



EMA

Euro-Mediterran-Arabischer Länderverein  
المنظمة العربية الأورومتوسطية للتعاون الإقتصادي  
Euro-Mediterranean-Arab Association

## Consulting, Energieaudits und Machbarkeitsstudien (PV-Anlagen für Häfen)

07.12.2021

EMA-Referenznummer: 2021-12-07\_2

Land: Tunesien  
Abgabetermin: 15.12.2021  
Finanzierung: Weltbankgruppe (IBRD)  
Referenznummer: WB-P879622-11/21  
Betreff: Energy audit studies including technical pre-feasibility studies of photovoltaic self-production installations for two selected ports Tunisia; eConsult

Vorgesehen:

**Durchführung von Energieaudits und technischen Machbarkeitsstudien für den Bau von Photovoltaikanlagen zur Eigenerzeugung von Strom für Schiffe, die in den Häfen La Goulette, Bizerte, Sousse, Zarzis, Sfax sowie weiteren Häfen anlegen**

- **Energieaudits für zwei ausgewählte Häfen: u.a. Unterstützung bei der Analyse der Energiequellen, des Energieverbrauchs, der Möglichkeiten und Herausforderungen der Eigenerzeugung und der Nutzung von Photovoltaikstrom für anliegende Schiffe**
- **Machbarkeitsstudien für zwei ausgewählte Häfen: u.a. Kapazitätsabschätzung und Abschätzung der Energieeinsparungen, Treibhausgasemissionen und Verschmutzung, Umrüstung/Ausbau und Integration des Stromsystems, Anreize zur Nutzung der Photovoltaikenergie, Investitionsausgaben und Betriebskosten, Betrieb und Instandhaltungsanforderungen**

Weitere Details entnehmen Sie bitte dem nachfolgenden Originaltext:

Assignment Description

Goal: To support the Government of Tunisia in decarbonizing its transport sector by conducting energy audits for two selected ports.

Background:

The Government of Tunisia has an ambitious renewable energy target as part of its intended nationally determined contribution (NDC) and developed the Sustainable Cities 2050 strategic program, which focuses on studying the sustainable development needs of cities and investing in pilot programs for urban development. With regard to transport, Tunisia's National Transport Master Plan for 2040 establishes a vision for a global, integrated, and coordinated transport system that contributes to sustainable development and meets the needs of the population. Tunisia requested international financing and technical support to operationalize their visions. In particular, deploying e-buses in cities and photovoltaic self-production installations for ports.



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In line with its National Transportation Master Plan 2040, and to achieve the INDC and other sustainable goals, Tunisia must implement its transport sector decarbonization. The energy consumption of transport sector in Tunisia is estimated at 32% of final national energy consumption. According to the National Agency of Environmental Protection, Tunisian public transport would be responsible for at least 30% of the emissions of CO and NOX. Berthed ships and ports in Tunisia are also large polluters with a high dependency on fossil fuel.

Tunisia has just started the greening agenda in the port sector but with the aim to leap-frog by learning from global best practices. Ports consume a lot of fossil fuel energy for its operations. Ships are significant sources of pollution in port cities, releasing contaminants such as nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM), and greenhouse gases like carbon dioxide and methane. Under the global trend and mandates in greening the ports and shipping lines, all the major ports around the world are deploying renewable energies to provide power supply for the port operations and to the berthed ships.

Scope: Energy audit studies including technical pre-feasibility studies of photovoltaic self-production installations for two selected ports.

a. Energy audit studies for two selected ports: assist the MOT and ports to understand the energy sources, energy consumption patterns, potentials and challenges for photovoltaic self-production installations, and potentials and challenges of supplying photovoltaic electricity production for berthed ships

\*The long list of ports includes the port of La Goulette, Bizerte, Sousse, Zarzis, and Sfax

b. Pre-feasibility studies of photovoltaic self-production installations for the two selected ports. It includes technical, economic, and financial pre-feasibility. The technical part may cover the following aspects i) capacity estimation and associated saving of energy, GHG emission, and pollution; ii) the required retrofitting/ upgrades and integration of the power system; iii) policies and incentives to encourage the ships to use photovoltaic electricity production; iv) CAPEX and OPEX; v) operation and maintenance requirements; vi) technical training (It is important to explain the business model of the RE projects to stakeholders and risks); vii) and other priorities defined by the stakeholders

Estimated Timeline: the project will be kicked off after signing the contract (estimated Jan -Feb 2022) and the final delivery will be around Nov-Dec of 2022.

## SUBMISSION REQUIREMENTS

The World Bank Group now invites eligible firms to indicate their interest in providing the services. Interested firms must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc. for firms; CV and cover letter for individuals). Please note that the total size of all attachments should be less than 5MB. Consultants may associate to enhance their qualifications.



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## Qualification Criteria

- 1. Provide information showing that they are qualified in the field of the assignment. \*
- 2. Provide information on the technical and managerial capabilities of the firm. \*
- 3. Provide information on their core business and years in business. \*
- 4. Provide information on the qualifications of key staff. \*
- 5. Provide information showing that they have conducted relevant assignments \*

\* - Mandatory

selection # 1278015

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eConsultant2

<https://wbgeconsult2.worldbank.org/wbgec/index.html>

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