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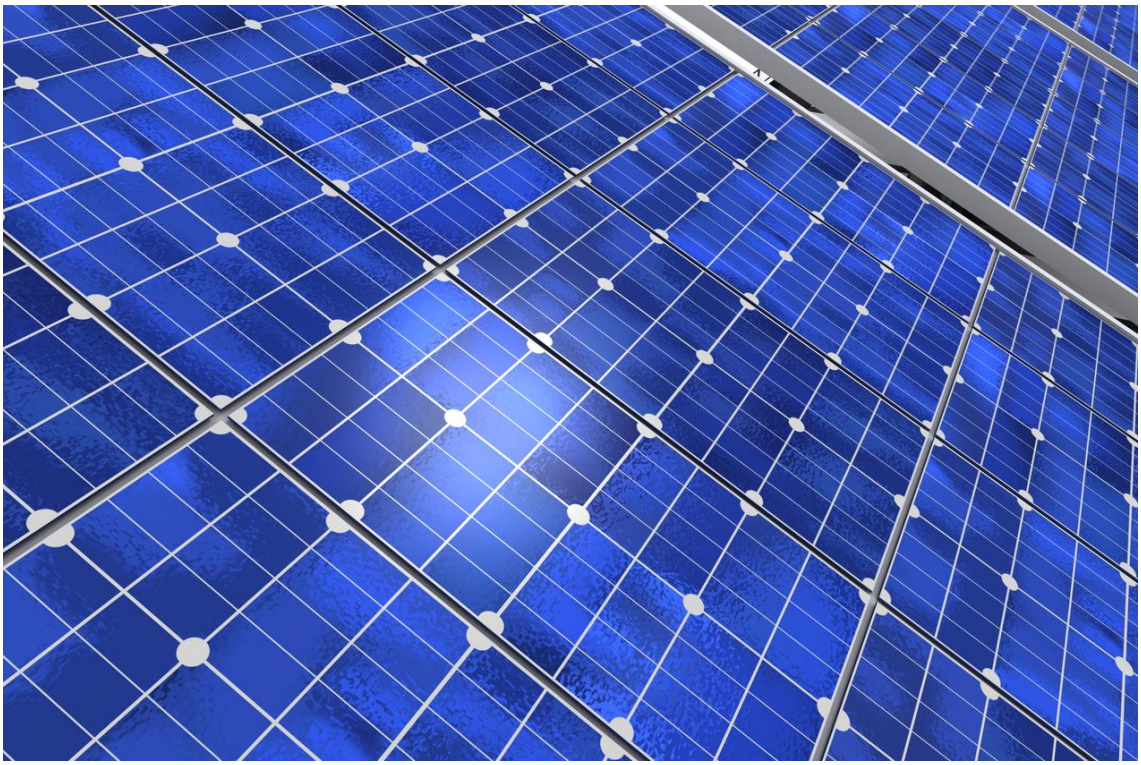
STRATEGY FOR RENEWABLE ENERGY DEVELOPMENT

Request for Qualifications: Independent Power Producer for Solar Energy in Seychelles

Ministry of Environment, Energy and Climate Change

Project No.: 84530250
Issue: D, Status: Final
Date: 24 November 2015



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Project name:	Request for Qualifications for Solar Independent Power Producer for Seychelles	DNV KEMA Renewables, Inc. Renewables Advisory
Customer:	Ministry of Environment, Energy and Climate Change Mahe Seychelles	1501 4th Avenue, Suite 900 Seattle, WA 98101 Tel. 1-206-387-4200 Enterprise No.: 26-2535197
Contact person:	Cynthia Alexander	
Date of issue:	24 November 2015	
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Task and objective: The Ministry of Environment, Energy and Climate Change (MEECC), through the Carbon War Room (CWR), has retained DNV KEMA Renewables, Inc. (DNV GL), to provide a request for qualifications (RFQ) to be provided to prospective bidders for a solar PV system on the island of Mahe in Seychelles.

Prepared by:	Verified & Approved by:
Danny Schoborg Project Manager	Chad Nancarrow Senior Engineer, Program Manager

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Issue	Date	Reason for Issue	Prepared by	Verified by	Approved by
D	24 November 2015	Final (minor edit)	D. Schoborg	C. Nancarrow	C. Nancarrow
C	03 November 2015	Final (revised based on additional information received)	D. Schoborg	C. Nancarrow	C. Nancarrow
B	29 October 2015	Revised based on review comments received	D. Schoborg	C. Nancarrow	C. Nancarrow
A	28 August 2015	Initial draft release	D. Schoborg	C. Nancarrow	C. Nancarrow

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Annexes

List of abbreviations

Abbreviation	Meaning
ac	alternating current
CWR	Carbon War Room
dc	direct current
DNV GL	DNV GL Renewables Advisory (DNV KEMA Renewables, Inc.)
EIA	Environmental Impact Assessment
GCS	Global Coordinate System
GMT	Greenwich Mean Time
IPP	Independent Power Producer
km/h	kilometers per hour
m	meter
MEECC	Ministry of Environment, Energy and Climate Change
MSL	Mean Sea Level
MW	Megawatts
O&M	Operations and maintenance
PPA	Power Purchase Agreement
PUC	Seychelles Public Utilities Corporation
RFP	Request for Proposals
RFQ	Request for Qualifications
SEC	Seychelles Energy Commission
SOQ	Statement of qualifications

1 INTRODUCTION

The Ministry of Environment, Energy and Climate Change (MEECC) is issuing this Request for Qualifications (RFQ) for interested parties to qualify themselves for a future tender for Independent Power Producer (IPP) services located on the island of Mahe (hereafter, the Island) in the Republic of Seychelles. MEECC is seeking relevant qualifications from experienced prospective bidders able to design, build, operate, and maintain solar photovoltaic (PV) power systems (hereafter, the Project).

The Project is intended to:

- Provide an environmentally responsible alternative for the existing fossil fuel generation on the Island.
- Provide a renewable energy source that supplies reliable electricity to the Island grid at a competitive rate.

At present, the proposed Project extents have not been firmly determined; however, the Project will likely be sited within or near a shallow water marine environment (e.g., lagoon) and have a total installed direct current (dc) capacity of approximately four (4) megawatts (MW dc). As such, the PV module mounting system has not been decisively specified and may consist of either traditional ground-mount PV, floating PV, and/or other means (or combinations of) for mounting PV in or near shallow water marine environments. The respondent is therefore encouraged to provide qualifications for traditional PV systems as well as those that may be appropriate for such conditions.

This RFQ document contains the following information:

- Project Information – Section 2
- Qualification Requirements – Section 3
- Qualification Form – Annex 1

Your company is invited to qualify for participation in a future Request for Proposals (RFP) through this RFQ process. The desired outcome of this RFQ is to prequalify a selected group of bidders to receive the final RFP, and eventually negotiate and execute a power purchase agreement (PPA) for the scope of services described therein.

2 PROJECT INFORMATION

The goal for this RFQ is to identify a short list of bidders to secure an IPP that will design, build, operate and maintain a PV system on the Island. Energy produced will be sold to the Seychelles Public Utilities Corporation (PUC) through a PPA. Subsequent to this RFQ, an RFP will be issued to the qualified short-listed bidders.

With the exception of an existing 6 MW wind farm, the majority of the current capacity of the PUC generation on the Island consists of diesel generators. Like most islands, the PUC relies heavily on foreign sources of petroleum to operate its power plants. The MEECC would like to supplement the conventional generation with a PV plant in order to reduce the negative effects of burning fossil fuels, stabilize electricity rates, and reduce energy production costs.

The MEECC have identified sites for this solar installation. This is the first large capacity solar PV energy project being developed in Seychelles.

The power plant shall be solar PV and should have a capacity of approximately four (4) MW dc. The current proposed location available for the PV plant is in a shallow water lagoon near the city of Providence, as shown in Figure 2-1; however, available land options are still being discussed. Therefore, the qualification form provided in Annex 1 has requested respondents to provide all PV system experience including, but not limited to, ground-mount, floating, and shallow water PV installations.

Figure 2-1 Proposed Project Location

Information on the proposed PV site location is listed below:

- Location (GCS): 4° 39’ 19” S, 55° 28’ 58” E
- Seabed condition: Sandy/coral/granite outcrops and silt due to nearby reclaimed area

- Proposed PV system area: 40,000 m^2
- Water depth: variable 1-2 m mean sea level (MSL)
- Profile of sea bed: nearly flat
- Water flow conditions (surface current): 2 km/h (1.1 knots)
- Tidal range: 2.2 m (the lowest and highest tidal water depth at the proposed PV site is approximately 0.4 m and 2.6 m MSL, respectively)

A hydrographic survey has not been completed at this time.

A transmission and distribution assessment has been conducted which, among other things, determines the maximum absorption levels of variable weather-dependent renewables such as PV and wind. In addition, a PPA template has been developed which shall serve as the contractual agreement basis between PUC and the IPP.

Other studies are also currently on-going that will supply requisite information for the PV project, including a grid interconnection analysis and an environmental impact assessment (EIA).

All completed studies and relevant documents will be provided to the final list of bidders during the subsequent RFP process.

3 QUALIFICATION REQUIREMENTS

In order to develop a list of qualified firms, MEECC requests that respondents complete the attached Prequalification Form (Annex 1) and include a copy of your statement of qualifications (SOQ) related to IPP services for solar PV systems, including traditional ground-mount systems and/or floating solar or shallow water marine solar systems. Your completed Prequalification Form and SOQ are requested by **17:00 (GMT), 17 December 2015**. At a minimum, please include the following information:

- Company overview/description, including documents of incorporation and certificate of good standing, or equivalent
- ISO 9001 certification (optional)
- 2012, 2013, and 2014 revenues (whole company and renewables)
- Relevant, verifiable project references with detailed project descriptions (e.g., project capacity, system component details, etc.), dates constructed, contracting entity (including contact information – names and phone numbers), and associated contract values your company worked on involving solar PV systems, including projects:
    1. In Seychelles
    2. In Africa (regional)
    3. On other island or isolated grid environments (worldwide)
    4. In other areas (worldwide)

5. With floating solar (worldwide)
6. In lagoon or other shallow water (worldwide)
7. Currently under construction (worldwide)

- Overview of concept(s) considered and proposed design solution of the entire system (including marine aspects) (e.g., general arrangements, design approach, standards for design of the overall system and components, strategy for dealing with the integrity key challenges in a marine environment).
- Describe IPP execution methods/capabilities.
- Detail your project financing history and proposed approach for the Seychelles PV plant
- Size of solar/renewables team
- Safety record and example safety plan
- Quality record and example quality plan
- Sample project organization chart
- Resumes for key personnel/management/supervisors proposed to work on the Project
- Description of IPP capabilities, including whether firm typically self-performs engineering, procurement, construction, operations, and maintenance or subcontracts one or more of these functions for solar projects
- Description of O&M services and capabilities

SOQ and completed Prequalification Form should be emailed to:

- Theodore Marguerite, MEECC – tmarguerite@env.gov.sc
- Cynthia Alexander, SEC – cynthalex@gmail.com
- Danny Schoborg, DNV GL - Danny.Schoborg@dnvgl.com

All responses must be received by the deadline indicated above. Responses received after this time will not be considered. Hard copies of the response documents, including SOQ and completed Prequalification Form, should be sent in a sealed envelope to the Seychelles Energy Commission office for the attention of:

Mr. Tony Imaduwa
Chief Executive Officer
Seychelles Energy Commission
Room 307, 3rd Floor, Block B
Unity House
PO Box 1488
Victoria, Seychelles

Materials provided will be shared with DNV GL, Carbon War Room, MEECC, and Seychelles Energy Commission (SEC) for the purpose of evaluating qualifications and determining eligibility to bid on the

upcoming solar IPP RFP. Once the final bid list for the RFP is determined, each potential bidder will be contacted directly to discuss the upcoming RFP.

ANNEX 1 - QUALIFICATION FORM

IPP PREQUALIFICATION FORM

ORGANIZATION BASICS

Company Name:			Date:
Parent Company Name:			
Registered company address:			
City:	State:	ZIP Code:	Country:
Contact Name:	Contact Title:		
Phone:	Email:		
Current D&B Rating (if available):	Web Page:		

OWNERSHIP TYPE

(Business Structure – check one)

☐ Corporation	Year Incorporated:	State/Country of Incorporation:
☐ LLC	State/Country Organized:	
☐ Partnership	State/Country Organized:	
☐ Sole Proprietorship	☐ Other	If Other:

ORGANIZATIONAL FOCUS & EXPERIENCE

1. Please provide a company overview, including the mission and purpose of your organization.

2. Years operating – Seychelles
   Whole company:
   Renewable energy:

3. Years operating – Africa (or regional)
   Whole company:
   Renewable energy:

4. Years operating – island/isolated grid environment
   Whole company:
   Renewable energy:

5. Years operating – other (worldwide)
   Whole company:
   Renewable energy:

6. Size of solar/renewables team
   Seychelles:
   Africa (regional):
   Island/isolated grid environment:
   Other (worldwide):

7. Has your company participated in any renewables business mergers or acquisitions in the last 5 years, or changed names during this period? ☐Yes ☐No If yes, explain:

8. Describe traditional ground mount solar PV assets (i.e., land-based) under direct ownership. If partially owned, include only partial total in capacity figure:

	Seychelles		Africa (regional)		Island/isolated grid environment (worldwide)		Other (worldwide)	
	Operating	Under Construction	Operating	Under Construction	Operating	Under Construction	Operating	Under Construction
# of Projects								
Years Operating		N/A		N/A		N/A		N/A
Capacity (MWac)								

9. Describe floating solar PV assets under direct ownership. If partially owned, include only partial total in capacity figure:

	Seychelles		Africa (regional)		Island/isolated grid environment (worldwide)		Other (worldwide)	
	Operating	Under Construction	Operating	Under Construction	Operating	Under Construction	Operating	Under Construction
# of Projects								
Years Operating		N/A		N/A		N/A		N/A
Capacity (MWac)								

10. Describe other shallow water (i.e, marine-based) solar PV assets under direct ownership. If partially owned, include only partial total in capacity figure:

	Seychelles		Africa (or regional)		Island/isolated grid environment (worldwide)		Other (worldwide)	
	Operating	Under Construction	Operating	Under Construction	Operating	Under Construction	Operating	Under Construction
# of Projects								
Years Operating		N/A		N/A		N/A		N/A
Capacity (MWac)								

11. Building from No. 8, 9, and 10 please provide as **Exhibit 1** relevant, verifiable project references with detailed project descriptions (e.g., project capacity, system component details, etc.), dates constructed, contracting entity (including contact information – names and phone numbers), and associated contract values your company worked on involving solar PV systems, including projects:

- In Seychelles
- In Africa (regional)
- On island/isolated grid environments
- In other areas (worldwide)
- With floating solar (worldwide)
- In lagoon or other shallow water marine environments (worldwide)
- Currently in construction

12. Please provided in **Exhibit 1** relevant, verifiable project references with general information of system and arrangements with graphics and photographs, dates constructed, contracting entity (including contact information – names and phone numbers), and associated contract values your company worked on involving marine applications (not necessarily solar PV systems).

13. Describe IPP capabilities, including how your organization executes a typical solar PV IPP project. Also describe how your organization typically finances renewable energy projects (e.g. balance sheet, private equity, loans, etc.).

14. Describe EPC capabilities, including whether your organization typically self-performs engineering, procurement and construction activities, or subcontracts these functions for solar projects.

15. Please describe how your organizational structure, prior experience, and business relationships would facilitate successful completion of work in Seychelles.

16. Please describe O&M service capabilities, including number and capacity of assets under management, if applicable. Does your organization self-perform O&M or subcontracts these functions? How would your firm provide O&M services on a project (land-based and marine-based) in Seychelles?

17. Please describe the approval process for suppliers or subcontractors.

18. Please provide resumes for key staff and a typical renewables project organization chart in **Exhibit 2**.

19. Please list any products manufactured or distributed.

FINANCIAL

20. Approximate balance sheet value: $

21. Gross Annual Revenue:	2012	2013	2014
Whole Organization	$	$	$
Renewables Group	$	$	$

22. Bank Reference/Bank Name:

Contact: Phone:

23. Have there been any judgments, claims, mediation proceedings, or suits pending or outstanding against your firm or any of its officers in the last five years? ☐Yes ☐No If yes, explain:

QUALITY MANAGEMENT PLAN

24. Is your company ISO 9001 certified? ☐Yes ☐No
If yes, please provide certification and quality management plan in **Exhibit 3**.
If no, provide any formal quality management plan information in **Exhibit 3**.

25. What methods do you employ for continuous improvement?

26. Comment on any other areas of your company's Quality program and policies that you feel will be appropriate in our evaluation?

SAFETY PERFORMANCE AND PROGRAM

27. Does your company have a written Environmental, Health & Safety (EHS) Program? ☐Yes ☐No
If yes, please provide in **Exhibit 4**.

28. Please provide safety record data or information in **Exhibit 4**.

29. Comment on any areas of your company's EHS program and policies that you feel will be appropriate in our evaluation?

MANAGEMENT			
30. List name, position and years of service of officers and key personnel this should include but not limited to Quality Personnel, Engineering, Electrical, Business, Document Control (attach resumes and an organization chart):			
NAME	**TITLE**	**YEARS WITH COMPANY**	**YEARS EXPERIENCE**

Exhibit 1 –Project References

Exhibit 2 – Project Organization Chart and Resumes

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