Reducing our energy use and supporting an increase in the amount that is generated from renewable resources will have a positive impact on both our planet and our wallets.

FOR MORE INFORMATION



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Additional Helpful References:

Find out more about New Jersey's energy initiatives and goals by visiting the official NJ "green" web site: www.state.nj.us/nj/green

Visit the New Jersey Clean Energy Program and the US Energy Star Program for tips, grants and rebates: www.njcleanenergy.com www.energystar.gov

The USEPA has several interesting web sites including www.epa.gov/climatechange/kids www.epa.gov/greenkit

Are you an energy hog? To estimate your carbon footprint go to: www.carboncounter.org

For more detailed energy related information visit these web sites: www.njssi.org
www.eere.energy.gov
www.coolnewjersey.org
www.nj.gov/emp
www.altenergy.org
www.nrel.gov

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MONMOUTH COUNTY PLANNING BOARD

ECO-TIPS:



WHY CONSERVE ENERGY?

Air conditioners to keep us cool, furnaces to keep us warm, cars to keep us moving, televisions to keep us entertained, and computers to keep us in business, all use energy. These modern conveniences are great, but it takes a lot of energy to keep them running.

When we make a conscious effort to reduce the amount of energy we consume, we are conserving valuable natural resources for the future. Conserving energy can be as easy as turning off our computers when we leave work or as difficult as replacing our car with a bicycle for certain trips. Choosing energy efficient appliances and replacing incandescent light bulbs with compact fluorescents are two simple conservation measures that everyone can employ. Conserving energy is not only good for the environment but it also saves money.

Energy conservation is important because the vast majority of our energy today comes from non-renewable resources, and some forms of power generation can pose hazards to the environment.

Resource protection and conservation can be increased through the use of clean, safe, renewable sources of power, such as bio-fuels, hydroelectric and solar.

WHERE DOES ELECTRIC POWER COME FROM?

The Federal Energy Information Administration reported that about 89% of the electric power generated in the United States in 2006 came from three main sources: coal (49%), natural gas (20%) and nuclear energy (20%). Other sources that produced electricity included

hydroelectric (7%), solar and other renewables (2%), petroleum (>2%) and miscellaneous gases (>1%). Wind generation, while still a very small overall contributor of electric power, was the fastest growing segment of the renewable energy market.

New Jersey's 2006 power story, however, was quite different from the national picture. Nuclear power provided more than half of our electricity (54%). Fossil fuels provided most of the rest, through a combination of natural gas (26%), coal (18%) and petroleum (>1%). Renewable energy provided just under 2%, and the vast

majority of that came from solar, rather than hydroelectric. Coastal New Jersey has great potential to harvest both wind and water to generate power. Increasing production from those sources could decrease our dependence on non-renewable fossil fuels and nuclear power.

OUR DEPENDENCE ON FOSSIL FUELS

Electric power is only one sector of energy consumption that depends on non-renewable fossil fuels. In New Jersey, our transportation needs consume more energy than the national average of 30%, as New Jersey workers have the longest average commute time in the nation. Most of our transportation energy needs are met by petroleum. Home heating is another way we are dependent on fossil fuels. About 20% of all homes in our state heat with oil and roughly 65% use natural gas. While New Jersey residents can take pride in knowing that we have a lower per capita energy consumption rating than two-thirds of all other states, there is still so much more that we can do

GREENHOUSE GASES

Vehicle use and energy generation from fossil fuels emit greenhouses gases, such as carbon dioxide and nitrous oxide, into the atmosphere. These are called greenhouse gases because they act like the glass panels of a greenhouse, allowing solar radiation in but then trapping the warmth underneath. While these gases are naturally occurring, and without them the planet would be too cold, an abundance of these gases could make the atmosphere too warm. Reducing energy consumption could result in a decrease in both energy generation and greenhouse gas emissions.

THE FUTURE OF ENERGY

Another way to reduce greenhouse gas emissions is to increase the share of our energy that is generated from clean alternative sources, such as renewables. Sunshine, ocean breezes, miles of rivers and coastline, and acres of agriculture make solar panels, wind mills, hydroelectric turbines and biofuels feasible alternatives for New Jersey's energy needs. The 2008 New Jersey Energy Master Plan calls for renewable resources to generate 30% of our state's energy by the year 2020. But until these new generators are up and running we need to make our homes and offices more efficient today.

SAVING ENERGY TODAY

There are several simple things that we can do immediately to improve energy efficiency and reduce consumption, such as:

- Change your thermostat by 5 degrees and save as much as 10% on your cooling costs and 20% for heating. Clean your HVAC filters regularly.
- * Cut waste by caulking leaky windows, adding insulation to attic and basement, and wrapping the water heater.
- Unplug phantom power users like battery chargers that draw energy even when they are not in use. Unplug those "hibernating" appliances, such as TVs, when a quick start isn't going to be needed.
- Energy is used to pump, transport, treat and heat water, so reducing water use, especially hot water, will save energy. Cut the temperature back on your water heater. Wash clothes in cold, run dishwashers only when full, and install low-flow shower heads and toilets.
- Remember to turn off the lights if you are leaving a room for more than a few minutes.
- When decorating for holidays, use timers and either reduce the amount of lights or switch to the newest solar powered and LED strings.