



INVESTMENT OPPORTUNITY

Investment Opportunity(1023)

Integrated Project for a 12 GW Solar Energy Complex



Project Overview

The Ministry of Investment hereby presents a strategic investment opportunity for the establishment of an integrated solar energy complex with an installed production capacity of 12 Gigawatts (GW) in East Libya. This mega-infrastructure project aims to strengthen energy security, diversify power generation streams, and elevate the contribution of renewable energy to the national economy. Utilizing cutting-edge photovoltaic technologies and smart energy storage systems (ESS), the complex will generate clean, sustainable power to satisfy domestic grid demands and catalyze future regional energy export pipelines.





Project Site

- **General Jurisdiction** : Jalo – Sarir – Kufra (East / Southeast Libya).
- **Type of Activity** : Renewable energy generation.
- **Nature of the Project**: Strategic energy and infrastructure project.

Proposed Project Locations

- Jalo – East Libya.
- Sarir – East Libya.
- Kufra – Southeast Libya.

Note on Site Selection The final configuration and specific site allocation within these zones will be determined based on comprehensive technical, geological, and environmental impact assessments. Critical factors include proximity to high-voltage transmission grids, logistical feasibility, land optimization, national grid interconnection capacity, and future cross-border export infrastructure requirements.

Target Markets

- The Libyan National Electricity Grid.
- Mega-scale industrial complexes.
- Large-scale water desalination plants.
- Green hydrogen production initiatives.
- Major urban and municipal development projects.
- Future regional power export markets.
- Utility companies and global energy consortiums.





Land Area Requirements

Item	Area
Total Area	220 – 280 km ²
Solar PV Generation Fields	180 – 230 km ²
Substations and Energy Storage Facilities	15 – 20 km ²
Services, Administrative Buildings, and Ancillary Utilities	Remainder

Estimated Investment Cost

Item	Value in USD
Solar Panels, Mounting Structures, and Inverter Systems	4.5 – 5.5 Billion
Utility-Scale Battery Energy Storage Systems (BESS)	1.5 – 2.0 Billion
Substations, Step-Up Transformers, and Grid Interconnection	1.0 – 1.5 Billion
Civil Infrastructure, Logistics, and Site Security	800 Million – 1.0 Billion
Operational and Startup Capital	700 Million – 1.0 Billion
Total Investment	8.5 – 11 Billion USD

Project Components

- Utility-scale, high-efficiency solar photovoltaic (PV) fields.
- Industrial Battery Energy Storage Systems (BESS) for grid stabilization.
- High-voltage step-up substations and transmission infrastructure.
- Smart central control and energy management center (SCADA/EMS).
- Automated digital monitoring, telemetry, and weather tracking networks.
- Internal medium-to-high voltage power collection grids.
- Specialized operation and maintenance (O&M) hubs.
- Administrative complexes and engineering service facilities.
- Integrated, multi-layered industrial site security systems.





Estimated Production Capacity

- Total Installed Nameplate Capacity 12 Gigawatts (12GW)
- Anticipated Annual Power Yield 28 – 32 Terawatt-hours (28 -32 TWh)
- Structural provisions for future expansion, downstream integration with green hydrogen synthesis, and direct supply to energy-intensive industrial corridors

Financial Indicators

Indicator	Value
Anticipated Annual Revenues	1.8 – 2.6 Billion USD
Annual Net Profit	700 Million – 1.2 Billion USD
Return on Investment (ROI)	10% – 15%
Payback Period	8 – 11 Years

Competitive Advantages

- Solar irradiance metrics that rank among the highest global indices.
- Expansive, uninhibited terrain ideal for modular expansion and continuous multi-phase development.
- Extremely low population density within target zones, ensuring frictionless land allocation and minimal environmental disruption.
- Seamless modular capacity scaling for future green hydrogen and e-fuels integration.
- Strategic, manageable distance to existing national energy infrastructure and major transmission corridors.





- Levelized Cost of Electricity (LCOE) projected significantly below conventional thermal power options.
- Multi-site geographical diversification offers investors distinct structural and optimization choices.
- Proven long-term political and regulatory backing for sustainable clean energy deployment.
- Unparalleled geographic potential for serving as a clean energy exporter to regional and Mediterranean grids.

Employment Opportunities

- **Direct jobs:** 2,500 – 4,000 jobs.
- **Indirect jobs:** 8,000 – 12,000 jobs.
- **Jobs during the construction and EPC phase:** 10,000 – 15,000 jobs.

Available Contractual Models

The Ministry of Investment provides international energy developers and investors with flexible contracting frameworks under the following models

- Direct Investment.
- Partnership with the Libyan Private Sector.
- Joint Venture with the Public Sector.
- Public-Private Partnership (PPP) frameworks.
- Build-Operate-Transfer (BOT).
- Build-Own-Operate (BOO).
- Comprehensive Management and Operation Contracts.





Investment Incentives and Advantages

The complex falls under the extensive fiscal protection, privileges, and exemptions guaranteed via the Investment Promotion Law No. 9 of 2010, which feature

- Full exemption from customs duties on all imported capital goods, PV machinery, BESS modules, and electrical hardware.
- Robust, long-term tax holidays on corporate income and related investment revenues.
- Streamlined, accelerated long-term leasing for mega-scale industrial land plots.
- Unrestricted freedom for capital repatriation, currency conversion, and foreign profit remittance under prevailing statutory frameworks.
- Dedicated fast-track government licensing, environmental permitting, and state-level approval routing.
- Direct eligibility to interface with international green financing windows, carbon-credit mechanisms, and global developmental financial institutions (DFIs).

Technical and Economic Study Preparation Services

Should the investor wish to obtain an integrated technical, economic, and financial feasibility study for the project in accordance with approved international standards, specialized consulting offices capable of preparing the final studies for the project are available through the Ministry of Investment and its partners. The cost for preparing the final study amounts to 1.5% of the total investment value of the project.





Invitation to Invest

The Ministry of Investment cordially invites institutional investors, sovereign wealth funds, Tier-1 global utility developers, and international renewable energy consortiums to participate in the development of this monumental asset. Positioned as one of the largest planned solar energy developments across Africa and the Middle East, this project presents an exceptional opportunity to secure long-term clean energy yields, strengthen national infrastructure, accelerate decarbonization, and establish Libya as a foundational green energy hub for the Mediterranean region.

MINISTRY OF INVESTMENT MINISTRY OF INVESTMENT -State of Libya

