Awareness

- Why?
 - *To reduce energy consumption, reduce energy cost, improve building quality and promote environmental protection*
- How?
 - *Through conducting Introductory Energy Evaluations (IEEs) and educational outreach campaigns.*
 - *Performed by both State and RTA auditors or representatives*
 - *Assist in TEA review*
- Who?
 - *The Rebuild program focuses on: Public Schools, Colleges/Universities, Public Housing Authorities, Local Governments, Churches, & Privately Owned Commercial Business (<30k sq ft per building)*

Program Overview

Rebuild Intro:

- Program started in 1998
- Modeled after USDOE "Rebuild America"
- To date, has evaluated over 120 million sq feet of floor space
- Has spurred over \$90 million of investment

Program Overview

2012 Rebuild Program Initiatives

- Rebuild Regions
- Technical coordinators are now defined as official Rebuild partners known as Regional Technical Assistants
- Removal of minimum square footage requirement (now requires MEO approval)
- Privately owned small business now eligible for energy evaluations (<30k sq feet per building)
- Rebuild Contracts
- Revitalized Rebuild webpage

Program Overview

Rebuild webpage:

- RTA Guidelines
- RTA Application Form (for first time RTAs or current RTAs electing to change service regions)
- RTA Regional Map (shows current regional boundaries)
- RCC Enrollment Form (used to enroll clients in the Rebuild program)
- Rebuild Technical Assistants Location Map (Shows all designated RTA locations and contact information)

** IEE Contracts and Annual Capstone Forms will be sent to RTAs directly*



Program Overview

Rebuild Partner Programs

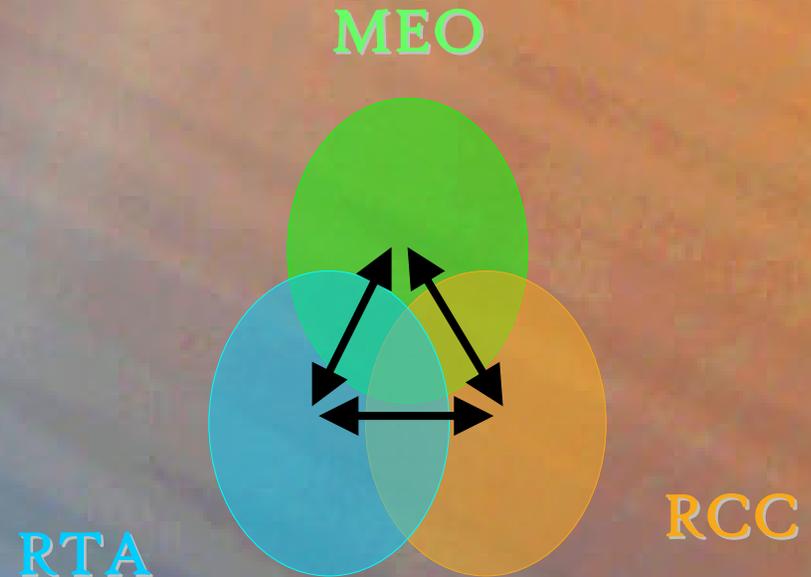
- Retired Engineers Technical Assistance Program (RETAP)
 - *Focus: By practice, services are traditionally targeted toward businesses (commercial and industrial) with 500 or fewer full-time employees, have full-time operations, annual utility bills in excess of \$15k, and have a floor space greater than 30k sq ft.*

* If you have any clients which meet the above criteria, please feel free to contact a RETAP representative for more information on how they may be able to assist.

RTA Guidelines

The RTA Designation

- Official Rebuild partnership designed to represent and promote the goals of the Rebuild program
 - *Conduct IEEs, stakeholder meetings, webinars & consultations*
- Official set of RTA Guidelines can be found on the main Rebuild webpage under the "Regional Technical Assistants" section.



RTA Guidelines

Key RTA Guidelines

- All Rebuild work done through grants and contracts must be performed within the RTAs primary or secondary region.
- If an RTA wants to change a primary or secondary region, a new RTA application form will need to be submitted (changes cannot be done inside a contract).
- All Rebuild client enrollments will need to be pre-approved by MEO prior to the conduction of an IEE.
- RTAs will be required to report on yearly Rebuild activities through the Annual Capstone Form. This form will be sent to RTAs on an annual basis.

IEE Template & Process Review



RTA IEE PROCESS

- 1) *Solicit Rebuild Clients*
- 2) *Fill out RCC Enrollment Form & submit it to MEO*
- 3) *Receive MEO approval - conduct evaluation*
- 4) *Submit IEE Report for MEO approval*



Rebuild Michigan Enrollment Agreement

Planning Questions: (attach additional sheet(s) if necessary)

1. What are your goals for building performance and energy reduction?
2. How will building energy improvements fit in with other organization priorities?
3. What financing options and sources are you considering for building improvements?
4. What is your likely timeframe for developing and completing an energy efficiency project?
5. Please list any problems, issues or complaints in the above mentioned buildings that you would like addressed. (Provided it is within the scope of this IEE)

Enrollee Signature

Date

Title/Position

Michigan Energy Office Signature

Date

Title/Position

RTA Signature (if applicable)

Date

Title/Position

Revised January 2012

IEE Template

- ❑ Standard format available from the MEO
- ❑ Some degree of creative freedom in report writing
- ❑ Review by MEO before submittal to client

Sections

1. Executive Summary
2. Energy Use Analysis/Benchmarking Report
3. Energy Conservation Opportunities
4. Energy Consumption Profiles for Individual Buildings

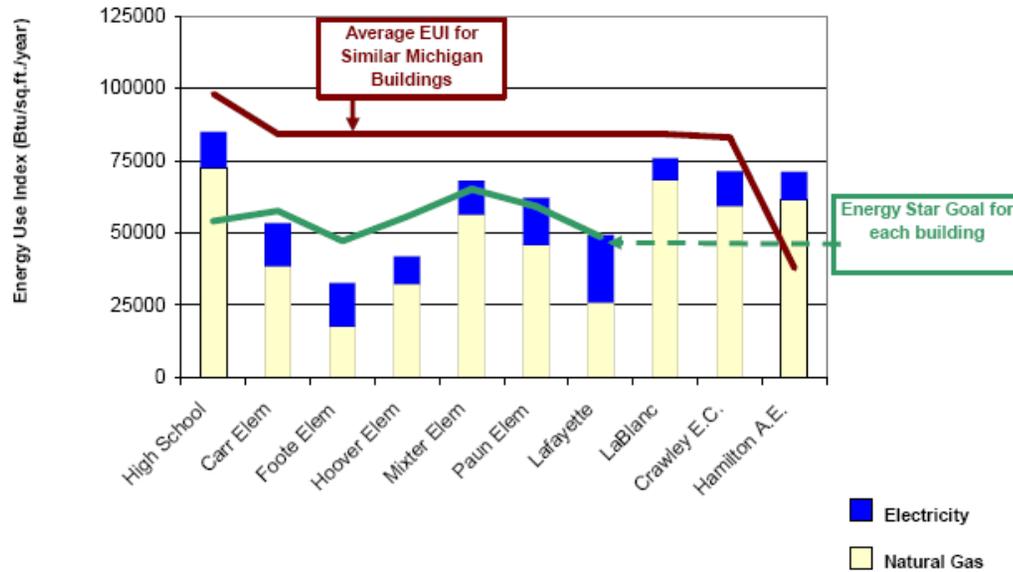
Executive Summary

- ❑ Short description of walk through and observations
- ❑ Proposal for meeting and timelines for implementation

Energy Use Analysis/Benchmarking Report

- ❑ Overall snap shot of all buildings
- ❑ Based on annual energy
- ❑ Benchmarked with respect to Energy Star Target Finder (Both avg. @50 and Energy Star Label @75%) and/or Michigan Energy Office Database

Figure 1 - Energy Use Index (EUI) Benchmark



Name of Building	Natural Gas Use (Btu / sq.ft. / year)	Electricity Use (Btu / sq.ft. / year)	Total EUI (Btu / sq.ft. / year)	Average EUI for Similar Building	Energy Star Goal
High School	72,601	12,264	84,865	98,152	54,130
Carr Elem	38,485	15,004	53,489	84,207	57,610
Foote Elem	17,493	15,226	32,719	84,207	47,216
Hoover Elem	32,324	9,578	41,902	84,207	55,695
Mixer Elem	56,377	11,645	68,022	84,207	65,158
Paun Elem	45,841	16,263	62,104	84,207	59,165
Lafayette	25,962	23,241	49,203	84,207	48,688
LaBlanc	68,173	7,637	75,810	84,207	
Crawley E.C.	59,254	12,162	71,416	83,008	
Hamilton A.E.	61,273	9,916	71,189	37,766	

Target Finder

REQUIRED

Select a target rating and/or compare your Design Energy

1. Facility Information

*Zip Facility
 Code Name
 Address City

2. Facility Characteristics

*Select Space Type(s) for this project.

[Space Types]

3. The Target¹

Target Rating Or Energy Reduction Target
 Or

*Choose the design target and select "View Results"

Energy Star Target Finder

www.energystar.gov/targetfinder

Rebuild Michigan

Energy Conservation Opportunities (ECOs)

- ❑ No Cost ECOs
- ❑ Low Cost ECOs
- ❑ Capital Intensive ECOs

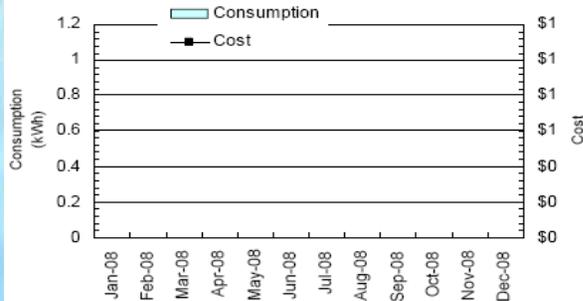
Energy Consumption Profiles for Individual Buildings

Senior Center

35000 Sims Ave
Wayne, MI 48184

Square Ft Year Built Additions DHW	Wall Construction Roof Construction Windows Interior Lighting Exterior Lighting	Heating Cooling Distribution Temp Cont. Other
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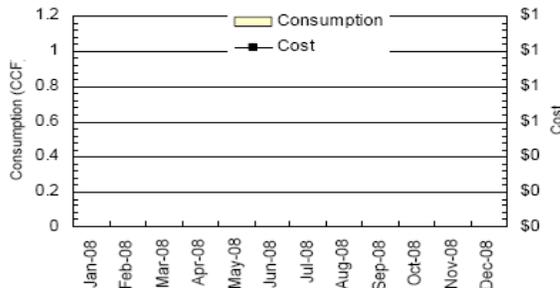
Electricity Consumption Profile



Month	kWh	Cost
Jan-08		
Feb-08		
Mar-08		
Apr-08		
May-08		
Jun-08		
Jul-08		
Aug-08		
Sep-08		
Oct-08		
Nov-08		
Dec-08		
Totals:	0	\$0

Cost/sq.ft.: ✓ #DIV/0! per sq.ft./yr.
Elec EUI: ✓ #DIV/0! BTU/sq.ft.
Avg. Cost: ✓ #DIV/0! /kWh

Natural Gas Consumption Profile



Month	CCF	Cost
Jan-08		
Feb-08		
Mar-08		
Apr-08		
May-08		
Jun-08		
Jul-08		
Aug-08		
Sep-08		
Oct-08		
Nov-08		
Dec-08		
Totals:	0	\$0

Cost/sq.ft.: ✓ #DIV/0! per sq.ft./yr.
Gas EUI: ✓ #DIV/0! BTU/sq.ft.
Avg. Cost: ✓ #DIV/0! / CCF

Annual Utility Cost = \$0
Total Cost / sq.ft. = #DIV/0!
Combined EUI = #DIV/0!

Energy Star Rating (Current) =

For Heating and Cooling

- Type of Equipment
- Capacity
- Quantity

Distribution System

- Brief description
- Quantity

Temperature

- Summer set-point & set-back
- Winter set-point & set-back

Fresh Air Arrangement

- Economizer?
- CO2 monitor, air changes/hr, %volume etc.

Walls and Roofs

- Description & R-values (if available)

Exterior Lighting

- Parking lots
- Building lighting
- Sign boards

Special Note

Waste Heat Recovery

- If there is an opportunity for recovering waste heat please be sure to make a special note of it in the report.

Thank You

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