



Global Energy Experience

With a 30 year track-record, Cedar is an award winning global management consulting firm with deep expertise in strategy and driving performance powered by the Balanced Scorecard. Its heritage includes being part of the \$1 Billion firm co-founded by the creator the Balanced Scorecard: Prof.Kaplan of HBS.

It has worked with over 50 globe energy clients across the world in the assessing of opportunities in the areas of renewable, non-renewable energy and related equipment. It's thought leadership in Balanced Scorecard has benefited a range of clients in the energy discovery and distribution sector.

Select Oil & Energy Client

ABB Duracell International Lanxide

ADCO Dynisco Larsen & Toubro
ADNOC Ecogen Mine Safety Appliances

Barnes Drill Emarat Mitsubishi

BP Amoco Emerson Electric Mitsubishi Heavy Industries

Calgor GasEppcoNippon MiningCanyon CorpETA - ZenathPacific Gas & ElectricCarbon LorraineEvereadyPeople's Gas Pittsburgh

Central & Southwest Utilities Ferraz-Shawmut Showa Shell

Coal & Oil Fluor Daniel Southern California Edison
Coastal Energy Gas Research Institute United Technologies
Dalma Energy General Electric Co Westinghouse

Dowa Mining Honeywell Corp. Yankee Gas Oil Dubai Fuel Supply Kawasaki Heavy Ind. Zapata Oil

Renewable Energy Related Programs

- Technological assessment of the potential to apply fuel cell technology to serve electric utility and industrial markets.
- Photovoltaic market assessment for Germany, Spain & US
- Provided a prospective of the wind energy market and growth, created a professional document for the investment decision in wind energy market, covering products, global supplier market shares and trends.
- Developed forecasts and scenarios for renewable energy in North America covering generation, investment models, CO2 auctions, Renewable Energy Credits (RECs), Renewable Energy Portfolio (RPS) and pending Federal incentives and regulations.
- Evaluated the markets for electric utility transmission & distribution products for grid upgrades.
- Evaluated the global demand for PV (photovoltaic) solar panel manufacturing equipment.
- Assessed the demand for energy storage components and systems for electric vehicles.
- Analyzed the market for wind power equipment and components.
- Analyzed the global energy market to identify opportunities for power generation. Current costs, subsidies and shortfalls were identified.





Diversified Energy Projects

- Strategic assessment of Indian industrial gas opportunities.
- Provided an overview of the metal enclosed switchgear and power fuse market.
- Performed a segmentation analysis of the low voltage circuit breaker business.
- Opportunity assessment for the supply of industrial gases in China.
- Finding patterns for pressure swing absorption technology in China.
- Evaluated the U.S., Asian and European markets for distributed generation using small localized turbo-generator modules.
- Evaluated the market opportunities for magnetic seals. Gas transmission compressors and other gas handling equipment were analyzed to determine needs, pricing and distribution.
- Evaluated sensor technologies for automated distribution systems.
- Evaluated opportunities for the use of advanced electric meters in tying in with DSM (demand side management) programs.
- Developed an entry strategy for industrial gas turbines covering multiple geographies (North and South America and the Mid-East).
- Created a business plan to enter China with a high efficiency, small-scale turbo-generator for power generation in small communities.
- Conducted an in-depth review of the U.S. market potential for natural gas fired, alkaline metal thermo-electric converters in the <100 KW range.
- Conducted an extensive study for a major electric/gas utility to determine how to more effectively market to industrial customers.
- Completed an extensive cogeneration study for three utilities and a gas turbine supplier of the <1MW co-generation market opportunity for a unique turbo alternator concept.
- Completed a technical market assessment of high velocity gas burners.
- Completed a detailed analysis of DSM opportunities in commercial and light industrial markets.
- Benchmarked a steel service center against its major competitors in industrial gas turbines, turbochargers for diesel locomotives and motors.
- Assessment of the Brazilian market for plastic pipes for gas distribution.
- Assessed future competition in the T&D and DSM market on a global basis.
- Assessed competitors' views of the U.S. utility market and characterized the strategies of these competitors in various product segments.
- Analyzed the technologies, economies and markets for non-invasive pipe repair in sewer, water and gas pipeline segments.
- Analyzed opportunities for market development of "total energy" on-site generating systems for commercial and industrial applications.
- Analyzed nuclear and nonnuclear utility outsourcing opportunities for a nuclear fuel supplier. Spent fuel storage, disposal, outage management and pump repair were covered.
- Analyzed component markets for airborne and land-based gas turbines, including definition of applications by specific engine design (model) and manufacturer.
- Analyzed co-generation opportunities for a manufacturer of gas turbine generators. Study evaluated the gas turbine's position relative to steam boilers, diesels and other alternatives.
- Analysis of the off-shore exploration market for breathing gases.
- An opportunity assessment for supply of industrial gases to petrochemical, chemical & steel sectors.





• A global market characterization and entry strategy study of under 1,500 HP industrial gas turbines and gas turbine generators. An extensive study was completed covering multiple geographies (North and South America and Mid-East).

Power Generation & Battery Projects

- Identified partners for the production of alkaline batteries in China.
- Quantified the market for consumer dry batteries in Asia.
- Analyzed the market for uninterruptible power supplies in electric service critical industries.
- Evaluated demand for new chemical compounds used in the production of lithium ion batteries.
- Assessed the demand for energy storage components and systems for electric vehicles.
- Evaluated new technologies for deep cycling military batteries.
- Analyzed the global automotive aftermarket, including replacement batteries.
- Estimated the global market demand for solid state electronic ballasts for lighting applications.
- Completed a study of back-up power supplies used in the telecom industry.
- Developed an acquisition analysis of a supplier of switching power supplies.
- Evaluated the market for power supplies in commercial and military aircraft.

Power Generation and T&D

- Detailed assessment of the electric utility transformer market and competition.
- Assessed future competition in the T&D and DSM market on a global basis.
- Evaluated opportunities for the use of advanced electric meters in tying in with DSM programs.
- Evaluated sensor technologies for automated distribution systems.
- Evaluated the markets for electric utility transmission and distribution products.
- Analyzed the U.S. and European markets for polymer-based insulators and arresters.
- Provided an overview of the metal enclosed switchgear and power fuse market.
- Performed a segmentation analysis of the low voltage circuit breaker business.
- Assessed a supplier of uninterruptable power supplies.
- Evaluated the U.S., Asian & European markets for distributed generation using small localized turbo-generator modules.
- Created a business plan to enter China with a high efficiency, small-scale turbo-generator for power generation in small communities.
- Completed a detailed analysis of DSM opportunities in commercial and light industrial markets.
 New electro-technologies and applications were explored for an electric utility with four distinct operating companies.
- Benchmarked utility strategies for deregulation. Utility & non-utility businesses were analyzed.
- Analyzed nuclear and non-nuclear utility outsourcing opportunities for a nuclear fuel supplier.
 Spent fuel storage, disposal, outage management and pump repair were covered.
- Assisted an electric utility seeking to implement a program of electro-conversion among its industrial customers.
- Co-generation study for three utilities and a gas turbine supplier of the <1MW cogeneration market opportunity for a unique turbo alternator concept.
- Analyzed opportunities for market development of "total energy" on-site generating systems for commercial and industrial applications.





- Conducted an in-depth review of the U.S. market potential for natural gas fired, alkaline metal thermo-electric converters in the <100 KW range, within residential, commercial and industrial markets.
- A global market characterization and entry strategy study of under 1,500 HP industrial gas turbines and gas turbine generators. An extensive study was completed covering multiple geographies (North and South America and Mid-East).
- Technological assessment of the potential to apply fuel cell technology to serve electric utility and industrial markets.
- Assessed competitors' views of the U.S. utility market through 2000 and characterized the strategies of these competitors in various product segments.