

**MRPC Workshop**  
**Mount Wachusett Community College**  
**Garner Campus**  
**December 1, 2010**

**Round 1: What factors are/will be important to energy demand in the Montachusett Region during the next 50 years?**

- Maintenance of (existing) infrastructure, including buildings, energy sources, and energy delivery
- Service providers' ability to handle future demands
- Uncertainty of where the energy will come from to meet future demands
- Incentives
  - Power companies get them
  - Towns can't get incentives
  - Incentives for making properties efficient
  - Proper use of REGGIE funds (funds for making the states more energy efficient)
- Demand for electricity
  - Electric cars
  - Roads sized to fit electric cars, and service stations for them
  - Electric gadgets
  - Industrial energy needs
  - Green buildings
  - Retrofitting buildings to reduce energy needs
- Cost of energy; with oil price going up, demand for alternative energy sources goes up
  - business demand
    - commercial and industrial growth/ grid protection
    - idea for windmills on lights in parking lots
    - profitability vs. effect on society
  - attractiveness of region
    - water supply
  - water energy/hydropower
  - nuclear energy
    - people are afraid of history and concerned about disaster
  - wind energy
    - wind energy maps show feasibility of wind
  - solar energy
    - solar water ( 3 year payoff)
    - cost benefit
    - fixed energy bill/subsidies
    - photovoltaic cells

- Smart Grid applications
- Possible scenario: as Green energy use goes up, the demand on utilities go down
- Zoning for wind power generation
  - Zoning measures being receptive to demands
- Restrictions on land for conservation
- Land availability, land use techniques
- Price of gas
- Oil supply
- Advances in technology for renewable energy[*Supply of oil/gas → Price of oil/gas → Advances in renewable energy generation*]
  
- Public policy for renewable energy generation
  - Biomass
  - Waste Energy
  - Incentives-renewable
- Bylaws
  
- Future regulations and restrictions impeding the process to meet demand
- Light departments for individual towns vs larger scale supplier, pros and cons of each, legal aspects
- Cap and Trade
- Population growth/migration
  - technology increases demand
  - energy consciousness of the next generation
- Capital investment in public transit
- Use of public transportation
- Smart growth –compact developments
  - TOD
- Economic Development
- Energy Source Protection
  - We are unprepared for emergencies
  - ice storm concerns/underground wiring conduit
  - mandatory buried utilities (concerns about sand base)
  - Delivery of service – how and at what cost
- Education of public about energy in general and about renewable energy
  - convince public of effectiveness
  - awareness of impact
  - many find alternative energy an eyesore/ “not in my backyard”
  - seniors concerned about what is in it for them, may vote down
  - boating complaints for windmills
  - safety and effectiveness of alternate methods
  - Public access to information about energy
- Volunteers are making the most difference in making towns more efficient.

- We need to catch up to other states with what they are doing for energy

**Round 2: What factors will make the Montachusett Region an attractive place to which people will move? What factors will make the Montachusett Region an unattractive place people will avoid? Attractive**

**Aesthetics and nature**

- Rural Character; rural living
- Open space
- Having local farms
- Well-planned town centers
- Natural resources-rivers
- Scenic beauty
- Tourism (skiing and hiking)
- Recreational activities (skiing, fall foliage, Johnny Appleseed trail)
- Lots of natural attractions
- Bike and walking trails – marketing what is already there
- Increase the interconnectedness of trails across the region
- Safety of recreation areas

**Cost of living**

- Low cost of living (many people view this differently)
- Affordable Region – Entry level to start family
- Affordability of housing and food
- Communal housing

**Economic development**

- Commercial, industrial development/ presence of jobs
- Potential for research & development
- Jobs, specifically high tech and green jobs
- Trained workforce – attractive to businesses

**Energy supply**

- Underground utilities
- Better energy service
- Electric stations for car charging
- Water supply, energy generation, hydro power
- Dams, creation of ponds, creation of power, tourism aspect
- Having a balanced distribution of energy sources across the region.
- Regional approach to Resource Allocation (Green)

- Increase electric vehicle infrastructure to user friendly levels.

## **Medical services / medical care**

### **Public policy and government**

- Transparency in the Government. Incentives vs red tape (reduce expenses)
- Leaders w/open minds and no agendas
- Cleanliness / lack of upkeep regarding public buildings including schools.
- Desire for more public funding for towns.
- Regional approach to increasing the attractiveness of area (rather than towns competing against each other)
- Some towns more resistant to change than others – difficult to achieve common goals as a region.
- Overcoming individual town traditions – “That’s the way we’ve always done it.

### **Schools/Education**

- How people think about energy and making the world more energy efficient
- Good schools
- Education and energy awareness
- Education, both primary and secondary
- Education – the general public – Renewable energy sources.

### **Transportation**

- Commuter friendly; lack of heavy traffic
- Transportation system (rail, bus, car, air) & easy access to it
- Transportation to jobs/population centers
- Expanding rail/train commuter lines to Boston
- Rail system and intermodal transportation
- Create a more user friendly rail system.

## **Unattractive**

### **Energy issues**

- Don’t solve energy problems
- Grid Reliability (unreliable)
- High cost of energy
- Energy services
- Problems and costs of electric suppliers

### **Jobs**

- Lack of commercial/industrial space → less jobs mean more commuting
- Cost of labor/jobs shipped overseas

- Lack of temp services – unattractive for businesses
- Papermills closed
- Prevailing wages
- Dealing with regulations + unions lowers competitiveness

#### **Medical care**

- Lack of health facilities

#### **Public policy and government**

- Less-than-ideal regional cooperation (Government)Unattractive regulation
- Having to hire architect/engineer
- Mandates from state to municipalities
- Cost of government action
- Unfunded mandates
- Taxes
- Apathy

#### **Regional development**

- High cost of living / high expenses
- Difficult access to town centers
- Unattractive town centers
- May not be a destination place for some people
- Sprawling development

#### **Schools**

- Stagnant schools
- (Lack of) primary schools

#### **Transportation**

- Lack of public transportation - rural areas
- Some towns have limited highway access
- Lack of major transportation routes

### **Round 3: What's taking shape?What ideas struck you as important?What connections are you seeing?What patterns and themes are emerging?Attraction**

- Lots of upsides and downsides to Urban Sprawl
  - Homes to own, places to live, more resources
  - Less open space, less of an urban feel
- Cost of living tied in with cost of energy
- Expenses affect everything
  - Cost of living

- Costs from energy suppliers
- Internet access / access to Broadband
- Medical services
- Land availability
- Traffic
- Local farms
- Working Regionally
  - collective effort
- Jobs
- Recreation

### **Economic development**

- Economy- long-range economic development
- Dependence on energy
- Affluence – disposable income
- Affordability of region
- Jobs
  - industry pull in/ not reducing beauty
  - economic energy, costs are high
  - business profitability
  - bringing industry and people
  - increased revenue
  - acceptance of technology in alternative energy
  - High Tech and Green Tech jobs
- Heating costs for business
- Paper mills left due to energy costs making business unprofitable
  - low labor prices overseas
- Competitive in high tech/light industry applications
- Future transitional costs – uncertainty
- Temp agencies to attract businesses

### **Education**

- Education of student and public to be
  - Resourceful
  - Efficient

### **Energy issues**

- Costs of energy
- Regulation and restriction uncertainties – will they help or hinder the region's future energy goals
- Energy demand from population and industry

- Renewable energy: desire for, bringing online, educating the public
- Town officials – become more knowledgeable about green energy
- Renewable energy usage to take more priority into the future
- Patchwork of service providers – can they handle future demands?
- Incentives to move toward green energy sources
- Implement SmartGrowth Planning
- Increase infrastructure for renewable energy
- Buildings becoming more energy efficient- new construction and existing

### **Public policy and government**

- Need for regional planning
- Regional effort vs. town effort
  - collective energy
  - regional grants and incentives for business
    - transportation
    - housing prices
- Community – friendly regional by-laws
- Regional effort to provide
  - Electric car resources
  - Transportation Infrastructure
- Funding
- Transparency
- Zoning and planning, permitting speed
- Standardized regulations
- Small towns avoiding industry vs. big towns (voting power + politics forcing big towns on small)
- People want change, but don't want to pay
  - unwilling to concede
- Incentives flowing to community level

### **Transportation**

- Trains and public transportation
  - roadways are being overused
- Rail system more user friendly
- Public transportation
  - Rural areas not served

**Final Review: Given the ideas, patterns, themes, connections that have emerged today, what should the modeling team's priorities be going forward?**

- Commercial/industrial/housing zoning
- Rural settings
- Education for the public on energy efficiency solutions
- Cluster housing
- Regionalization/ town conversations
- Education –best practices re. renewable energy benefits & Costs.
- Plan for implementation & model results into the region
- Model should provide demand scenarios (aggregate vs. mixed)
- Zoning for residential & commercial use
- Model will reflect influences

*People wanted more time to think about priorities, so we agreed to create an online poll so they can choose the most important issues.*