

REQUEST FOR PROPOSALS

FEASIBILITY STUDY FOR THE

SNTL SOLAR PHOTOVOLTAIC ROOFTOP POWER PROJECT IN MOROCCO

Submission Deadline: **4:00 PM**
LOCAL TIME
JUNE 20, 2012

Submission Place: Mr. Oussama LOUDGHIRI
Directeur Général
Société National des Transports et de la Logistique (SNTL)
Rue El Fadila, Quartier Industriel
Rabat, Maroc
Tel.: +212 5 37 29 38 01
Fax: +212 5 37 79 67 13
Em ail: Loudghiri@sntl.ma

SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

N.B.: Any and all questions pertaining to the RFP should be sent to Rob Yavuz, USTDA, 1000 Wilson Blvd, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009, ryavuz@ustda.gov

REQUEST FOR PROPOSALS

SECTION 1: INTRODUCTION	4
1.1 BACKGROUND SUMMARY.....	4
1.2 OBJECTIVE	5
1.3 PROPOSALS TO BE SUBMITTED	5
1.4 CONTRACT FUNDED BY USTDA.....	6
SECTION 2: INSTRUCTIONS TO OFFERORS	6
2.1 PROJECT TITLE.....	6
2.2 DEFINITIONS.....	6
2.3 DEFINITIONAL MISSION REPORT	6
2.4 EXAMINATION OF DOCUMENTS	6
2.5 PROJECT FUNDING SOURCE.....	7
2.6 RESPONSIBILITY FOR COSTS	7
2.7 TAXES.....	7
2.8 CONFIDENTIALITY.....	7
2.9 ECONOMY OF PROPOSALS.....	7
2.10 OFFEROR CERTIFICATIONS	7
2.11 CONDITIONS REQUIRED FOR PARTICIPATION	8
2.12 LANGUAGE OF PROPOSAL.....	8
2.13 PROPOSAL SUBMISSION REQUIREMENTS	8
2.14 PACKAGING	8
2.15 OFFEROR'S AUTHORIZED NEGOTIATOR	9
2.16 AUTHORIZED SIGNATURE	9
2.17 EFFECTIVE PERIOD OF PROPOSAL	9
2.18 EXCEPTIONS	9
2.19 OFFEROR QUALIFICATIONS	9
2.20 RIGHT TO REJECT PROPOSALS	9
2.21 PRIME CONTRACTOR RESPONSIBILITY	9
2.22 AWARD	10
2.23 COMPLETE SERVICES.....	10
2.24 INVOICING AND PAYMENT	10
SECTION 3: PROPOSAL FORMAT AND CONTENT	11
3.1 EXECUTIVE SUMMARY	11
3.2 U.S. FIRM INFORMATION.....	12
3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL	12
3.4 TECHNICAL APPROACH AND WORK PLAN	12
3.5 EXPERIENCE AND QUALIFICATIONS	12
SECTION 4: AWARD CRITERIA	13
4.1 CONTRACTOR MINIMUM QUALIFICATIONS.....	13
4.2 AWARD CRITERIA.....	15

ANNEX 1	FEDBIZOPPS ANNOUNCEMENT
ANNEX 2	PORTIONS OF BACKGROUND DEFINITIONAL MISSION REPORT
ANNEX 3	USTDA NATIONALITY REQUIREMENTS
ANNEX 4	USTDA GRANT AGREEMENT, INCLUDING MANDATORY CONTRACT CLAUSES
ANNEX 5	TERMS OF REFERENCE (FROM USTDA GRANT AGREEMENT)
ANNEX 6	U.S. FIRM INFORMATION FORM

Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant in the amount of US\$666,619 to the Moroccan National Company for Transportation and Logistics (Société Nationale des Transports et de la Logistique) (SNTL) (the “Grantee”) in accordance with a grant agreement dated March 21, 2012 (the “Grant Agreement”). This grant will support a Feasibility Study (the “Study”) that will develop the optimal design, technology and project financing structure for a 1.5 megawatt (MW) peak capacity solar photovoltaic (PV) rooftop power project on the planned SNTL facility at Mohammedia. The Study will also recommend tender specifications based on the findings of the Study. In addition, the Study will develop a duplicable methodology to identify preferred technologies for additional site development at four other planned SNTL facilities throughout Morocco, in order to achieve a cumulative installed peak generation capacity of 7 MW. The Grant Agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U. S. firms to provide expert consulting services to perform the Feasibility Study.

1.1 BACKGROUND SUMMARY

Morocco does not have crude oil, coal or natural gas resources and consequently relies heavily on imports to meet more than 95% of the country’s energy requirements, mostly in the industrial, residential and transportation sectors. However, Morocco has vast renewable energy resources that the Government of Morocco (GOM) recognizes can reduce dependence on foreign sources of energy. At the same time, rising energy demand from population growth and economic development is outstripping capacity. Current energy market predictions show energy consumption rising approximately 8% per year while capacity is growing at only half that rate.

Accordingly, the GOM has embarked upon an ambitious national campaign to achieve 6 GW of installed capacity from renewable energy resources by 2020, representing 42% total of Morocco’s total electricity generation portfolio. This plan includes 2 GW from solar energy, for which the GOM announced in 2009 a \$12.4 billion utility-scale solar power plant investment program known as the Moroccan Solar Plan. For grid-connected distributed solar PV electricity, the National Office of Electricity (ONE) announced a smaller program in 2007 targeting 150 MW of solar PV power, which aims to support public sector entities such as SNTL as they implement their own renewable energy projects.

Created in 2007 out of the former National Transportation Office, SNTL is a 100% state-owned entity that is the leading company in Morocco for road transport freight, logistics services and passenger transportation. In addition, SNTL operates one of the largest fleets of delivery vehicles in Morocco. Given their energy requirements, SNTL is very interested in on-site solar power production to reduce energy consumption and lower electricity costs through the development of a solar PV rooftop power project in Mohammedia and subsequent duplication at the company’s planned logistical centers. Given their fleet of delivery vehicles, the company is also interested in an analysis of the steps required to convert the entire fleet over to electric vehicles that can be charged from the rooftop solar PV array.

In October 2010, SNTL completed construction of its first logistics center, the 36,000 m² Zenata platform, in Mohammedia, Morocco and is now planning to expand this platform with a new

60,000 m² facility. The company intends to pilot a 1.5 MW solar PV project on the new facility, followed by an expansion to four additional planned facilities in the Moroccan cities of Agadir, Fes, Marrakesh and Tangier, for a total of 7 MW peak generating capacity installed on 220,000 m² of roof. SNTL has instructed their engineering company to design the roof of the Zenata facility expansion to be structurally sufficient for the installation of rooftop solar PV arrays.

The Study will support SNTL by providing a detailed assessment for the implementation of the 1.5 MW solar PV rooftop power project in Mohammedia with further solar PV system implementation at four other SNTL facilities, for a total of 7 MW. The rooftop pilot project is expected to showcase the applicability of the selected solar PV technology on a utility scale and on a commercial rooftop facility. The Study will identify the specific needs of a solar PV power facility by providing site evaluations; permitting analysis; technology recommendations; financial modeling; net metering and connection requirement assessments; electrical vehicle fleet and PV charging capability assessments; electrical engineering recommendations, a preliminary environmental impact assessment, project implementation planning, and tender development support.

Implementation of the solar PV rooftop project is a high priority for SNTL. As a state-owned company, they are interested in taking a leadership position in catalyzing the use of solar PV technology on commercial rooftops. The SNTL project is expected to be the first large scale (>1MW) rooftop PV investment in Morocco and would serve as a model for replication throughout Morocco.

Portions of a background Definitional Mission are provided for reference in Annex 2.

1.2 OBJECTIVE

The objective of the Study is to develop the optimal design, technology and project financing structure for a 1.5 MW peak capacity solar PV rooftop power project on the planned SNTL facility at Mohammedia. The Study will also recommend tender specifications based on the findings of the Study. Finally, the Study will develop a duplicable methodology to identify preferred technologies for additional site development at four other planned SNTL facilities throughout Morocco, in order to achieve a cumulative installed peak generation capacity of 7 MW.

The Terms of Reference (TOR) for this Feasibility Study are attached as Annex 5.

1.3 PROPOSALS TO BE SUBMITTED

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

The amount for the contract has been established by a USTDA grant of US\$666,619. **The USTDA grant of US\$666,619 is a fixed amount. Accordingly, COST will not be a factor in**

the evaluation and therefore, cost proposals should not be submitted. Upon detailed evaluation of technical proposals, the Grantee shall select one firm for contract negotiations.

1.4 CONTRACT FUNDED BY USTDA

In accordance with the terms and conditions of the Grant Agreement, USTDA has provided a grant in the amount of US\$666,619 to the Grantee. The funding provided under the Grant Agreement shall be used to fund the costs of the contract between the Grantee and the U.S. firm selected by the Grantee to perform the TOR. The contract must include certain USTDA Mandatory Contract Clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA Mandatory Contract Clauses are attached at Annexes 3 and 4, respectively, for reference.

Section 2: INSTRUCTIONS TO OFFERORS

2.1 PROJECT TITLE

The project is called the SNTL Solar Photovoltaic Rooftop Power Project Feasibility Study in Morocco.

2.2 DEFINITIONS

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal, including qualifications statement.

The term "Offeror" means the U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

2.3 DEFINITIONAL MISSION REPORT

USTDA sponsored a Definitional Mission to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. Portions of the report are attached at Annex 2 for background information only. Please note that the TOR referenced in the report are included in this RFP as Annex 5.

2.4 EXAMINATION OF DOCUMENTS

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the Feasibility Study.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution and completion of the Feasibility Study.

2.5 PROJECT Funding Source

The Feasibility Study will be funded under a grant from USTDA. The total amount of the grant is not to exceed US\$666,619.

2.6 RESPONSIBILITY FOR COSTS

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal. Neither USTDA nor the Grantee assumes any obligation as a result of the issuance of this RFP, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, final selection or negotiation of a contract.

2.7 TAXES

Offerors should submit proposals that note that in accordance with the USTDA Mandatory Contract Clauses, USTDA grant funds shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in the Host Country.

2.8 CONFIDENTIALITY

The Grantee will preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror, to the extent permitted by the laws of the Host Country.

2.9 ECONOMY OF PROPOSALS

Proposal documents should be prepared simply and economically, providing a comprehensive yet concise description of the Offeror's capabilities to satisfy the requirements of the RFP. Emphasis should be placed on completeness and clarity of content.

2.10 OFFEROR CERTIFICATIONS

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a

proposal; and (d) that it has not sought by collusion to obtain for itself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

2.11 CONDITIONS REQUIRED FOR PARTICIPATION

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from the Host Country for up to 20 percent of the amount of the USTDA grant for specific services from the TOR identified in the subcontract. USTDA's nationality requirements, including definitions, are detailed in Annex 3.

2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English, and only English.

2.13 PROPOSAL SUBMISSION REQUIREMENTS

The **Cover Letter** in the proposal must be addressed to:

Mr. Oussama LOUDGHIRI
Directeur Général
Société Nationale des Transports et de la Logistique (SNTL)
Rue El Fadila, Quartier Industriel
Rabat, Maroc
Tel.: +212 5 37 29 38 01
Fax: +212 5 37 79 67 13
Email: Loudghiri@sntl.ma

An Original and eight (8) copies of your proposal must be received at the above address no later than 4:00 PM LOCAL TIME, on JUNE 20, 2012.

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline will be returned unopened. The Grantee will promptly notify any Offeror if its proposal was received late.

Upon timely receipt, all proposals become the property of the Grantee.

2.14 PACKAGING

The original and each copy of the proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including the name of the project and designation of "original" or "copy number x." The original and eight (8) copies should be collectively wrapped and sealed, and clearly labeled, including the contact name and the name of the project.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly wrapped, sealed and labeled.

2.15 OFFEROR'S AUTHORIZED NEGOTIATOR

The Offeror must provide the name, title, address, telephone number, e-mail address and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

2.16 AUTHORIZED SIGNATURE

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

2.17 EFFECTIVE PERIOD OF PROPOSAL

The proposal shall be binding upon the Offeror for NINETY (90) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

2.18 EXCEPTIONS

All Offerors agree by their response to this RFP announcement to abide by the procedures set forth herein. No exceptions shall be permitted.

2.19 OFFEROR QUALIFICATIONS

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered a advisory, feasibility study and/or other services similar to those required in the TOR, as applicable.

2.20 RIGHT TO REJECT PROPOSALS

The Grantee reserves the right to reject any and all proposals.

2.21 PRIME CONTRACTOR RESPONSIBILITY

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of any subcontractors. USTDA nationality provisions apply to the use of subcontractors and are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all of the applicable USTDA

Mandatory Contract Clauses, to be inserted in any subcontract funded or partially funded by USTDA grant funds.

2.22 AWARD

The Grantee shall make an award resulting from this RFP to the best qualified Offeror, on the basis of the evaluation factors set forth herein. The Grantee reserves the right to reject any and all proposals received.

2.23 COMPLETE SERVICES

The successful Offeror shall be required to (a) provide local transportation, office space and secretarial support required to perform the TOR if such support is not provided by the Grantee; (b) provide and perform all necessary labor, supervision and services; and (c) in accordance with best technical and business practice, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete the TOR to the satisfaction of the Grantee and USTDA.

2.24 INVOICING AND PAYMENT

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. After the Grantee's approval of each invoice, the Grantee will forward the invoice to USTDA. If all of the requirements of USTDA's Mandatory Contract Clauses are met, USTDA shall make its respective disbursement of the grant funds directly to the U.S. firm in the United States. All payments by USTDA under the Grant Agreement will be made in U.S. currency. Detailed provisions with respect to invoicing and disbursement of grant funds are set forth in the USTDA Mandatory Contract Clauses attached in Annex 4.

Section 3: PROPOSAL FORMAT AND CONTENT

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. A cost proposal is NOT required because the amount for the contract has been established by a USTDA grant of US\$666,619, which is a fixed amount.

Offerors shall submit one (1) original and eight (8) copies of the proposal. Proposals received by fax cannot be accepted.

Each proposal must include the following:

- Transmittal Letter,
- Cover/Title Page,
- Table of Contents,
- Executive Summary,
- Firm Background Information,
- Completed U.S. Firm Information Form,
- Organizational Structure, Management Plan, and Key Personnel,
- Technical Approach and Work Plan, and
- Experience and Qualifications.

Detailed requirements and directions for the preparation of the proposal are presented below.

3.1 EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major elements of the proposal, including any conclusions, assumptions, and general recommendations the Offeror desires to make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

3.2 U.S. FIRM INFORMATION

A U.S. Firm Information Form in .pdf fillable format is attached at the end of this RFP in Annex 6. The Offeror must complete the U.S. Firm Information Form and include the completed U.S. Firm Information Form with its proposal.

3.3 ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this Feasibility Study. Identify the Project Manager who will be the individual responsible for this project. The Project Manager shall have the responsibility and authority to act on behalf of the Offeror in all matters related to the Feasibility Study.

Provide a listing of personnel (including subcontractors) to be engaged in the project, including both U.S. and local subcontractors, with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. If subcontractors are to be used, the Offeror shall describe the organizational relationship, if any, between the Offeror and the subcontractor.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Technical Approach and Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

3.4 TECHNICAL APPROACH AND WORK PLAN

Describe in detail the proposed Technical Approach and Work Plan (the "Work Plan"). Discuss the Offeror's methodology for completing the project requirements. Include a brief narrative of the Offeror's methodology for completing the tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports.

Prepare a detailed schedule of performance that describes all activities and tasks within the Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones.

Based on the Work Plan, and previous project experience, describe any support that the Offeror will require from the Grantee. Detail the amount of staff time required by the Grantee or other participating agencies and any work space or facilities needed to complete the Feasibility Study.

3.5 EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications that are relevant to the objectives and TOR for the Feasibility Study. If a subcontractor(s) is being used, similar information must be provided for the prime and each subcontractor firm proposed for the project.

The Offeror shall provide information with respect to relevant experience and qualifications of key staff proposed. The Offeror shall include letters of commitment from the individuals proposed confirming their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided for each of the Offeror and any subcontractor, including the following information:

Project name,
Name and address of client (indicate if joint venture),
Client contact person (name/ position/ current phone and fax numbers),
Period of Contract,
Description of services provided,
Dollar amount of Contract, and
Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to the Feasibility Study as described in this RFP.

Section 4: AWARD CRITERIA

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors. The Grantee will notify USTDA of the best qualified Offeror, and upon receipt of USTDA's no-objection letter, the Grantee shall promptly notify all Offerors of the award and negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations may then be undertaken with the second most qualified Offeror and so forth.

4.1 CONTRACTOR MINIMUM QUALIFICATIONS

Offerors must address how they meet the minimum qualifications listed below. If these minimum qualifications are not addressed, the proposal will be rejected.

The Feasibility Study team should have the following minimum qualifications:

- Proven experience and capability to perform feasibility studies for rooftop solar PV projects.
- Listing by one or more recognized Multilateral Development Banks (World Bank, International Finance Corporation, European Investment Bank, Asian Development Bank etc.) as qualified to perform bankable Solar Resource Assessments.
- Experience with DC-side PV system design and AC-side grid connection design.

- Experience with financial modeling of PV power plants and securing debt financing for PV power projects.
- Experience preparing EPC and O&M service contract agreements for solar PV.
- Experience negotiating Power Purchase Agreements (PPA) for solar PV systems.
- Experience in Morocco or the Middle East and North Africa (MENA) region is required.
- The proposed staff should have qualifications and experience in engineering, technical analysis, operations planning and modeling, environmental assessments, as well as excellent technical knowledge of PV technology units and power transmission systems.
- Experience with utility or independent power producer clients would be beneficial.

Project Manager - The Project Manager should have a minimum of 15 years broad experience in all technical, commercial, and financial aspects of renewable energy sector project transactions, in particular for solar PV. The Project Manager should have experience in evaluating different project financing structures for solar PV, preparing investment memoranda, advising on the business tools necessary to be included in all underlying project agreements (PPA, EPC Contracts, land lease, insurance, etc), and experience working with regulatory requirements to facilitate project financing. The Project Manager should offer a demonstrated track record in working with International Financial Institutions and other relevant stakeholders to bring renewable energy projects in developing country environments to financial close.

Electrical Engineer (U.S.) - The Electrical Engineer should have a minimum of 10 years of experience in power systems electrical systems design and construction of substations (AC-side) and also experience with the design of utility-grade PV power plants (DC-side).

Electrical Engineer (Local) - The Electrical Engineer should have a minimum of 5 years of experience in power systems electrical systems design and construction of substations and transmission lines in Morocco.

Solar Resource Engineer (U.S.) - The Solar Resource Engineer should have a minimum of 5 years experience in Irradiation Measurements and Solar Energy Yield Calculations.

Environmental Engineer (U.S.) - The Environmental Engineer should have a minimum of 10 years of experience carrying out environmental impact analyses for energy development projects in developing countries. This specialist must have strong experience in socio-economic impact analyses in this context as well. Experience in Morocco would be beneficial.

Environmental Engineer (Local) - The Environmental Engineer should have a minimum of 5 years of experience carrying out environmental impact analyses for energy development projects in Morocco.

Civil Engineer (U.S.) – The Civil Engineer should have a minimum of 10 years of experience of detailed engineering for Civil Works, particularly related to roof mounted solar PV.

Civil Engineer (Local) - The Civil Engineer should have a minimum of 10 years of experience of detailed engineering for Civil Works in Morocco, particularly related to roof and structural design for logistic centres.

Attorney (U.S.) - The Attorney should have a minimum of 15 years of experience working on regulatory issues related to the renewable energy sector, negotiating PPAs, EPC and O&M Services contracts, preferably in emerging markets.

Attorney (Local) - The Attorney should have a minimum of 10 years of experience working on energy sector regulatory issues and PPAs in Morocco.

Financial Specialist (U.S.) - The Financial Specialist should have a minimum of 10 years of experience in modeling complex independent power projects, including experience in modeling utility-grade solar PV power projects.

4.2 AWARD CRITERIA

Given the above minimum qualifications, the selection of the Contractor will be based on the following criteria:

1. Company/Staff Background and Experience (25%) - Background and experience of the Contractor and/or Contractor team, including:
 - a. General overview of the Contractor's firm and demonstrated expertise in areas described in the minimum qualifications (5%);
 - b. Overview of the Contractor's team including identification of local Subcontractor(s) that can support communications and logistics and act as an interface with SNTL (2%);
 - c. Documentation of prior rooftop solar PV project experience that meets the minimum qualifications (2%);
 - d. Key professional staff that are to be involved on the project shall be identified by name, title and role, and detailed resumes including identification of staff responsible for positions described in minimum qualifications (7%);
 - e. French language capabilities of proposed key staff (2%); and
 - f. Detailing of solar PV rooftop project experiences for comparably-sized (approximately 1.5MW) projects with at least one letter of reference from a client (7%).
2. Project Approach (35%) - Approach to the performing the Terms of Reference, including:
 - a. Proposed staffing plan (10%);
 - b. Schedule (10%); and
 - c. Approach and methodology for completing stated tasks (15%).

3. Similar Experience (35%) - Demonstrated experiences and/or expertise, including:
 - a. Experience in preparing feasibility studies for utility-scale commercial PV projects (9%);
 - b. Experience with PV System Design and Engineering (12%);
 - c. Experience with negotiating PPAs, EPC and O&M Services contracts for Solar PV (7%); and
 - d. Experience in Morocco with grid connection and net metering (7%).

4. Unique Qualifications (5%) - Unique qualifications, such as prior planning assignments in Morocco or the MENA region or other qualifications which might distinguish and differentiate the Contractor and team from other proposers for this project.

Proposals that do not include all requested information may be considered non-responsive.

Price will not be a factor in contractor selection.

ANNEX 1

MR. OUSSAMA LOUDGHIRI, DIRECTEUR GENERAL, SOCIETE NATIONALE DES TRANSPORTS ET DE LA LOGISTIQUE (SNTL), RUE EL FADILA, QUARTIER INDUSTRIEL, RABAT, MAROC, TEL.: +212 5 37 29 38 01, FAX: +212 5 37 79 67 13. EMAIL: LOUDGHIRI@SNTL.MA

SNTL SOLAR PHOTOVOLTAIC ROOFTOP POWER PROJECT IN MOROCCO

POC: Robin Yavuz, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. SNTL Solar Photovoltaic Rooftop Power Project in Morocco. The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms that are qualified on the basis of experience and capability to develop a feasibility study (the "Study") that will evaluate the optimal design, technology and project financing structure for a 1.5 megawatt (MW) peak capacity solar photovoltaic (PV) rooftop power project on the planned National Company for Transportation and Logistics (SNTL) facility at Mohammedia. The Study will also recommend tender specifications based on the findings of the Study. In addition, the Study will develop a duplicable methodology to identify preferred technologies for additional site development at four other planned SNTL facilities throughout Morocco, in order to achieve a cumulative installed peak generation capacity of 7 MW.

Morocco does not have crude oil, coal or natural gas resources and consequently relies heavily on imports to meet more than 95% of the country's energy requirements, mostly in the industrial, residential and transportation sectors. However, Morocco has vast renewable energy resources that the Government of Morocco (GOM) recognizes can reduce dependence on foreign sources of energy. At the same time, rising energy demand from population growth and economic development is outstripping capacity. Current energy market predictions show energy consumption rising approximately 8% per year while capacity is growing at only half that rate.

Accordingly, the GOM has embarked upon an ambitious national campaign to achieve 6 GW of installed capacity from renewable energy resources by 2020, representing 42% total of Morocco's total electricity generation portfolio. This plan includes 2 GW from solar energy, for which the GOM announced in 2009 a \$12.4 billion utility-scale solar power plant investment program known as the Moroccan Solar Plan. For grid-connected distributed solar PV electricity, the National Office of Electricity (ONE) announced a smaller program in 2007 targeting 150 MW of solar PV power, which aims to support public sector entities such as SNTL as they implement their own renewable energy projects.

Created in 2007 out of the former National Transportation Office, SNTL is a 100% state-owned entity that is the leading company in Morocco for road transport freight, logistics services and passenger transportation. In addition, SNTL operates one of the largest fleets of delivery vehicles in Morocco. Given their energy requirements, SNTL is very interested in on-site solar power production to reduce energy consumption and lower electricity costs through the development of a solar PV rooftop power project in Mohammedia and subsequent duplication at the company's planned logistical centers. Given their fleet of delivery vehicles, the company is also interested in an analysis of the steps required to

convert the entire fleet over to electric vehicles that can be charged from the rooftop solar PV array.

In October 2010, SNTL completed construction of its first logistics center, the 36,000 m² Zenata platform, in Mohammedia, Morocco and is now planning to expand this platform with a new 60,000 m² facility. The company intends to pilot a 1.5 MW solar PV project on the new facility, followed by an expansion to four additional planned facilities in the Moroccan cities of Agadir, Fes, Marrakesh and Tangier, for a total of 7 MW peak generating capacity installed on 220,000 m² of roof. SNTL has instructed their engineering company to design the roof of the Zenata facility expansion to be structurally sufficient for the installation of rooftop solar PV arrays.

The Study will support SNTL by providing a detailed assessment for the implementation of the 1.5 MW solar PV rooftop power project in Mohammedia with further solar PV system implementation at four other SNTL facilities, for a total of 7 MW. The rooftop pilot project is expected to showcase the applicability of the selected solar PV technology on a utility scale and on a commercial rooftop facility. The Study will identify the specific needs of a solar PV power facility by providing site evaluations; permitting analysis; technology recommendations; financial modeling; net metering and connection requirement assessments; electrical vehicle fleet and PV charging capability assessments; electrical engineering recommendations, a preliminary environmental impact assessment, project implementation planning, and tender development support.

Implementation of the solar PV rooftop project is a high priority for SNTL. As a state-owned company, they are interested in taking a leadership position in catalyzing the use of solar PV technology on commercial rooftops. The SNTL project is expected to be the first large scale (>1MW) rooftop PV investment in Morocco and would serve as a model for replication throughout Morocco.

The U.S. firm selected will be paid in U.S. dollars from a \$666,619 grant to the Grantee from the U.S. Trade and Development Agency (USTDA).

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and portions of a background definitional mission report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to: <https://www.ustda.gov/businessopps/rfpform.asp>. Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day.

Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal in English directly to the Grantee by 4:00 PM LOCAL TIME, JUNE 20, 2012 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

ANNEX 2



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

Project Recommendation: SNTL Solar PV Rooftop Pilot Project Feasibility Study

A. PROJECT DESCRIPTION

Project Summary Information	
Host Country	Morocco
Project Name	SNTL Solar Photovoltaic Rooftop Pilot Project Feasibility Study
Sector	Renewable Energy
Region	North Africa
Project Location	Mohammedia
Grant Amount	\$666,619
Grantee	SNTL – Société Nationale des Transports et de la Logistique

1) Introduction & Overview of Project Submitted for USTDA Grant

Société Nationale des Transports et de la Logistique ("SNTL"). SNTL is a state owned company conducting logistics services, including the storage and transport of goods. The company was created in 2007 by transferring the activity of the National Office of Transportation into a new entity with joint-stock status. The company has \$110 million in annual revenues. The Managing Director, Mr. Loudghiri, previously worked for the Office National d'Electricite (ONE) and the Logistics Director, Mr. Jebbar, previously worked for Danone.

SNTL commenced construction of its first logistics center in October 2009 in Mohammedia (Grand Casablanca region). The 36,000m² Zenata Platform was completed in October 2010. The storage facility includes a 6,000m² cold storage area divided into 5 sections with different temperatures (ranging from minus 25 to 0 Celsius).

SNTL's development strategy includes construction of five additional logistics centers located in Agadir (25,250m²), Casablanca (Grand Casablanca region 107,500m²), Fès (12,250m²), Marrakech (12,250m²) and Tangier (50,500m²). The total storage area under management is expected to reach 220,000m² by 2016.



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

The next logistics center to be built is the 60,000m² extension of the Zenata Platform in Mohammedia. SNTL have instructed their engineering company to design the roof to support 20kg/m² as they want all new buildings to be structurally sufficient for the installation of rooftop solar PV arrays. The 60,000 m² extension is scheduled to be opened in October 2012. SNTL would like to construct a 1.5MW solar PV array on the roof in Q4 2012 once the building is complete. Additionally SNTL would like an analysis of the potential to install PV arrays on the roofs of the entire future portfolio of building stock to be built.

SNTL is extremely interested in on-site solar power production to reduce energy consumption and lower electricity costs. Since the company also owns fleets of delivery vehicles, SNTL would like an analysis of converting their entire fleet over to electric vehicles so they could be charged from the rooftop PV array.

Energy consumption for the refrigerated storage at the existing 36,000 m² Zenata logistics center requires 1.45MW of installed capacity. Since peak demand for SNTL occurs between 5pm to 11pm the company is interested in a net metering solution. Net metering is a utility resource usage and payment scheme in which a customer who generates their own power is compensated monetarily. In a net metering program, the electric company allows a customer's meter to actually run backwards if the electricity the customer generates is more than they are consuming. Net metering would be a new technology for the local electricity supply company Lydec, but not for the National Electricity Company, as ONE has experience connecting wind farms to the grid.

SNTL is applying for a USTDA grant for a feasibility study to determine the optimal configuration of equipment and the economic model for financing turnkey rooftop PV power plants. The company would like to use the planned 60,000 m² extension of Zenata as the 'base case' for the calculations, however the feasibility study will also analyze the requirements for installing rooftop PV on other 5 logistics centres to be built in the coming years. GreenMax initial estimates show that 1.3MWp of PV could be installed on the Zenata extension. SNTL would like the feasibility study to recommend the best solution in terms of technology and design of the solar installation. The lessons learned from the Zenata rooftop PV array would be replicated on the other SNTL logistics centers, reaching an estimated cumulative installed capacity of 7MWp.

Currently there is not a commercial PV industry operating in Morocco. In January, USTDA approved a grant regarding a 5MW ground-based PV facility in Essaouira. To date, no utility-scale rooftop PV has been constructed in Morocco and SNTL, as a state-owned company, would like to take a leadership position in catalyzing the use of PV on commercial rooftops. The Zenata project in Mohammedia would be the first commercial rooftop PV installation in the country. Successful implementation of the first PV installation will prove the viability of rooftop PV in Morocco and can be shown as a case example for other companies.



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

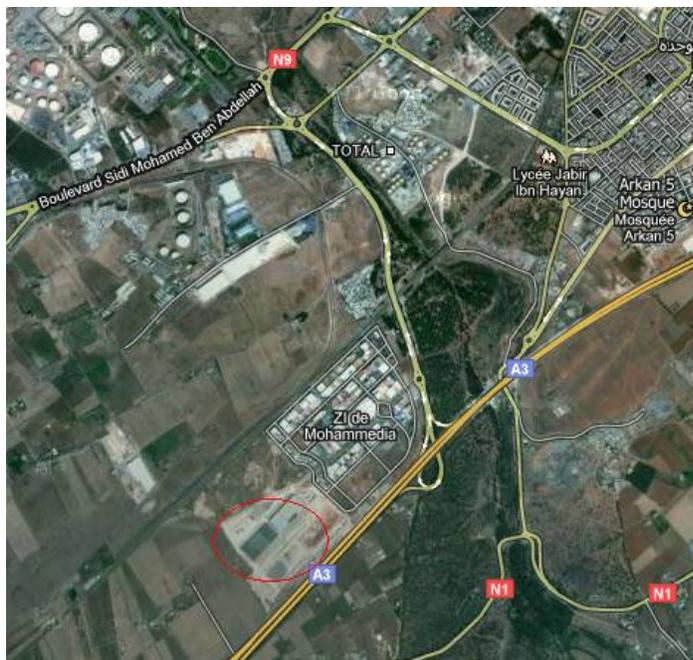
Public Version

2) SNTL – 7MWp portfolio of commercial rooftop solar

2.1. Project Location

The initial rooftop PV array would be built on the roof of a new 60,000m² logistics center that is expected to be completed in October 2012. Additional rooftop PV arrays will be installed on the roofs of future SNTL logistic centers to be built in Agadir, Casablanca, Fès, Marrakech and Tangier. The 60,000m² extension of the existing Zenata Platform logistics centre is located within 3km of the highway and 10km from the port of Mohammedia. The site is surrounded by low buildings and a railway line runs along Eastern side of the site. There are currently no structures or trees that would present any issue with shading. Nearby on the Atlantic coast is the 1,500MW Jorf Lasfar coal-fire power plant. The feasibility study needs to assess the impact of any dust or air pollution on the performance and maintenance costs of the PV array.

Figure 1: Mohammedia, SNTL logistic center



Source: Google Maps

2.2. Project Status

Site Secured – land has been secured for the construction of the logistics centers. The Mohammedia project will be developed at the site of the existing 36,000m² logistics center. The new 60,000m² facility will commence construction in October 2011 and the warehouses are expected to be completed by October 2012. Land for the other four logistic centres has been secured in Agadir, Fès, Marrakech and Tangier.



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

Permits & Clearances – as rooftop solar is a completely new industry in Morocco, the feasibility study will have to determine the permits and applicable regulations for installing and connecting a large PV system on the roof. SNTL would like to have a ‘net metered’ system which would allow them to use the power produced on-site, but it would also give them the opportunity to export excess power to the grid. Every SNTL logistics center has a substation on-site and in the case of the Mohammedia site there is also the possibility to connect to medium voltage lines owned by the Office National d’Electricite (ONE).

Site Layout & Preliminary Design – the feasibility study will assess the building design/plans and recommend the optimal solar installation design to maximize electricity production and system performance.

Evacuation Scheme – the feasibility study will assess the grid connection options and recommend the optimal solution for the Mohammedia site and a methodology for determining grid connection potential at future sites.

Technology – the feasibility study will assess existing PV technologies (modules, inverters, mounting structures) and recommend the optimal technologies based on the design, climatic conditions, DNI and cost.

Construction – the feasibility study will prepare a tender for SNTL to conduct for the selection of a turn-key EPC contractor for the construction of the PV system on the roof of the 60,000m² Zenata extension.

Commissioning – commissioning should occur within 3 months of commencing construction of the PV system, but no later than December 2012.

2.3. Project Timeline

The feasibility study will determine the project timeline.

2.4. Proposed Project Implementation Consortium

It is too early to select an implementation consortium or EPC contractor. As of today, there is no utility-scale solar PV installation in Morocco (either ground-based or rooftop). The SNTL project is expected to be the first large scale (greater than 1MW) rooftop PV investment in Morocco. The purpose of the grant is to assess the building, determine the optimal design, technology and project financing structure, so that SNTL can conduct a tender in Q2 2012 for the project construction and commissioning.

2.5. Technology Selection

The technology selection will be based on the feasibility study recommendations. The Terms of Reference for the USTDA grant includes an assessment of different rooftop PV technologies and



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

recommendations for suitable technologies based on local conditions. The initial project in Mohammedia will determine the technology and design to be used at future SNTL sites.

2.6. Financial Assumptions for the Mohammedia Project

Counterparty:	The electricity will be used on-site with the possibility to sell the excess production to the distribution grid, operated by Lydec or ONE.
Operational term:	20 years
PPA Tariff:	The average electricity price in 2011 is 7c\$/kWh. Energy prices in Morocco are subsidized. The market expects an increase in energy prices in the medium-term future.
Tariff Escalation:	Energy prices are regulated and their escalation depends on the government decision.
Carbon Credits:	Moroccan renewable energy projects are eligible for sale of carbon credits.

Financing assumptions used by GreenMax Capital Advisors

Leverage:	65% debt (local financing) / 35% equity (SNTL)
Tenor:	15 years (in total construction and repayment)
Repayment profile:	linear with sponsor guarantees
All-in pricing:	5.5%

The interest rate benchmark is 5.5%, however SNTL prefers to assume higher financing costs (7%) in their economic models, to hedge for a change of market conditions. GreenMax believes that the financial strength of SNTL, together with their state-owned status allows them to obtain preferential financing (e.g. from the African Development Bank), so the GreenMax model uses 5.5% as the current market interest rate.

3) Morocco's Energy and Power Market

In 2010, the population of Morocco was almost 32 million. In 2010, the country had a GNI per capita of US\$ 2,790 (nominal) (in 2005 a GNI per capita was of US\$1,730 (nominal)). The country is growing rapidly with GDP annual growth rates averaging 7% and energy consumption growing at a rate of 8% annually.

Morocco had an installed power capacity in 2009 of 6,135MW, including 1,748 MW of hydropower and 222 MW of wind energy. More than 75% of power supply was produced by thermal power plants (84% fueled by imported coal and 16% by imported oil products). Power supply in 2006 was about 20,000 GWh and growing at a rate of around 8.8% per year. Assuming that demand growth averages 8% per year, required installed capacity in 2020 would be around 17,000 GW. The energy consumption per capita of 0.5 toe is the lowest in the MENA region.



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

Table 1: Energy in the Moroccan national economy

	2002	2003	2004	2005	2006	2007	2008	2009
GDP	7%	7%	7%	7%	7%	7%	7%	7%
Electricity invoice (DH bln)	19.1	21.4	26.6	37.6	44.4	51.8	69.7	50.6
Energy Consumption (Mtep)	10.5	10.9	11.5	12.2	12.9	13.7	14.8	15.1
Consumption (kWh/hab)	483	515	545	584	631	666	694	710

Source: Ministry of Energy, Mines, Water and Environment

Morocco relies heavily (over 90%) on imported sources of energy to meet its energy needs. The country is part of an interconnection program with Algeria and Spain, whereby electricity is imported from its two partners. Morocco imports coal from the United States, Colombia, and South Africa.

Morocco is in the process of gradually integrating its electrical power grid with those of neighboring African and European countries. Morocco has formed part of the Maghreb integration program, a program directed by the Maghreb Electricity Committee. Physical integration initiatives had commenced in the 1990s. In April 2004 an effort was made to expand the capacity of the interconnection between Spain and Morocco by 700 MW, resulting in the total capacity reaching 1,400 MW by 2012.

Table 2: Moroccan energy balance in ktep

	2002	2003	2004	2005	2006	2007	2008	2009
Production	330	478	528	346	370	365	374	819
Petrol and natural gas	61	57	64	45	66	60	59	49
Hydropower	219	375	414	251	256	235	238	668
Wind	50	46	50	50	48	70	77	102
Consumption	10,461	10,961	11,511	12,190	12,901	13,734	14,764	15,139
Petrol	6,445	6,681	6,982	7,582	7,713	8,069	9,069	9,106
Coal	3,337	3,439	3,620	3,716	3,878	3,910	3,740	3,475
Hydropower	219	375	414	251	256	235	238	668
Natural gas	48	46	45	379	479	540	533	586
Import	362	374	400	212	527	910	1,108	1,202
Wind	50	46	50	50	48	70	77	102
Share of petrol	61.6%	61%	60.6%	62.6%	59.8%	58.8%	61.4%	60.1%
Dependency ratio	96.8%	95.6%	95.4%	97.2%	97.1%	97.3%	97.5%	94.6%

Source: Ministry of Energy, Mines, Water and Environment

In 2010, imported power from Spain and supply from renewable energy (hydropower and wind energy) each represented approximately 18% of total capacity. In 2005, renewable energy



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

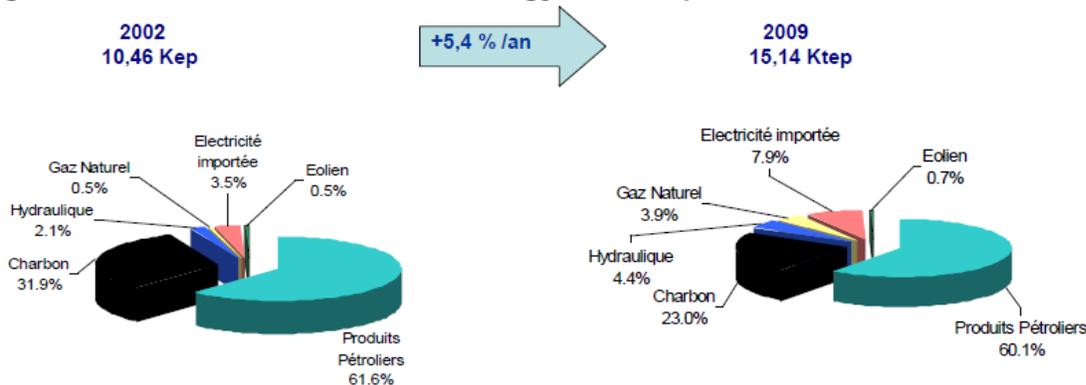
(hydro, wind energy and solar energy) provided about 3% of national energy supply; oil provided 60%, coal 32%, natural gas 2.3% and imported electricity 1.4%.

Because energy generation is based on imported fossil fuels, energy prices are highly dependent on raw material prices on the international market. In 2009, the government increased electricity prices by 18% and today the average electricity price for the industrial sector is approximately 7cUSD/kWh. Retail electricity prices are below current generation costs (e.g. PPA for wind in Tangier is 9cUSD/kWh; the transmission costs are not included). The gap between the retail electricity price and true generation costs is financed by the Ministry of Finance. Due to the unstable situation in the North Africa region and the increased cost of living, the government is not expected to liberalize energy prices in the coming years.

i. Energy consumption

The Moroccan energy generation sector is faced with rapid growth in energy consumption. During the period 2002-2009 energy consumption increased over 5% per year. Current energy market predictions show growth in energy consumption of approximately 8% per year.

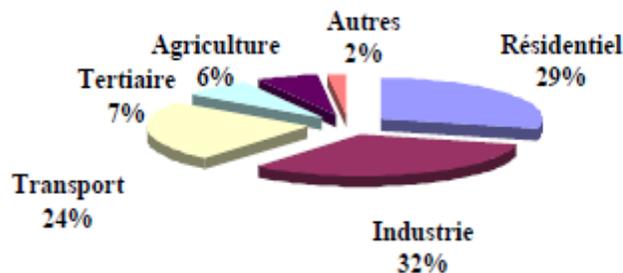
Figure 2: Current breakdown of energy consumption in Morocco



Source: Ministry of Energy, Mines, Water and Environment

The industrial, residential and transport sector are the main consumers of energy in Morocco.

Figure 3: Energy consumption structure in Morocco:



Source: Ministry of Energy, Mines, Water and Environment



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

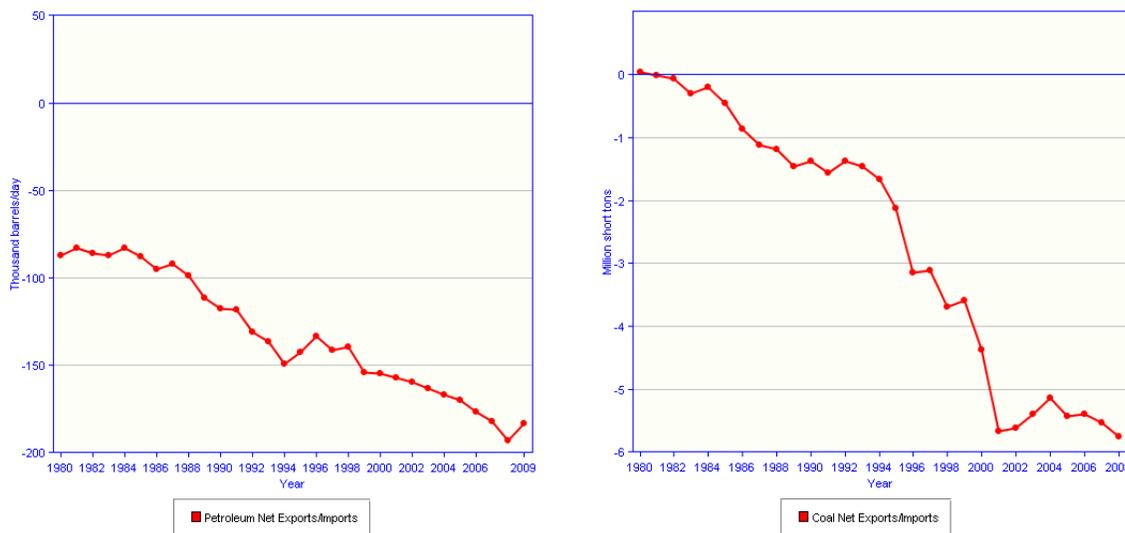
To satisfy the increasing energy demand the ONE, committed itself to a capacity expansion program for new facilities during the 2007-2011 period. The program targeted the following new installations (by energy source):

- 1) Thermal energy (470 MW hybrid thermal-solar power plant in Ain Beni Mathar, 116 MW diesel power plant in Tantan, 300 MW gas power plant in Mohammedia, 2x 660 MW coal power plant in Safi, 3x 33 MW gas transfer from Tan Tan to Laayoune, 300 to 360 MW gas power plant in Kenitra, 72 MW diesel power plant in Agadir 72 MW).
- 2) Hydro energy (40 MW in Tanafnit El Borj, 300 MW in Abdelmoumen).
- 3) Wind energy –1,000 MW program of wind farms.

ii. Fossil fuels

Morocco does not have crude oil, coal or natural gas resources and subsequently the country's energy dependency ratio is very high (over 90%) with 2009 levels reaching 94.6%. In 2008, energy imports stood at US\$8.1 billion, up from US\$6 billion in 2007 and US\$4 billion in 2005. With the majority of Morocco's power generation infrastructure relying on imported hydrocarbons, the current financial burden is unlikely to reduce in the near future.

Figure 4: Morocco --Petroleum net export/import; Coal net export/import



Source: Energy Overview Charts (EIA)

iii. Renewable Energy Potential

The Moroccan government is targeting a dramatic increase in the number of wind and solar power plants, with 4,000 MW of new installed capacity by 2020. In a detailed wind electricity development program, ONE intends to increase the installed wind capacity from the current 253 MW to up to 2 GW until 2016. Most of the projects will be located alongside the country's Southern Atlantic coastline, which has excellent wind conditions, comparable to off-shore sites



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

in Europe. Concentrated Solar Power (CSP) is the second axis of the Moroccan government's renewable energy development plans. The government has estimated that the country has approximately 7,300 MW of RE potential.

In 2009 a €9 billion (USD 12.4 billion) investment program was announced targeting 2 GW of solar power plants by 2020. The plan was announced by the King of Morocco in the presence of U.S. Secretary of State Hillary Clinton. The 2,000 MW "Moroccan Solar Plan" is being managed and implemented by a new government agency – the Moroccan Agency for Solar Energy (MASEN). For grid-connected photovoltaic (PV) electricity, a smaller program was announced by ONE in 2007 targeting 150 MW of distributed PV capacity by 2015. However, this program has suffered from delays, making achievement of the goals by 2015 unlikely.

As a net energy importer, Morocco launched the National Renewable Energy and Efficiency Plan in February 2008 to develop alternative energy, with a goal to meeting 15% of its domestic needs. The plan is expected to create more than 40,000 jobs and stimulate over €4.5 billion (USD 6.2 billion) in investment by 2020. The National Plan for the Development of Solar Thermal Energy, formulated in 2001, targeted the installation of 440,000 solar water heaters (SWH) by 2012. As of 2010, 235,000 solar water heaters had been installed.

All of the various programs are helping the Moroccan government reach their goal of 42% share of energy consumption to be produced from renewable energy sources by 2020. In 2009 wind and hydro installations accounted for 5% of energy consumption.

Figure 5: Morocco's renewable energy development plan

Prospective 2020-2030 : indicateurs par type d'énergie renouvelable						
	Surface cumulée réalisable. MW ou surface en m ²	Cumul énergie en TWh	Investissement MD Mad	Energie économisée Ktep/an	CO ₂ évité en K tonnes/an	Création d'emplois
Eolien	5500	18,15	75	1560,9	10600	12000
Biomasse	400	4	7	338,62	2300	900
Solaire CSP	1000	4	10	344	2362	3200
PV Connecté	400	0,68	15	58,8	500	2000
Solaire CES	3 000 000 m ²	2,1	12	181	1204	1600
PV décentralisé	80	0,14	9	12	100	5000
Total		29,07	128	2495,32	17066	24700

Source : Ministère de l'Énergie, des Mines, de l'Eau et de l'Environnement.

A. Solar energy

In 2009, in the city of Ouarzazate, HM King Mohammed VI joined by the Moroccan government and by U.S. Secretary of State Hillary Clinton launched the Moroccan Agency for Solar Energy (MASEN). MASEN's core activity is to manage and implement 2,000 MW of solar power plants across five sites by 2020. The project is one of the world's largest solar energy project and its



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

total investment costs are estimated to be USD 9 billion. 2,000 MW represents 38% of total national power generation capacity in 2008 and will represent 14% of predicted generation capacity in 2020. MASEN's formation was approved by Parliament with initial capital of USD 62 million. MASEN is equally owned by three shareholders: the Moroccan State, the Hassan II Fund for Economic and Social Development and the National Electricity Office (ONE).

Concentrated solar power (CSP) is expected to be the primary energy technology of the future for the MENA region. Its power generation potential is enormous with the capacity to generate far beyond the present and future power demand in the MENA and EU regions combined. It is also likely to become the most cost-effective water desalinization technology. At present, however, CSP is in the "pilot / early demonstration phase"; the cost of generation per kWh of close to €0.20 per kWh is beyond commercial viability. The Moroccan Solar Plan will be implemented at five pre-selected sites: Ouarzazate, Ain Bni Mathar, Fom Al Oued, Boujdour, Sebkhath Tah.

Average solar irradiation across the country is 5.0 kWh/m²/day. However, certain regions of Morocco have irradiation levels of 6.5-7.0 kWh/m²/day. Initial on-site measurements of solar irradiation at Mohammedia indicated approximately 2,700 hours annually.

Currently the Beni Mathar Integrated Solar Combined Cycle (ISCC) is under construction by Spanish contractors. The total turbine capacity (fossil fuel + solar) is 470MW. The project obtained the loan of USD \$211 million from the African Bank for Development for 20 years with a 5 year grace period. The project is expected to commence operations in late 2011.

The potential for utility scale PV is currently under assessment. In January 2011, USTDA has approved a grant for a feasibility study for a 5MW PV installation close to city of Essouira. It appears that to date, no formal assessment of the potential for commercial rooftop solar PV has been conducted in Morocco.

iv. Energy supply

The electrical power supply in Morocco is generated, distributed and transmitted by the state-owned company, ONE". An increase in population and economic development has caused an increase in demand for electricity. The Moroccan government has put into effect privatization measures in the country's power utility, liberalizing the electrical power sector. Up to 1994, ONE was responsible for all the electric power generation in the country, apart from on-site power produced for industrial use owned by certain large electricity users in the chemical and phosphate industries.

One of the most important changes was the introduction of legislation which allowed power generation to be opened to private investors. Since then, a number of Independent Power Production (IPP) projects have been implemented. The restructuring of ONE has resulted in both the public and private sectors being responsible for electrical power provision. However,

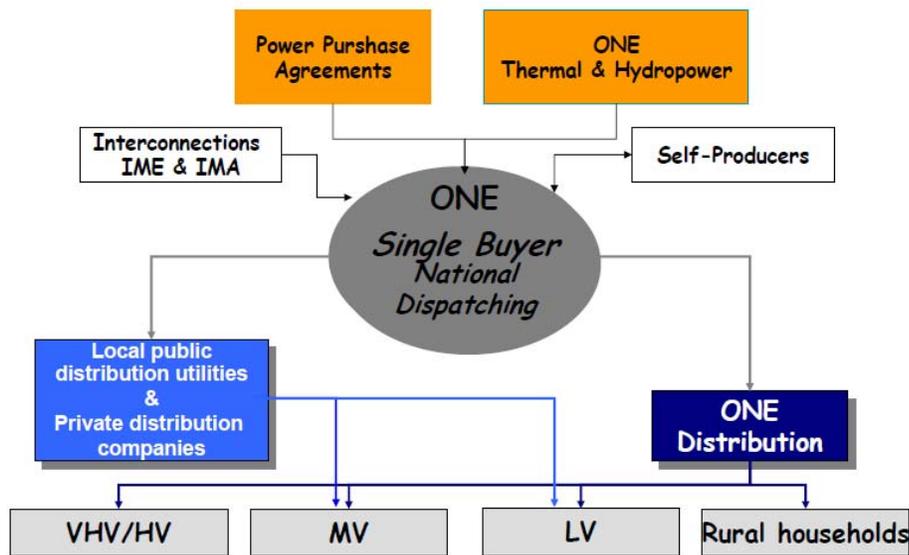


DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

ONE continues to be solely responsible for transmission of electricity in Morocco. ONE is the single buyer of electricity from IPPs. The two largest electricity power stations in Morocco at Mohammedia and Jorf Lasfar are both coal fired. Jorf Lasfar became the first privately operated power station in 1997 in Morocco, when it was taken over by a CMS-ABB consortium. In 2007 the power plant was acquired by TAQA from the UAE.

Figure 6: Current Electricity Market Structure in Morocco



B. ABOUT THE GRANTEE

From 1937 to 2003 SNTL’s predecessor had a monopoly position on the logistics services market.

In pursuance of Article 20b of the Law 16/99, Law No. 25-02 of 23 November 2005 SNTL was established and acquired the National Office of Transportation activities. At the same time National Office of Transportation was dissolved.

In 2007, SNTL acquired the new legal status of a limited company with 100% of state ownership. Today, SNTL is a leading company in road transport freight in Morocco with 30 national offices and more than 300 clients. SNTL employs over 400 employees and guarantees the transport services of over 20 million tons of goods per year.

SNTL has obtained the ISO 9000 quality certificates of all its procedures.

As of today the SNTL core activities are:



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

- a) Transport and logistics – SNTL is obliged to ensure goods are transported at national and international levels
- b) Car fleet management for State bodies
- c) Passenger transportation – management and improvement of 8 bus stations

Corporate Information on the Grantee and prospective Grantee's shareholders

The Moroccan Government owns 100% of SNTL.

The Grantee has a stable financial situation. In 2009, SNTL generated revenues totaling USD \$110 million. The net income margin exceeded 7.5%. In 2009 the total asset value was \$327.8 million and total equity was almost \$100 million.

SNTL has a very good financial structure with low indebtedness and low financing costs. The company easily obtains the bank financing required for its operations and as well as for planned investment activities. Additionally, since SNTL shares are 100% held by the State, external financing will have preferential conditions.

Board of Directors:

Oussama LOUDGHIRI General Director

Zouhair EL ASSOULI Strategy and Communication Director

Ihssan CHERKAOUI Financial Director

Mohamed ZOUANI Human Resources Director

Mohamed Najib JOUAHRI Transport and Trade Director

Mohamed OUALI Administration Director

Ali HACHIMI IT System Director

Ahmed EL AHMADI Internal Control Director

Yasser GOUNAJJAR Insurance Subsidiary Director

Hamid JEBBAR Logistics Director



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

C. DEVELOPMENT IMPACT

The proposed project, when fully implemented, would have a significant development impact on the energy sector in Morocco by facilitating the introduction of the commercial rooftop PV sector in Morocco. Since the project entails the construction of rooftop PV on logistics centers located in 5 different cities, experience in the installation and maintenance of PV arrays would be developed in major metropolitan areas. SNTL's role in validating the commercial viability of rooftop solar could kick-start an enormous industry that could be driven without subsidies.

The development of indigenous renewable energy options for Morocco and the MENA region is critical for ending the Middle East's unhealthy dependence on fossil fuel based power generation. This dependence is a crushing burden on Morocco's economic development because of the enormous government subsidies given to the sector, in order to provide reliable and cheap power to citizens and industry in the face of turbulent fossil fuel supply markets. Renewable energy will reduce these uncertainties by eliminating fuel supply risks and ease economic risk by eliminating fuel price adjustment costs. Once subsidies are removed, renewables will be competitive with fossil fuels (wind power is already competitive with coal). The reduction in dependency on imported coal and heavy oil will also improve macro-economic conditions. The portfolio of 7MW will lead to annual savings of 1,600 tons of oil equivalents and a value of \$0.45 million in carbon credits from saving 14,650 tons of CO₂ emissions on every MWh produced.

A number of assessments regarding the employment effect of solar power have been carried out in Germany, Spain, and the USA. According to the research performed at the University of California at Berkeley each MW of installed solar energy creates approximately 20 manufacturing job-years and 13 installation job-years. The Statistics show that for every job created by the PV industry, between 1.8 and 2.8 jobs are created in other segments of the economy. The study validated its findings by examining Japan and the European Union solar energy job creation records.

It is the opinion of GreenMax that the PV modules and inverters could be exported from the United States, while the balance of system (cables, mounting structure, combiner boxes) would most likely come from Europe or Asia.

In summary, the SNTL rooftop PV plants will achieve sustainable development through a:

- Portfolio of PV power plants that will produce more than 18.9 MWh annually, displacing the equivalent of 14,650 tons of fossil fuel generation carbon emissions.
- Significant portion of the materials, labor, and equipment being locally sourced (over USD \$6 million in value – 28% of the total project costs).
- Project financed by local banks and IFI's.
- CDM Qualified Facility generating carbon credits.
- Facility that generates power for on-site use and/or exported to the grid.
- Stimulation of a national rooftop PV industry, ultimately creating thousands of new jobs in manufacturing, construction and operations.
- Ripple effect of over 13 local jobs per rooftop PV system.



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

1) Infrastructure/Industry

The project will add to the energy sector infrastructure of Morocco by facilitating the construction of the first commercial rooftop utility scale solar PV facilities. The positive results of SNTL may boost the development of solar installations in Morocco as the national strategy is highly renewable energy oriented. To date, there are no operational utility scale PV installations.

On-site energy production and consumption will help to decrease the nation's energy invoice and will reduce the risk of potential energy price increases in the near future. Catalyzing the commercial rooftop PV market will allow for additional on-site installations which would contribute to reductions in energy demand (predicted growth rate of 8%).

2) Human Capacity Building

The project will help to develop skills necessary to manage further renewable energy development for the country. In addition, the employment generated from this project is a crucial factor to weigh alongside the other costs and benefits. High unemployment rates are a drain on the Moroccan economy. Thus, any project that requires a significant level of skilled and unskilled labor is of economic importance.

D. PROJECT SPONSOR COMMITMENT

SNTL's commitment to pursuing the Project is evidenced by the fact that the company has already instructed their architects and engineers to modify the designs of the planned logistics centers to guarantee that the building structure can support the weight of the solar installations. Increasing the structural integrity of the roof has cost implications which SNTL feels will be outweighed by the benefits derived from producing electricity on-site.

Since the CEO of SNTL is an former Director of ONE he is well versed in electricity production and consumption issues. As there is currently no PV expertise in the country, SNTL requires an expert analysis of their buildings, PV technologies and designs and the turnkey costs in order to gain Board approval of the anticipated investment.

Installing 7MW of rooftop PV is estimated to cost USD \$21 million. An equity contribution of 30% would require SNTL to invest USD \$6.3 million. As a company with \$110 million in annual revenues, an investment of this magnitude is within the company resources. The 7MW would be installed over a couple of years as the logistics centers are constructed, therefore equity requirements would average USD 1 million per rooftop PV array.

SNTL is managing a fleet of delivery vehicles which transport goods stored in the logistics centers to the towns and villages that consume the goods. As fuel costs are expected to increase over the next 10 years, the company is considering switching the entire delivery fleet over to electric vehicles. One Task of the Technical Assistance looks at the cost-benefit model of such a conversion. Thus, the rooftop PV installations could provide electricity for both the buildings and the delivery fleet.



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

E. IMPLEMENTATION FINANCING

There are a variety of possible financing sources for the rooftop solar PV project. Commercial debt financing is available from Moroccan banks:

1. Banque populaire (BP) with 23.8% market share
2. Attijariwafa Bank 22.3%
3. BMCE Bank 15.7%
4. Crédit Agricole du Maroc 9.5%
5. Société Générale 8.9%
6. Crédit du Maroc (CDM) 7.4%
7. BMCI 6.4%
8. CIH 4.2%.

Additionally GreenMax met with the African Development Bank and the Islamic Development Bank. The IFI's stated that they are definitely interested in financing renewable energy projects.

The US government is also active in providing export financing for renewable energy projects worldwide. Financing is available from EXIM Bank and OPIC.

E.1 – African Development Bank

Contact:

Mr. Wadii RAISS
Financial Analyst
National Office of Morocco
Immeuble "Espaces les Lauriers", 1er Etage
Angle des avenues Annakhil et Mehdi Ben Barka, Hay RiadRabat, Morocco
Tel: 212 537713826
E-mail: w.raiss@afdb.org

The AfDB confirmed that the bank is looking to have more exposure in renewable energy in its energy sector portfolio in Morocco.

The bank is eager to provide financing for renewable energy projects with minimum bank's exposure of EURO €15 million (USD 20.6 million). AfDB has split the activity between:

- public sector – loans secured by sovereign guarantees (e.g. MASEN), the financing is provided at the costs of 60bp for 20 years term (5 year grace period and 15 year repayment period);
- private sector – public and private entities without the sovereign guarantees, financing is provided at 200 bp.

AfDB provides also bank guarantees for private sector to reduce the financing costs and risk for loans delivered by commercial banks.



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

E.2 ISLAMIC DEVELOPMENT BANK

Contact:

Mr. Abdelfettah OUEDGHIRI
Managing Director
177 Avenue John Kennedy
Souis10105, P.O. Box. 5003, Rabat, Morocco
Tel: +212 537 75 71 91
E-mail: aouedghiri@isdb.org

Currently the IDB is not involved in financing any renewable energy projects. However, the bank is considering participation in the financing of hydropower plants developed by ONE. The final decision should be taken by the end of 2011. The bank provides financing with market conditions (loan term up to 20 years, the debt/equity ratio: 70%:30%, loan cost at 5.5%).

E.3- EXIMBANK

Craig O'Conner
Head of Renewable Energy Group
Export-Import Bank of the United States
International Business Development - Africa Team
811 Vermont Avenue, N.W.
Washington, D.C. 20571
Tel: (202) 565-3946 (EXIM) or (800) 565-3946 (EXIM)
Email: craig.oconner@exim.gov

The Export-Import Bank of the United States has an environmental unit that supports among other types of projects, solar projects. Moroccan solar projects qualify for EXIM bank financing assuming PPA contracts are with a bankable counterparty.

E.4- OPIC

Lynn Tabernacki
Managing Director
Renewable Energy and Sustainable Development Finance
Overseas Private Investment Corporation
1100 New York Avenue, NW
Washington, D.C. 20527
Tel: 202 336-8502
Email: lynn.tabernacki@opic.gov

The US Overseas Private Investment Corporation ("OPIC") provides direct loans and political risk insurance to facilitate US investments abroad. OPIC has made the financing of sustainable **GREENMAX CAPITAL ADVISORS**



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

energy projects its number one global priority. Morocco is an eligible country for OPIC financing.

F. US EXPORT POTENTIAL

There is a direct US export potential for the construction of 7MW of rooftop PV power plants across the future SNTL logistic center portfolio. SNTL has committed to tendering for its first rooftop PV system in August 2012. American solar module and inverter manufacturers would have the opportunity to export to Engineering, Procurement and Construction (EPC) companies providing turnkey solar installations. In some cases, the solar module manufacturer also acts as an EPC contractor. For US companies this is the case with First Solar and SunPower. They could bid for the work directly or their equipment could be part of an EPC package presented by European EPC contractors (e.g. German or Spanish). Also, there are many US EPC Contractors which might themselves bid for the project using US equipment.

The direct US export potential for the 7MW portfolio of rooftop PV power plants is estimated to be USD \$16.9 million. The indirect impact for the SNTL rooftop PV project could be 100 times larger if commercial rooftop solar PV is shown to be an economically viable market in Morocco without subsidy. 700MW of rooftop PV installed over a 10 year period would equate to an export potential of USD \$1.7 billion.

Table 3: SNTL Rooftop Solar Project US export potential breakdown

Component	Costs breakdown	CAPEX \$mil	US content \$mil
Modules	65%	13.7	13.7
<i>Balance of system:</i>			
Inverters	7%	1.7	1.7
Wiring, transformers	7%	1.5	1.5
Electrical installation	2%	0.4	0
Mounting structure	15%	3.2	0
Structural Installation	3%	0.6	0
Total	100%	30.0	16.9

In addition to the technology export the US companies might participate in other Direct Exports:

- Planning
- Conceptual design, Design
- Construction management
- Project Sponsor's Engineer and Independent Engineering roles



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

Moreover, by promoting US technology in the first solar PV rooftop installation in the country, US companies should be well positioned to grab a significant market share of future PV (rooftop and as well ground based) plants constructed in Morocco.

It should be emphasized that US potential exports are not only modules and inverters, but also there is potential for exports of transmission, control, auxiliary equipment and general contracting services that could be expanded to other Moroccan solar PV power projects. It could be also the case that even using modules that are not manufactured in US, the turn key installation company could be a US firm.

Many of the technology providers are also EPC contractors who take advantage of the entire solar value chain.

Table 4: US Suppliers

US Suppliers for Photovoltaic Power Systems		
US Supplier	Address	Product/Service
First Solar, Inc.	350 West Washington Street Suite 600 Tempe, Arizona 85281 USA	Thin film
Ascent Solar Technologies, Inc.	12300 N. Grant St. Thornton, CO 80241 USA	Flexible thin film
SunPower Corporation	77 Rio Robles San Jose, California 95134	Combined solar panel, frame, and mounting system into a single pre-engineered unit
Solyndra	47488 Kato Road Fremont, CA 94538	Thin film, cylindrical modules
Solar Power Industries LLC	440 Jonathan Willey Road, Belle Vernon, PA	Policrystalline solar cells
Abound Solar	2695 Rocky Mountain Avenue Suite 300 Loveland, CO 80538	Thin film
1SolTech, Inc.	671 North Plano Road Suite #202. Richardson, Texas 75081	Monocrystalline
Suniva	5765 Peachtree Industrial Blvd. Norcross, GA 30092	Monocrystalline
RBI Solar, Inc.	5513 Vine Street Cincinnati OH 45217	Mounting structure
Sencera	3101 Stafford Drive Charlotte, NC 28208	Thin film
NanoSolar	5521 Hellyer Avenue San Jose, CA 95138	Thin film
WK Solar	1775 Progress Drive Perrysburg, OH 43551	Thin film
MiaSole	2590 Walsh Ave. Santa Clara, California 95051	Thin film
Advanced Energy Inverters	1625 Sharp Point Drive Fort Collins, CO 80525	Inverters



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

Satcon	27 Drydock Avenue Boston, MA 02210	Inverters
SMA America	6020 West Oaks Blvd, Ste 300 Rocklin, CA 95765	Inverters
GE	Fairfield, CT 06828	Inverters
PowerOne	740 Calle Plano Camarillo, California, 93012	Inverters

Potential US Suppliers for Power Transmission Systems in Morocco

US Supplier	Product/Service
ABB	Breakers, transformers, switchgear
Barr Engineering Company	Engineering, Environmental and IT services
Basler Electric	Protection, metering, controls
Beckwith Electric	Controls
Black & Veatch	Consulting Services
Eaton Electrical	Power Systems and services
Emerson Process Control	SCADA
Enercorp LLC	Project development, Project management, Project financing
Enxco	Design, Development, Construction, Operations and Consulting services
GE Industrial	Transformers, switches, breakers, automated controls
Joslyn Hi Voltage	Reclosers, sectionalizers, switches
Hammond Power Solutions	Dry-type transformers and reactors
Square D Co. (Schneider Electric)	Power and Control Solutions
Stoel Rives LLP	Renewable Energy Attorneys
Virginia Transformer	Transformers
Wanzek Construction, Inc.	Construction Services
Waukesha Electric Systems	Power transformers, circuit breakers



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

G. FOREIGN COMPETITION

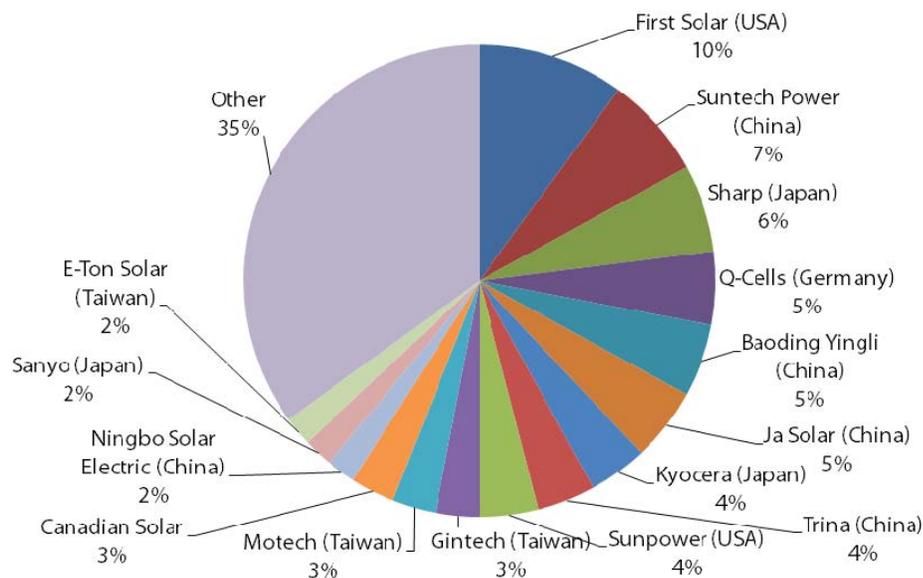
As detailed in US Department of Commerce's December 2010 *Renewable Energy and Energy Efficiency Export Initiative* report:

"Exporters of U.S.–manufactured PV equipment face a highly competitive marketplace. Despite capturing only 6 percent of global manufacturing capacity, the United States exported a relatively robust \$1.18 billion of cells, modules, and panels in 2009."

The solar PV supply chain includes poly-silicon feedstock, wafers, cells, balance of systems, crystalline silicon, (c-Si) modules, thin-film modules, and Concentrated PV modules. The United States is a leading producer of poly-silicon feedstock and its production technology.

Poly-silicon is the primary feedstock of c-Si modules. U.S. companies also have a strong competitive advantage in innovative thin-film modules, which account for 10 percent of PV modules shipped or installed globally. Although demand is unpredictable, U.S. manufacturers of concentrated PV modules appear to be highly competitive. U.S. companies captured 69 percent market share of concentrated PV capacity in operation or soon to be online.

Figure 7: Solar PV Module Manufacturers, By Market Share 2009



Source: Bloomberg New Energy Finance

U.S.–based c-Si companies face fierce competition. Because of widespread use of glass, c-Si modules are more costly to ship long distances than thin-film panels. Chinese companies currently account for 40 percent of the c-Si market. Prices of the c-Si modules have dropped significantly since 2008, putting pressure on company margins. Although better for consumers,



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

lower panel prices and strains on national budgets are prompting a number of European countries to reevaluate the levels of financial incentives for solar PV. The policy changes create a degree of demand uncertainty for all PV technologies.

U.S.-based manufacturers can offer innovative low-cost manufacturing techniques and identify outlets for their products, either by building relationships with developers or by initiating projects themselves, will be best placed to successfully compete.

Given the fact that the solar energy market is "relatively mature with significant local capacity", US companies can expect to face increasing competition. International PV companies (module manufacturers and EPC contractors) are attracted to Morocco's high solar irradiation and its potential to provide bankable solar PV projects without a support mechanism, such as a Feed-in Tariff. Thanks to the country's stable political and economic situation some French companies have established regional offices in Morocco to service the North African region. Some US solar companies are servicing Morocco out of offices in Spain.

Isofon (Spain) is developing a pilot project in Chourouk, together with ONE regarding solar systems in urban areas. Funding was approved by the Spanish Council of Ministers through a preferential loan. In May 2011 QSolar (Canada) developed a pilot project and shipped 56 of its 230W Spraytek79 panels to Morocco to help complete the final testing phase of a small residential solar pilot project (13kWp).

Fire Energy Group signed an agreement at the end of 2010 regarding the promotion of Canadian Solar PV modules in Morocco, the Czech Republic and China.

The solar PV industry is largely driven by Engineering Procurement and Construction (EPC) contractors who provide turnkey installation services and the warranties and guarantees required by banks to provide debt financing. Since 2005, larger and larger industrial players have entered the solar EPC market. Initially many of the solar EPC companies were construction companies with large balance sheets or companies that had experience constructing wind farms in Germany and Spain. Over the last two years, the PV industry has seen large industrial groups such as Bosch, ABB, Siemens and Toshiba establishing solar EPC divisions. Many of these EPCs are "technology neutral" and they purchase modules via framework agreements. US module and inverter manufacturers are selling to EPCs of all nationalities.

In the case of US module manufacturer SunPower, they have integrated down the value chain and in addition to manufacturing PV modules, they are now a major EPC contractor providing turnkey installation services. In April 2011 French oil company Total acquired a controlling stake in SunPower for USD \$1.37 billion.

In 2010 Sharp has acquired US solar developer Recurrent Energy for US \$305 million to enter the utility PV market.

International module manufacturers Sanyo (Japan), SolarWorld (Germany) and Kyocera (Japan) have all established PV module manufacturing plants in the United States. Oregon's tax credits have attracted Sanyo and SolarWorld, while Kyocera chose California as the location for their 30MW manufacturing plant.



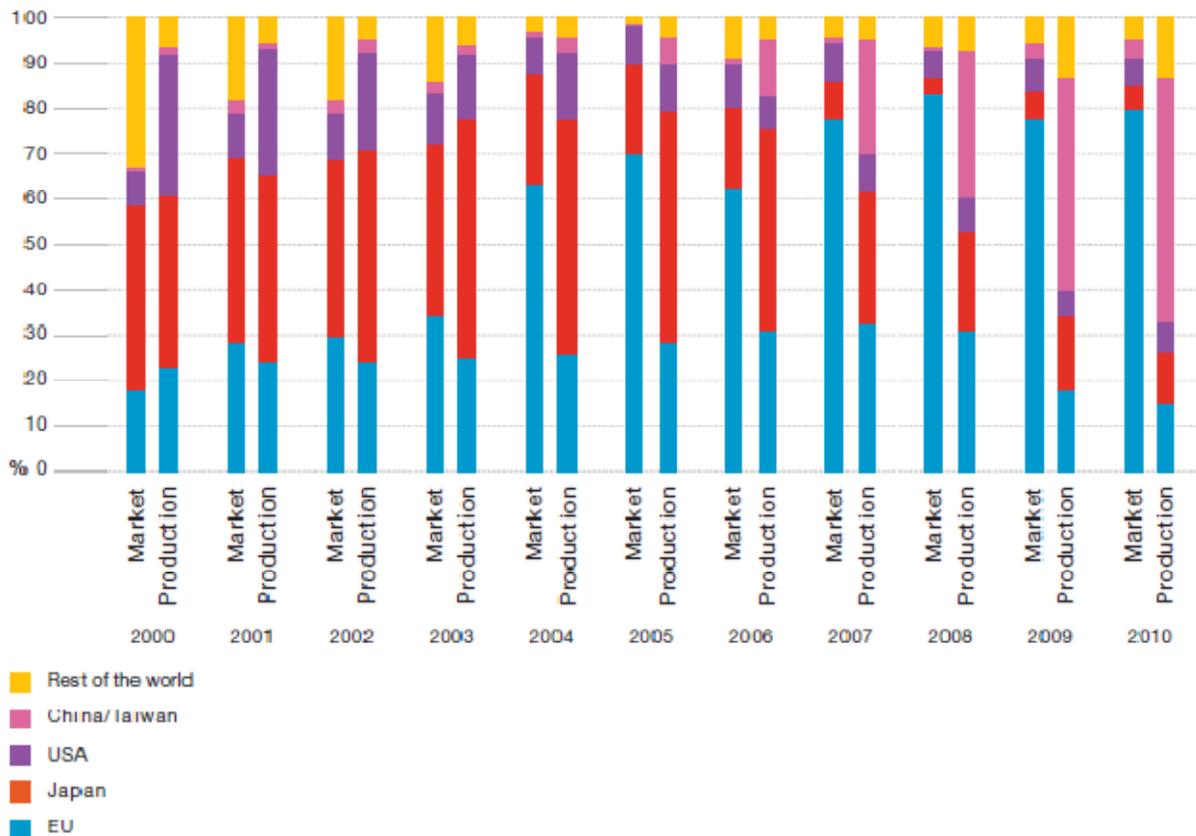
DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

The PV industry experienced significant growth in 2010. Capacity additions grew from 7.2 gigawatts (GW) installed in 2009 to 16.6 GW in 2010. The total installed capacity in the world now amounts to around 40 GW, producing some 50 terawatt-hours (TWh) of electrical power every year. This major increase was linked to the rapid growth of the German and Italian markets. With 7.4 GW installed in Germany in just one year, the country continues to dominate the PV market world-wide. Italy installed 2.3 GW in one year, exploiting its solar resource potential. Other countries also saw significant growth.

In 2010 European installations represented 80% of the global PV market, while more than 50% of global PV module production occurred in China and Taiwan.

Figure 8: PV market versus production



Source: EPIA



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

H. SOCIAL AND ENVIRONMENTAL IMPACT

Fulfillment of the region's growing energy needs is a key development impact of the project. The proposed project is expected to reduce greenhouse gas emissions by replacing fossil fuel generated electricity with solar generated electricity, subsequently reducing CO₂ emissions.

The project will undergo environmental review before final permitting; however, no negative impacts are expected as the project is a rooftop installation and there is no loss of arable agricultural land.

GreenMax estimates that PV plants contribute to the reduction of greenhouse (CO₂) gas emissions by 1.4 million tons for every 1GW produced annually (up to 773 kgs per 1 MWh of electricity produced).

According to research performed at the University of California at Berkeley each MW of installed solar energy creates approximately 20 manufacturing job-years and 13 installation job-years. The statistics show that for every job created by the PV industry, between 1.8 and 2.8 jobs are created in other segments of the economy. The study validated its findings by examining Japanese and European Union solar energy job creation records.

The Project's negative environmental impact is expected to be minimal or insignificant as the project will be developed on the already completed logistics centers. Additionally, the EIA usually includes preventive and mitigation measures to reduce any environmental impacts that would occur during the construction and the operation phases.

I. IMPACT ON US LABOR

The project has the potential to generate more than \$15 million in direct US exports, thereby generating substantial US employment opportunities. If the project were to catalyze a national commercial rooftop PV market, the potential for US exports is \$1.5 billion over a ten year period.

None of the following factors are present in this proposed project:

A. Financial incentive to any business enterprise currently located in the United States for the purpose of inducing such an enterprise to relocate outside the United States if such incentive or inducement is likely to reduce the number of employees of such business enterprise in the United States because United States production is being replaced by such enterprise outside the United States.

B. Assistance for the purpose of establishing or developing in a foreign country any export processing zone or designated area in which the tax, tariff, labor, environment, and safety laws



DEFINITIONAL MISSION FOR CLEAN ENERGY PROJECTS IN MOROCCO

Public Version

of that country do not apply, in part or in whole, to activities carried out within that zone or area.

C. Assistance for any project or activity that contributes to the violation of internationally recognized workers rights.

D. Direct assistance for establishing or expanding production of any commodity for export by any country other than the United States, if the commodity is likely to be in surplus on world markets at the time the resulting productive capacity is expected to become operative and if the assistance will cause substantial injury to United States producers of the same, similar, or competing commodity.

J. Recommendation

GreenMax Capital Advisors recommends that subject to fulfillment of the conditions precedent below USTDA support this Feasibility Study by providing a grant to SNTL of \$666,619 to execute the feasibility study for constructing five, utility-grade, commercial rooftop PV power plants on the logistic centers to be built by the Grantee.

A N N E X 3



**U.S. TRADE AND DEVELOPMENT AGENCY
Arlington, VA 22209-2131**

NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS

The purpose of USTDA's nationality, source, and origin requirements is to assure the maximum practicable participation of American contractors, technology, equipment and materials in the prefeasibility, feasibility, and implementation stages of a project.

USTDA STANDARD RULE (GRANT AGREEMENT STANDARD LANGUAGE):

Except as USTDA may otherwise agree, each of the following provisions shall apply to the delivery of goods and services funded by USTDA under this Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from host country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for implementation of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in host country are not subject to the above restrictions. USTDA will make available further details concerning these standards of eligibility upon request.

NATIONALITY:

1) Rule

Except as USTDA may otherwise agree, the Contractor for USTDA funded activities must be either a U.S. firm or a U.S. individual. Prime contractors may utilize U.S.

subcontractors without limitation, but the use of host country subcontractors is limited to 20% of the USTDA grant amount.

2) Application

Accordingly, only a U.S. firm or U.S. individual may submit proposals on USTDA funded activities. Although those proposals may include subcontracting arrangements with host country firms or individuals for up to 20% of the USTDA grant amount, they may not include subcontracts with third country entities. U.S. firms submitting proposals must ensure that the professional services funded by the USTDA grant, to the extent not subcontracted to host country entities, are supplied by employees of the firm or employees of U.S. subcontractor firms who are U.S. individuals.

Interested U.S. firms and consultants who submit proposals must meet USTDA nationality requirements as of the due date for the submission of proposals and, if selected, must continue to meet such requirements throughout the duration of the USTDA-financed activity. These nationality provisions apply to whatever portion of the Terms of Reference is funded with the USTDA grant.

3) Definitions

A "U.S. individual" is (a) a U.S. citizen, or (b) a non-U.S. citizen lawfully admitted for permanent residence in the U.S. (a green card holder).

A "U.S. firm" is a privately owned firm which is incorporated in the U.S., with its principal place of business in the U.S., and which is either (a) more than 50% owned by U.S. individuals, or (b) has been incorporated in the U.S. for more than three (3) years prior to the issuance date of the request for proposals; has performed similar services in the U.S. for that three (3) year period; employs U.S. citizens in more than half of its permanent full-time positions in the U.S.; and has the existing capability in the U.S. to perform the work in question.

A partnership, organized in the U.S. with its principal place of business in the U.S., may also qualify as a "U.S. firm" as would a joint venture organized or incorporated in the United States consisting entirely of U.S. firms and/or U.S. individuals.

A nonprofit organization, such as an educational institution, foundation, or association may also qualify as a "U.S. firm" if it is incorporated in the United States and managed by a governing body, a majority of whose members are U.S. individuals.

SOURCE AND ORIGIN:

1) Rule

In addition to the nationality requirement stated above, any goods (e.g., equipment and materials) and services related to their shipment (e.g., international transportation and insurance) funded under the USTDA Grant Agreement must have their source and origin in the United States, unless USTDA otherwise agrees. However, necessary purchases of goods and project support services which are unavailable from a U.S. source (e.g., local food, housing and transportation) are eligible without specific USTDA approval.

2) Application

Accordingly, the prime contractor must be able to demonstrate that all goods and services purchased in the host country to carry out the Terms of Reference for a USTDA Grant Agreement that were not of U.S. source and origin were unavailable in the United States.

3) Definitions

“Source” means the country from which shipment is made.

"Origin" means the place of production, through manufacturing, assembly or otherwise.

Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.

ANNEX 4



GRANT AGREEMENT

This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency ("USTDA") and the Société Nationale des Transports et de la Logistique (SNTL) ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Agreement US\$666,619 ("USTDA Grant") to fund the cost of goods and services required for a feasibility study ("Study") on the proposed SNTL Solar Photovoltaic Rooftop Power Project ("Project") in Morocco ("Host Country").

1. USTDA Funding

The funding to be provided under this Grant Agreement shall be used to fund the costs of a contract between the Grantee and the U.S. firm selected by the Grantee ("Contractor") under which the Contractor will perform the Study ("Contract"). Payment to the Contractor will be made directly by USTDA on behalf of the Grantee with the USTDA Grant funds provided under this Grant Agreement.

2. Terms of Reference

The Terms of Reference for the Study ("Terms of Reference") are attached as Annex I and are hereby made a part of this Grant Agreement. The Study will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the Study shall also be included in the Contract.

3. Standards of Conduct

USTDA and the Grantee recognize the existence of standards of conduct for public officials, and commercial entities, in their respective countries. The parties to this Grant Agreement and the Contractor shall observe these standards, which include not accepting payment of money or anything of value, directly or indirectly, from any person for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study.

4. Grantee Responsibilities

The Grantee shall undertake its best efforts to provide reasonable support for the Contractor, such as local transportation, office space, and secretarial support.

5. USTDA as Financier

(A) USTDA Approval of Competitive Selection Procedures

Selection of the U.S. Contractor shall be carried out by the Grantee according to its established procedures for the competitive selection of contractors with advance notice of the procurement published online through *Federal Business Opportunities* (www.fedbizopps.gov). Upon request, the Grantee will submit these contracting procedures and related documents to USTDA for information and/or approval.

(B) USTDA Approval of Contractor Selection

The Grantee shall notify USTDA at the address of record set forth in Article 17 below upon selection of the Contractor to perform the Study. Upon approval of this selection by USTDA, the Grantee and the Contractor shall then enter into a contract for performance of the Study. The Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the Study that they were not selected.

(C) USTDA Approval of Contract Between Grantee and Contractor

The Grantee and the Contractor shall enter into a contract for performance of the Study. This contract, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing. To expedite this approval, the Grantee (or the Contractor on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 17 below, a photocopy of an English language version of the signed contract or a final negotiated draft version of the contract.

(D) USTDA Not a Party to the Contract

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of the contract and any amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of funding the Study and shall not be construed as making USTDA a party to the contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the contract or any subcontract, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Grantee or USTDA from asserting any right they might have against the

Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Grantee or USTDA.

(E) Grant Agreement Controlling

Regardless of USTDA approval, the rights and obligations of any party to the contract or subcontract thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and any contract or subcontract funded by the Grant Agreement, the Grant Agreement shall be controlling.

6. Disbursement Procedures

(A) USTDA Approval of Contract Required

USTDA will make disbursements of Grant funds directly to the Contractor only after USTDA approves the Grantee's contract with the Contractor.

(B) Contractor Invoice Requirements

The Grantee should request disbursement of funds by USTDA to the Contractor for performance of the Study by submitting invoices in accordance with the procedures set forth in the USTDA Mandatory Clauses in Annex II.

7. Effective Date

The effective date of this Grant Agreement ("Effective Date") shall be the date of signature by both parties or, if the parties sign on different dates, the date of the last signature.

8. Study Schedule

(A) Study Completion Date

The completion date for the Study, which is September 30, 2013, is the date by which the parties estimate that the Study will have been completed.

(B) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Grant Agreement for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

9. USTDA Mandatory Clauses

All contracts funded under this Grant Agreement shall include the USTDA mandatory clauses set forth in Annex II to this Grant Agreement. All subcontracts funded or partially funded with USTDA Grant funds shall include the USTDA mandatory clauses, except for clauses B(1), G, H, I, and J.

10. Use of U.S. Carriers

(A) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(B) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

11. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

12. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Grantee nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

13. Cooperation Between Parties and Follow-Up

The parties will cooperate to assure that the purposes of the Grant Agreement are accomplished. For five (5) years following receipt by USTDA of the Final Report (as defined in Clause I of Annex II), the Grantee agrees to respond to any reasonable inquiries from USTDA about the status or results of the Project, and upon receipt by the Grantee of the Final Report, will designate (by both title and organization) a point of contact for any such inquiries.

14. Implementation Letters

To assist the Grantee in the implementation of the Study, USTDA may, from time to time, issue implementation letters that will provide additional information about matters covered by the Grant Agreement. The parties may also use jointly agreed upon implementation letters to confirm and record their mutual understanding of matters covered by the Grant Agreement.

15. Recordkeeping and Audit

The Grantee agrees to maintain books, records, and other documents relating to the Study and the Grant Agreement adequate to demonstrate implementation of its responsibilities under the Grant Agreement, including the selection of contractors, receipt and approval of contract deliverables, and approval or disapproval of contractor invoices for payment by USTDA. Such books, records, and other documents shall be separately maintained for three (3) years after the date of the final disbursement by USTDA. The Grantee shall afford USTDA or its authorized representatives the opportunity at reasonable times to review books, records, and other documents relating to the Study and the Grant Agreement.

16. Representation of Parties

For all purposes relevant to the Grant Agreement, the Government of the United States of America will be represented by the U. S. Ambassador to Host Country or USTDA and Grantee will be represented by the Director General. The parties hereto may, by written notice, designate additional representatives for all purposes under the Grant Agreement.

17. Addresses of Record for Parties

Any notice, request, document, or other communication submitted by either party to the other under the Grant Agreement shall be in writing or through a wire or electronic medium which produces a tangible record of the transmission, such as a telegram, cable or facsimile, and will be deemed duly given or sent when delivered to such party at the following:

To: Mr. Oussama Loudghiri
Director General
La Société Nationale des Transports et de la Logistique
Rue El Fadila Quartier Industriel
Cité Yacoub El Mansour
Rabat, Morocco

Phone: +212 5 37 29 38 01
Mobile: +212 6 61 31 60 08
Fax: +212 5 37 79 67 13
Email: loudghiri@sntl.ma

To: U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial Section of the U.S. Embassy in Host Country with a copy of each communication sent to USTDA.

Any communication relating to this Grant Agreement shall include the following fiscal data:

Appropriation No.: 11 12/13 1001
Activity No.: 2012-21012A
Reservation No.: 2012106
Grant No.: GH201221106

18. Termination Clause

Either party may terminate the Grant Agreement by giving the other party thirty (30) days advance written notice. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the Study, except for payments which they are committed to make pursuant to noncancellable commitments entered into with third parties prior to the written notice of termination.

19. Non-waiver of Rights and Remedies

No delay in exercising any right or remedy accruing to either party in connection with the Grant Agreement shall be construed as a waiver of such right or remedy.

20. U.S. Technology and Equipment

By funding this Study, USTDA seeks to promote the project objectives of the Host Country through the use of U.S. technology, goods, and services. In recognition of this purpose, the Grantee agrees that it will allow U.S. suppliers to compete in the procurement of technology, goods and services needed for Project implementation.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Government of the United States of America and the Société Nationale des Transports et de la Logistique, each acting through its duly authorized representative, have caused this Agreement to be signed in the English language in their names and delivered as of the day and year written below. In the event that this Grant Agreement is signed in more than one language, the English language version shall govern.

For the Government of the United States of America

For the Société Nationale des Transports et de la Logistique

By: Samuel L. Kaplan

By:  Suzanne LOUVGHIRI

Date: 3/21/12

Date: 21/03/2012

Witnessed:

Witnessed:

By: Heather Lonja

By:  Aziz LARBATI

Annex I – Terms of Reference

Annex II – USTDA Mandatory Clauses

Annex II

USTDA Mandatory Contract Clauses

A. USTDA Mandatory Clauses Controlling

The parties to this contract acknowledge that this contract is funded in whole or in part by the U.S. Trade and Development Agency ("USTDA") under the Grant Agreement between the Government of the United States of America acting through USTDA and the Société Nationale des Transports et de la Logistique (SNTL) ("Client"), dated _____ ("Grant Agreement"). The Client has selected _____ ("Contractor") to perform the feasibility study ("Study") for the SNTL Solar Photovoltaic Rooftop Power Project ("Project") in Morocco ("Host Country"). Notwithstanding any other provisions of this contract, the following USTDA mandatory contract clauses shall govern. All subcontracts entered into by Contractor funded or partially funded with USTDA Grant funds shall include these USTDA mandatory contract clauses, except for clauses B(1), G, H, I, and J. In addition, in the event of any inconsistency between the Grant Agreement and any contract or subcontract thereunder, the Grant Agreement shall be controlling.

B. USTDA as Financier

(1) USTDA Approval of Contract

All contracts funded under the Grant Agreement, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing in order to be effective with respect to the expenditure of USTDA Grant funds. USTDA will not authorize the disbursement of USTDA Grant funds until the contract has been formally approved by USTDA or until the contract conforms to modifications required by USTDA during the contract review process.

(2) USTDA Not a Party to the Contract

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of this contract and amendments thereto, including assignments, the selection of all contractors, the Terms of Reference, the Final Report, and any and all documents related to any contract funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of financing the Study and shall not be construed as making USTDA a party to the contract. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the contract or any subcontract, jointly or separately, without thereby incurring any responsibility

or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Client or USTDA from asserting any right they might have against the Contractor, or relieve the Contractor of any liability which the Contractor might otherwise have to the Client or USTDA.

C. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

D. Recordkeeping and Audit

The Contractor and subcontractors funded under the Grant Agreement shall maintain, in accordance with generally accepted accounting procedures, books, records, and other documents, sufficient to reflect properly all transactions under or in connection with the contract. These books, records, and other documents shall clearly identify and track the use and expenditure of USTDA funds, separately from other funding sources. Such books, records, and documents shall be maintained during the contract term and for a period of three (3) years after final disbursement by USTDA. The Contractor and subcontractors shall afford USTDA, or its authorized representatives, the opportunity at reasonable times for inspection and audit of such books, records, and other documentation.

E. U.S. Carriers

(1) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(2) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

F. Workman's Compensation Insurance

The Contractor shall provide adequate Workman's Compensation Insurance coverage for work performed under this Contract.

G. Reporting Requirements

The Contractor shall advise USTDA by letter as to the status of the Project on March 1st annually for a period of two (2) years after completion of the Study. In addition, if at any time the Contractor receives follow-on work from the Client, the Contractor shall so notify USTDA and designate the Contractor's contact point including name, telephone, and fax number. Since this information may be made publicly available by USTDA, any information which is confidential shall be designated as such by the Contractor and provided separately to USTDA. USTDA will maintain the confidentiality of such information in accordance with applicable law.

H. Disbursement Procedures

(1) USTDA Approval of Contract

Disbursement of Grant funds will be made only after USTDA approval of this contract. To make this review in a timely fashion, USTDA must receive from either the Client or the Contractor a photocopy of an English language version of a signed contract or a final negotiated draft version to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

(2) Payment Schedule Requirements

A payment schedule for disbursement of Grant funds to the Contractor shall be included in this Contract. Such payment schedule must conform to the following USTDA requirements: (1) up to twenty percent (20%) of the total USTDA Grant amount may be used as a mobilization payment; (2) all other payments, with the exception of the final payment, shall be based upon contract performance milestones; and (3) the final payment may be no less than fifteen percent (15%) of the total USTDA Grant amount, payable upon receipt by USTDA of an approved Final Report in accordance with the specifications and quantities set forth in Clause I below. Invoicing procedures for all payments are described below.

(3) Contractor Invoice Requirements

USTDA will make all disbursements of USTDA Grant funds directly to the Contractor. The Contractor must provide USTDA with an ACH Vendor Enrollment Form (available from USTDA) with the first invoice. The Client shall request disbursement of funds by

USTDA to the Contractor for performance of the contract by submitting the following to USTDA:

(a) Contractor's Invoice

The Contractor's invoice shall include reference to an item listed in the Contract payment schedule, the requested payment amount, and an appropriate certification by the Contractor, as follows:

(i) For a mobilization payment (if any):

"As a condition for this mobilization payment, the Contractor certifies that it will perform all work in accordance with the terms of its Contract with the Client. To the extent that the Contractor does not comply with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(ii) For contract performance milestone payments:

"The Contractor has performed the work described in this invoice in accordance with the terms of its contract with the Client and is entitled to payment thereunder. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(iii) For final payment:

"The Contractor has performed the work described in this invoice in accordance with the terms of its contract with the Client and is entitled to payment thereunder. Specifically, the Contractor has submitted the Final Report to the Client, as required by the Contract, and received the Client's approval of the Final Report. To the extent the Contractor has not complied with the terms and conditions of the Contract, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(b) Client's Approval of the Contractor's Invoice

(i) The invoice for a mobilization payment must be approved in writing by the Client.

(ii) For contract performance milestone payments, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and the terms and conditions of the USTDA Grant Agreement."

(iii) For final payment, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the Contractor have been performed satisfactorily, in accordance with applicable Contract provisions and terms and conditions of the USTDA Grant Agreement. The Final Report submitted by the Contractor has been reviewed and approved by the Client. "

(c) USTDA Address for Disbursement Requests

Requests for disbursement shall be submitted by courier or mail to the attention of the Finance Department at USTDA's address listed in Clause M below.

(4) Termination

In the event that the Contract is terminated prior to completion, the Contractor will be eligible, subject to USTDA approval, for reasonable and documented costs which have been incurred in performing the Terms of Reference prior to termination, as well as reasonable wind down expenses. Reimbursement for such costs shall not exceed the total amount of undisbursed Grant funds. Likewise, in the event of such termination, USTDA is entitled to receive from the Contractor all USTDA Grant funds previously disbursed to the Contractor (including but not limited to mobilization payments) which exceed the reasonable and documented costs incurred in performing the Terms of Reference prior to termination.

I. USTDA Final Report

(1) Definition

"Final Report" shall mean the Final Report described in the attached Annex I Terms of Reference or, if no such "Final Report" is described therein, "Final Report" shall mean a substantive and comprehensive report of work performed in accordance with the attached Annex I Terms of Reference, including any documents delivered to the Client.

(2) Final Report Submission Requirements

The Contractor shall provide the following to USTDA:

(a) One (1) complete version of the Final Report for USTDA's records. This version shall have been approved by the Client in writing and must be in the English language. It is the responsibility of the Contractor to ensure that confidential information, if any, contained in this version be clearly marked. USTDA will maintain the confidentiality of such information in accordance with applicable law.

and

(b) One (1) copy of the Final Report suitable for public distribution ("Public Version"). The Public Version shall have been approved by the Client in writing and must be in the English language. As this version will be available for public distribution, it must not contain any confidential information. If the report in (a) above contains no confidential information, it may be used as the Public Version. In any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

and

(c) Two (2) CD-ROMs, each containing a complete copy of the Public Version of the Final Report. The electronic files on the CD-ROMs shall be submitted in a commonly accessible read-only format. As these CD-ROMs will be available for public distribution, they must not contain any confidential information. It is the responsibility of the Contractor to ensure that no confidential information is contained on the CD-ROMs.

The Contractor shall also provide one (1) copy of the Public Version of the Final Report to the Foreign Commercial Service Officer or the Economic Section of the U.S. Embassy in Host Country for informational purposes.

(3) Final Report Presentation

All Final Reports submitted to USTDA must be paginated and include the following:

(a) The front cover of every Final Report shall contain the name of the Client, the name of the Contractor who prepared the report, a report title, USTDA's logo, USTDA's mailing and delivery addresses. If the complete version of the Final Report contains confidential information, the Contractor shall be responsible for labeling the front cover of that version of the Final Report with the term "Confidential Version." The Contractor shall be responsible for labeling the front cover of the Public Version of the Final Report with the term "Public Version." The front cover of every Final Report shall also contain the following disclaimer:

"This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U. S. Government. The opinions, findings, conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report."

(b) The inside front cover of every Final Report shall contain USTDA's logo, USTDA's mailing and delivery addresses, and USTDA's mission statement.

Camera-ready copy of USTDA Final Report specifications will be available from USTDA upon request.

(c) The Contractor shall affix to the front of the CD-ROM a label identifying the Host Country, USTDA Activity Number, the name of the Client, the name of the Contractor who prepared the report, a report title, and the following language:

“The Contractor certifies that this CD-ROM contains the Public Version of the Final Report and that all contents are suitable for public distribution.”

(d) The Contractor and any subcontractors that perform work pursuant to the Grant Agreement must be clearly identified in the Final Report. Business name, point of contact, address, telephone and fax numbers shall be included for Contractor and each subcontractor.

(e) The Final Report, while aiming at optimum specifications and characteristics for the Project, shall identify the availability of prospective U.S. sources of supply. Business name, point of contact, address, telephone and fax numbers shall be included for each commercial source.

(f) The Final Report shall be accompanied by a letter or other notation by the Client which states that the Client approves the Final Report. A certification by the Client to this effect provided on or with the invoice for final payment will meet this requirement.

J. Modifications

All changes, modifications, assignments or amendments to this contract, including the appendices, shall be made only by written agreement by the parties hereto, subject to written USTDA approval.

K. Study Schedule

(1) Study Completion Date

The completion date for the Study, which is September 30, 2013, is the date by which the parties estimate that the Study will have been completed.

(2) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this contract for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

L. Business Practices

The Contractor agrees not to pay, promise to pay, or authorize the payment of any money or anything of value, directly or indirectly, to any person (whether a governmental official or private individual) for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study. The Client agrees not to receive any such payment. The Contractor and the Client agree that each will require that any agent or representative hired to represent them in connection with the Study will comply with this paragraph and all laws which apply to activities and obligations of each party under this Contract, including but not limited to those laws and obligations dealing with improper payments as described above.

M. USTDA Address and Fiscal Data

Any communication with USTDA regarding this Contract shall be sent to the following address and include the fiscal data listed below:

U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

Fiscal Data:

Appropriation No.:	11 12/13 1001
Activity No.:	2012-21012A
Reservation No.:	2012106
Grant No.:	GH201221106

N. Definitions

All capitalized terms not otherwise defined herein shall have the meaning set forth in the Grant Agreement.

O. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Client nor the Contractor will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

A N N E X 5

Annex I

Terms of Reference

Objective: The objective of this feasibility study (FS) is to evaluate and recommend appropriate Solar Photovoltaic (PV) technologies for a portfolio of five rooftop solar PV plants to be constructed on a total of 200,000 m² of roof space comprised of five logistics centers to be built in Morocco (the “Project”). A review of the five project sites (Agadir, Fès, Marrakech, Mohammedia and Tangier) will be conducted to assess the potential for installing rooftop solar PV across the portfolio. The Mohammedia PV project would showcase the applicability of rooftop solar PV at utility scale in Morocco and create a replicable PV roll-out plan for the portfolio of planned SNTL logistic centers, while generating a model for replication on commercial and industrial buildings throughout Morocco.

Task 1: Project Kick Off and Data Collection

The Contractor shall conduct an initial conference call with SNTL (“Grantee”) to present the selected team, discuss the proposed project methodology and schedule, and coordinate an initial visit to Morocco. As a result of this conference call, the Contractor shall conduct preliminary data analysis and prepare a FS plan prior to the initial visit, including an agenda to meet with relevant stakeholders in order to discuss the proposed 60,000 m² rooftop solar Pilot Project at Mohammedia and its specific objectives. The plan should also include visits to two sites of future logistics centers, for a total of three site visits including Mohammedia. The purpose of the site visits shall be for the Contractor to become well oriented to the sites and to collect initial data.

The Contractor shall demonstrate in this FS plan a clear and comprehensive understanding of the Grantee’s structural design of the planned logistics centers, energy consumption data, refrigerated storage and energy pricing data. The Contractor shall demonstrate in the FS plan its knowledge of the U.S. rooftop solar PV industry including system design, racking systems, modules and inverters for large rooftop solar projects. The Contractor shall deliver the FS plan at least 14 days before travel for review by the Grantee.

Subsequently, the Contractor shall conduct a five (5) business day visit to Morocco to meet with the Grantee and conduct the scheduled site visits. This travel shall occur within 6 weeks of issuance of a “notice to proceed” by the Grantee following approval of Contractor’s contract by UST DA. At a minimum, the Contractor shall meet with the following relevant stakeholders:

- SNTL (in Rabat headquarters and onsite in Mohammedia);
- LYDEC (Electricity Distributor);

- National Office of Electricity (ONE);
- Engineering company designing SNTL's logistics centers;
- Financial institutions working in Morocco, including B MCE Bank, Société General, BMCI, Credit de Maroc and SIE;
- Other stakeholders suggested by the Grantee; and,
- Other stakeholders deemed appropriate by the Contractor.

During the business visit, the Grantee shall make available to the Contractor any information that would be relevant and beneficial to the FS.

The Grantee reserves the right to mark information provided pursuant to this Project as Confidential. The studies and raw data provided shall not be disclosed by the Contractor to any other parties outside of the Contractor's own staff and consultants. The information may be used only as reference documentation for the Contractor to complete all analyses required pursuant to this TOR. The citation of any confidential data or documents provided by the Grantee in the Contractor's interim or final reports shall cause the Contractor to mark such sections of the reports as "Confidential" so that they will not be included in the public version made available by USTDA.

The preceding paragraph does not limit in any way (i) the Contractor's obligation to provide to USTDA and the U.S. Embassy in Morocco the Final Report as described in Clause I of the USTDA Mandatory Contract Clauses set forth in Annex II of this Grant Agreement, or (ii) the rights of USTDA and the U.S. Embassy in Morocco to use, and make available copies of, the Final Report as described in Clause I. As noted in Task 11 of these Terms of Reference, USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report. As noted in Clause I, (i) it is the responsibility of the Contractor to ensure that confidential information, if any, contained in the complete version of the Final Report is clearly marked, and (ii) USTDA will maintain the confidentiality of such information in accordance with applicable law. As also noted in Clause I, the only version of the Final Report that the Contractor should provide to the U.S. Embassy in Morocco is the version of the Final Report that is suitable for public distribution.

In addition to the information provided by the Grantee, the Contractor shall collect and review additional data and studies provided by the entities other than the Grantee (for example, solar resource studies conducted by ADEREE). The Contractor shall request and obtain LYDEC interconnection requirements¹ based on location, voltage, and existing transmission and distribution equipment at the proposed Pilot Project site at

¹ Lyonnaise de Eaux de Casablanca (LYDEC) is a Moroccan company that provides public services, such as the distribution of electricity and drinking water, as well as the drainage services in the region of Casablanca and Mohammedia, Morocco.

Mohammedia. The Contractor shall obtain photographs of the entire project area including the interconnection location.

The Contractor shall identify additional information required from the Grantee and other relevant entities in order to successfully carry out the FS, and shall outline this information in a matrix format with allowance for notating receipt of additional information requested or learned during the FS.

It is anticipated that prior to and during the meetings, the Contractor shall work closely with the Moroccan entities, including, but not limited to, those listed above, to clearly identify all necessary input and requirements for a successful FS.

DELIVERABLE #1: At least fourteen days prior to travel, the Contractor shall deliver a preliminary FS plan. After completing the initial mission, the Contractor shall prepare and deliver a report establishing the final FS plan that will be utilized to develop, specify and measure the data collection, project parameters, and desired outcome. The plan shall consider the objectives of the Grantee's building design, usage, and loading, as well as the metering, billing, and interconnection requirements of the Ministry of Energy, Mines, Water, and Environment; LYDEC; and ONE. The report shall include an index of data, in a matrix format, collected during the visit and data required for the remainder of the FS.

Task 2: Site Assessment and Permitting

The Contractor shall review all information collected during Task 1, including solar resources, structural integrity of the roof, and interconnection requirements for the proposed site locations to provide the basis for rooftop PV technology selection.

The Contractor shall work with relevant stakeholders identified in Task 1 as well as the National Meteorology Department to obtain at least 36 months data from the nearest weather stations, and analyze this meteorological data and any other pertinent insolation information. During the course of this task, the Grantee shall work closely with the Contractor to ensure that access to the pertinent data and information is provided.

Subsequently, the Contractor shall utilize this information to conduct an assessment of the proposed site locations and determine adequacy for the proposed Pilot Project.

The technical assessment of available information shall include, but not be limited to:

- Initial structural assessments based on building design and expected PV loads;
- Analysis of size of the PV array for development of the rooftop Pilot Project;

- Verification of the LYDEC and ONE interconnection requirements based on the existing transformers, connection points, voltage, and existing transmission and distribution equipment;
- Substation location and inverter positioning;
- Analysis of suitability of identified and described solar resources;
- Description and photographs of buildings, rooftops and interconnection points;
- Physical GPS coordinates, roof orientation and determination of usable area;
- Description of appropriate zoning and environmental considerations;
- Shading analysis from vegetation, structures, hills, or other factors;
- Analysis of separation from domestic residences or noise and visual impact-sensitive areas; and
- Analysis of proximity to sources of dust which could obscure sunlight and coat panel surfaces with a film that would reduce plant efficiency.

Considering the information learned in the technical assessment, the Contractor shall also determine the required licensing and permitting procedures including electricity and power; substation connection requirements; environmental licensing; and construction and registration permits.

DELIVERABLE #2: The Contractor shall prepare and submit a report detailing the findings of the site assessment for the Pilot Project. At a minimum, the report shall include a description of the site, structural analysis, estimates of the system size based on usable area, technical description and photographs of the location, recommendations for initial PV array layout, interconnection point, inverter housing dimensions and location.

Task 3: Net Metering and Connection Requirements

Working in coordination with the Grantee, the Contractor shall obtain consumption data from the existing 36,000 m² logistics center and cold storage facilities. Based on this information, the Contractor shall determine the trends in demand and growth at the location and for the planned 60,000 m² expansion at the Mohammedia site.

The Contractor shall also collect and document technical information pertaining to net metering from LYDEC and the ability to sell excess energy to ONE.

In addition, the Contractor shall present a generic methodology that can be easily replicated to evaluate interconnections and determine inverter and substation siting at the planned logistic centers.

Finally, the Contractor shall identify and establish the various technical, financial, and legislative requirements for connecting the Pilot Project to the LYDEC substation and/or to the ONE medium voltage line.

DELIVERABLE #3: The Contractor shall prepare and submit a report detailing the potential demand and any specific utility connection requirements for existing and planned logistic centers. The report shall present all assumptions made for the various scenarios related to electricity consumption, generation, demand projections and interconnection requirements for the proposed Pilot Project. In addition, the Contractor shall present a generic methodology that can be easily replicated to evaluate interconnections and determine inverter and substation siting at the planned logistic centers.

Task 4: Assessment of Site Specific Solar PV Technology Options

The Contractor shall analyze various solar PV generation technologies considering the following FS objectives: a) to identify those technologies that could reasonably be considered suitable for commercial power generation at the proposed pilot SNTL logistic center; and b) to develop a duplicable generic methodology (baseline) to identify preferred technologies for additional site development beyond the Pilot Project.

The Contractor shall conduct a rooftop solar PV technology screening, which shall compare applications most appropriate for the 60,000 m² Pilot Project and the remaining four sites totaling approximately 110,000 m². The purpose of this analysis is to determine the suitability of PV technology for solar power generation given the local conditions. At a minimum, the Contractor shall assess six commercially viable technologies. The Contractor shall develop a comparative analysis of potential technologies, including: mounting systems versus “glue-on” systems; crystalline versus thin film; string versus central inverters; and other commercially available rooftop solar PV technologies appropriate for the Pilot Project site and Morocco’s climatic conditions.

Based on the Pilot Project site, the Contractor shall evaluate potential technology options considering solar insolation; roof inclination; metering and interconnection requirements; design life; cost; maintenance and other appropriate parameters. The Contractor shall describe the development status of PV technology applications, with specific attention and emphasis on those applicable to this Pilot Project in Morocco, considering future development through expansion of the successful Pilot Project.

For each of the PV technology options evaluated, the Contractor shall consider at the minimum the following factors:

- The methodology developed and documented for the measurement and the evaluation of each technology’s performance. For each screened technology, the Contractor shall describe the technical means by which the performance of such technology is evaluated in order to continuously monitor and evaluate factors such as productivity and efficiency;
- Reliability and maintenance issues related to system equipment, operations, and controls, performance guarantees and operating experience based on PV manufacturers’ knowledge. The Contractor shall conduct a review of published

information on different technology applications, as well as any data that may be obtained from specific technology manufacturers;

- Comparison of the energy conversion efficiency factors; degradation and failure rates; and impact of high temperatures and humidity for the various technologies based on previously published or documented data measurements and documented case studies and experiments;
- Comparison of solar efficiency and field performance factors provided by at least three PV manufacturers based on actual plants that would resemble the proposed site in Morocco, including comparison of performance ratio guarantees provided by manufacturers;
- Technology and operations risk areas and mitigation as it relates to project yield, as well as capital and operating expenses, including expected O&M requirements by the Grantee;
- Analysis of the financial strength of the manufacturer including an assessment of the balance sheet and the ability to provide any favorable financing, including deferred payments or export credits; and;
- Analysis of the available storage technologies and the feasibility to match the energy profile of the building, as peak demand occurs after 5pm.

In addition to the factors above, the Contractor shall evaluate the appropriate PV technologies considering the status of the technologies and commercial experience; the solar resource in the study area; costs and any associated risks. The Contractor shall also consider additional criteria in the comparative analyses, such as average unit plant capital cost; average unit operation and maintenance costs; average unit cost to generate electricity; average unit roof requirements; and annual capacity factors.

The Contractor shall include in the comparative analyses a brief description of each potential technology, including any information available to the Contractor regarding the current status of each technology and its availability. The analysis shall contain a more detailed description of the three “best alternatives”. This information shall be presented in a format that can be easily used in the future by the Grantee to assess adequate PV technologies, including inverters and mounting structures, for sites similar to the proposed Pilot Project.

Additionally, for each type of technology addressed, the Contractor shall identify environmental considerations including water usage; ownership and licensing requirements; economic assessment, including a cost/benefit comparison; infrastructure and interconnection requirements; and a description of potential commercial, industrial, and technical risks and a comparison of risk management solutions.

Based on the findings from the analyses above, the Contractor shall develop a technology comparison matrix using the parameters above, as well as any others deemed appropriate

by the Contractor. The matrix should be used to identify top-tier technology alternatives. The matrix shall be a document suited for modification and use in future project replication.

The Contractor shall utilize the results to establish the most adequate technology for this Pilot Project and for the planned future logistics centers and provide a final technology recommendation based on the suitability of the PV technology, including inverters and mounting structures, for solar power generation given the site-specific location parameters.

DELIVERABLE #4: The Contractor shall prepare and submit a report detailing the work conducted in Task 4, including a comparison matrix of viable technologies, with detailed information on the proposed top three alternatives including manufacturer specifications. This report shall provide a recommendation for the most appropriate technologies.

Task 5: Assessment of Electrical Vehicle Fleet and PV Charging Capability

The Contractor shall analyze the possibility to convert the existing delivery fleet at the Pilot Project to electric vehicles. The assessment shall include analysis of the ability, capacity and cost to charge the delivery fleet's batteries from the rooftop array.

The Contractor shall conduct an economic analysis of the fuel savings incurred from switching to electric vehicles including a cost-benefit analysis and internal rate of return (IRR) calculation.

DELIVERABLE #5: The Contractor shall prepare and submit a report presenting an analysis and recommendation on the feasibility of converting the delivery fleet at the Pilot Project site to electric vehicles. The report shall include a comparison matrix of viable technologies, with detailed information on the proposed top three alternatives including manufacturer specifications. This report shall provide a recommendation for the most appropriate technology, including a detailed economic justification for its selection.

Task 6: Preliminary Engineering for Facility and Equipment Requirements

Based on the estimated demand at the preferred site, and the technology screening results, the Contractor shall prepare a conceptual design and technical specifications for the proposed Pilot Project facility. This shall include the following:

- Design basis and philosophy;
- Process and technology/equipment description and options;
- Balance of System component list;
- System performance and specifications;
- Primary equipment sizing and specification (for local conditions);

- Technical and conceptual design drawings and supporting preliminary calculations for the selected technology, including the following:
 1. Electrical distribution optimization;
 2. Plant reliability;
- The conceptual design shall include at a minimum:
 1. System layout and design drawings;
 2. Major equipment list with sizing (modules, inverters, combiner boxes, cabling and mounting structure);
 3. Major equipment specifications;
 4. Preliminary interconnection details;
 5. Substation design and specifications; and
 6. SCADA system and online monitoring.

DELIVERABLE #6: The Contractor shall prepare and submit detailed design documents addressing preliminary engineering requirements for the facility and equipment. The design documents shall describe and include all design reports and calculations, as well as the conceptual drawings developed under this task.

Task 7: Develop Financial Analysis and Determine Financial Incentives

The Contractor shall prepare detailed cost estimates, including engineering costs, capital construction costs and equipment costs, for the proposed Pilot Project. The cost estimates shall be based on the Contractor's knowledge of turnkey solar engineering, procurement, and construction (EPC) pricing, the local market, and costs provided by the Grantee. In addition, the Contractor shall include the costs of operations and maintenance, insurance, and scheduled equipment replacement as well as benefits from predicted sales of electricity.

The Contractor shall develop a potential fee structure for electricity sales, covering operation and maintenance costs, depreciation, debt service in excess of depreciation, taxes, and reasonable profit. This shall also include revenues resulting from carbon credits and other incentives as available in Morocco.

The Contractor shall prepare pro forma financial statements for the Project over a 20-year period taking into consideration capital investments, operations and maintenance costs. The Contractor shall assess the potential rate of return of the project and conduct a sensitivity analysis for key variables including solar irradiation, building energy demand, cost of electricity, debt-equity ratios, interest rates, debt-service coverage ratios, and exchange rate risk.

As part of this task, the Contractor shall conduct meetings with potential financiers, including commercial banks, International Financial Institutions (IFI's), the U.S. Export Import (EX-IM) Bank and the U.S. Overseas Private Investment Corporation (OPIC).

Finally, the Contractor shall assess potential mechanisms to enable private sector participation and make recommendations in regard to the strategy to be followed, including a proposed schedule and outline of the process.

DELIVERABLE #7: The Contractor shall prepare and submit a report comprising the financial analysis, pro forma financial statements, financing mechanisms and recommendations for private sector engagement.

Task 8: Host Country Development Impact Assessments and Market Oriented Reforms

The Contractor shall prepare a developmental impact analysis to provide the Pilot Project's decision-makers and interested parties with a broader view of this Pilot Project's potential effects on the host country. While specific focus shall be paid to the immediate impact of the Pilot Project, the Contractor shall also analyze any additional developmental benefits that may result from the Pilot Project's implementation, including efforts to scale, modify, and duplicate this Pilot Project.

The factors to be considered shall include the following, at a minimum:

- Infrastructure - The Contractor shall describe the infrastructure to be built as a result of this Pilot Project implementation. The Contractor shall also analyze the potential impact of project replication in Morocco.
- Market-Oriented Reform - The Contractor shall provide a description of any regulation, laws, or institutional changes that are recommended and the effect they would have if implemented.
- Human Capacity Building - The Contractor shall assess the number and type of local positions needed to construct and operate the proposed Pilot Project, including the number of local people who would require training; and shall provide a description of such additional training programs.
- Technology Transfer and Productivity Enhancement Opportunities - The Contractor shall identify efficiency gains as a result of the Pilot Project as well as describe the transfer of technology to Morocco.

Other - The Contractor shall describe any other developmental impacts or benefits that would result from the Pilot Project, specifically including: replication projects, safety, and increased good governance.

Task 9: Preliminary Environmental Impact Assessment

The Contractor shall perform a preliminary review of the recommended project's environmental impacts consistent with local requirements and those of the World Bank. This review shall identify potential negative impacts, discuss the extent to which they can be mitigated, and develop plans for full environmental impact assessment if and when the project moves forward to the implementation stage.

This assessment shall focus on potential impacts of the Pilot Project on (a) ecological resources including flora and fauna, (b) cultural heritage sites and relics, (c) soil erosion, (d) water usage (e) local community disturbances from construction activities, and (f) possible changes in land use. The Contractor shall outline appropriate mitigation measures, management procedures and monitoring programs, if any.

DELIVERABLE #8: The Contractor shall prepare a report describing the preliminary developmental impact assessment and the preliminary environmental impact analysis as discussed in Tasks 7 and 8. The Contractor shall identify any issues that may require further analysis and/or mitigation.

Task 10: U.S. Sources of Supply

The Contractor shall identify the potential value of U.S. exports of equipment and services and prepare a U.S. supplier list which shall outline potential U.S. sources for procurement of goods and services for carrying out the services required to implement the development plan for the Pilot Project. The list shall include company name, contact information, contact person and a general description of products and services that may be procured.

DELIVERABLE #9: The Contractor shall prepare and submit a list of potential U.S. suppliers of products and services, which shall include contact information and general product descriptions.

Task 11: Prepare the Request for Proposals (RFP) Specifications for the 60,000 m² rooftop PV plant in Mohammedia

Upon finalizing Task 9, the Contractor shall work in close coordination with the Grantee to develop RFP specifications based on the results of Tasks 1-8. The Contractor shall ensure that the RFP is consistent with the Moroccan and the Grantee's public bidding and tendering policy and procedures and the business and operational objectives of the Pilot Project. The RFP shall also reflect internationally accepted practices to ensure an open competition from both domestic and international companies. The Contractor also shall recommend to the Grantee potential advertising sources for such an RFP.

The RFP shall clearly request a response regarding all technical and business

requirements for this project, including but not limited to:

- Technical requirements based on the results from Tasks 1-8, including site, technology and interconnection issues as applicable;
- Financial requirements of the project, including performance ratios, system costs, maintenance, operation, training, etc.;
- Periodic maintenance requirements to obtain the full life cycle of the components of the plant;
- Organizational requirements including staffing, technical management, quality control and quality assurance parameters and metrics;
- Training needs and human capacity building;
- Implementation timeframe, plan and schedules;
- Submittals and deliverables;
- RFP bidding rules and evaluation criteria;
- Sample contract (should the bidder be selected);
- Success metrics, including measures to demonstrate project results considering the evolutionary nature of PV technologies; and,
- Other points to be determined by the Contractor and Grantee.

The RFP Specifications for the Pilot Project shall be developed to be used as a template for future similar projects. The Contractor shall work with the Grantee to finalize the RFP specifications for the Pilot Project for external distribution.

The Contractor shall produce the RFP in French and English. The Contractor shall ensure that both the French and English versions of the RFP state that bidders' responses to the RFP may be solely in English. The Contractor shall ensure that the Grantee's staff is fully informed and active in the RFP planning process. The Contractor shall work with the Grantee to ensure that procedures are in place to allow the RFP evaluation process to be fair, open and transparent.

The Contractor shall work with the Grantee to develop the RFP evaluation criteria and methodologies, and ensure that international RFP evaluation procedures are in place for evaluating bidders' responses to the RFP. The Contractor shall translate the evaluation criteria and methodologies into French as a reference for the Grantee. The Contractor shall develop a timeline for the RFP release, the receipt of responses and evaluation, and document the anticipated timeline for the final negotiations and project awards. The Grantee shall review and edit the Contractor's translation of the evaluation criteria and methodologies into French.

DELIVERABLE #10: The Contractor shall deliver the RFP specifications for the Pilot Project; RFP evaluation criteria and methodologies; translation of the evaluation criteria and methodologies into French; a timeline for the RFP release, receipt, and evaluation, and the anticipated timeline for the final negotiation and project award. All documents shall be presented in Microsoft Word files.

Task 12: Final Report

The Contractor shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference (“Final Report”). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex I of the Grant Agreement.

The Final Report shall also include a comprehensive list of potential sources of U.S. equipment and services relevant to the implementation of each component of the Pilot Project as outlined in the FS.

DELIVERABLE #11: The Contractor shall submit to the Grantee four (4) copies of the complete version of the Final Report in French and one (1) copy in English. The Contractor shall also provide to the Grantee one (1) electronic version of both the confidential and public versions of the Final Report. The Contractor shall provide copies of the Final Report to USTDA in English in accordance with Clause I of Annex II of the Grant Agreement.

Notes:

- (1) The Contractor is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.
- (2) The Contractor and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.
- (3) The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work products that are developed under these Terms of Reference.

ANNEX 6



USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

U.S. Firm Information Form

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number *[To be completed by USTDA]*

Activity Type <i>[To be completed by USTDA]</i>	Feasibility Study	Technical Assistance	Other (specify)
---	-------------------	----------------------	-----------------

Activity Title *[To be completed by USTDA]*

Full Legal Name of U.S. Firm

Business Address (street address only)

Telephone	Fax	Website
-----------	-----	---------

Year Established (include any predecessor company(s) and year(s) established, if appropriate).
Please attach additional pages as necessary.

Please provide a list of directors and principal officers as detailed in Attachment A. Attached? Yes No

Type of Ownership	Publicly Traded Company
	Private Company
	Other (please specify)

If Private Company or Other (if applicable), provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in U.S. Firm, please complete Attachment B.

Is the U.S. Firm a wholly-owned or partially owned subsidiary?	Yes <input type="checkbox"/> No <input type="checkbox"/>
--	--

If so, please provide the name of the U.S. Firm's parent company(s). In addition, for any parent identified, please complete Attachment B.

Is the U.S. Firm proposing to subcontract some of the proposed work to another firm?	Yes <input type="checkbox"/> No <input type="checkbox"/>
--	--

If yes, U.S. Firm shall complete Attachment C for each subcontractor. Attached?	Yes <input type="checkbox"/> Not applicable <input type="checkbox"/>
---	--

Project Manager

Name	Surname	
	Given Name	
Address		
Telephone		
Fax		
Email		

Negotiation Prerequisites

Discuss any current or anticipated commitments which may impact the ability of the U.S. Firm or its subcontractors to complete the Activity as proposed and reflect such impact within the project schedule.	
--	--

Identify any specific information which is needed from the Grantee before commencing negotiations.	
--	--

U.S. Firm may attach additional sheets, as necessary.

U.S. Firm's Representations

U.S. Firm shall certify to the following (or provide any explanation as to why any representation cannot be made):

1. U.S. Firm is a [check one] Corporation LLC Partnership Sole Proprietor Other:
 duly organized, validly existing and in good standing under the laws of the State of:
 The U.S. Firm has all the requisite corporate power and authority to conduct its business as presently conducted, to submit this proposal, and if selected, to execute and deliver a contract to the Grantee for the performance of the USTDA Activity. The U.S. Firm is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.
2. The U.S. Firm has included herewith, a copy of its Articles of Incorporation (or equivalent charter or document issued by a designated authority in accordance with applicable laws that provides information and authentication regarding the legal status of an entity) and a Certificate of Good Standing (or equivalent document) issued within 1 month of the date of signature below by the State of:
 The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change in its status in the state in which it is incorporated. USTDA retains the right to request an updated certificate of good standing.
3. Neither the U.S. Firm nor any of its principal officers have, within the ten-year period preceding the submission of this proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.
4. Neither the U.S. Firm, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 3 above.
5. There are no federal or state tax liens pending against the assets, property or business of the U.S. Firm. The U.S. Firm, has not, within the three-year period preceding the submission of this proposal, been notified of any delinquent federal or state taxes in an amount that exceeds US\$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.
6. The U.S. Firm has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself of its debts under any bankruptcy, insolvency or other similar law. The U.S. Firm has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.
7. The U.S. Firm certifies that it complies with USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The U.S. Firm commits to notify USTDA and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.

The U.S. Firm shall notify USTDA if any of the representations are no longer true and correct.

U.S. Firm certifies that the information provided in this form is true and correct. U.S. Firm understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the U.S. Firm.

Name	<input type="text"/>	Signature	<input type="text"/>
Title	<input type="text"/>		
Organization	<input type="text"/>	Date	<input type="text"/>



ATTACHMENT B

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

U.S. Firm Information Form – Shareholder(s) and Parent Company(s)

If applicable, U.S. Firm provided a list of shareholders and the percentage of their ownership. This form shall be completed for each shareholder that owns 15% or more shares in U.S. Firm, as well as any parent corporation of the U.S. Firm ("Shareholder"). In addition, this form shall be completed for each shareholder identified in Attachment B that owns 15% or more shares in any Shareholder, as well as any parent identified in Attachment B.

USTDA Activity Number <i>[To be completed by USTDA]</i>	
---	--

Activity Title <i>[To be completed by USTDA]</i>	
--	--

Full Legal Name of U.S. Firm	
------------------------------	--

Full Legal Name of Shareholder	
--------------------------------	--

Business Address of Shareholder (street address only)	
---	--

Telephone number		Fax Number	
------------------	--	------------	--

Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	
---	--

Country of Shareholder's Principal Place of Business	
--	--

Please provide a list of directors and principal officers as detailed in Attachment A. Attached?	Yes
--	-----

Type of Ownership	<input type="checkbox"/> Publicly Traded Company
	<input type="checkbox"/> Private Company
	<input type="checkbox"/> Other

If applicable, provide a list of shareholders and the percentage of their ownership. In addition, for each shareholder that owns 15% or more shares in Shareholder, please complete Attachment B.	
---	--

Is the Shareholder a wholly-owned or partially owned subsidiary?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No

If so, please provide the name of the Shareholder's parent(s). In addition, for any parent identified, please complete Attachment B.	
--	--

Shareholder may attach additional sheets, as necessary.



ATTACHMENT C

USTDA-Funded Feasibility Study, Technical Assistance, or Training Grant

Subcontractor Information Form

This form is designed to enable the U.S. Trade and Development Agency ("USTDA") to obtain information about entities and individuals proposed for participation in USTDA-funded activities. Information in this form is used to conduct screening of entities and individuals to ensure compliance with legislative and executive branch prohibitions on providing support or resources to, or engaging in transactions with, certain individuals or entities with which USTDA must comply.

USTDA Activity Number <i>[To be completed by USTDA]</i>	
---	--

Activity Title <i>[To be completed by USTDA]</i>	
--	--

Full Legal Name of Prime Contractor U.S. Firm ("U.S. Firm")	
---	--

Full Legal Name of Subcontractor	
----------------------------------	--

Business Address of Subcontractor (street address only)	
---	--

Telephone Number	
------------------	--

Fax Number	
------------	--

Year Established (include any predecessor company(s) and year(s) established, if appropriate). Please attach additional pages as necessary.	
---	--

Subcontractor Point of Contact

Name	Surname	
	Given Name	

Address	
---------	--

Telephone	
-----------	--

Fax	
-----	--

Email	
-------	--

Subcontractor's Representations

Subcontractor shall provide the following (or any explanation as to why any representation cannot be made), made as of the date of the proposal:

1. Subcontractor is a <i>[check one]</i>	<input type="checkbox"/> Corporation	<input type="checkbox"/> LLC	<input type="checkbox"/> Partnership	<input type="checkbox"/> Sole Proprietor	<input type="checkbox"/> Other
--	--------------------------------------	------------------------------	--------------------------------------	--	--------------------------------

duly organized, validly existing and in good standing under the laws of: _____ .

The subcontractor has all the requisite corporate power and authority to conduct its business as presently conducted, to participate in this proposal, and if the U.S. Firm is selected, to execute and deliver a subcontract to the U.S. Firm for the performance of the USTDA Activity and to perform the USTDA Activity. The subcontractor is not debarred, suspended, or to the best of its knowledge or belief, proposed for debarment or ineligible for the award of contracts by any federal or state governmental agency or authority.

2. Neither the subcontractor nor any of its principal officers have, within the ten-year period preceding the submission of the Offeror's proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government contract or subcontract; violation of federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating federal or state criminal tax laws, or receiving stolen property.

3. Neither the subcontractor, nor any of its principal officers, is presently indicted for, or otherwise criminally or civilly charged with, commission of any of the offenses enumerated in paragraph 2 above.

4. There are no federal or state tax liens pending against the assets, property or business of the subcontractor. The subcontractor, has not, within the three-year period preceding this RFP, been notified of any delinquent federal or state taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied. Taxes are considered delinquent if (a) the tax liability has been fully determined, with no pending administrative or judicial appeals; and (b) a taxpayer has failed to pay the tax liability when full payment is due and required.

5. The subcontractor has not commenced a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law. The subcontractor has not had filed against it an involuntary petition under any bankruptcy, insolvency or similar law.

6. The Subcontractor certifies that it complies with the USTDA Nationality, Source, and Origin Requirements and shall continue to comply with such requirements throughout the duration of the USTDA-funded activity. The Subcontractor commits to notify USTDA, the Contractor, and the Grantee if it becomes aware of any change which might affect U.S. Firm's ability to meet the USTDA Nationality, Source, and Origin Requirements.

The selected Subcontractor shall notify the U.S. Firm, Grantee and USTDA if any of the representations included in its proposal are no longer true and correct.

Subcontractor certifies that the information provided in this form is true and correct. Subcontractor understands and agrees that the U.S. Government may rely on the accuracy of this information in processing a request to participate in a USTDA-funded activity. If at any time USTDA has reason to believe that any person or entity has willfully and knowingly provided incorrect information or made false statements, USTDA may take action under applicable law. The undersigned represents and warrants that he/she has the requisite power and authority to sign on behalf of the Subcontractor.

Name		Signature	
Title			
Organization		Date	