

## Greenhouse Gases in perspective, Milton's Energy Reduction Plan, 1 year later Henry MacLean, Alternate Energy Committee, Chair

With the recent updated data on the biggest jump ever seen in global warming gases just published in early November, and the UN Climate Conference now taking place in Durban South Africa focusing on reducing emissions worldwide, this looks like a good time to check on Milton's success in that department. It was also just about a year ago that Milton's Municipal energy use was submitted to the DOER as part of our Energy Baseline and Energy Reduction Action Plan which secured our Green Community status and awarded the Town \$157,000 in funding.

A year later Milton is capitalizing on growth in renewable energy and implementing energy efficiency funding through the efforts of the School Department's Assistant Superintendent for Business Affairs Matthew Gillis, Consolidated Facilities Director Bill Richie, and Milton's Planning Director Bill Clark. The new schools buildings have cut energy use by 25 %, and town wide by 21% since the 2008 baseline. They are busy making the best use of the funding by reducing energy usage in lighting, adding motion sensors for lighting management, as well as variable speed drives to existing sewer pumps, adding setback controls to mechanical equipment, and updating insulation in a variety of locations as outlined for the Dept. Of Energy Resources last winter.

Additional energy savings and a final itemized costing of those projects is now being compiled and will be made public and submitted to the DOER in the coming weeks. Working with the incentives from the Green Communities funding as well as incentive programs pursued by the School Dept., the Town is looking to increase overall savings to a baseline of 58,134 million BTU's by 2013, a 27.5 % reduction from the baseline of 82,511 million BTU's in 2008.

When added to the existing solar systems already operating in town (producing 112,000 kWh/ yr.), 3,381 million BTU's in carbon emitting energy will be displaced when the School Dept. completes the new installations of Solar PV now underway on the Tucker, Pierce, Glover and High Schools (878,585 kWh/yr). And with the expected yield from the proposed wind turbine for Milton (now tied up in Superior Court), another 20,825 million BTU's offset would increase our estimated renewable quotient to roughly 36% of the 2013 baseline. Added to the 27.5% reduction in energy savings, this would total to a 63.5% reduction in greenhouse gas emissions for the town in 5 years.

With all this good news, it is important to remember that these numbers only represent about 3-5% of the total energy footprint of Milton. The Alternate Energy Committee is focused on completing a Greenhouse Gas Inventory for the Town to determine that exact number, using software from our ICLEI (Local Cities and Towns for Sustainability) membership, to look at our travel, solid waste, wastewater, and buildings from the Town. We plan to use these findings as a 1st step to reduce our total energy use, looking towards the long term goal of 80% by 2050, now seen as the target to keep these global warming gasses, and their unruly climate consequences, under control.

So here in Milton, we can take pride in our progress while one of our our young Milton colleagues, Adam Greenberg works as a delegate at the UN conference in Durban. This week and next, Adam will represent the USA, where just 5% of the world 's population consume 25% of the world's energy, and produce 22% of those emissions we can all join in to help reduce.