

Sustainable Closter Initiative

The environmental challenges in the United States are becoming increasingly complex. According to an October 2007 EPA Sustainability Report, in the last 30 years this country's energy consumption has increased by 42% and demand for petroleum, natural gas and coal each is projected to increase by 25-40% over the next 20 years (EPA 600/S 07/001, October 2007, www.epa.gov/sustainability). Our water resources are also under strain, as 408 billion gallons of water are withdrawn each day. The pace of land development between 1992 and 1997 was more than 1.5 times the rate of the previous 10 years. If we do not change consumption habits, the EPA believes a 24% projected increase in population will result in a comparable increase in total waste generation over the next 20 years. While it has been difficult to implement change on a national level, communities are increasingly attempting to make a difference by introducing sustainability initiatives on a local level.

According to the World Commission on the Environment (1987) the definition of sustainability is: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The New Jersey Department of Environmental Protection further defines a sustainable community as one that acknowledges that economic, environmental and social issues are interrelated and that these issues should be addressed "holistically." This view acknowledges that environmental considerations alone are not enough to achieve a sustainable state but it is also necessary to consider the effects on the economy and society as a whole.

Communities can benefit from sustainable development in several ways. Health benefits are attained through reducing air and water pollution as well as increasing physical conditioning by supporting use of pedestrian and bicycle transportation. Cost savings can be achieved by reducing energy consumption and through recycling programs. And in the end, the quality of life can be enhanced through these health and financial benefits, as well as aesthetic improvements and increased community interaction. Closter Borough, New Jersey is embarking on a new initiative to embrace the resources of its community and to adopt new policies and ordinances to address environmental sustainability concerns to protect and preserve its finite environmental resources.

Closter Borough and the Surrounding Environment

Bergen County is the most populous county in the state of New Jersey. As of the 2000 Census, the population was 884,118, growing to 904,037 as of the Census Bureau's 2006 estimate. It is part of the New York Metropolitan Area and ranks as the 21st among the highest-income counties in the United States, with a per capita income of \$33,638. According to the U.S. Census Bureau, the county has a total area of 247 square miles. The sharp cliffs of the New Jersey Palisades lift much the county up from its eastern boundary with the Hudson River, but then relief remains relatively minimal across the county as much of it is in the Hackensack River valley. Only in the northwestern portion of the county are any serious hills found, leading to the Ramapo Mountains. The damming of the Hackensack River and a tributary, the Pascack Brook, produced three reservoirs in the county, Woodcliff Lake Reservoir, Lake Tappan and Oradell Reservoir, which provide drinking water to much of northern New Jersey. The Hackensack River drains the eastern portion of the county through the New Jersey Meadowlands, a wetlands area in the southern portion of the county. The central portion is drained by the Saddle River and the western portion is drained by the Ramapo River. Both of these are tributaries of the Passaic River, which forms a section of the southwestern border of the county. Bergen County is bordered by Rockland County, New York to the north, by Westchester County, The Bronx, and Manhattan in New York, across the Hudson River to the east, Hudson County to the south, a small border with Essex County also to the south and Passaic County to the west.

The Borough of Closter in Bergen County, New Jersey is a growing community of over 8,000 citizens. At 3.17 square miles its population density is 2,644.32 persons per square foot. This compares with a population density of 1134.42 for all of NJ and 79.56 for the entire United States. Although

situated in this densely populated region, the Borough contains nearly 230 acres of open space and woodlands. According to NJDEP 2002 land use data, Closter Borough is 68% urban, 13% wetlands, 12% forest, 6% water and 1% agriculture. Closter maintains a leadership role as the "Hub of the Northern Valley," with shopping centers, recreational facilities, religious services, and medical, educational and legal resources. Closter is also rich in ethnic and cultural diversity. The community has had an active Recreation Commission since shortly after World War II, which sponsors a major portion of Closter's recreational activities. In addition, the municipality has had a dedicated Environmental Commission, which was established in 1976, as well as a Shade Tree Commission. Together, these Commissions are actively working with the Borough Planning Board, the Mayor and Council to preserve, protect, and enhance the open space and recreational resources within the community.

Closter Borough believes that environmental stewardship complements its efforts to foster economic and social health. Closter is committed to maintaining and improving the quality of life and standard of living of its residents without impairing the natural system on which the community depends. An energy audit needs to be conducted for Closter Borough buildings and operations, as well as a greenhouse gas emissions inventory. This information will provide baseline data to set performance goals and measure the success of any actions.

Based on community input as well as examples from other municipalities, specific goals are being set for the following areas of sustainable opportunity:

- Energy Efficiency
- Transportation
- Building Construction
- Brownfields Inventory and Redevelopment
- Purchasing
- Solid Waste and Recycling
- Natural Resources

Sustainability Action Plan

Five priority actions (To Be Determined) have been identified through a public consensus building effort to guide borough leaders, businesses and citizens in implementing long-term sustainability practices. These priorities support local, regional, state and national initiatives to reduce energy consumption, promote green development practices, and protect natural resources. In addition, all action items discussed and agreed upon during the public process have been detailed to support future efforts of the community to maintain its quality of life.

Summary Table of Priority Actions (To Be Determined)

#	Action	Area of Opportunity	Participant Leaders
1			
2			
3			
4			
5			

Summary Table of All Actions

Energy Efficiency

#	Action	Participant Leaders
1	Installation of LED Traffic lights and high efficiency lighting on street lamps.	Government
2	Installation of solar roof panels for municipal buildings and schools.	Government
3	Updating municipal buildings for energy and water efficiency.	Government
4	Enrollment in NJ Clean Energy Program's CleanPower Community Partners program to receive incentives and rebates for energy improvements and to increase public awareness in energy efficiency.	Business/Industry Government Residents

Transportation

#	Action	Participant Leaders
5	Identify areas to connect to the walkable downtown area such as shopping centers, schools and recreational areas.	Government
6	Determine needs for new sidewalks, upgraded pedestrian walkways, use of better signage at intersections, and addition of bike lanes.	Government
7	Identify areas where the use of traffic calming techniques such as build-outs, raised crosswalks, re-routing, traffic circles and islands can improve safety and encourage pedestrian traffic.	Government
8	Provide public transportation options in-town, such as bussing between the downtown area, shopping centers, recreational area and residential developments.	Government
9	Develop plan to only purchase alternative fuel vehicles when replacing older ones.	Government
10	Consider the feasibility of installing a centralized alternative fueling station for use by municipal and private car and bus fleets.	Government

Building Construction

#	Action	Participant Leaders
11	Apply to the New Jersey SmartStart Buildings Program that provides rebates to expansion and renovation projects for government facilities and schools.	Government
12	Adopt new ordinances that would either permit or mandate (as appropriate) LEED building standards in municipal, commercial and residential building projects.	Government
13	Require new major construction projects to replace blacktop with state-of-the-art pervious surfaces and increase tree and shrub plantings to reduce the urban heat island effect throughout the Borough.	Government
14	Support innovative technologies and green roofs to serve as "models" for commercial development.	Business/Industry Government

Brownfields Inventory and Redevelopment

#	Action	Participant Leaders
15	Support brownfields redevelopment identifying the known contaminated sites to determine if any are abandoned or unused sites that can be returned to productive use.	Government
16	Explore programs that are available from the State of New Jersey to assist with funding and planning for brownfields redevelopment.	Government

Purchasing

#	Action	Participant Leaders
17	Purchase recycled products whenever possible, paying up to 5% premium, if necessary.	Business/Industry Government Residents
18	Adopt green purchasing policies, such as the purchase of Energy Star® qualified products.	Business/Industry Government Residents
19	Encourage local vendors to provide “green” alternatives for shopping bags and food and beverage containers.	Business/Industry Government Residents

Solid Waste and Recycling

#	Action	Participant Leaders
20	Educate the community on reducing the use of plastics and Styrofoam by providing alternatives such as reusable shopping bags and beverage containers.	Government Residents
21	Support school programs that promote the three Rs: reduce, reuse, and recycle.	Government Residents
22	Provide education on waste composting. Explore the feasibility of composting at the local transfer station.	Government Residents

Water and Natural Resources

#	Action	Participant Leaders
23	Take advantage of resources such as Clean Water NJ to educate residents on stormwater management.	Government Residents
24	Offer water conservation aids, such as discounted water conservation kits.	Business/Industry Government Residents
25	Encourage use of rain gardens and rain barrels by offering educational materials or workshops.	Business/Industry Government Residents
26	Reduce use of toxic pesticides and fertilizer through integrated pest management and alternative plant management techniques.	Business/Industry Government Residents
27	Support local purchasing of foods. Continue to promote and extend the use of MacBain Farm for residents.	Business/Industry Government Residents
28	Sponsor and support community forestry and tree planting projects.	Business/Industry Government Residents

Closter Sustainable Community Opportunities

Energy Efficiency

Closter Borough receives its energy from PSE&G for gas and from Rockland Electric, a division of ConEdison, for electricity. Both companies provide rebates for updating heating and cooling systems to newer, more energy-efficient models and each support the NJ Board of Public Utility’s (BPU) Clean Energy Program, which promotes increased energy efficiency and offers financial incentives, programs,

and services for residential, commercial, and municipal customers to save energy, money, and the environment.

The Borough of Closter can benefit from the Clean Energy Program in many ways. Through the Municipal Audit Program, the NJBPU will subsidize the cost of energy audits of government facilities in order to identify where efficiency improvements can be made. Closter can reduce the cost of installation of renewable energy systems such as solar electric, wind and sustainable biomass through financial incentives from The Customer On-Site Renewable Energy (CORE) Incentive Program and by selling New Jersey Renewable Energy Certificates to NJ electric suppliers. For instance, Montclair Township received an \$8,800 rebate from the NJ BPU's Clean Energy Program by installing LED traffic lights. By becoming a CleanPower Community through the NJ Clean Energy Program, Closter can commit to the 20% by 2020 clean energy goal for NJ, which aims to reduce energy use 20% by 2020, increase the use of renewable energy to 20% and reduce greenhouse gases.

Closter can also take advantage of the Program's Community Outreach initiatives that promotes clean energy programs for the entire community. Residents can participate in the NJ CleanPower Choice Program that allows consumers the choice of renewable energy sources. Incentives are available for residents and businesses as well.

Recommendations for energy efficiency improvements:

- Installation of LED traffic lights and high efficiency lighting on street lamps.
- Installation of photovoltaic (solar electric) roof panels for municipal buildings and schools.
- Updating municipal buildings for energy and water efficiency.
- Enrollment in NJ Clean Energy Program's CleanPower Community Partners program to receive incentives and rebates for energy improvements and to increase public awareness in energy efficiency.

Transportation

Closter Borough is situated in densely-populated Bergen County. Its proximity to New York City and other urban centers in New Jersey make Closter susceptible to high traffic volumes from local residents as well as commuter and commercial through-traffic from other towns. Closter has limited access to mass transit and no public train service, and like most other townships in New Jersey and across the United States, Closter has become dependent on the automobile as its primary mode of transportation.

Many townships have been addressing this issue by creating more pedestrian- and bicycle-friendly communities. Sidewalk improvements and the installation of dedicated bicycle lanes and traffic calming techniques are some ways that can encourage residents to reduce automobile use. Closter already has a walkable downtown, and by connecting it to other areas of the community the township can take advantage of alternate modes of transportation.

Recommendations for transportation improvements:

- Identify areas to connect to the walkable downtown area such as shopping centers, schools and recreational areas.
 - Determine needs for new sidewalks, upgrading pedestrian walkways, use of better signage at intersections and addition of bike lanes. The NJ DOT has created a Bike/Pedestrian Action Plan which serves to assist communities in creating a strategy for improving bike and pedestrian activity.
- Identify areas where the use of traffic calming techniques such as build-outs, raised crosswalks, re-routing, traffic circles and islands can improve safety and encourage pedestrian traffic.
- Provide public transportation options in-town, such as bussing between the downtown area, shopping centers, recreational areas and residential developments.

Closter Borough currently uses 75 municipal vehicles. Closter can take measures to reduce public fleet energy use and air emissions via fleet management and alternative technologies. Options to be considered include compressed natural gas cars and changing Municipal trucks over to biodiesel fuel.

Recommendations for Municipal fleet energy reductions:

- Develop plan to only purchase alternative fuel vehicles when replacing older ones.
- Consider the feasibility of installing a centralized alternative fueling station for use by municipal and private car and bus fleets.

Building Construction

Closter is a highly residential community with some light industry and commercial business and a strong track record of acquiring open space for preservation. Little land exists for development, and as a result, rebuilds are common in the township. Closter Borough can support sustainability by adopting green policies for municipal buildings and schools and encouraging green building initiatives through ordinances and incentive programs.

Recommendations for green building construction:

- Apply to the New Jersey SmartStart Buildings Program that provides rebates to expansion and renovation projects for government facilities and schools.
- Adopt new ordinances that would either permit or mandate (as appropriate) LEED building standards in municipal, commercial and residential building projects.
- Require new major construction projects to replace blacktop with state-of-the-art pervious surfaces and increase tree and shrub plantings to reduce the urban heat island effect throughout the Borough. The NJ Clean Energy Program provides rebates for planting trees on public streets as part of its Cool Cities Program.
- Support innovative technologies such as rain gardens and green roofs to serve as “models” for commercial development.

Brownfields Inventory and Redevelopment

“Brownfields” are typically unused or underused properties that have a real or perceived soils and/or groundwater pollution. Examples of brownfields include former or current gasoline stations, drycleaners, or industrial buildings. There are 27 properties in Closter Borough that are on the New Jersey Department of Environmental Protection (NJDEP) “Known Contaminated Sites” listing. Many of these sites are being used while others may be ready for redevelopment.

Recommendations for brownfields redevelopment:

- The Borough should support brownfields redevelopment identifying the known contaminated sites to determine if any are abandoned or unused sites that can be returned to productive use.
- Various programs are available from the State of New Jersey to assist with funding and planning for brownfield redevelopment. More information is available in the Brownfields Redevelopment Resource Kit at:
<http://www.nj.gov/dca/osg/docs/brownfieldsresourcekit.pdf>.

Purchasing

Closter Borough can support green business practices by providing programs and incentives for sustainable business and business practices. Residents expressed concern for the use of plastics for disposable bottles and shopping bags as well as Styrofoam cup use. The Borough can encourage local vendors to provide alternate products for sale, such as reusable shopping bags and coffee cups. The Borough can also encourage local vendors to supply and promote energy saving products such as compact fluorescent light bulbs.

Recommendations for sustainable purchasing:

- Purchase recycled products whenever possible, paying up to 5% premium, if necessary.
- Adopt green purchasing policies, such as the purchase of Energy Star® qualified products for all municipal acquisitions.
- Encourage local vendors to provide “green” alternatives for shopping bags and food and beverage containers.
- Coordinate with Closter Chamber of Commerce to facilitate efforts.

Solid Waste and Recycling

In the calendar year 2007 the Closter produced approximately 4000 tons of waste. Closter has a very successful mandatory curbside recycling program and a computer recycling program. Residents can also drop off select recyclable materials at the transfer station located in Closter, provided they obtain a permit from the Recycling Center. The Borough can continue to support the programs through education efforts in the schools and community.

Recommendations for solid waste and recycling efforts:

- Educate the community on reducing the use of plastics and Styrofoam by providing alternatives such as reusable shopping bags and beverage containers.
- Support school programs that promote the three Rs: reduce, reuse, and recycle.
- Provide education on waste composting. Explore the feasibility of composting at the local waste transfer station.

Water and Natural Resources

Closter Borough lies between the Hudson and Hackensack River valleys. The Borough receives its water supply from the Oradell Reservoir, the terminal reservoir of a larger water supply system associated with the Hackensack River. The watershed drainage basin for the Oradell Reservoir encompasses 113 square miles, and serves 60 communities in most of Bergen County and parts of Hudson County, NJ. Closter’s location at the base of the palisades is the place for water to go on its way to the Reservoir and as area development has increased, there has been a reduction of open space to absorb water after storms. Street flooding and land erosion is common in Closter, and the Borough uses open space acquisition and town regulations, such as impervious cover restrictions and stormwater management, to mitigate flooding and stormwater runoff. Closter Borough can conserve its water and natural resources by requiring and promoting water conservation and use efficiency as well as reinforcing stormwater management best practices.

Recommendations for water and natural resource conservation:

- Take advantage of resources such as Clean Water NJ to educate residents on stormwater management.
- Offer water conservation aids. United Water of NJ in conjunction with Niagara Conservation provides water conservation kits at discounted costs, ranging from \$5-\$15.
- Encourage use of rain gardens and rain barrels by offering educational materials or workshops.
- Reduce use of toxic pesticides and fertilizer on municipal and school properties through integrated pest management and alternative plant management techniques.
- Support local purchasing of foods (fresh produce for residents: shortens distance from farm to table, which reduces energy use). Continue to promote and extend use of the MacBain Farm for residents.
- Sponsor and support community forestry and tree planting projects.