NOKIAN TYRES FACTORY

Project Highlights

- Project Name: Nokian Tyres Manufacturing Facility
- Project Type: Industrial Solar I Carport System
- Project Location: Nashville, Tennessee, USA
- Project Size: 3.0 MW DC
- Project Commissioning Date: March 2023
- PV Module Supplier: Boviet Solar
- Project Developer / Installer: LightWave Solar
- Project Owner: Nokian Tire Company

Nokian Tyres

Nokian Tyres is a global tire manufacturer headquartered in Nokia, Finland, renowned for its high-quality, durable, and sustainable tire solutions. The company designs and produces tires for passenger cars, trucks, and heavy machinery, with a strong focus on safety, innovation, and environmental stewardship. Nokian Tyres' North American manufacturing facility in Dayton, Tennessee, serves as a flagship for its commitment to sustainability and responsible production. The plant integrates advanced manufacturing technologies with renewable-energy solutions, showcasing the company's global strategy to reduce carbon emissions and achieve carbon neutrality across its operations.

Project Overview

This 3.0 MW DC solar carport system was installed at Nokian Tire's advanced manufacturing facility in Nashville, Tennessee. Developed and constructed by LightWave Solar and powered by Boviet Solar's top-performing PV modules, the grid-tied system provides on-site renewable energy to support the facility's production and administrative operations. In addition to generating clean electricity, the solar canopies offer shaded parking for employees and visitors, integrating sustainability with functional design.

The project delivers broad economic, social, and environmental benefits. Economically, it offsets a major portion of the facility's annual power consumption, stabilizing long-term energy costs and strengthening operational resilience. Socially, it underscores Nokian Tire's leadership in sustainable manufacturing and supports local clean-energy employment through LightWave Solar's deployment team. Environmentally, the system generates an estimated 3.9 GWh of renewable electricity annually, avoiding roughly 1,640 metric tons of CO_2 emissions per year—equivalent to planting over 26,000 trees, saving nearly 66 million gallons of water, or eliminating around 1,750 short tons of coal. Over its 25-year lifetime, the project will prevent more than 41,000 metric tons of CO_2, advancing both corporate and regional climate-action goals.

Economic Benefits

The 3.0 MW DC solar array produces approximately 3.9 GWh of clean electricity annually, directly offsetting on-site manufacturing energy use. By lowering utility expenses and providing predictable long-term energy pricing, the project enhances the facility's financial performance and competitiveness. The installation also created numerous local construction and electrical jobs, and ongoing maintenance continues to support Tennessee's clean-energy workforce.

Social Benefits

Nokian Tire's solar initiative demonstrates strong corporate commitment to sustainability and environmental responsibility within the U.S. manufacturing sector. Through its collaboration with LightWave Solar, the project supported local tradespeople, engineers, and installers while inspiring regional businesses to adopt renewable-energy solutions. The solar carport also improves on-site amenities by providing shaded, weather-protected parking, enhancing employee comfort and wellbeing.

Environmental Benefits (Estimated)

By generating roughly 3.9 GWh of renewable energy each year, the system avoids about 1,640 metric tons of CO_2 emissions annually, equivalent to planting more than 26,000 trees, saving 66 million gallons of water, or eliminating approximately 1,750 short tons of coal. Over its operational lifetime, it will prevent

over 41,000 metric tons of CO_2, equal to removing more than 8,600 gasoline-powered cars from the road. The project plays a vital role in reducing Nokian Tire's carbon footprint and supporting Tennessee's transition to clean, renewable energy.

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.