CASE STUDY

POWERING OMAN'S INDUSTRIAL HEART — TM2500 PROJECT

DUQM - OMAN

BACKGROUND

Energizing Growth in a Remote Economic Hub

Duqm, located within Oman's Special Economic Zone (SEZAD), has rapidly emerged as a key driver of the country's industrial and economic development. As ports, refineries, and petrochemical projects accelerated, demand for reliable electricity surged—outpacing the aging diesel infrastructure.

With no access to the national grid, a fast, flexible, and scalable power solution was needed to sustain progress and attract further investment into the region.

Under a strategic partnership, Prismecs was selected to support the deployment of four mobile gas turbines, providing 110 MW of reliable power to Duqm's city and port operations. This initiative marked a major leap forward in supporting industrial growth while transitioning to cleaner, more efficient energy.

KEY OBJECTIVES

Duqm TM2500 project was designed to:

- Provide continuous 24/7 power to Duqm city, port, and industrial facilities ahead of the national grid connection
- Replace diesel generation with natural gas to reduce emissions and fuel costs
- Support SEZAD's growth by enabling power-intensive developments in logistics, manufacturing, and refining
- Deliver a mobile, modular solution that could be rapidly installed and scaled as needed
- Align with Oman's sustainability goals and long-term energy strategy

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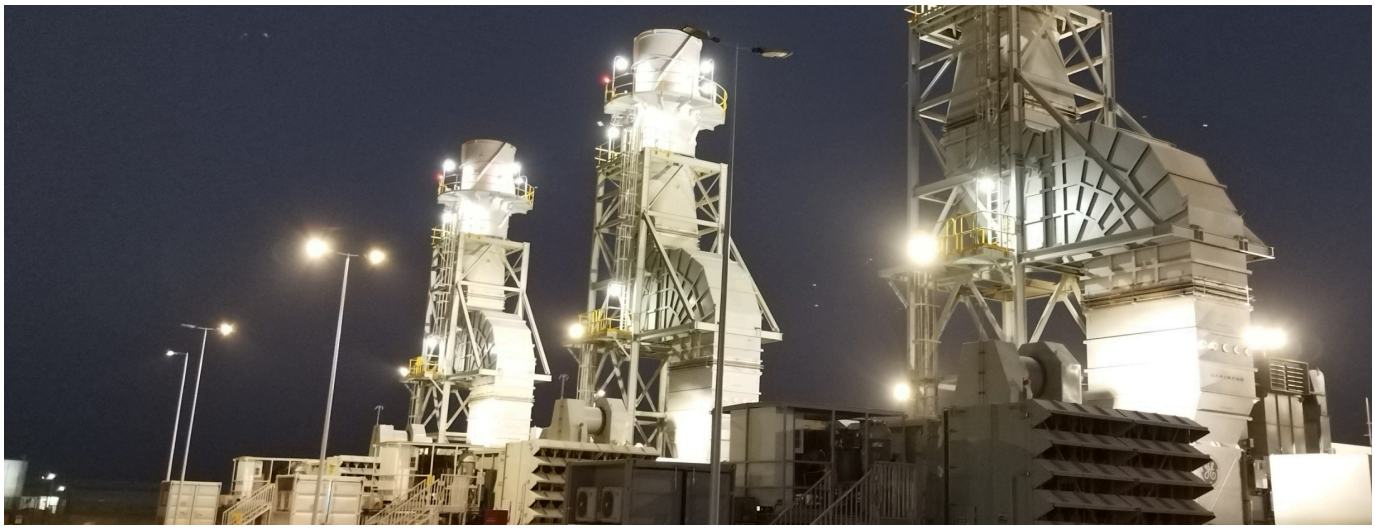
FROM CHALLENGE TO IMPACT

How Prismecs Delivered

	Challenge	Our Solution	Impact
Remote Location & No Grid Access	Duqm's isolation required standalone power systems	Developed a full off-grid infrastructure including fuel logistics, water, and power interconnection	Enabled **24/7 grid-independent power** for SEZAD operations, supporting regional GDP-generating projects
Accelerated Timeline	Commissioning target of under 200 days	Rapid mobilization of O&M teams and expedited operational setup through global and local networks.	Helped commission 110 MW in less than **200 days — 40% faster** than typical greenfield installations of similar scale.
Diesel-to-Gas Transition	Switching fuels required major system changes	Adapted BOP and combustion systems for gas compatibility; aligned with local fuel supply	Enabled up to **30% fuel cost reduction** and significantly lowered carbon emissions compared to diesel-based operations
Regulatory Compliance	Strict environmental and HSE regulations	Designed and enforced site-specific protocols aligned with Omani regulations and international industry standards.	Delivered with **zero recordable incidents**; met all HSE and environmental benchmarks
Workforce Mobilization & Training	Remote site with advanced tech needs	Deployed a skilled multicultural team and trained local operators in TM2500 O&M	Trained **15+ local technicians** and reduced post-handover dependence on external specialists



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PRISMECS' TURNKEY SOLUTIONS

Multicultural Technical Deployment

Deployed mechanical, electrical, I&C, and logistics teams with deep mobile gas turbine expertise—ensuring speed and precision in both setup and commissioning.

CMMS Implementation for Operational Reliability

Established a full Computerized Maintenance Management System (CMMS) to manage:

- Warehouse and spare parts inventory
- Maintenance planning and work order tracking
- Operational documentation and audit trails

Zero-Incident Execution with Local Compliance

Designed and enforced a custom HSE protocol meeting both Omani environmental standards and global best practices—delivered with no recordable incidents throughout execution.

Strategic Localization for Long-Term Support

Formed a local entity to ensure compliance, faster response times, and seamless alignment with national objectives. Also underwrote insurance for critical remote power assets.

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MEASURING SUCCESS

110 MW

Reliable Power Delivery to Critical Infrastructure

Delivered 110 MW of continuous, grid-independent power to Duqm's city, port, and industrial zones—bridging critical infrastructure needs ahead of national grid integration.

06 Months

Rapid, Safe Project Execution

Executed the project in under 06 Months with zero safety incidents, meeting both Omani regulatory standards and international benchmarks for quality, environment, and compliance.

Advancing Energy Transition Goals

Enabled the diesel-to-gas transition, improving energy efficiency and reducing emissions in line with Oman's ESG priorities and Vision 2040 goals.

Strategic Positioning as a Trusted Partner

Cemented Prismecs' role as a trusted in-country partner for fast-deploying, scalable power solutions in high-growth, industrializing regions.

Building Local Capacity and Presence

Built local technical capacity through workforce training and established Prismecs Oman, ensuring long-term support and regulatory alignment.

Scalable, Modular Power Innovation

Developed a modular, stand-alone power system that supported SEZAD's rapid growth and investment readiness without relying on legacy grid infrastructure.

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