



Adam Smith Awards Asia

Winner - Best Funding Solution

Funding the construction of Europe's largest solar power plant in Turkey

J.P.Morgan

Kalyon Holding's Karapinar Solar Power Plant Project is a landmark project for Turkey in pursuit of ambitious green energy goals.

About Kalyon

Kalyon Yatirim Holding A.S. (Kalyon) is a major Turkish construction company with global interests spanning construction, real estate, energy and concessions such as airport management. The company's energy capabilities aligned with the Turkish government's focus on expanding their national expertise in solar power solutions. Turkey prioritizes sustainable research and development (R&D) activities, Turkish owned and developed solar technology, and locally sourced solar panels for each project. As part of this project, Kalyon aimed not only to build Europe's largest solar power plant built on a single site, but to lay the technological foundation for future solar projects so the Turkish Ministry of Energy can achieve their sustainability goals. But becoming a cornerstone of the emerging solar sector in Turkey came with its own challenges.

The challenge

Kalyon was selected to act as contractor, investor, concessionaire, and operator for Karapinar Solar Power Plant, the first project to be executed under Turkey's renewable energy initiative. Kalyon also served as the technology developer and manufacturer of the power plant. This required an extensive design and construction process, followed by commissioning, operation and maintenance of the facility. The sheer size of the project, stretching across approximately 20 million square meters of land in the Karapinar district, made this the largest solar power plant in Turkey and Europe's largest power plant built on a single site.

To ensure the success of the project, Kalyon had the responsibility of arranging large-scale financing. However, securing this funding required coordinating across multiple stakeholders within the Turkish government, UK Export Finance, and multiple lenders. Additionally, Kalyon needed to diversify funding opportunities and overcome pandemic-related road bumps like supply chain obstacles and limited funding resources.

Kalyon also faced technological challenges. The solar panels proposed for the project, Kalyon PV Modules, were new to the market and would be used for the first time for Karapinar Solar Power Plant. Lenders and technical advisors needed proof of reliability before funding the project.

The solution

To meet Turkey's growing power demands and to satisfy the government's mandate for increased production of clean, abundant solar power, Kalyon secured a US\$1.1 bn facility where US\$291m was financed by the export & agency finance team within J.P. Morgan Payments and guaranteed by UK Export Finance (UKEF).

J.P. Morgan's global perspective and positive working relationship with all parties across buyers, guarantors and suppliers simplified alignment. The J.P. Morgan deal team coordinated with the Turkish government, UKEF, GE and six Turkish Commercial Lenders under a project finance structure to secure funding for the project. J.P. Morgan also provided escrow account services and hedging solutions in respect of the UKEF guaranteed facility. J.P. Morgan's hedging solutions aimed to reduce the interest rate volatility on the UKEF guaranteed facility in a rising global interest rate environment.

The UKEF facility specifically financed GE Renewable Energy's innovative flexinverter solar technology for the project, making it the first time that this technology had been deployed outside of the US. The UKEF guarantee for this project was the largest ever issued for a solar project, which was critical in helping the UK meet its 2021 United Nations Climate Change Conference (COP26) commitments.

- With this funding, Kalyon constructed a 1.35GW solar power plant using 100% brand-new modules which were domestically manufactured by the Kalyon factory.

Despite the fact that the project reached financial closure in November 2021, the factory had been supplying the modules for 6 months prior to closure. Moreover, at the date of closure, the project's installed capacity had already reached 200MW and was crowned the "largest solar power plant in Turkey" where at that time, the installed largest plant was around 50MW.

The results

Best-In-Class Funding Solution: By partnering with J.P. Morgan and other lending providers for their project finance structured loan, Kalyon earned the 2022 Adam Smith Award for Best Funding Solution - Highly Commended.

Commitment to Clean Energy: This power plant is expected to generate clean, green power for two million households in Turkey, where 20% of total power comes from solar energy. The country expects to eliminate at least 1.5 million tons of annual fossil fuel waste and harmful carbon emissions.

Technological Advancement: Kalyon Holding evidenced their technology and brand-new solar PV modules by obtaining quality, performance and efficiency certificates from internationally recognized institutions, in line with international standards.

Manufacturing Excellence: Kalyon's experience across the solar value chain, starting from being solar PV manufacturer, EPC contractor, investor and O&M operator, reduces risks while delivering reliable, dependable, and cost-effective power solutions for customers.

Innovation for the Future: Kalyon's Karapinar Solar Power Plant project forms the basis upon which other clean energy projects can be built in Turkey, laying the foundation to achieve Turkey's ambitious solar power goals.



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