GFA GROUP
Your purpose
Our expertise

GFA CONSULTING GROUP

ENERGY

RENEWABLE ENERGY AND POWER SECTOR DEVELOPMENT

ENERGY USE & ENERGY EFFICIENCY

RENEWABLE ENERGY AND POWER SECTOR DEVELOPMENT

Training in Indonesia

CHALLENGES

The renewable energy and power sector faces numerous challenges that hinder the transition to sustainable energy solutions. In this respect, GFA Consulting Group addresses key problems head-on. Integrating intermittent renewable energy sources into existing power grids without compromising grid stability and overcoming high initial investment costs to ensure economic viability are two major challenges. Navigating complex regulatory environments to facilitate project approvals and implementation while promoting technological advancements and the adoption of advanced technologies are additional solutions. In other scenarios, developing infrastructure in remote and under-served regions to enhance energy access, and strengthening the technical and managerial capacities of stakeholders involved in renewable energy projects point in the right direction.

GFA SERVICES

GFA Consulting Group offers a comprehensive range of problem-solving services to meet the distinct needs of the renewable energy and power sector.

GENERAL RENEWABLE ENERGY SERVICES

GFA expert teams provide strategic advice on grid integration, conduct technical and financial feasibility studies, and carry out environmental and social impact assessments. The teams develop renewable energy project pipelines, conduct due diligence, and facilitate training and capacity development. In addition, GFA creates digital innovation tools to support project planning, implementation, and monitoring.

POWER SECTOR DEVELOPMENT

The company's experts advise partners on power market reforms, utility transformation, and smart grid development. They offer guidance on independent power producer (IPP) and public-private partnership (PPP) projects, negotiate power purchase agreements (PPAs), and develop distribution network and grid models. They also facilitate the development of cross-border electricity markets.

OFF-GRID ENERGY AND ELECTRIFICATION

GFA supports mini-grid development, innovative rural electrification schemes, and provides advice on the productive use of energy. An experienced team utilizes GIS mapping and digital platforms for off-grid energy planning and implementation and assists with procurement processes for off-grid energy projects.

REGIONAL PRESENCE

GFA has a strong presence in a variety of regions, where the company's experts and their partners implement localized solutions to address specific energy challenges.

In **AFRICA**, GFA enhances electricity access, integrates renewable energy, and promotes rural electrification across the continent. Projects span North Africa (solar energy integration), West Africa (electricity access and hydro-power), East Africa (mini-grid development and rural electrification), Central Africa (infrastructure development in remote regions), and Southern Africa (regulatory reforms and capacity building). Notably, GFA cooperates with the West, East

and South African power pools on market access guides for IPPs and regional electricity trading mechanisms.

In the **CARIBBEAN**, the company's consultants promote renewable energy and energy efficiency through the Technical Assistance for Capacity Building in the Energy Sector Belize (LAIT up!) project. Related work includes developing financing mechanisms, designing policies and regulations for energy efficiency and grid integration, and supporting rural electrification through mini grids and grid integration.

In **WESTERN BALKANS**, GFA enhances the regulatory and technical framework to support renewable energy integration. Projects provide technical and regulatory advisory services to increase renewable energy in electricity grids, support regional exchanges on renewable energy solutions, and establish a favorable regulatory framework. Teams of experts collaborate with multi-level key actors to implement grid integration solutions and create conditions for a renewable energy transition.

In **ASIA**, GFA supports renewable energy infrastructure development. In South Asia, the focus is on grid integration and renewable energy adoption. The Renewable Energy and Energy Efficiency Programme II (REEEP II) in Bangladesh is a case in point as it implements solar rooftop systems, capacity development, digital platforms, and awareness campaigns. In Southeast Asia, the company improves commercial rooftop solar energy conditions through the development of regulatory and technical standards. In Vietnam, GFA fosters technological advancements and smart grid solutions as part of the GIZ 4E project by conducting grid impact studies and training distribution utility engineers. In Central Asia, consultants assist clients in regulatory reforms and capacity development for enhanced energy access and sustainability.

GLOBAL INITIATIVES

GFA facilitates renewable energy projects worldwide and emphasizes decentralized energy solutions and rural development by means of global initiatives, especially the Global Energy Transformation Programme (GET.transform). These initiatives cover whole continents, ensuring localized and impactful solutions such as the development of an enabling framework for solar home systems, mini-grids in underserved regions, comprehensive support for cross-border electricity markets, setting up of auctioning mechanisms, etc. In the context of these initiatives, GFA engages extensively with the three power pools in Africa, i.e. the West African Power Pool (WAPP), the East African Power Pool (EAPP) and the South African Power Pool (SAPP). This promotes regional cooperation and efficient energy trading which, in return, enhance grid stability and energy security across borders.

GFA Consulting Group's long-standing experience and comprehensive services make it a key player in advancing renewable energy and power sector development worldwide. The company's strategic initiatives, technological advancements, and localized solutions keep driving progress towards a sustainable energy future.

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ENERGY USE & ENERGY EFFICIENCY

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CHALLENGES

ENERGY EFFICIENCY (EE) plays a major role in decreasing non-productive energy consumption. Particularly in developing and transition countries with obsolete industrial technologies and buildings not adapted to regional climate, technological and processual upgrading, refurbishment, and the introduction of EE standards are big challenges.

The demand for consultancies is growing due to EE benefits such as reduced energy costs, resource conservation for coal, oil, and gas, increased competitiveness, the positive impact on the environment, and energy security. In addition, improving EE decreases countries' reliance on imported energy resources and enhancing energy security.

GFA offers its partners complete project management solutions ranging from the identification and implementation of EE measures to policy advice and capacity development. Over time, GFA experts gained solid experiences in accompanying clients in their development process. The GFA approach ensures long-lasting impacts on clients' and local partners' capacities to develop appropriate solutions to EE-related challenges.

GFA CONCEPT AND SERVICES

Building on longstanding expertise and experience in implementing EE measures in the building, industry and transport sectors, GFA consultant teams are well-positioned to advise on the best strategies to improve energy performance. GFA consults clients on improving energy conservation, and provides the following services:

- Development of building codes and EE building regulations, including the development of building typologies.
- Implementation of EE measures in building and industry sectors, including but not limited to improving the energy performance of existing building stock and energy-efficient retrofitting of buildings using rooftop photovoltaic installations.
- Improving the energy performance of district heating/cooling and decarburized heating systems.
- Execution of energy audits and management in industry and public infrastructure.
- Development and implementation of municipal energy management systems, including street lighting, district heating, and buildings.
- Development of funding models and innovative financing options for investments in EE.
- Support to the reform and restructuring of EE funds.
- Consultation on Energy Service Companies (ESCOs), Super-ESCOs, and energy performance contracting.
- Development and scaling-up of business models for the deployment of more extensive EE measures.
- Capacity development and training measures on EE for suppliers/enablers.

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