

Energy market opportunities in North Africa and Gulf region

This report is part of Export Consortium project funded by Sitra, City of Vaasa, Mustasaari community and participating companies.

EXECUTIVE SUMMARY AND SUGGESTED IMPLICATIONS

This report has studied energy market opportunities for Finnish solution providers in selected countries in North Africa and Gulf region. The work has been conducted as a combination of review of Internet sources and local investigations in some extent.

The chosen market areas for this study have common features in some extent. The economies are in transition from oil and gas toward sustainable energy and at the same time transforming the economic dependence from raw materials toward goods and services. Unemployment and great share of young people are visible in the demographic descriptors. Many countries are challenged by the low cost of oil and general political instability which is related to geopolitics. Governments and rulers have strong influence on decision-making – this allows fast start of large scale projects when needed. On the other hand, large scale implementation needs technology support imported from other countries and sustaining operations may be limited by the capabilities and capacities in the lower levels. Each country has also its specific challenges due to size of the country, infrastructure, location of major cities and geopolitical situations.

Summary per geographical market area is as follows:

Morocco

- Waste and biomass (solid waste) handling projects
- Renewable power generation: Solar, wind, hydropower

United Arab Emirates

- Clean renewable energy solutions in general to achieve the national objectives
- Natural gas, solar, low carbon solutions

Qatar

- Grid building
- Renewable projects: solar, desalination

Saudi-Arabia

- Power generation capacity expansions combined with requirements for fuel efficiency improvements
- Renewable solutions in general: solar and wind
- Load-balancing solutions for grid
- Waste to energy solutions

Oman

- Energy market solutions - tariff system, trading etc.
- Solar projects
- Technology transfer and combining local technical education

Kuwait

- Solar projects: PV and CSP

Bahrain

- Upgrading power stations
- Renewable energy solutions

Renewable energy generation solutions are interesting in many countries. Waste handling and smart grid solutions are topic items as well. High tech proposals are being seek to find solutions to reduce carbon emissions in multiple areas. Scope of supply should cover the entire delivery as well as operations and maintenance solutions.

Approach suggested

Each country needs to be targeted separately and contacts should be developed in governmental level to have blessing for discussions. Model piloted in the Energy Days concept for each region could offer a solution to introduce the offering for key decision makers. Offerings could be organized to form project consortia. Consortium offering should be summarized in joint presentations which would describe the overall solutions.

Some general suggestions to consortia:

- (1) Scope of supply should consist of plant level solution and support for operations.
- (2) Justification: renewable and eco-efficiency combined with high technology image
- (3) Consideration of technology transfer agreements aiming to support targets related to reduce unemployment and advancing the technology level.