

Project Highlight

London Stadium, UK

AMERESCO 🖓

Revolutionizing Iconic
Event Venue's Sustainability
with Innovative and Flexible
Solar PV Solution

Technology Type:

Solar PV | Operations & Maintenance (O&M)

Installation Rooftop Size

6,500 square meters

Estimated Annual Energy Generation

850,000 kWh

Project Size

£3.5 million

Contract Term

25 years





Summary

As a symbol of athletic achievement and community engagement and home to the West Ham United Football Club in the UK, London Stadium demonstrates its commitment to sustainability and progress towards net zero by incorporating rooftop solar power. Ameresco was awarded the contract to implement an innovative solution that would overcome the challenge posed by the stadium's unique membrane roof. The flexible silicon module solar PV system will generate approximately 850,000 kWh of clean energy annually, the equivalent of powering over 250 homes.



Solution

London Stadium's unique membrane roof prevented the use of conventional framed solar PV arrays due to weight restrictions, high wind loading, and complex shading patterns, necessitating an innovative approach.

Ameresco's solution maximizes energy generation levels while seamlessly integrating with the stadium's architectural constraints. Specific solutions and services include:

- Ultra-thin, flexible solar panels, complemented by dynamic SolarEdge optimizers and inverters
- Installation spanning 6,500 square meters
- Operations and maintenance services for 25 years



This investment means that we can drive down our carbon footprint and become the venue of choice for artists and event owners who are serious about sustainability. This ambitious large-scale investment will reduce our energy costs, but most importantly our carbon footprint. We are proud to take the lead in tackling climate change, and especially pleased to be able to power concerts and other event days from energy generated on-site.

Graham Gilmore Chief Executive, LS185



Benefits

In addition to reducing the stadium's energy costs and carbon footprint, the solar solution will power concerts and sporting events with on-site renewable generation, making London Stadium one of the most sustainable live event venues in the world. Other benefits of the project include:

- ~850,000 kWh of annual clean energy generation
- Estimated to offset 21,000 metric tons of CO₂ emissions
- Advances sustainability efforts to reach net zero carbon emissions
- Minimal disruption to ongoing site activities while maintaining safety for stadium goers, teams, and staff during installation



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Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full range of energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.