



METRO WATER SERVICES

Project Highlights

- **Project Name:** Metro Water Services
- **Project Type:** Municipal Solar I Ground Mount System
- **Project Location:** Nashville, Tennessee, USA
- **Project Size:** 4.2 MW DC (Multi Projects)
- **Project Operation Date:** 2021-2022
- **PV Module Supplier:** Boviet Solar
- **Project Developer:** Lightwave Solar

Metro Water Services (MWS)

Metro Water Services (MWS) is a department of the Metropolitan Government of Nashville and Davidson County, providing safe, reliable drinking water, wastewater, and stormwater management to more than 250,000 customers across the region. MWS is recognized for its innovation in resource conservation and sustainability. By investing in solar energy, the utility has demonstrated its commitment to lowering operational costs, reducing carbon emissions, and building a more resilient and sustainable municipal water infrastructure.

Project Overview

The Metro Water Services Solar Program consists of a portfolio of distributed solar projects totaling 4.2 MW DC, designed and constructed by LightWave Solar and powered by Boviet Solar's top-performing PV modules. The installations include rooftop and ground-mounted solar arrays distributed across multiple MWS facilities in the Nashville area. Together, these systems provide on-site renewable electricity to power energy-intensive water and wastewater treatment operations.

Collectively, the installations generate approximately 6.2 GWh (6,200,000 kWh) of clean electricity annually, offsetting a substantial share of MWS's total power consumption. Economically, the systems reduce long-term energy costs, hedge against rising utility rates, and deliver predictable savings for municipal budgets. Socially, they strengthen Nashville's leadership in sustainability and support Tennessee's growing clean-energy workforce. Environmentally, the portfolio avoids around 2,350 metric tons of CO₂ emissions per year, equivalent to planting 110,000 trees, saving 780,000 gallons of water, or eliminating 2,500 short tons of coal annually.

Economic Benefits

The 4.2 MW DC multi-site solar portfolio produces roughly 6.2 GWh of renewable power each year, significantly reducing electricity costs across MWS's operational facilities. On-site generation enhances financial stability, lowers exposure to energy-price volatility, and supports long-term planning for public infrastructure. Construction of the projects created local engineering, construction, and electrical jobs while ongoing operations continue to sustain maintenance and monitoring roles, contributing to Nashville's clean-energy economy.

Social Benefits

The Metro Water Services solar initiative highlights Nashville's leadership in renewable-energy adoption and sustainable municipal operations. Implemented by LightWave Solar, the program supported local workforce development, created skilled clean-energy jobs, and enhanced community pride in the city's environmental progress. The highly visible installations on public facilities demonstrate how municipalities can lead by example in integrating renewable energy into essential public infrastructure.

Environmental Benefits (Estimated)

Generating approximately 6.2 GWh of clean energy annually, the systems avoid about 2,350 metric tons of CO₂ emissions each year, equivalent to planting 110,000 trees, saving 780,000 gallons of water, or displacing 2,500 short tons of coal. Over their combined 25-year operational life, the projects will prevent

more than 58,000 metric tons of CO₂ emissions, advancing Nashville's citywide climate-action and sustainability goals.

BOVIET SOLAR

Boviet Solar Technology Co., Ltd. is a leading solar technology company founded in 2013 in Vietnam, specializing in the manufacturing of high-performance monocrystalline PV cells and premium Gamma Series™ monofacial and Vega Series™ bifacial PV modules. Our top-performing modules are engineered for a wide range of applications, including residential, commercial, industrial, community, and utility-scale solar projects.

Boviet Solar combines business acumen, financial strength, technological expertise, and manufacturing excellence to deliver reliable, high-efficiency solar solutions to industry clients worldwide. The company is deeply committed to sustainability, supply chain traceability, and compliance with international trade standards, while fostering long-term, trust-based partnerships across the global energy sector. Boviet Solar has earned industry-wide recognition for quality and reliability. The company has maintained a Tier 1 PV Module Manufacturer ranking by Bloomberg New Energy Finance (BNEF) since 2017, has been recognized as one of the Top 10 Most Bankable Global PV Module Manufacturers by Wood Mackenzie, and is ranked among the Top 10 Most Financially Reliable PV Module Manufacturers by Sinovoltaics. Boviet Solar's modules have also been consistently rated as Top Performers in Kiwa PVEL's PV Module Reliability Scorecard since 2019.

Headquartered in Vietnam, Boviet Solar operates manufacturing facilities in both Vietnam and the United States, with an annual production capacity of 3.0 GW for PV cells and modules. The company also maintains regional operations in the United States, Germany, and other key international markets. To learn more, visit www.bovietsolar.com.