

Community Development & Sustainable Energy

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Energy Center of Wisconsin

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Wisconsin Electric Power Company

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Wisconsin's Environmental Decade

Wisconsin Environmental Initiative Wisconsin Power & Light

Wisconsin Public Utility Institute

Wisconsin Energy Bureau

Wednesday, February 19, 1997

8 am - 3:30pm

Wisconsin Memorial Union

Madison

Keynote Presentation

William Becker, Director, Center for Excellence for Sustainable Development

William Becker, past editor of the Wisconsin State Journal returned to Wisconsin and introduced conferees to the online “Sustainable Communities Tool Kit” provided by his office to help communities understand and adopt sustainable development strategies.

The Kit includes, among other products, the Sustainable Building Technical Manual, helping architects, developers, building owners, and government officials implement sustainable development practices; the Community Energy Workbook, outlining steps to achieve sustainable community wide energy savings; and the Codes and ordinances.

Database, highlighting real models that can be adapted for different communities. Much of the Tool Kit can be downloaded from the Center’s website, <http://www.sustainable.doe.gov>.

Community Based Projects: A Study of Marketing Alternatives.

George Edgar, Wisconsin Energy Conservation Corporation Kathy Kuntz, Energy Center of Wisconsin

In the early 1990’s, six Wisconsin utilities, in conjunction with Wisconsin Demand-Side Demonstrations, Inc. (WDSI), developed and fielded community-based energy conservation projects. Established to evaluate energy conservation marketing alternatives, WDSI was a collaborative of the Public Service Commission, several electric utilities, and a variety of public interest groups. These projects were implemented in geographically specific area using formal and informal community structures to facilitate service delivery.

Lessons

1. Take full advantage of synergies between project partners. The best example of this came from the Merrill project where the local utility enlisted the local fire department to sell energy efficient exit lighting during routine inspections. Fire inspectors turned out to be the perfect people to promote energy efficient exit lighting because the average commercial establishment pays more attention to those lights during the fire inspection than at any other time all year.
2. It’s much easier to use existing community infrastructures than to invent them. It’s easier to implement a community-based project that taps into existing community priorities or uses existing community organizations than to start from scratch.
3. Informal community structures are key. In the Madison project, the utility asked local citizens to invite others on their block to energy workshops. The local volunteers got more people to come to the workshops than professional organizers did in other comparable neighborhoods. Similarly, an evaluation of the Milwaukee project found that

a good predictor of whether or not someone had participated in the project was whether or not they knew someone else who had participated.

4. Approach customers with a comprehensive array of potential services. A number of the WSDS projects were limited to electric conservation. That meant those projects ended up ignoring important opportunities for customers to save gas or water in some cases.

5. Projects take a lot of time to gain momentum. To be effective, they should probably remain active for years rather than months.

Future projects in the deregulated world

Dramatic changes brought about by industry deregulation have complicated assessments of the projects. The world is moving from a system where customers buy their gas and electricity from a regulated monopoly to a system where many if not all customers will be able to choose their energy supplier. This has significant implications for future community-based projects.

Most future community-based projects will probably not be funded by utility dollars because utilities will probably not be tied to particular communities like they are now.

Other groups will be needed to lead future efforts and that the concentration on specific communities will be driven by something other than utility planning issues.

There may be new opportunities for community-based efforts that enable neighborhoods or cities to implement conservation plans that will enable them to buy energy more cheaply than they could on an individual basis.

Elk River, MN “Energy City”

Bill Poppert, Technical Administrator for Energy City Project Stephen Rohlf, Building and Zoning Administrator, Elk River, MN

Mission Statement:

To promote Minnesota’s renewable and efficient energy products and services by showcasing economical, cost-effective and viable energy technologies and programs to benefit our communities, the economy and the environment.

Elk River, Minnesota, is a community of 14,000 located between the rapidly growing areas of the Twin Cities and St. Cloud. The city has recently partnered with the non-profit organization, Minnesota Environmental Initiative, to turn Elk River into a world model for sustainable energy. The long-term project will merge the resources of Elk River with those of the energy efficiency and renewable energy industry to demonstrate how cost effective energy products and services can benefit a city economically and environmentally. Organizers expect that tapping into this growing multi-million dollar market will help Elk River increase its job and tax base. Potential demonstrations include

an energy business incubator, wind turbines, a fuel cell, lighting retrofits, a demonstration home, insulation, and passive solar heating systems, among others.

The Energy City project's uniqueness lies in the industry-based delivery of products and services. The project emphasizes demonstrations based on return-on-investment data and cost effectiveness rather than on mandates and rebates. Organizers feel that their market based approach is all the more timely, given the looming deregulation of the energy industry and ever more competitive energy markets. Planning the extensive project has required much cooperation by local officials, the energy industry, non-profit organizations, and citizens. Direction and content of the project has been determined by a steering committee and four "working groups."

Action Committee for Energy (ACE)

The ACE committee consists of ELK River city leaders and members of the renewable and efficient energy industry. This overall decision-making body for the project ultimately reports to the Minnesota Environmental Initiative board of directors and to the Elk River City Council. The following working groups report to ACE.

Marketing and Communications Committee

This group is responsible for enlist the participation of renewable and efficient energy companies, and publicize the benefits to consumers.

Energy Use Committee

This group is responsible for the technical integrity of the project and the city's Energy Use Profile. The Profile will map ElkRiver's energy use and identify areas of potential savings and improvement.

Demonstration Committee

This group is developing the process for demonstration projects. They will inventory current renewable and efficient energy products and services in the Elk River Area; manage incoming demonstration site requests; and solicit demonstration project sectors that result from the Energy Use Profile.

Economic Development Committee

This group will bring together the economic development, financial and business arms to retain and attract energy businesses to Elk River. For more information about the Energy City project, contact Julie Ball at (612) 334-3388.

Environmentally Sustainable Energy Choices: A National Town Meeting

This conference incorporated a 90 minute interactive video teleconference sponsored by the Renew America organization. Deborah Potter of The Poynter Institute moderated, as four diverse panelists discussed the issue of sustainable energy. They were; Christine Ervin, U.S Department of Energy, David Freeman, SunLight Power International, Amory Lovins, Rock Mountain Institute, and Roger Sant, The AES Corporation. During the broadcast, the panelists took viewer questions from across the nation.

Videotapes of this informative discussion are obtainable from Renew America, (800) 922-RENEW.

Roundtable Discussions

“ We’re all familiar with the expression, ‘Talk is cheap.’ I suggest, rather, that talk can be ‘cheapened.’ Talk can be quite useful, and is, in fact, vital if we are to find reasonable solutions to the complex issues currently facing the energy industry. ”

Rodney Stevenson, Conference Chair

Attendees of this conference broke into groups to discuss obstacles and solutions to the design and implementation of sustainable energy programs. Participants valued the opportunity to exchange ideas with people of divergent viewpoints.

Roundtables were presented with three questions, and achieved the following results.

Question 1: How can sustainable energy (SE) benefit community development?

1. SE investment stimulates community pride and improves the quality of life.
 - SE systems promote efficient land use, e.g., cluster development.
 - SE systems promote better designs for living and working environments.
2. SE stimulates the local economy and creates jobs.
 - SE investment attracts businesses and residents.
3. SE saves money.
 - SE reduces the amount of money leaving the community for outside sources of energy.
 - SE stabilizes energy supply and costs, reducing vulnerability to curtailments, service interruptions, etc.
 - SE reduces need for electrical facility construction.
 - SE reduces the costs of environmental compliance.
 - SE reduces direct energy costs through weatherization and enhanced energy efficiency; this is especially important regarding low income housing. (Wisconsin provides energy assistance payments to 130,000 households - one out of every eleven, and provides weatherization for 3,500 households per year).
4. SE improves the environment.
 - Fosters an ethic of sustainability.
 - “Closed Loop” reduces the negative environmental impact of current energy sources.
 - SE preserves or improves human health, leading to reduced health care costs.

5. SE reduces the threat of military conflict over fossil fuels.

Question 2: What are the barriers to developing local sustainable energy projects?

1. SE systems cost more than conventional systems.

- Funding is limited both for complex SE systems and simple weatherization programs.
- SE systems tend to have higher front end costs resulting in long pay-backs.
- A well established SE infrastructure does not exist.
- Installation and maintenance of SE systems is expensive.
- Local technical expertise is minimal.
- SE systems are not yet mass-produced.

2. SE systems are poorly understood.

- Without models, gauging cost effectiveness and determining practical applications is difficult.
- Incremental retrofitting of conventional systems is difficult.
- People are skeptical of SE systems.
- Past SE projects have failed.
- Customers don't perceive a need for SE systems.

4. Conventional energy systems have much institutional and technological inertia.

- Retrofitting existing infrastructure is expensive.
- Existing housing is incompatible with SE technology, e.g. fluorescent light fixtures.
- Regulatory barriers deter the installment of SE systems.
- Mandated DSM incentives hinder SE development.
- Conventional energy is inexpensive and subsidized.
- Current fossil fuels prices do not reflect their true costs.
- Individuals resist restrictions on their right to consume cheap conventional energy.
- Energy companies exercise considerable political influence.
- Electricity is not taxed.

5. There is too little long-term planning at all levels of government.

- SE is not coordinated with new development e.g., housing subdivisions.
- SE development is underbudgeted.
- Government entities don't cooperate with one another.
- SE is a low priority for the legislature.

Question three: How can these barriers be overcome

1. Financing should be improved.

- Increase federal, state and local funding for SE projects.
- Design new SE projects on a shared risk basis.
- provide grants, e.g. Iowa blends federal, state, and local jurisdictions.
- Create revolving loan pools.
- Create a public benefit fund.
- Shift subsidies to SE programs.
- Reduce property tax for home energy improvements (Norway).
- Finance housing rehabilitation through sweat equity programs, e.g. Habitat for Humanity.
- Institute incentives aligned with financing, e.g. H.E.R.S. & Lifecycle.
- Fund alternative transportation systems.

2. The SE market should be developed.

- Commercialize SE technology.
- Design SE systems that are accessible and convenient.
- Finance SE through methods that create a quick positive cash flow.
- Provide more consumer choice, e.g. green pricing.
- Implement portfolio standards for energy providers.

3. Subsidies for fossil fuels should be eliminated.

- Tax fuels to reflect true costs.
- Tax carbon, or establish tradable credits.
- Tax inefficiency, or offer tax credits for efficiency.

4. SE should be included in community planning activities. Address the potential loss of the PSC Advance Planning Process.

- Develop better zoning ordinances with multi-sensitivity as a vision..
- Change housing codes to reinforce the use of sustainable energy.
- Mandate that energy budgets address long term benefits.
- Consider energy caps for communities.
- Develop community commons/resources/programs.
- Implement local action programs, e.g. composting.

5. Improve education and community outreach.

- Include energy in school curriculums at all levels.
- Establish credibility with political leaders and decision makers; enlist their help.
- Establish diverse partnerships between SE professionals conventional energy providers consumers and government.
- Specifically target changes in community attitudes.
- Increase the level of community peer pressure.

- Promote competition among communities.
- Establish an open forum to discuss issues and develop a community vision.

Community Development & Sustainable Energy Conference Sponsors

- Energy Center of Wisconsin
- Midwest Renewable Energy Association
- RENEW Wisconsin
- Urban & Regional Planning - UW Madison/UWEX
- Wisconsin Electric Power Company
- Wisconsin Energy Conservation Corporation\
- Wisconsin's Environmental Decade
- Wisconsin Environmental Initiative
- Wisconsin Power & Light
- Wisconsin Public Utility Institute
- Wisconsin Energy Bureau

Conference Steering Committee

- Jim Christensen
Wisconsin Power & Light
- Noel Cutright
Wisconsin Electric Power Company
- Mark Hanson
Energy Center of Wisconsin
- Sabrina Karl
Wisconsin Energy Conservation Corporation
- Brian Ohm
Urban & Regional Planning - UW Madison/UWEX
- Tehri Parker
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- Michael Vickerman
RENEW Wisconsin

Introduction

This interactive conference presents the most progressive local and national examples of how governments, citizens and businesses are cooperating to promote sustainable energy.

Conference attendees will learn proven and practical tools to build effective partnerships between different stakeholders in their communities.

Topics

Community Based Projects

Beginning in 1991, Wisconsin utilities worked with Wisconsin Demand-Side Demonstrations, Inc. to field six community based projects with varying results. Although individual projects were unique, they shared the common goal of increasing energy conservation in specific communities through partnerships between investor owned and public utilities, local businesses and community organizations.

At this conference, organizers and participants in the projects will discuss:

- What has worked.
- What has *not*.
- What future projects are being planned.

Energy City

Elk River, Minnesota, has embarked on a mission to become a world model for sustainable energy. The city is planning to build several working demonstrations of technologies related to energy efficiency and renewable energy, showing that they can be both commercially viable and environmentally sound.

At this conference, organizers of the Energy City project will present:

- Step by step descriptions of cooperative planning by local officials, conventional and alternative energy producers, nonprofit organizations, and citizens.
- Economic benefits for the city, energy producers and local consumers.

Renew America Teleconference

Environmentally Sustainable Energy Choices: A National Town Meeting is a 90-minute interactive video teleconference. 15,000 viewers nationwide will participate in this live event discussing ways to promote sustainable energy. You will have the opportunity to ask questions and exchange ideas with the Washington DC panel of business, government and environmental leaders.

Who should attend?

Economic development and community planners; government regulators and policy makers; representatives of public, cooperative and investor owned utilities; producers of energy efficient technologies and renewable energy; environmental advocates; business managers and leaders; and other interested parties.

Agenda

8:00-8:45 am Registration & Continental Breakfast

8:45-9:00 am Welcome & Introduction

9:00-9:30 am Keynote Address

William Becker - Director, Center of Excellence for Sustainable Development (U.S. Department of Energy)

9:30-9:45 am Question & Answer

9:45-10:00 am Break

10:00-11:00 am Do / Don't try this at home! Critical discussion about past and current sustainable energy projects.

Panelists;

- *Kathy Kuntz - Project Manager, Energy Center of Wisconsin*
- *Stephen Thompson - General Manager, New London Electric & Water Utilities*
- *Bill Poppert - Technical Administrator, Energy City project*
- *Steven Rohlf - Building & Zoning Administrator, Elk River, MN*

11:00-11:30 am Question & Answer

11:30-12:30 pm Facilitated Roundtable Discussions

Attendees will break into groups and discuss how different stakeholders can form effective partnerships in their communities to design and implement sustainable energy programs. Ideas generated will be published in a conference report.

12:30-1:00 pm Lunch

1:00-2:30 pm Sustainable Energy Choices: A National Town Meeting

Washington DC Panelists:

- *Deborah Potter, The Poynter Institute for Media Studies (moderator)*
- *Amory Lovins, Vice President, Rocky Mountain Institute*
- *David Freeman, CEO and Chairman, Sunlight Power International*
- *The Secretary, U.S. Department of Energy (invited)*

- *The Hon. Norman Rice, Mayor, Seattle, Washington (invited)*

2:30-3:00 pm Roundtable Conclusions

Facilitators from each table will report back to the general assembly.

3:00-3:30 pm Informal Networking (Optional)

3:30 pm Adjournment

Local Panel Biographies

- **William Becker** is the director of the Center for Excellence for Sustainable Development, Denver (U.S. Department of Energy). The Center helps communities nationwide understand and adopt sustainable development strategies. Bill has deep roots in Wisconsin. Previously, he served as editor/publisher of the Kickapoo Scout in Soldiers Grove, worked for the state energy office where he developed Wisconsin's Energy Extension Service, and served as editorial page writer for The Wisconsin State Journal.
- **Kathy Kuntz** is a project manager with the Energy Center of Wisconsin (which assumed responsibility for the activities of Wisconsin Demand-Side Demonstrations in 1995). She is currently leading Center efforts to identify lessons learned from the six WSD community based projects. Kathy also manages several low income and education related projects, including the School-to-Work Energy Education Project.
- **William Poppert** serves as Technical Administrator of the Energy City project. He is also president of Technology North, a St. Paul design engineering and energy management consulting firm. Bill was awarded the National Award for Energy Innovation by the U.S. Department of Energy for his work as energy director at Carlson Companies.
- **Steven Rohlf** is the Building and Zoning Administrator for Elk River, MN, a rapidly growing (pop. 14,000) near Minneapolis. He has been the city's key figure in the Energy City project, working closely with community leaders, businesses and energy producers to design and implement the project.
- **Stephen Thompson** is the General Manager of New London Electric and Water Utilities. As one of the WSD participants, the utility cooperated with the community to develop and market a successful energy conservation project. Stephen also serves on the board of the Municipal Electric Utilities of Wisconsin.

Conference Steering Committee

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WEI Mission Statement

The Wisconsin Environmental Initiative is a non-partisan, educational organization bringing diverse groups together in a non-contentious forum to facilitate solutions to contemporary regional environmental problems.

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