TO: Longmeadow Select Board
FROM: Renewable Energy Task Force (RETF)
RE: EXECUTIVE SUMMARY STATUS REPORT
DATE: July 21, 2008

Convening History and Purpose:

Charge: In May of 2007, Robin Crosbie, Town Manager, convened a task force to study and recommend options for renewable energy use for the town that would help the town reduce its reliance of non-renewable energy sources such as oil and gas and improve economic efficiencies for the town. In November of 2007, the additional responsibility of developing and implementing a local action plan to reduce Longmeadow's impact on climate change was added.

REVIEW OF CURRENT WORK:

RETF focused its initial work on energy conservation and the study of existing renewable energy sources, with energy conversation opportunities given top priority. RETF determined that the most practical renewable energy source for Longmeadow is the solar panel/photovoltaic source. Because there is extremely limited wind source in the Pioneer Valley, the use of wind power is not appropriate. During this past year, RETF has begun work on four distinct projects that will have the immediate result of conserving energy and demonstrating the use of solar power for energy needs. Listed on the next page is an overview of these four projects; including anticipated costs and savings and, where appropriate, rebate information.

RETF RATIONAL FOR PROJECT RECOMMENDATIONS:

The field of energy conservation and renewable energy is one that is in current flux. By that it is meant that as of today there are new technologies available to help with conservation and implementation of non-fossil fuel energy sources. The field is one where both policy and research are creating changes in real time. The challenge for any municipality is to find the current best practices and make reasoned decisions for its residents and businesses, all the while recognizing that these cannot be static decisions; they must be re-evaluated at different points in time to make sure that changes capture best practices as the field evolves.

RECOMMENDATIONS FOR TOWN MANAGER AND SELECT BOARD:

1) The four projects listed on the last~~next~~ page are recommended by the RETF for the town's benefit. Taken as a whole, they begin to help the town realize significant reductions in energy use and save dollars and improve efficiencies.

2) The RETF has been working for approximately one year now: In a relatively short period of time it is clear that it has begun finding ways for Longmeadow to save significant dollars through energy conservation. At this point, to continue its work, to help build more public awareness and gain community support, and to be ready to benefit from the new Green Communities Act (S.2768) in which municipalities will be able to receive financial assistance for energy conservation for its work, the RETF is requesting that the Select Board formally support acknowledge the importance of this work by and creating and adopt an Energy Conservation Committee (Andrea… or Energy Commission, or Energy Alliance… see Newton MA website) that will be opened to the public for greater participation and allow the current RETF members to continue their work on behalf of Longmeadow.

RENEWABLE ENERGY TASK FORCE RECOMMENDED PROJECTS

PROJECT NAME	TRAFFIC LIGHT LED CONVERSION	INSULATION OF HIGH SCHOOL NATATORIUM	TOWN STREET LIGHTS: PURCHASE	SOLAR POWER DEMONSTRATION PROJECT
Project description	Install LED bulbs in all traffic lights in town	Insulation of exposed walls of high school swimming pool.	The town currently rents the street lights from WMECO. George Woodbury has been hired as a consultant to create a complete inventory and map all existing street lights, with the goal of determining their condition and appraisal for purchase so that Longmeadow reduces its monthly utility costs and assumes responsibility for maintenance.	Installation of 10 kilowatt solar/photovoltaic (PC) array on Glenbrook Middle School Roof: This project shall serve 2 purposes: (A): Develop experience with solar renewable energy; and (B): Demonstrate to both students and residents the manner in which this type of energy source works to help further knowledge of science and technology. Project includes a web-based monitoring system for continual data accessibility. (C): provide electric power to supplement the needs of the middle school.
Pre- Conversion Energy Costs	$18,000 per year	Approximately $39,000 per year	Approximately $213,000 per year	
Energy Costs after improvement	$3600 per year (approximately 80% annual savings)	Approximately $23,000 (estimated 41% annual savings)	Mr. Woodbury has done this work in other towns and has helped them realize significant savings: potential estimated savings of $100,000 per year	Currently GMS uses about 300,000 KWH per year. This system would provide approximately 4% of total load: about 11,475 KWH per year.
Project Conversion Costs (including rebate information)	$45,000 -18,000 (WMECO rebate) $27,000 (out of pocket for town)	Anticipated project cost $24,000-35,000	Purchase of lights: $100,000-$175,000	$82,712.22 -39,520.00 (MTC rebate) $43,192.22
Rate of Return on Investment	2 years	1.5 to 2.2 years	Not known: however anticipated 2 years	13.7 years
Project Status	Completed in March, 2008	This project is still being developed.	Initial inventory and mapping is completed.	The development of this project is complete and awaiting Town approval.