



Exergy SC
Energy and Sustainability consultancy



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Exergy SC

Energy and Sustainability Consultancy

Strategy. Efficiency. Decarbonization.

Data-driven sustainability solutions delivering measurable ROI and long-term environmental impact.

About Exergy SC

An independent sustainability and energy consultancy headquartered in Egypt, serving the MENA industrial, commercial, and public sectors.

Led by a seasoned Energy & Sustainability framework, Exergy SC possesses deep field experience in complex industrial audits, ISO 50001 energy management systems, renewable integration, and comprehensive greenhouse gas (GHG) management.

We bridge the gap between compliance and profitability. By combining rigorous engineering principles with financial acumen, we turn energy data into tangible business value through strategy formulation, flawless execution, and independent verification.

Key Differentiators & Credentials

Certified Expertise

Accredited energy managers, EnMS Auditors, GHG Verifiers, and specialized optimization experts.

Comprehensive Carbon Focus

End-to-end Scope 1, 2, & 3 GHG accounting and independent verification readiness.

Bankable Deliverables

Feasibility models, M&V documentation, and technical due diligence for lenders.

Field-Tested Execution

Proven track record across manufacturing, oil & gas, textiles, and commercial sites.

Vision, Mission, Values

The core principles driving our commitment to sustainable industrial development.

Vision

Accelerate a low-carbon, efficient economy across MENA through measurable energy performance.

Mission

Deliver bankable, standard-aligned solutions from audits and EnMS to renewables and GHG, backed by rigorous measurement and verification.

Values

Integrity
Technical excellence
Impact orientation
Partnership
Continuous learning

What We Do



Energy Efficiency & Audits

Walkthrough and detailed audits, advanced metering, and opportunity registers with ROI analysis.



ISO 50001 Implementation

EnMS scope definition, energy reviews, baselines establishment, and complete certification readiness.



Carbon Footprint & GHG

Organizational CFP per ISO 14064-1, rigorous data frameworks, and practical decarbonization levers.



Renewable Energy and Low-Carbon Solutions

PV and CHP/CCHP feasibility, conceptual design, owner's engineer services, and robust PPA review.



Sustainability Strategy & ESG

Comprehensive ESG policies, governance structures, and strategic roadmaps for resource efficiency.



Measurement & Verification





IPMVP-aligned plans, advanced metering architecture, and reliable performance assurance for stakeholders.



Energy Efficiency & Audits

Transforming industrial and commercial energy data into actionable, high-ROI optimization strategies through rigorous engineering analysis.

Core Capabilities





-  **Comprehensive Audits:** Walkthrough and detailed assessments (electrical and thermal) tailored for heavy industrial plants and widespread commercial portfolios.
-  **Deep-Dive System Analysis:** Specialized optimization of critical systems including motors, compressed air, boilers, steam networks, chillers, HVAC, lighting, and process heat.
-  **Advanced Metering & Data:** Strategic deployment of power analyzers, data loggers, and spot measurements to build baselines and drive actionable data analytics.
-  **Financial Opportunity Registers:** Delivery of prioritized saving measures complete with estimated CAPEX, robust IRR/NPV calculations, and clear implementation roadmaps.



ISO 50001 Implementation

Establishing robust Energy Management Systems (EnMS) to drive continuous performance improvement and regulatory compliance.

Core Capabilities

-  **EnMS Foundation:** Establish clear EnMS scope, energy policy, and define organizational roles while ensuring alignment with legal and other requirements.
-  **Comprehensive Energy Review:** Identify Significant Energy Uses (SEUs), establish robust energy baselines, define precise EnPIs, and develop actionable plans.
-  **Documentation & Auditing:** Develop necessary documentation, conduct thorough internal audits, facilitate management reviews, and ensure full certification readiness.
-  **Ongoing Monitoring & Training:** Implement real-time monitoring strategies, deliver targeted training programs, and drive a culture of continual improvement.





OUR SERVICES



Carbon Footprint & GHG Accounting

Rigorous quantification and strategic management of greenhouse gas emissions aligned with global standards to drive net-zero pathways.

Core Capabilities

-  **Organizational CFP Reporting:** Comprehensive greenhouse gas inventories aligned with ISO 14064-1 and the GHG Protocol covering Scopes 1, 2, and relevant Scope 3 emissions.
-  **Robust Data Frameworks:** Structured activity data collection protocols utilizing credible emission factors from recognized sources (IPCC, DEFRA, and local utility coefficients).
-  **Independent Verification Support:** Expert facilitation and independent assessment for third-party carbon footprint verification and assurance statement readiness.
-  **Decarbonization Strategies:** Actionable emission reduction levers including renewable energy integration, operational process optimization, and strategic fuel switching pathways.

OUR SERVICES



Renewable Energy and Low- Carbon Solutions

Delivering bankable, high-performance renewable and co-generation projects from concept to commercial operation.

Core Capabilities

-  **Photovoltaic (PV) Integration:** Expert design, verification, and supervision for rooftop, ground-mount, off-grid, and innovative BIPV systems with hydro panels.
-  **CHP / CCHP Advisory:** Comprehensive techno-economic modeling, feasibility assessment, and design verification for complex Combined Heat and Power plants.
-  **Due Diligence & Contracts:** Rigorous review of PPAs, EPC contracts, procurement documentation, and financial models to ensure project bankability for lenders and owners.
-  **Construction & Performance:** Active construction supervision, validation of progress drawdowns, performance guarantee negotiations, and final acceptance testing.



Sustainability Strategy & ESG

Developing comprehensive ESG frameworks and actionable decarbonization roadmaps to drive long-term business value and resilience.

Core Capabilities

-  **ESG Policies & Governance:** Establishing robust environmental, social, and governance frameworks, conducting comprehensive materiality assessments, and defining tailored KPIs.
-  **Decarbonization Roadmaps:** Creating actionable, step-by-step pathways for carbon reduction, integrating resource efficiency, and aligning operations with global climate targets.
-  **Compliance & Reporting:** Ensuring strict adherence to international standards and local environmental regulations, while enabling transparent, audit-ready sustainability reporting.
-  **Stakeholder Engagement:** Driving organizational change management through active community engagement, broad awareness campaigns, and specialized sustainability training programs.



Measurement & Verification

Proving the value of energy interventions with rigorous data tracking, baseline modeling, and independent performance assurance.

Core Capabilities

-  **IPMVP-Aligned M&V Plans:** Developing robust methodologies to accurately establish energy baselines and quantify verifiable savings for complex industrial projects.
-  **Smart Metering Architecture:** Designing and specifying comprehensive data logger networks, power analyzers, and real-time visualization dashboards.
-  **Post-Implementation Verification:** Conducting independent site inspections and data reviews to confirm project completion and assure ongoing operational performance.
-  **Lender & ESCo Documentation:** Providing bankable certification reports that validate energy yield and satisfy critical requirements for project financing and performance contracts.

Key Achievements & Impact

Measurable results delivered across energy, sustainability, and industrial transformation

20+

MW Solar PV
Verified & Supervised

50+

Energy Audits
Completed

6

ISO 50001
Certifications Led

5+

GHG Reports
Verified

15+

Industries
Served

Energy Efficiency Leadership

Led energy management at different industries and corporates, reducing costs and carbon intensity across factories.

International Project Portfolio

Delivered projects for UNIDO, IFC, EU Climate Dialogues, Alexbank, Banque Misr, Mobily (KSA), TotalEnergies, and major Egyptian industrials.

Multi-Sector GHG Expertise

Prepared and independently verified Carbon Footprint reports (Scope 1, 2, 3) for industrial, pharmaceutical & energy sector clients per ISO 14064 & GHG Protocol.

Research & Knowledge Transfer

Published energy guidelines on bioenergy in Africa.
Research on energy benchmarking in Egyptian textile manufacturing.

Industries Served & Geographic Reach

Delivering tailored energy and sustainability solutions across diverse sectors and regions.

Key Industries

 Textiles & Carpets

 Steel & Metals


 Data Centers / Telecom

 Oil & Gas / Refining


 Banking & Finance


 Pharmaceuticals

 Food & Beverage

 Garments & Apparel

 Agriculture & Irrigation

 Chemicals & Rubber

 Building Materials

 Public Sector & UN

 Plastics Manufacturing

 Utilities & Distribution

 Tourism & Hospitality

Geographic Reach

- Egypt (Nationwide)
- Kingdom of Saudi Arabia (KSA)
- Bahrain
- MENA via multilaterals (UNIDO, IFC)

Why Choose Us

Standards-Led: Built on ISO 50001, ISO 14064, and IPMVP methodologies.

Bankability: Trusted due diligence and robust M&V for owners and top lenders.

Measurable Impact: Data-driven ROI, capacity building, and continuous improvement.

Project Portfolio

Energy Auditing & EnMS

Oriental Weavers Group

Manufacturing

Group-Wide Energy Audits

Regular thermal & electrical energy audits across different industrial facilities.

MACRO Pharmaceuticals

Pharmaceuticals

Comprehensive Energy Assessment

Full electrical systems audit; identified no/low-cost savings & economic feasibility of major measures.

TotalEnergies Egypt

Energy/Retail

Network of Fueling Stations Audit

Energy audit for multiple fueling stations nationwide; system optimization & savings identification.

UNIDO / 4 Plants

Industry

Industrial Motor Efficiency Program

CASO & MSO audits for El-Ashry Steel, Al-Monairy Corn, First Printing, Nassar Plastics.

UNIDO / 10+ Facilities

Multiple Sectors

Solar Heat for Industrial Process

Thermal audits + solar integration design for food/beverage, metals, chemicals & leather industries.

Nasr Petroleum / El-Sewedy

Oil & Gas / Industry

ISO 50001 EnMS Implementation

Full EnMS deployment, SEU definition, energy baselines, internal audits & ISO 50001 certification.

Project Portfolio

Renewable Energy

5,000 kW

Oriental Weavers Group

5 MWp Rooftop Solar PV

Tender management, contractor evaluation, technical & financial bid review for concrete rooftop PV installation.

2,500 kW

Oriental Weavers Group

2.5 MW Rooftop Solar PV

Technical compliance review, contractor selection & detailed design verification for two plants.

4,055 kW

Alexbank / Saint Gobain

PV Plant Verification

Full technical, financial & contractual verification. Quarterly construction monitoring. Final certification.

5,011 kW

Alexbank / Canal Co.

PV Plant Verification

Technical design, suppliers, contractors, PPA & financial model verification.

2,796 kW

Alexbank / Al-Montazah

PV Plant Verification

Full lifecycle verification: design through O&M risk assessment for water desalination facility.

2,500 kW

T&C Garments

PV Consultancy

Conceptual design, PGA development, contractor management, construction supervision & post-commissioning.

Project Portfolio

Sustainability & GHG Projects

Scope 1, 2, 3 Oriental Weavers Group

CFP Reports – Oriental Weavers

Full GHG inventory per ISO 14064-1 for two companies. Coordinated with production, utilities & procurement teams.

Scope 1, 2, 3 Independent Verifier

CFP Verification – Energya/Elsewedy Helal

Independent verification per ISO 14064-1, GHG Protocol & ISO 14064-3. Risk & materiality assessment. Assurance statement.

Scope 1, 2 MACRO Pharmaceuticals

CFP – MACRO Pharma

CFP report development + ISO 50001 EnMS. Emission reduction roadmap including RE integration & fuel switching.

Industry IFC (World Bank)

Resource Efficiency – Kandil Steel

HCl acid regeneration + green hydrogen scenarios. Baseline assessment, MRV methodology & carbon credit advisory.

Infrastructure UNRWA

Green Design Guide – UNRWA

Practical green design strategies for camps across Palestine, Syria, Lebanon & Jordan (energy, water, materials).

Policy EU Climate Dialogues

Green Hydrogen MoU Egypt-EU

Facilitated 3 knowledge-sharing sessions on green hydrogen supporting the EGY-EU MoU implementation.

Why Choose Exergy SC?



Certified Technical Depth

CEM, ISO 50001 Lead Auditor, Certified M&V Expert, GHG Verifier - we bring internationally accredited expertise to every engagement.



Results-Oriented Approach

We measure what matters: energy savings, CO₂ reductions, payback periods, and ROI. Our recommendations are grounded in data and economics.



MENA Regional Experience

Deep on-the-ground experience across Egypt, Saudi Arabia, UAE, and GCC countries — navigating local regulations, utilities, and market conditions.



Full-Spectrum Solutions

From energy audits and ISO 50001 to solar PV verification and GHG reporting - we handle the complete sustainability and energy value chain.



Partnership & Integrity

We act as a trusted partner, not just a contractor. Our independent verification services ensure objectivity and client-first decision-making.



Proven Track Record

80+ projects across 15+ industries with leading Egyptian industrials, international banks, UN agencies, and global energy companies.

Clients & Partners

Trusted by leading organizations across industry, finance, and international development



ALEXBANK



بنك مصر
BANQUE MISR



International
Finance Corporation
WORLD BANK GROUP



UNRWA

ELSEWEDY
ELECTRIC



النساجون الشرقيون
ORIENTAL WEAVERS



حديد العشري
ASHRYSTEEL



mobica.



Clients & Partners

Trusted by leading organizations across industry, finance, and international development



Let's decarbonize
your operations with
measurable ROI.

Partner with Exergy SC for bankable
sustainability solutions, standard-aligned
implementation, and guaranteed energy
performance.



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