



**A Report on the City of Dover's efforts to
Implement the recommendations of the
U.S. Conference of Mayors Climate Protections Agreement**



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Introduction

On April 9, 2007 the City of Dover City Council adopted a resolution endorsing the U.S Mayors Climate Protection Agreement.

Mayors from around the nation have signed the U.S. Mayors Climate Protection Agreement which, as amended at the 73rd Annual U.S. Conference of Mayors meeting, reads: We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities such as:

1. Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable, urban communities;
2. Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling and public transit;
3. Increase the use of clean, alternative energy by, for example, investing in “green tags”, advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology;
4. Make energy efficiency a priority through building code improvements, retrofitting City facilities with energy efficient lighting and urging employees to conserve energy and save money;
5. Purchase only Energy Star equipment and appliances for City use;
6. Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system;
7. Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to bio-diesel;
8. Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production;
9. Increase recycling rates in City operations and in the community;
10. Maintain healthy urban forests; promote tree planting to increase shading and to absorb CO₂; and
11. Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.

Since that time we have strived to implement a number of polices, programs, and projects to further the intent of the City Council. The following is a report on our activity.

Central Services Department

The Central Services Department consists of three divisions; Fleet Auto Shop, Facilities Management, and Central Services Warehouse. Each of these divisions has Green Energy concepts either already in force or proposed to be implemented as outlined within the budget.

- The Auto Shop is recycling used oil, absorbent pads, and the shop rags are being sent out for cleaning to be reused.
- The Auto shop is also moving in the direction of using non-carbon synthetic oils and lubrications in City vehicles.
- The Facilities Management division has been installing energy efficient light fixtures and bulbs in City buildings to help reduce the cost electric bills.
- Work crews have also installed timers on heating and air conditioning units and outside lights have either timers or electric eyes for energy conservation. Thermostats in City buildings have been set at a standard temperature for optimum cost efficiency.
- Areas being remodeled (Finance, Public Services, and Inspections) have Low E factors light fixtures installed.
- Warehouse and Purchasing continue to order Bio-diesel fuel in an effort to help maintain a cleaner environment.
- The warehouse purchases and stocks recycled paper products and supplies for use.
- A Green Procurement Policy has been developed.
- City Manager amended the vehicle purchasing approval form to require Department Heads to certify that they have considered the most energy efficient possible for purchase.

Public Utilities

- Installation of a roof mounted 5kW photovoltaic system will significantly reduce the amount of power the Public Utilities Building consumes from the City's electrical grid. At this time it is difficult to estimate the exact power production but it is anticipated that as an annual average it should produce over 8,000 kWh. The proposed system is designed using the latest solar panel and inverting technology, giving it the capability of "Islanding" itself to ensure independent operation, grid reliability and most importantly, safety. By installing this in a public building it can serve as model for the Utility customers as well providing a demonstration of the system operation and aesthetics. This project will be funded from the City of Dover Green Energy Grant Program and should be completed by June 30, 2008. The cost of the system is \$40,820.
- The Utility offers the online "Energy Depot," a set of online tools and resources, to help customers better understand and manage their home energy use and costs. This one-stop resource can provide: a personalized energy profile with cost estimates for each energy system and appliance; provide specific ideas to reduce energy use; provides a complete do-it-yourself home energy audit and report; compares existing heating and cooling systems to a range of new systems and helps determine the pay-back for upgrading these systems; and provides access to an energy library where energy questions can be researched. This online resource was found by Ron Lunt our Public Utilities Director. Through Dover's leadership and through DEMEC, this web-based product has been active since March 4, 2008 and received almost 100 hits in the first month. It is also deployed at all 9 Delaware Public Power Utilities and is funded through the State's Green Energy Fund which each Utility financially supports.
- Replaced two vehicles with Hybrid Vehicles, and replaced four vehicles with smaller more energy efficient vehicles.
- Through our association with DEMEC (Delaware Municipal Energy Corporation) the City will have an opportunity to buy power from the proposed "Bluewater Wind" project.
- The Public Utilities Department, through the work of the 2030 Energy Committee, has issued a Request for Proposal for future energy capacity that encouraged proposals from alternative energy sources. Two alternative energy proposals were received and are being evaluated.

Public Services

- Pilot GPS (Global Positioning System) in Sanitation Vehicles. This year we tested two GPS systems and further selected one for trial use in Sanitation Vehicles. A GPS system will allow remote monitoring of speeds, idling, and routing of vehicles. The ability to remote monitor causes drivers to be more aware of their driving behavior. The results are lower speeds, more efficient routing, and less idling all of which saves gas and reduces carbon emissions.
- Expansion of the City's Urban forest through a number of tree grants as well as the Saint Jones River Riparian Buffer Project that is now underway.
- Introduction of Recycling Bins in all City of Dover buildings.
- Planning a Pilot expansion of the City's curbside recycling program in two subdivisions where all homes will receive recycling bins.
- Solar lighting technology is being considered for the new downtown parking lot.
- A draft ordinance has been developed to give waive permit fees for LEED (Leadership in Environmental and Energy Design) certified buildings where the added costs of LEED certification would not be included in the calculations for a building permit.