



CROWN AGENTS
ACCELERATING SELF-SUFFICIENCY & PROSPERITY

SOLAR INSPECTIONS

SUPPORTING CLIENTS TO TRANSITION TO SUSTAINABLE SOLAR SOLUTIONS

Access to energy is key to achieving sustainable development goals across the healthcare, education and economic growth sectors.

Ensuring reliable, affordable access to renewable energy remains a vital tool in the fight against climate change, and will be increasingly necessary as fossil-fuel reliant economies in the Global South develop.



Significant gains have already been made in the drive towards expanding renewable energy resources, especially when it comes to solar power. Global prices for photovoltaic (PV) panels, lithium-ion batteries for energy storage, and the other key components needed for solar power continue to drop as production levels increase and the technology is adopted more widely. In many countries, solar energy is now cost-competitive with fossil fuel power on a per-kilowatt-hour basis. Decentralised renewable energy installations, such as solar mini-grids and stand-alone solar systems for hospitals and schools, now offer the least-cost route to electrification for as many as half of the 900 million people globally who still have no access to electricity.

In order to ensure consistent high-quality solar installations, it is essential to apply rigorous quality assurance on all aspects of solar PV systems, including panels, batteries, inverters, connectors and support structures. Crown Agents is working with governments, foundations, solar energy companies and other stakeholders around the world to accelerate energy access via sustainable solar projects by providing a full suite of quality assurance and inspections services, in addition to our procurement and last-mile logistics offer. Building transparent and secure supply chains help our clients maximise the impact of large-scale off-grid solar projects in challenging environments.



OUR QUALITY ASSURANCE CAPABILITIES

Through our world-class quality assurance and inspections services we have had over 100 years of experience in providing a range of inspection types, from vendor appraisal to pre-and-post-shipment inspections, to sampling and lab testing.

From the factory to the final mile, Crown Agents helps our clients embed quality assurance in solar component supply chains to maximise the impact of complex solar energy projects in volatile environments. Since 2014 we have provided comprehensive quality assurance and inspections services of PV modules, inverters and batteries, including:

- Pre-production factory audits
- Preparation of quality assurance plans, including negotiation of supply contracts with PV module manufacturers
- Parallel inspections and sample testing during production
- Pre-shipment inspection and loading supervision of completed modules
- Pre-shipment inspections of inverters and batteries
- Post-shipment inspections, unloading supervision and inspections at warehouses
- Final mile logistics in difficult environments including end-to-end logistics management
- Inventory and warehouse management

Over 95% of the inspections we carry out happen before the products even leave the factory. Physical inspection prior to shipment ensures the integrity of PV modules, batteries and inverters and provides confirmation that all standards have been met. Our highly trained inspectors can therefore carefully verify product certificates and packing lists against contractual specifications.

CASE STUDY

BRINGING SOLAR POWER TO 12,000 SCHOOLS IN PAKISTAN

Between 2018 – 2020, Crown Agents worked with the Punjab energy department to ensure supplier compliance with the quality requirements for an ambitious project to deliver solar power to 12,000 schools. We contracted a specialist team of experts who flew to China to inspect the PV modules, lithium-ion batteries and inverters in the factories to verify the goods and authorise their transportation and installation in the schools.

With reliable electrification throughout the academic year, the quality of education and learning environment has radically improved.



Inspection of
17 MW of PV modules
23.8 MW of inverters and
43.6 MWh of batteries
to support the delivery
of solar power to
12,000 schools

CASE STUDY

IMPROVING ACCESS TO RELIABLE HEALTHCARE IN NIGERIA

The ground-breaking Solar Nigeria programme was a £25 million project to procure and install stand-alone PV solar systems for schools and health centres across Lagos and Kaduna states. Crown Agents undertook quality assurance at multiple stages of the project, utilising our team of skilled inspectors who carried out factory audits, pre-shipment and post-shipment checks, lab testing, and sample testing in the production factory to verify the integrity of all products.

Across both the Lagos and Kaduna solar projects, we inspected and installed stand-alone systems at 245 facilities with a combined generating capacity of over 4 MWP plus battery storage. The enhanced reliability of electricity in these facilities has enabled 25,000 patients to better access healthcare services.



Inspection of
solar PV systems across
245 schools
and health facilities
in Nigeria, with a combined
generating capacity of over
4 MWP.



CROWN AGENTS' EXPERTISE

Our unique energy and climate offer draws on our world-leading expertise in end-to-end supply chain management, fund management and technical advisory work in clean energy sustainable landscapes and climate change adaptation.

We deliver off-grid and grid-interactive solar power solutions around the world, powering local and national economies and supporting the delivery of essential services. From assessing the needs of our clients to providing training to ensure the sustainable use of the installed technology, we handle every stage of the solar project.

GET IN TOUCH:

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