

# Thinking Green: Saving Energy, Saving Money and Saving the Environment

# **WSSC** has been recognized by the EPA as an environmental leader.



### WIND POWER

- WSSC purchases renewable energy credits with the Montgomery County Aggregate Buying Group for 100% of its electrical energy.
- WSSC incurred no capital cost as part of the wind procurement.
- WSSC plans to award a new long-term wind contract in 2019 at rates less than conventional power rates. As a result, WSSC will get 30% of its energy from wind power.

#### **HYDRO-POWER**

- Three 700 horsepower pump turbines operate at WSSC's Rocky Gorge Water Pumping Station.
- Hydropower has saved WSSC an average of \$200,000 a year in energy costs.
- Brighton Dam is home to two 250 horsepower hydro turbine generators with a production capacity of 1,800,000 kilowatt-hours (kWh) of electricity annually.
- Hydropower has saved WSSC an average of \$200,000 a year in energy costs.





#### **SOLAR POWER**

- WSSC has 4 MW of clean, solar photovoltaic power at two of its water resource recovery facilities.
- WSSC incurred no out-of-pocket expense for this project. WSSC purchased solar power over a long term period at a fixed unit price.
- The solar project is expected to save WSSC an estimated \$3 million in electricity costs over the life of the contract.
- Standard Solar was awarded a contract for an additional 6 MW of solar power in 2018. Standard Solar is currently looking for available sites to lease.

#### **BIO-ENERGY**

- The upcoming Piscataway Bio-Energy Plant, WSSC will generate 24 MMBTU per hour of renewable natural gas from wastewater. This gas will be sold to a regional bus fleet as renewable fuel.
- The Piscataway Bio-Energy Plant will generate approximately 3 MW of electricity from clean, natural gas to power the entire plant on a continuous basis.
- The Bio-Energy Plant is expected to be online in 2023.



## **ENERGY CONSERVATION**

Here are just a few of WSSC's recent cost-effective energy savings.

- Replacement of two wastewater pumps for dry weather flow created an annual savings of \$330,000.
- WSSC retrofitted its Water Resource Recovery Facilities with energy-saving measures that save 8,600,000 kWh or \$900,000/yr.
- WSSC has upgraded six pumps at its Potomac Water Filtration Plant with energy efficient equipment, which is expected to save an estimated 5,703,000 kWh or \$570,000/year.
- WSSC is replacing five aeration blowers at its Piscataway Water Resource Recovery Facility with energy efficient High Speed Turbo Blowers, saving an estimated \$535,000 kWh/yr or \$51,000/year.
- WSSC is replacing existing fluorescent lighting at its field offices and RGH building with efficient LED lighting, at a savings of 5,700,000 kWh per year or \$545,000/year.









For more energy info and to review our Strategic Energy Plan, visit <u>wsscwater.com/greenenergy</u>