

INVITATION TO QUOTE
ITQ REF NO: NKF/JT/2023/020
Date : 11 September 2023

**ITQ FOR SUPPLY AND INSTALLATION OF PV PHOTOVOLTAIC SYSTEMS AT
INTERGATED RENAL CENTRE**

1. Introduction

- 1.1. The National Kidney Foundation (“NKF”) wishes to invite vendor (the “Vendor”) to quote for the Supply and installation of PV Photovoltaic Systems at Integrated Renal Centre.
- 1.2. This INVITATION TO QUOTE incorporates the following documents:
- Requirement Specifications (Annex A)
 - Electricity consumption (Annex B)
 - Price Schedule (Annex C)
 - Schedule of Rates (Annex D)
 - Deed of Warranty and Indemnity (Annex E)
 - Information About Vendor (Annex F)
 - ITQ Terms
 - Agreement to Terms and Conditions

2. Requirement Specification

- 2.1 Please refer to **Annexes A to E** for details.
- 2.2 For any enquiries pertaining to the requirement, please contact **Ms Ivy Leong**, Assistant Manager, Property & Facilities Management - Building at **DID 6506 2206**.

3. Compulsory Briefing Session on Proposal Bids

- 3.1 There will be a **compulsory** briefing conducted at the specific time and location below:

Date: 14 September 2023, Thursday
Time: 10.00am
Venue: 500 Corporation Road, Singapore 670274

Interested Vendors are required to register their contact with The National Kidney Foundation, via email attention to **Ivy Leong** @ ivy.leong@nkfs.org before **13 September 2023**.

4. Submission of ITQ

- 4.1 If you wish to submit a proposal for the above requirement, you must complete and submit the documents mentioned in paragraph 1 above, and supporting documents and materials (if any) referred to in the above documents (e.g. brochures, catalogues, handbooks, artwork and samples).

- 4.2 NKF requires:

two (2) copies of the documents referred to in paragraph 1 above that is, one original copy and one duplicate copy.

Full set of quotation / proposal must be submitted with Vendor's stamp on all pages stipulated in the ITQ. These are to be delivered in a sealed envelope which is not to bear any mark of identification of the Vendor (defined in the Conditions of Contract).

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The envelope is to be endorsed with the words "Invitation to Quote Ref No: NKF/JT/2023/020 ITQ for Supply and installation of PV Photovoltaic Systems at Integrated Renal Centre" and hand delivered:

To deposit to : ITQ Box B
Security Counter
National Kidney Foundation
81 Kim Keat Road
Singapore 328836
Attn: Mr Julian Teoh

- 4.1 All ITQ must be received at the location specified above, no later than **25 September 2023, Monday, 1500 hours** (the "Closing Date"). ITQ received after this deadline shall not be considered.
- 4.2 Your ITQ bid shall be irrevocable and open for acceptance by NKF for 180 days from the Closing Date.
- 4.3 The Vendor, at the point of submission of its bid, is required to provide the following information and/or documents to NKF:
- 4.4 Extract of company/business registration from the Accounting & Corporate Regulatory Authority (ACRA), showing a full list of directors/partners of the Vendor. The date of the business profile should be no more than thirty (30) days from the date of submission.
- 4.5 The Vendor's latest annual report (if applicable) or published accounts.
- 4.6 If you have any inquiries relating to this ITQ, please contact Mr Julian Teoh at telephone no 6506 2151 or email to julian.teoh@nkfs.org.

5 Terms and Conditions

- 5.1 The Terms and Conditions as set out in the Conditions of Contract shall form part of the binding contract between the successful Vendor and NKF. The Vendor shall perform the Services according to the requirements specified in Annexes A to E.
- 5.2 The successful Vendor may be required to enter into further documentation with NKF and shall do so, if ever required by NKF.
- 5.3 NKF is not obliged to accept and reserves the right to reject the lowest or any quotation, or part or all of any quotation or assign any reason for rejecting any quotation. NKF reserves the right in the exercise of its absolute discretion to accept any part or all of any quotation.

6. Price Quotations

- 6.1 All prices quoted by the Vendor shall be in the lawful currency of the Republic of Singapore.
- 6.2 All prices quoted by the Vendor shall represent the total cost to NKF.

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The PV Photovoltaic Systems installation works shall be as follow and it shall include all other installation, electrical and builder works not mentioned in the lump sum breakdown cost.

The scope of the PV Photovoltaic Systems installation works shall include but not limited to:

1. Planning and Design of Grid-connected PV Photovoltaic Systems

- a) The PV vendor should carry out Shadow Analysis at the site and design strings & arrays layout considering optimal usage of space, material and maintenance. The PV vendor should submit the array layout drawings along with Shadow Analysis Report to NKF for approval.
- b) The PV vendor shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The PV vendor submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.
- c) PV Vendor to design and configuration of the PV arrays, inverters and associated electrical networks
- d) Design and simulation of PV system models for the performance verification
- e) Grid-tied PV inverters with data logging
- f) Balance of System (BOS), including DC & AC cabling and trucking, lighting protection system, protection devices, etc, up to the point of common coupling (PCC)
- g) Reticulation of PV power to MSB

2. Supply and Installation of Grid-connected PV Photovoltaic Systems

- a) All PV modules shall be supported by the supporting structure and endorsed by the PE to ensure that the roofing is safe after the installation of PV modules.
- b) All PV modules install shall maximizes energy harvest and minimizes glare to neighbouring buildings. PV vendor to ensure that PV modules are mounted at an incline 10 to 15 degrees for framed modules or as little as 3 to 5 degree for unframed modules.
- c) A qualified person to be engaged by the PV vendor to ensured appropriate physical installation and compliance with the regulation.
- d) The PV vendor shall ensure that all necessary approval related to the work are sought from the authorities eg. BCA (structural safety), URA, (planning permission), SCDF (fire safety), CAAS (aviation zone) for the PV installation.
- e) All electricity produced by the PV vendor shall be connected to the DC main cables to the DC terminals of the PV inverter. After conversation, the AC current of the PV

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inverter to be connected through the PV supply cable to the building's electrical installation (AC distribution board).

- f) The PV system should be provided with all necessary protections like earthing, Lightning, and grid islanding
- g) Any alteration, modification or upgrading of electrical circuit within the lot is subject to prior approval from NKF. Detailed single line drawings with Professional Engineer's endorsement are to be submitted to NKF.
- h) PV vendor shall seek prior permission from NKF or its representative and Building LEW before tapping/modification electricity from any Distribution Board (DB).
- i) PV vendor is required to inform NKF/Building LEW in writing 7 working days in advance if shut-down of electrical supply is necessary. Should the shut-down affect NKF's operations, a mutually agreed date/time must be worked out by the parties concerned.
- j) Approval must be obtained from NKF prior to any entry to the electrical riser room. Such request shall be made in advance in writing.
- k) All electrical parts and accessories installed shall be of relevant authorities' approval.

3. Testing & Commissioning

- a) Testing, quality assurance, and performance verification before commissioning.
- b) Vendor shall engage the Building LEW at their own cost to commission and power turn on from the PV system, including applying for the relevant electrical licenses and assessing the electrical connection requirements. Please contact LEW directly.

Loh Wah Kay
M & P Consulting Engineers
Tel: 62467866

4. Drawings & Manuals

- a) Two sets (Hard and Softcopy) of Engineering, electrical drawings and Installation and O&M manuals are to be submitted upon the completion of installation. Vendor shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- b) For complete electro-mechanical works, vendors shall supply complete design, details and drawings for approval to NKF before progressing with the installation work

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5. Defects Liability Period

- a) The Works to be tendered shall also include the defects liability period for the works shall expire **Twelve (12) months** after the completion of the Works, upon completion of all the works which including maintenance and servicing to NKF.
- b) During the Defects Liability Period, the PV vendor shall complete any outstanding work and shall make good any defects, omissions or other faults which may be or become apparent in the Contract Works, within Response Time and Down Time. As such, PV vendor must comply with the Response time and Down Time during the Defects Liability Period. The cost of such maintenance and servicing is deemed to be included in the ITQ. The Response time is 4 hours and Down Time is 24 hours.
- c) The PV vendor is required to provide comprehensive inspection to the new applications during the twelve (12) months Defects Liability Period. The comprehensive inspection cost would regular routine inspection, consumables (such as application materials, etc.), labour, replacement of parts due to normal wear and tear, repairs, tests, documentation and all other costs necessary to maintain the system in working condition. The only exceptions are damages due to vandalism or accidents not caused by the PV vendor.
- d) The PV vendor shall submit to NKF a 6-monthly report in such forms as may be approved by the NKF containing details of the periodic inspection, servicing and rectification works made or done by him. The 6-monthly report shall include a log showing the time when rectification works commences. The nature of a fault and the actual time taken for the rectification work shall be signed by the NKF user department. The report shall be submitted to the NKF within the first week of the following month.
- e) The PV vendor shall provide NKF with a telephone number for reporting any faults occurring to the system. The telephone shall be manned 24 hours of the day. PV Vendor shall provide a senior member of his maintenance team a hand phone to enable NKF or the user department to contact him for emergency repairs to the system.
- f) The PV Vendor shall submit two sets of schedules and the visual inspection scope for routine inspection for the year (4) weeks before the start of the twelve (12) months defects liability period. The schedule shall show the dates and times for the routine inspection. The Contractor shall inform the NKF any changes in the schedule dates or times at least 5 days in advance.
- g) If In the event that PV Vendor fail to remedy and/or rectify any defects or others faults within Response time and Down Time, NKF may carry out the remedial and/or rectification works by employ others PV vendors to carry out the same, and the costs of such remedial and/or rectification works shall be borne by PV vendor.

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6. Warranties

- a) The PV vendor shall provide all duly executed Indemnities jointly and severally with their Suppliers in accordance with the specimen contain in the contract documents and shall submit the same to NKF prior to the Commencement of any works which have been approved for subletting.
- b) All indemnities shall cover the NKF against faulty material and or workmanship or the periods particularly stated. The indemnity period shall commence from the Date of the Completion Certificate.
- c) The PV vendor shall provide Energy Guarantee for the total 25 years & will compensate the client for any shortfall in the PV energy production with every 5-year window of observation.

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Electricity consumption

	2023	2022	2021	2020	2019
Jan	59,361.694	64,725.930	53,610.294	59,541.074	26,271.600
Feb	55,920.699	66,406.280	56,320.964	64,734.825	60,800.480
Mar	52,476.448	65,970.680	54,805.016	63,525.015	57,534.782
Apr	71,523.815	71,523.815	62,637.410	67,446.111	62,001.660
May	60,549.530	66,361.354	59,590.042	58,043.175	61,712.990
Jun	65,426.307	67,391.141	63,719.391	58,369.249	64,276.230
Jul	60,969.323	63,507.493	62,384.143	54,693.320	61,235.090
Aug		66,363.113	69,231.119	57,873.991	63,761.960
Sept		65,042.180	63,498.319	57,333.584	64,472.436
Oct		61,095.130	66,825.273	61,493.778	60,024.893
Nov		62,585.131	63,084.455	61,101.196	63,963.870
Dec		60,194.391	63,878.722	53,948.566	58,403.500
Total	426,227.82	781,166.64	739,585.15	718,103.88	704,459.49
Avg	60,889.688	65,097.220	61,632.096	59,841.990	58,704.958

PRICE SCHEDULE - Breakdown

Supply and installation of PV Photovoltaic Systems			
No.	DESCRIPTION		Price
1	Supply and installation of PV system	1 lot	
Total Contract sum			

Optional (PPA scheme)			
No.	DESCRIPTION	Year	Proposed Tariff
3	Installation of PV panels system (PPA PV lease)		

Submissions must include:

1. The proposal of the PV and EV charger system to be installed as well as the energy generated and the estimated ROI.
2. The proposal for PPA PV lease which includes both PV system and EV charger system.

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SCHEDULE OF RATES

S/No.	Description	Per Unit	Price
1	PV modules (Model: _____)	1 unit	\$ _____
2	Electrical Vehicle Station (Model: _____)	1 unit	\$ _____
3	Maintenance of Solar panel system (Valid till _____)	Yearly	\$ _____
4	Service call per trip during operation hours (Mondays to Saturdays; (9:00am to 6:00pm)	1 unit	\$ _____
5	Service call per trip after operation hours	1 unit	\$ _____

Accepted By:

Authorized Signature: _____ Date: _____

Signatory Name: _____ Signatory Title: _____

Telephone Number: _____ Vendor's Name: _____

Email Address: _____ Vendor's Stamp: _____

JOINT INDEMNITY

DEED OF WARRANTY AND INDEMNITY FOR

[DESCRIPTION OF WARRANTY WORKS FOR WHICH WARRANTY IS GIVEN]

THIS DEED OF INDEMNITY AND WARRANTY is made the [] day
of [] by

1. _____ having its
registered office at _____

(hereinafter called "the PV Vendor ") of the first part; And

2. _____ having its
registered office at _____

(hereinafter called "the Sub - PV Vendor ") of the second part;

In favour of _____ (hereinafter

called "the NKF" which term shall include its assigns and successors in title).

WHEREAS:-

1. By a written Contract dated [] made between the NKF and the PV Vendor (hereinafter referred to as "the Contract"), the NKF engaged the PV Vendor to construct, complete and maintain the Works (as defined in the Contract) including [Description of specific part of the Work respect of which warranty is given] (Hereinafter called the "Warranty Works" for or in respect of the [Name and Type of Contract] at [Address of Project]).
2. By a written Contract dated the [] and made between the PV Vendor and the Sub-PV Vendor (hereinafter referred to as "the Sub-Contract"), the Sub-PV Vendor agreed, inter alia, to execute such part of the Premises, namely to supply, install, complete and maintain the [] works specified in the Sub-Contract. (Hereinafter referred to as "the Sub-Contract Works").
3. The PV Vendor and the Sub-PV Vendor have agreed to jointly and severally warrant the Sub-Contract Works and to jointly and severally indemnify the NKF, in relation to the Sub-Contract Works in the manner hereinafter appearing.

THE PV VENDOR AND THE SUB-PV VENDOR HEREBY JOINTLY AND SEVERALLY AGREE with the NKF as follows:

1. The PV Vendor and the Sub-PV Vendor jointly and severally warrant that the Contract Works shall be free from any defect, deterioration, shrinkage, seepage, lack of fitness, non-satisfaction of performance specifications or other requirements under the Contract or other faults in the Contract Works including without prejudice to the generality of the foregoing if applicable in relation to the Contract Works ("the Defects"), as shall be determined by the NKF, for a period of twenty-five (25) years from the date stated in the Completion Certificate of the Works under the terms of the Contract ("the Period"), and in the event of any Defects appearing or becoming apparent in the Contract Works within the Period, the PV Vendor and/or the Sub-PV Vendor shall forthwith upon written notice from NKF and within such time as the NKF may direct, remedy, repair or make good to the absolute satisfaction of the NKF:
 - a. the Defects; and
 - b. any damage to the Contract Works or any property of the NKF or a third party, arising directly or indirectly out of the Defects and/or the remedy, repair or making good of such Defects, including but not limited to any damage to plaster, painting, panelling, tiling and other similar works, mechanical, electrical or other installations or other property.
2. In the event the works undertaken by the PV Vendor or the Sub-PV Vendor referred to in Clause 1 above prove ineffective as determined by the whose decision shall be final and conclusive, or are not to the satisfaction of the NKF, the PV Vendor and/or the Sub-PV Vendor shall effect such additional works in such a manner and within such time as the NKF may direct and shall carry out all tests, as directed by the NKF until such Defects and damage have been remedied, repaired or made good to the absolute satisfaction of the NKF.
3. If the PV Vendor or the Sub-PV Vendor fails to perform their obligations under Clauses 1 and 2 above within the time directed by the NKF or in the absence of such direction, within 14 days from the date of written notice from the NKF, the NKF shall be entitled (but not obliged) to remedy, repair or make good such Defects or damage and the PV Vendor and the Sub-PV Vendor shall forthwith on demand fully indemnify the NKF in respect of all losses, damages, costs and expenses incurred by the NKF in remedying, repairing or making good such Defects or damage, including all legal costs as between solicitor and client incurred by the NKF in enforcing this clause.
4. Nothing in this Deed or in Clause 3 above is intended to take away any of the NKF's rights at law against the PV Vendor or the Sub-PV Vendor, and for the avoidance of doubt, should the PV Vendor or the Sub-PV Vendor fails to perform their obligations under Clauses 1 and 2 above within the time directed by the NKF or in the absence of such direction, within 14 days from the date of written notice from the NKF, the NKF shall be entitled to claim against the PV Vendor and/or the Sub-PV Vendor all its damages, losses, costs and expenses including all legal costs on the indemnity basis arising from a breach by the PV Vendor or the Sub-PV Vendor of any warranties or undertakings under this Deed.

5. The exercise by the NKF of any of its rights under this Deed in any manner (including without limitation the engaging of third parties to remedy the Defects) shall not in any way relieve the PV Vendor and the Sub-PV Vendor of their obligations under this Deed, the Contract (in the case of the PV Vendor) and at law.
6. The PV Vendor and/or the Sub-PV Vendor shall indemnify the NKF from and against any claim, actions or proceedings for any loss, damage, compensation or indemnity arising out of or in connection with:
 - a. such Defects or damage or the remedy, repair or making good of such Defects or damage; or
 - b. any breach by the PV Vendor and/or the Sub-PV Vendor of any of the warranties, covenants and undertakings contained in this Deed.
7. All costs and expenses arising out of the performance of the parties' obligations under this Deed shall be borne by the PV Vendor and the Sub-PV Vendor.
8. The giving of time or the neglect or forbearance of the NKF in enforcing its rights under this Deed or other indulgence granted to either the PV Vendor or the Sub-PV Vendor or both shall not in any way prejudice or affect the obligations of the PV Vendor and/or the Sub-PV Vendor under this Deed, the Contract (in the case of the PV Vendor) and at law.
9. The NKF shall be entitled at its absolute discretion to assign the benefit of and/or its rights under this Deed to any third party without the consent of the PV Vendor and/or the Sub-PV Vendor. For the avoidance of doubt, such an assignment shall not prejudice, modify, limit, exclude or affect in any way the NKF's rights and remedies against the PV Vendor and the Sub-PV Vendor under the Contract (in the case of the PV Vendor) and at law.
10. The rights and benefits conferred upon the NKF by this Deed are in addition to any other rights and remedies the NKF has or may have against the PV Vendor and/or the Sub-PV Vendor including without limitation, its rights and remedies under the Contract (in the case of the PV Vendor) and at law.
11. Any notice or demand required to be made shall be sufficiently given if sent by registered post to the aforesaid addresses of the PV Vendor or the Sub-PV Vendor or such addresses specified by them and shall be deemed to be received at the time when it would have been delivered in the ordinary course of post.
12. The statements and representations in the Recital hereinabove stated are true and accurate in all respects and this Deed shall have full force and effect notwithstanding:
 - a. any limitation or termination of the PV Vendor 's and/or Sub-PV Vendor 's liability and/or responsibility under the Contract and/or Sub-Contract respectively.
 - b. any termination of the Contract or the PV Vendor 's employment under the Contract and/or the termination of the Sub-Contract or the employment of the Sub - PV Vendor under the Sub-Contract; or
 - c. the expiry of any limitation period for any claim or cause of action which the NKF has or may have against the PV Vendor under the Contract.

13. A person who is not a party to this Deed shall have no rights or remedies under the Contracts (Rights of Third Parties) Act [Chapter 53B] to enforce any of the terms in this Deed.
14. The NKF shall be entitled to assign the benefit of this Indemnity/Warranty at any time without the consent of the PV Vendor /Sub-PV Vendor

IN WITNESS WHEREOF the PV Vendor and the Sub-PV Vendor have executed this Deed of the day and year first above written.

The Common Seal of)
[Name of the PV Vendor])
was hereunto affixed in)
The presence of:)

Director

Director/Secretary

The Common Seal of)
[Name of the Sub-PV Vendor])
was hereunto affixed in)
The presence of:)

Director

Director/Secretary

INFORMATION ABOUT VENDOR

ITQ REF NO. _____

ITQ FOR _____

1. Vendor's name: _____
2. Company/Business registration no.: _____
3. Registered address: _____

4. GST registration no. (if applicable): _____
5. Type of business (please select)

- () Sole proprietorship () Private company (limited by shares)
- () Partnership () Public company (limited by shares)
- () Others (please specify): _____

6. Contact person
 Name: _____
 Title: _____
 Tel No.: _____
 Fax No.: _____
 Email: _____

7. **I declare that I/the PV Vendor is not related¹ to any person in NKF who is involved in this ITQ howsoever and whatsoever.**
8. The above named PV Vendor certifies and declares that all information, documents and materials provided in connection with its quotation bid are true and accurate to the best of its knowledge.

Authorised Signature: _____

Signatory's name: _____ Signatory's title: _____

PV Vendor 's name: _____ PV Vendor 's stamp: _____

¹Related refers to the following: Spouse, domestic partner, child, mother, father, brother or sister or close associates; any corporation, business or non-profit organization of which you are serving as staff, officer, board member, partner, participate in management or are employed by; any trust or other estate in which you have a substantial interest or as to which you serve as a trustee or in a similar capacity.

Company's Stamp & Signature: