



ENERGY CENTER OF WISCONSIN

# **Organizational Background and Integrated Energy Communities**

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**YOUR PARTNERS IN ENERGY RESEARCH, EDUCATION & CONSULTING**

# Energy Center of Wisconsin

**Located in the  
University of  
Wisconsin  
Research Park**



**455 Science Drive, Madison, Wisconsin**

# Who We Are

- **Est. 1989, the Energy Center of Wisconsin is an independent, non-profit**
- **Our Mission: to develop solutions to energy challenges that promote economic and environmental sustainability through innovative research and education**

# What We Do

- Technology research paves the way for new energy-related technologies
- Program planning, design and implementation puts those technologies to work
- Program evaluation and market research improves the delivery of energy programs
- Professional education programs keep energy professionals current on industry trends and new technologies
- Work with communities to help integrate energy planning into their sustainability and carbon reduction goals to improve their overall quality of life
- Outreach communicates the results of energy research to audiences who can put that information to work
- Library services offer a repository of energy materials for researchers and others

# Energy and Environment

**The Energy and Environment group examines the environmental, economic and technical issues associated with energy use.**

- **Biomass resource assessments**
- **Integration of energy concepts into community planning**
- **Case studies of renewable energy and innovative design installations**
- **Conversion of technical information for lay audiences**

# Projects

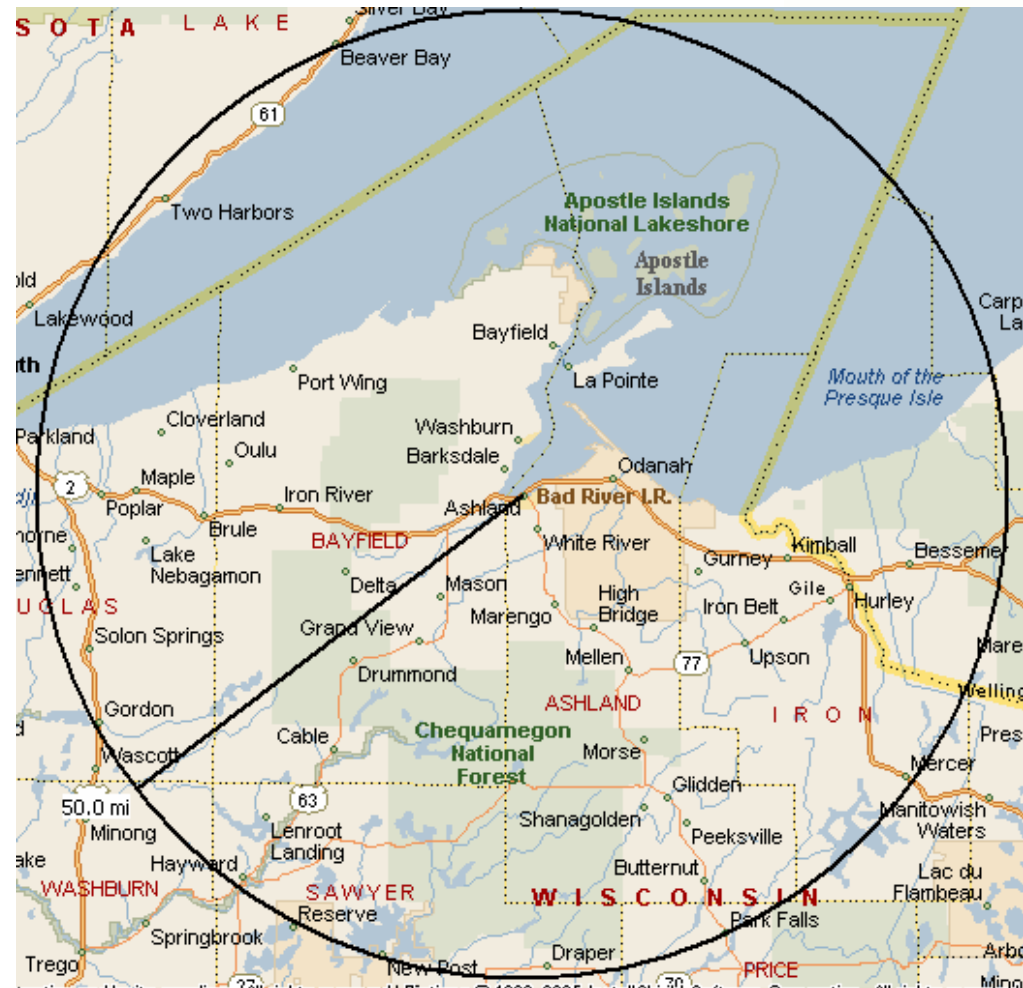
- **Renewable Resource Mapping Tool for Wisconsin (ongoing)**
- **River Falls Campus Energy Independence Study (current)**
- **Governor's Global Warming Task Force**
- **Biomass Resource Assessment for Xcel Energy (2007)**
- **Governor's Biobased Industry Consortium 2005-6**

# Xcel Biomass Assessment



**Biomass in counties  
within 50 mi. radius  
of Bay Front**

- **Wood industry**
- **Harvest**
- **Dedicated biomass**

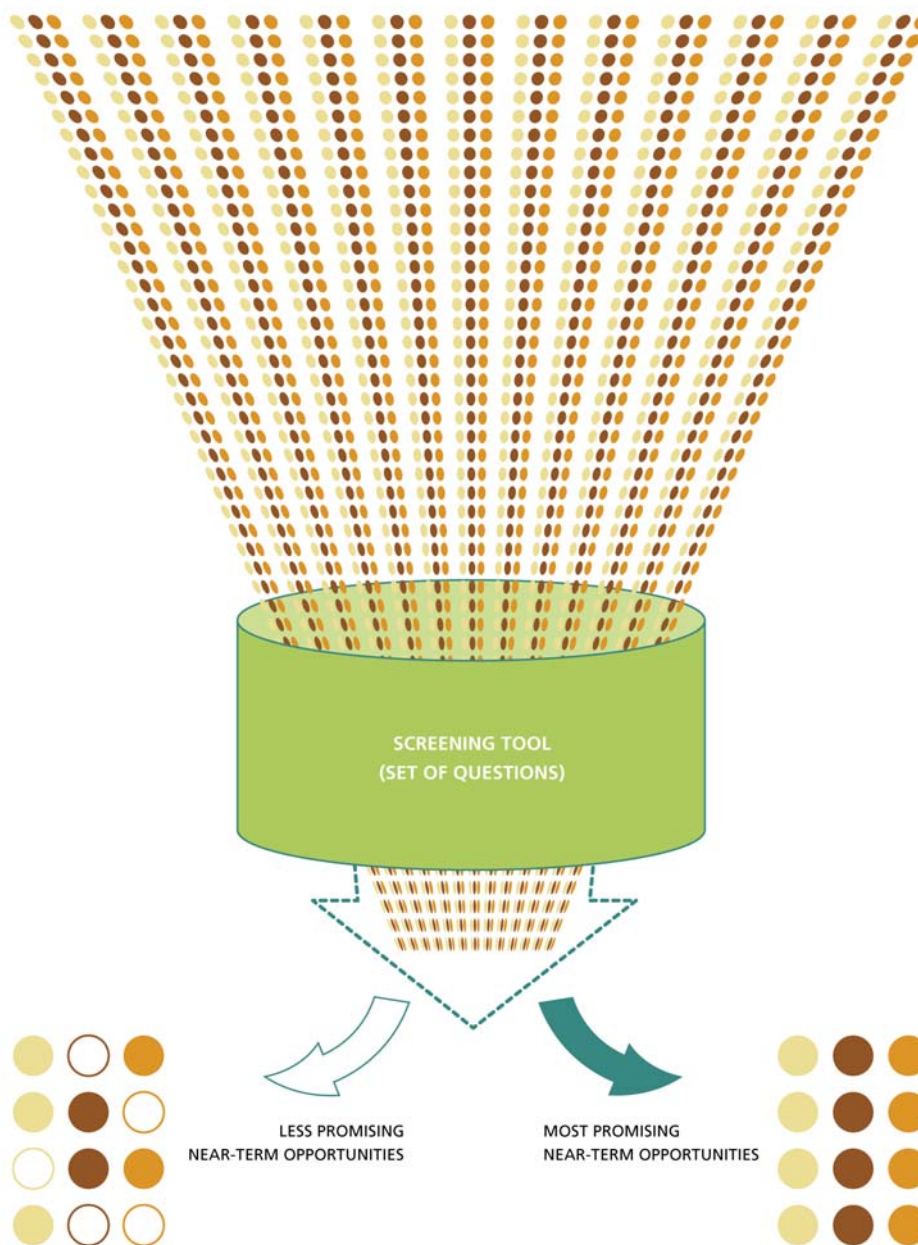


STEP 4 APPLY SCREENING TOOL TO RESOURCE-PRODUCT CHAINS (RPCs)



# Governor's Biobased Industry Consortium Process:

653 resource  
product chains



# Political Tide Turning



**“Your political base will melt away as surely as the polar ice caps... You will become a political penguin on a smaller and smaller ice floe, drifting out to sea. Goodbye, my little friend.”**

**- A. Schwarzenegger**

# Local Action at Forefront

- **Mayors of 691 cities have signed on to the US Mayors CPA**
  - Most are not sure where to start
- **Sustainable Chequamegon Initiative**
  - “Green Teams” are making a difference – specialization and innovation
  - Model for communities in the state – attracting interest of Office of Energy Independence



# Integrated Energy Communities

- **Measure your progress so far**
- **Help you further refine community/regional goals**
- **Provide structured analysis and ranking of options**
- **Jointly develop a plan to achieve goals**

## Practice Area Roles

### Building Performance

- Improve building energy efficiency
- Examine multi-bldg integration
- Evaluate design/equipment options

### Energy Research

- Define goals and monitor effects
- Guide choice of options
- Establish best practices

## Integrated Energy Communities

### Energy and Environment

- Explore innovative resource uses
- Maximize environmental benefits
- ID policies, practices, technologies

### Education and Outreach

- Communicate goals
- Describe options/impacts
- Publicize accomplishments

# Contact Information

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