LED Street Lighting

Expected project CAPEX : 1'210'000 €

Mandating Authority : Municipality of Zgharta-Ehden

Summary
In its quest for sustainability in all aspects of resource management, the Council has decided to convert its public lighting to LED. The resulting reduction in power requirements constitutes an important step in alleviating the financial burden while laying the foundations for the city’s shift towards renewable energies. This application concerns the territory of Zgharta-Ehden.

Location and population
Zgharta-Ehden, Lebanon
60'000 inh.

Social and environmental impact
Enhanced living conditions and night time security / Improved public finances and shifting of expenditures to social projects / Increased awareness on importance of energy savings / Reduced emissions and mitigation costs / Reduced reliance on imported fuel

Main stakeholders
Municipality of Zgharta-Ehden / Citizens of the city of Zgharta-Ehden
**Project maturity (IFC / World Bank Categories)**

**STAGE 1 : Concept Development, Site identification**

- Number of Lighting points: 3200
- Mapping of the street lighting system: YES
- Current installation: When grid-connected, 40% energy is saved using LED v/s HPS for same lighting levels

**STAGE 2 : Pre-Feasibility Studies**

- Pre-feasibility study: Yes

**STAGE 3 : Feasibility Studies**

- Feasibility study: not yet

**STAGE 4 : Permitting / Financing / Contracts**

- Contract with municipality: No
- Building permits signed: No
- Environmental impact study: No
- Identified sources of fundings: Tbd

**STAGE 5 : Engineering / Construction / Commercial Operation**

- Engineering, Procurement and Construction Contractor: Tbd
- Operation and Maintenance Contractor: Tbd
- Comments: This application is filed for a simple change of lighting points from high pressure sodium to LED, assuming that 90% of the points will be grid fed.

Source of electricity:
98% Grid connected at this stage, 2% stand-alone solar PV at this stage