

Introduction

“Urgency is growing across the nation as the impacts of global warming on our economy, health, agriculture, and environment become certain. Greenhouse gas emissions from our buildings, transportation, and energy generation are causing our climate to change, and to avoid catastrophic consequences, we must change too. Simultaneously, the advent of peak oil production and the ongoing instability of foreign oil markets threaten our national and economic security, requiring more than ever that the U.S. achieve energy independence.

The imperative is clear: we must find new ways to create clean and local energy, reduce our energy consumption, and remake our society to support a low carbon infrastructure. With buildings contributing close to 40 percent of greenhouse gas emissions and consuming 40 percent of energy in the U.S., energy efficiency and renewable energy technologies must become central to the way we design and build.”¹

The recommended energy policy is designed to meet the goal of improving the conservation of energy within the Town of Bourne, increase standards in energy efficiency and develop the capacity to generate independent clean energy for the town and its inhabitants.

The benefits of such policy will be:

- Create new sources of revenue from energy conservation that will reduce energy expenditures. Savings could be reinvested in energy efficiency measures.
- Provide a revenue stream for funding through government incentives
- Improve energy efficiency in existing buildings and vehicles
- Reduce carbon footprint and green house gases within the town by reducing emissions
- Provide employment for maintenance and managing of facilities, and green development
- Meet requirements of the Massachusetts Green Communities Act of 2008
- Attract public and private projects in renewable/alternative energy sources
- By decreasing energy consumption, and siting alternative/renewable energy we will provide a cleaner environment, improve the health and sustainability of our community and become more energy independent.

¹ Excerpt from “Getting to Zero”, 2009 Final Report of the Governor Duval Patrick’s Zero Net Energy Task Force

Energy Policy

The Town of Bourne is hereby now committed to energy conservation and the efficient use of energy, decreasing the cost of energy to the town, and establishing on-going goals for renewable and alternative energy sourcing. By maximizing the available programs of the Cape Light Compact, the Cape and Islands Electric Cooperative, the Mass. Technology Collaborative, the Mass. Division of Energy Resources and other federal and state incentive programs, and siting renewable/alternative energy generation, we will strive to decrease the municipal use of energy by 20% by Fiscal Year 2014 and 35% overall by the Fiscal Year 2020. Such reductions shall be based on a Fiscal Year 2004 baseline and measured on a BTU per square foot basis.

Reduce greenhouse gas emissions that result from municipal operations by 25% by Fiscal Year 2014 and 40% by Fiscal Year 2020. In calculating emissions, Fiscal Year 2004 shall be used as the baseline, and emissions reductions shall be measured on an absolute basis, not adjusting for facility expansion, load growth and weather.

Procure 15% of municipal electricity consumption from renewable sources by Fiscal Year 2014 and 30% by 2020. This may be achieved through procurement of renewable energy supply, purchase of renewable energy certificates (RECs) and/or through the production of on-site renewable power. Only renewable sources that qualify for the Massachusetts Renewable Portfolio Standard (RPS) shall be eligible.

We are also committed to establishing Community Education Programs to increase the public's awareness of stated goals. Teaching the benefits of conservation and the use of renewable/alternative energy for the residential and business sectors within the town's borders is crucial to enacting this policy and insuring continued efficient use of energy for future generations.

The Massachusetts Green Communities Act of 2008 has established certain requirements, (as stated below) which we shall also aim to meet, becoming a recognized Green Community, eligible for benefits and grants provided to Green Communities.

Green Communities Act **Requirements Summary**

1. As-of-right siting for renewable or alternative energy generating, manufacturing or R&D facilities in designated locations
2. Expedited permitting processes for approving such facilities within one year of filing an application
3. Conduct a baseline energy inventory of municipal buildings, vehicles, street and traffic lighting, and establish a plan to reduce energy use by 20% within 5 years
4. Adopt a policy to purchase only fuel efficient vehicles for municipal use whenever commercially available and practicable
5. Adopt a policy to minimize lifecycle energy and water costs for all new commercial, industrial and large residential new construction

Conclusion

With the recent attention to climate change and greenhouse gases, inception of renewable and alternative energy technologies, developing rules/regulations, financial grants and incentives, constant attention is needed to maximize the available benefits to the town.

This committee further recommends that a full time Municipal Facilities Manager be hired to ensure the safe, efficient, operation and maintenance of town assets, in particular energy consuming equipment and buildings. In addition to energy management and maintenance management responsibilities, the facilities manager could be given construction management responsibilities. The savings realized by reduced energy consumption, less equipment breakdowns, maintenance and construction planning should more than payback the cost of a facility manager.

Concerning the construction of wind turbines in Bourne, (2) properly sited net metered turbines could provide 100% of the municipal electric needs of the town.