

RELOCATING POWER FOR RESILIENCE

CRETE - GREECE 

BACKGROUND

Enhancing Energy Security for an Island in Transition

Crete, Greece's largest island, has long faced energy reliability issues due to its isolation from the mainland grid and heavy reliance on diesel-powered plants. With growing energy demands driven by tourism and economic development, the island required a fast, flexible, and sustainable solution to safeguard grid stability.

The LM6000 Relocation Project was launched under a multi-million-euro contract to address this need. Prismecs was selected to relocate three LM6000 gas turbine generators—originally part of one of the biggest OCGT power plant in Thiva—to a temporary power site in Crete. The turbines' operational flexibility made them ideal for supporting both peak load demand and renewable integration.

KEY OBJECTIVES

The project aimed to:



Strengthen Crete's power supply with fast-start backup generation



Provide emergency reserve capacity for peak tourist seasons



Optimize national energy asset usage by relocating existing turbines



Bridge the gap until full interconnection with mainland Greece






Support Greece's energy transition strategy through flexible generation



FROM CHALLENGE TO IMPACT

How Prismecs Delivered

	 Challenge	 Our Solution	 Impact
Logistical Complexity	Transporting turbines and BOP equipment across Greece	Coordinated operational readiness closely with site teams and managed logistics via project partners	Ensured secure, timely movement of high-value assets across land and sea for smooth project commissioning
Site Preparation	Major civil/electrical upgrades needed	Oversaw foundation, electrical works, fuel systems, and switchgear compatibility	Enabled seamless installation and safe turbine integration into the local grid
Tight Timeline	Meet peak summer demand urgently	Mobilized teams in parallel in Thiva and Crete; adapted swiftly to on-site changes	Kept project aligned with stakeholder and national grid operator timelines
Regulatory Compliance	Strict Greek/EU environmental and grid rules	Supported permitting and ensured emissions, vibration, and noise compliance	Earned stakeholder and regulatory confidence through flawless execution
Recommissioning Requirements	Integrity across decommissioning and reinstall	Delivered mechanical checks, I&C calibration, and grid synchronization	Ensured turbines returned to service with full operational readiness
Manpower Coordination	Multiple teams, agencies involved	Deployed skilled multicultural team; coordinated across global and local partners	Drove cross-functional alignment and field productivity under pressure
Maintenance Classification	Inconsistent tracking hindered KPI visibility	Adopted EN-13306 standard to standardize maintenance types	Generated reliable KPIs to continuously improve maintenance strategy
Energy Security Pressure	Delays risked destabilizing Crete's grid	Delivered adaptable, high-quality execution under national spotlight	Helped Greece maintain stable power during high-demand periods



PRISMECS' TURNKEY SOLUTIONS



Multidisciplinary Technical Deployment

Prismecs mobilized field teams with deep LM6000 experience—mechanical, electrical, I&C, and logistics specialists—positioned in both Thiva and Crete to ensure seamless execution from disassembly to recommissioning.



End-to-End Equipment Handling

Supported the safe disconnection and preparation of LM6000 and BOP components, while logistics and transport were managed by project partners using heavy-lift assets and secure protocols.



BOP Reconfiguration and Integration

Managed all installation activities and BOP integration at the Crete site, including transformers, fuel systems, demineralized water lines, and switchgear tie-ins.



Agile, On-Schedule Execution

Adapted to evolving field realities with speed and technical precision, maintaining alignment with client's project plan and local authority requirements.

MEASURING SUCCESS



Seamless Execution Across Sites

Parallel execution across Thiva and Crete ensured a rapid, disruption-free transition.



Regulatory Compliance Achieved

All works completed in full compliance with HEDNO and RAE regulatory standards.



Cost-Effective & Sustainable Approach

Asset reuse over new build optimized CapEx and aligned with circular infrastructure goals.

147 MW

Grid Stability Secured

147 MW of reserve capacity redeployed to Crete, securing grid stability ahead of peak demand.

LM6000

Agility & Energy Resilience Partnership

Showcased the mobility of LM6000 technology while strengthening public-private collaboration to enhance national energy resilience



Support for Renewable Integration

Provided fast-start backup for Crete's renewable integration, supporting EU decarbonization efforts.

