

Chapter 7: Energy



Overview

Energy is a pervasive influence in our lives. We use energy to heat homes and offices, power industry, and to transport people, goods and services from place to place. Energy costs are a major line item in government, business, and personal budgets.

In Vermont, fossil fuels are the primary source of our energy, accounting for 75 percent of all energy use. Our reliance on fossil fuels contributes to our dependency on foreign countries, the accumulation of "greenhouse gases" in the atmosphere, acid precipitation, and human health hazards resulting from declining air quality. Continued dependency on fossil fuels over the long term will ultimately create severe environmental problems and the potential for economic hardship when supplies dwindle or are cut off.

Common sense dictates that we attempt to decrease our overall energy demands, use our current supplies more efficiently, and begin to shift some of what demand remains to renewable sources such as small scale hydropower, wind, solar, and biomass. While these alternatives are not completely benign in their impacts, they are generally less harmful than fossil fuels and are available in perpetuity at more stable costs.

Land use policies are important in facilitating energy conservation and the development of renewable energy resources. Land use planning can save energy that would otherwise be lost through inefficient site designs and settlement patterns. Standards to consider include encouraging building development on southern slopes, in areas sheltered from the wind, use of vegetation as wind blocks and shade, and flexible lot layouts encouraging planned unit developments with the above considerations according to topography, soils and aesthetic considerations. Directing new growth toward areas with existing infrastructure and services can also reduce energy demands.

Although the energy picture often appears abstract and beyond the influence of individual communities, local planning can play a positive and effective role in guiding energy decisions. By promoting efficient land use patterns, participating in energy development decisions, facilitating alternative transportation options, and encouraging energy conservation strategies, even small towns can do much to bring about a sustainable energy future.

The three main sources of energy consumption in Middlesex are household heating, private vehicles, and electricity.

Home heating costs and energy use can be dramatically reduced through auxiliary solar systems, passive solar design, and building orientation. In addition, proper insulation/weatherization of both new and existing structures yields returns far greater than the investment required over the life of most buildings.

Goals, Objectives, & Implementation Strategies

Energy Goal:

- 1. To attempt to decrease our overall energy demands, use our current supplies more efficiently, and begin to shift some of what demand remains to renewable sources such as small scale hydropower, wind, solar, and biomass.**