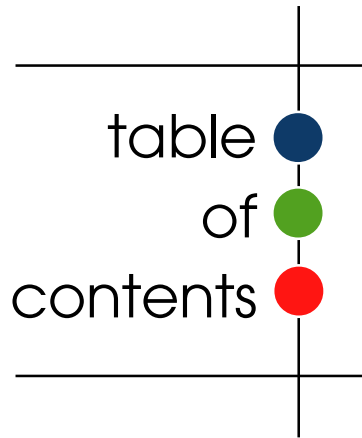


action plan

Energize
Muscatine
Muscatine
Power
and
Water

April 2000





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Energize Muscatine vision



Energize Muscatine will provide energy efficiency education and programs to Muscatine industries, businesses and residents to help conserve energy, improve profitability and improve the overall quality of life.

ACTION ITEMS:

- Energize Muscatine will educate and inform business and industry on the importance and profitability of implementing energy efficient projects and provide assistance programs for such projects.
- Energize Muscatine will educate and inform the construction and banking industries and residential communities of available conservation programs and renewable sources of energy.
- Energize Muscatine will provide an umbrella for existing and new energy programs.
- Energize Muscatine will introduce the latest energy conservation and renewable energy developments to the Muscatine community.

vision

STATEMENT

Goals:

- Reduce commercial electrical consumption by 5% over a 5-year period.
- Begin implementation of a building energy rating program by 2001.
- Audit 75% of the churches and city buildings in Muscatine by the end of 2001.

Barriers:

In Muscatine, the largest barrier is the lack of knowledge regarding the benefits of utilizing energy efficient practices by residential and commercial customers. Energize Muscatine will use the tactics listed as ACTION ITEMS to overcome these barriers.

Partners:

Following is a list of our current Rebuild partners. We are confident that this number will double over the next year.

- Seventh Day Adventist School
- Bandag Training Center
- City of Muscatine Library
- CK Processing
- Colorado School
- Hoffman Inc.
- HON Inc. Systems Component Facility
- Kentucky Fried Chicken
- Lutheran Homes
- Menards
- Sunset Village
- Wendy's
- Faith United Church
- Bandag R&D facility
- West Middle School
- Arby's
- City of Muscatine Airport
- Holiday Inn
- HON Inc. Systems Panel Facility
- Mississippi Brewing Co.
- 101 Mississippi Dr.
- Pierce Furniture
- Taco John's
- Snackers Restaurant
- Plamor Lanes
- Dutch Treat



v i s i o n

STATEMENT

Incentives for potential partners:

- Increased sales
- Lower overhead
- Enhanced community image
- Increased employee comfort

Target buildings:

- City buildings
- Restaurants
- Churches
- Random sampling of community

Advisory board:

We have established an advisory board to help with the planning of Energize Muscatine and to inspire the various building owners within our community. Following you will find the various builders and building groups and the person for inspiring that contingent of the Muscatine population.

<u>Name</u>	<u>Represents</u>	<u>Address</u>
Allan Jorgensen	Home Owner	2525 W. Fulliam
Steve Sontag	Sontag Architecture	102 W. 2nd Street
Ray Childs	City Of Muscatine	
Larry Pitzer	MP&W	3205 Cedar Street
	Plumb Supply	1418 Houser Street
Wayne Taylor	City of Muscatine	
Jodi Muller-Stotser	MP&W	3205 Cedar Street
Lynnett Brus	Van Meter Industrial Inc.	
Dave Maeglin	Maeglin Properties	P.O. Box 84
David Luth	Lutheran Homes	2421 Lutheran Drive

Previous programs:

Prior to receiving the Rebuild Iowa Grant, Muscatine Power and Water had an energy efficiency program in place since 1992. In fact, our home energy audit partnership with IES, now Alliant Utilities, won us national recognition. Also, MP&W has a very comprehensive rebate program in place. However, because of the many changes in the energy field, the uncertainty of deregulation and our desire to provide even better service to our commercial customers, MP&W is looking forward to Energize Muscatine providing an umbrella over all our existing services. Thus, making it possible for us to provide expanded services to our commercial customers.



candidate

BUILDINGS AND RETROFIT OBJECTIVES

- Churches (5) — John R. Root, Energy Services Advisor, Muscatine Power and Water
- Low income Housing (204 units) — Wayne Taylor, Housing Director, City of Muscatine
- Residential Housing (100) — Larry Pitzer, Head of Maintenance, MP&W and Allan Jorgensen, Home Owner
- Non-Profit organizations (4) — Dave Luth, Head of Maintenance, Lutheran Homes
- City Buildings (7) — Ray Childs, City Engineer, City of Muscatine
- Commercial Accounts (20) — John Root, Energy Services Advisor, MP&W and Lynnette Brus, Lighting Specialist, Van Meter Industrial

We have targeted restaurants, hotels and nursing homes because they have the highest energy usage per square foot of any business. This information was acquired from a spreadsheet developed by Cedar Falls Utilities, which compared energy usage to square footage. Also, we are able to access energy use data from Muscatine Power and Water. From this information we are able to build three-year energy usage profiles and energy savings derived from lighting retrofits and comprehensive audits. From these audits, projects will be prioritized and order of implementation can be determined based on ROI and utility rebate programs.

Energize Muscatine intends to encourage area banks to provide low interest financing to homes and business wanting to implement energy efficiency projects.

- Banks would establish a pool from which project funds would be withdrawn.
- All participating banks would charge the same rate of interest.
- At some future date, MP&W will consider the bill financing. Presently it is budgeted for 2001.



actions

RESPONSIBILITIES AND RESOURCES

Strategy 1:

Members of the Advisory Board will notify John Root of Muscatine Power and Water of potential target buildings.

- John Root will then determine the level of audit appropriate for the building.
- Mr. Root will meet with the building owner or his or her representative and advise them of the best way to proceed.
- Mr. Root will either perform the audit himself or arrange for the audit to be performed.
- After the audit has been completed, Mr. Root will meet with the building owner or his representative again to determine a course of action to take. Mr. Root will advise the client of local contractors and lending institutions involved with the Energize Muscatine program and assist the client through the implementation stage of the program.

Strategy 2:

Encourage area banks to provide low interest financing to homes and business wanting to implement energy efficiency projects.

Tactic 1

Banks would establish a pool from which project funds would be withdrawn.

Tactic 2

All participating banks would charge the same rate of interest.

Tactic 3

At some future date MP&W will consider the bill financing. Presently it is budgeted for 2001.

Muscatine Power has a long-term commitment to provide information and expertise to the community concerning energy efficiency and the wise use of electricity. Therefore, MP&W will be the driving force to assure the continuity and longevity of this program. Also, it is our belief that once area businesses experience the effect these energy efficient projects have on their bottom line they will share their experience with their neighbors. This is one of the many benefits of living in a small Iowa town.



monitoring

EVALUATION AND REPORTING

- We will determine the energy use of the equipment before and after implementation. From this information we can determine the cost of implementation, dollars saved, kW saved, kWh saved, ROI and payback.
- MP&W will provide the auditing expertise and equipment necessary for a phase I audit, or will help the client find an organization capable of providing the level of audit appropriate for a project.
- The Energy Services Advisor will complete reporting required by IDNR.

promotion

AND EXPANSION

Strategy 1:

- Establish an Advisory Board
- Orchestrate at least four events which will attract attention to the Energize Muscatine Program.
- Energize Muscatine Kick – Off
- Possibly use the International Environmental Art Show by Kathy Stanazek
- Electrathon Car built by the Muscatine High School team
- Junior Solar Sprint Races – Elementary students build and race solar model cars
- Fall Energy Fair at MP&W – invite area contractors to display their energy efficient products

Strategy 2:

Use MP&W's web site (www.mpw.org) to educate area residents, non-profit organizations, commercial and industrial businesses on the importance of economic development, energy conservation, renewable energy and the reduction of greenhouse gases.

Tactic 1:

Send announcements on energy conservation programs and an energy conservation tip of the week or month via e-mail to MachLink (MP&W's Internet service) users. Customers would be given the option to cancel service after the first e-mail.

Tactic 2:

Amend MP&W's web site to include a complete listing of energy conservation links and tips, with a special emphasis being put on a user-friendly interactive energy audit.

Strategy 3

Include inserts in MP&W's monthly bills and articles in the bimonthly newsletter to create interest and educate area businesses and residents about energy conservation options.

Tactic 1

Through bill inserts and newsletters inform customers of the availability of the energy conservation tools contained on MP&W's web page.

Tactic 2

Use bill inserts and the newsletter to give customers an energy conservation tip of the month.



promotion

AND EXPANSION

Tactic 3

Include in the bill or newsletter a card for customers to fill out and return if they would like Muscatine Power and Water personnel to perform an energy audit on their small business or home.

An Action Audit will consist of conducting a walk through audit and the installation of a compact fluorescent light bulb, two aerators, one showerhead and an insulating water heater blanket (providing the customer has an electric water heater).

Once the audits are completed, students will enter results into a database and quantify the energy savings and CO₂ reduction achieved. Then the students will present a list of additional home improvements that the customer can make. Finally, students will check back at three and six-month intervals to see what improvements have been accomplished. If improvements have been made, the database will be updated and the additional energy savings and pollution reduction will be recorded.

Note: For commercial applications, the MP&W Energy Service Advisor will perform the audit and provide suggestions on how to further decrease energy use.

Strategy 4

Make presentations to schools, area service groups, small commercial customers and residential customers to promote their involvement in Energize Muscatine.

Tactic 1

Get on speaker's lists for area service groups and give presentations on Energize Muscatine.

Tactic 2

Discuss economic development with area business and service groups.

- Because of Muscatine's limited labor force, emphasis would be placed on the benefits of keeping dollars in the community by increasing the efficiency of the way we use energy.
- The point can also be made that increased energy efficiency will increase the quality of life in Muscatine.



promotion

AND EXPANSION

Tactic 3

An MP&W representative will make presentations to third graders, fourth graders and junior high students. The students will be instructed in conducting on-site energy audits. The students will be encouraged to demonstrate their newly learned skills at home, and convince their parents to conduct an in home action audit.

- Prizes – A solar cap will be given to each class. Each student who returns a completed audit will be allowed to put his or her name in the hat. Once all the audits are in, a name will be drawn from the hat and that student will be allowed to keep the hat.
- Prizes, Elementary – Junior Solar Sprint kits will be awarded to the Middle School that discovers and implements the most energy saving projects in their school with in the contest year.

Tactic 4

Provide energy audits to Muscatine churches in return for allowing a MP&W representative to give an energy efficiency presentation to a church group.

- When the audited churches have implemented improvements and documented their savings, pastors and church leaders may serve as energy-efficiency advocates to their parishioners.
- Reaching people through their church, in combination with the “demonstration” of efficiency methods in the church itself, offers an exciting new communication and education channel that has an unusual potential to be effective.

Tactic 5

Presentations describing the Energize Muscatine Energy Efficiency program will be offered to any interested civic group.

- A plaque recognizing exemplary energy conservation achievements will be presented at a yearly luncheon. A combination of ten large and small Muscatine businesses, which have participated in the Energize Muscatine program and who established viable programs, will receive community recognition and media coverage for their efforts.
- Awards will be given to residents who have participated in the Energize Muscatine Program and have attained predetermined goals for energy efficiency. Through citywide competition, an electric bike may be awarded to the homeowner achieving the greatest energy reduction. Ranking would be based on a weighted average, taking into account such factors as occupancy level, size and age of the house, weather, etc.



promotion

AND EXPANSION

Strategy 5

Implement a program for rating energy efficient homes.

Tactic 1

Develop a program for residential buildings in the Muscatine area using the “Star Improvement” or other energy efficiency equivalent program.

- Investigate available rating programs and the pros and cons of each.
- Implement an energy efficient residential home construction program.
- A house rated by MECcheck or HERS, as a 4- or 5- Star house would automatically qualify.
- A 2-Star house would need to improve to at least a 3-Star house to qualify. Similarly, a house rated at 3-Star would have to attain a 4-Star rating.
- A similar program could be implemented for light commercial buildings.

Tactic 2

Encourage realtors and building contractors to participate.

Tactic 3

Provide training for those interested in installing energy conservation equipment. This would include builders, HVAC installers, lighting representatives, etc.

- Adopt criteria for installers, and provide them with a certificate of accomplishment when they meet established criteria.
- Develop a database of installers participating in Energize Muscatine, and provide their names to prospective customers desiring more information.
- Develop a database of organizations willing to lend money for these programs, and make this information available to potential clients.

Strategy 6

Train, certify and provide updates to parties interested in making energy efficient improvements to homes and business in Muscatine.

Tactic 1

Host a series of workshops.

- How to make your home more energy efficient.
- What’s too tight?
- EEBA workshop “The cure for the common call back”
- Energy efficient lighting.
- Geo exchange heat pumps — are the right for you?
- Energy efficient demo home budgeted for 2002.



promotion

AND EXPANSION

Community support

- Have 100% of community organizations aware of the Energize Muscatine program by 2001 and have 25% participation by these groups.
- We have begun making presentations to community service groups. At these presentations we are explaining the Energize Muscatine program and soliciting community support.
- We are already communicating with local business, public and private elementary and high schools, the Muscatine Chamber of commerce, City Administrator and the County residential care facility.
- Our goal is to acquire \$5,000 in in-kind services in 2000 and \$10,000 in in-kind services in 2001.

