



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

7.1.2 The Institution has facilities for alternate sources of Energy and Energy Conservation Measures

7.1.2 (A) Solar Energy

The University consists of solar power generating system of 310 KW on the roof top of the academic building A, B & C as well as on the hostel building. An additional benefit comes in the form of rebate in property tax under 'Green Building' norms and uninterrupted energy is available for use during daytime all around the year. Apart from this, solar power generating system is provided in the hostels for power generation and hot water requirement.

IQAC -Data for Solar Panels						
Sr.No	Building	No. of Panels	Total no. of solar panels	Capacity	Total capacity	Rebate rate
1	A	157	984	310 Kw/day	41850 units/month	0.25
2	B	375				
3	C	204				
4	DG	120				
5	Hostel	128				


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

K.R. Mangalam University (SOLAR PANEL DATA FROM YEAR 2018-2020)

Sr.No	Month	Solar Energy consumption in KWH (Year 2020)	Solar Energy consumption in KWH (Year 2019)	Solar Energy consumption in KWH (Year 2018)
1	January	25984	30390	NIL
2	February	34484	28877	NIL
3	March	32059	41233	NIL
4	April	33773	41425	20013
5	May	30546	43858	37669
6	June	21128	36766	34233
7	July	19136	25186	28081
8	August	18119	32736	28410
9	September	NIL	31637	28810
10	October	NIL	35536	30062
11	November	NIL	24634	28237
12	December	NIL	19066	28037
		215229	391344	263552

Total for 29 month = 215229+391344+263552 =870125 KWH

Note : Sanctioned load for Institution is 2000 Ampere

Yearly power Requirement : 1740262 KWH

Source: KRMU State Electricity Bills



Registrar
K.R. Mangalam University
Sector Road, Gurugram, (Haryana)

K.R. Mangalam University (SOLAR PANEL DATA FROM YEAR 2021-23)

Sr. No	Month	Solar Energy consumption in KWH (Year 2021)	Solar Energy consumption in KWH (Year 2022)	Solar Energy consumption in KWH (Year 2023)
1	January	7383	23992	18169
2	February	20657	35860	29464
3	March	25815	40903	33764
4	April	33501	39729	36798
5	May	25630	34145	36308
6	June	23627	33135	31117
7	July	18385	21836	22951
8	August	29952	23911	31238
9	September	27302	26479	27498
10	October	40038	28519	29577
11	November	26160	27659	19158
12	December	25997	22668	22382
		215229	358836	338424

Total for 36 months = 912489KWH

Note : Sanctioned load for Institution is 2000 Ampere

Yearly power Requirement : 1824978KWH

Source: KRMU State Electricity Bills


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

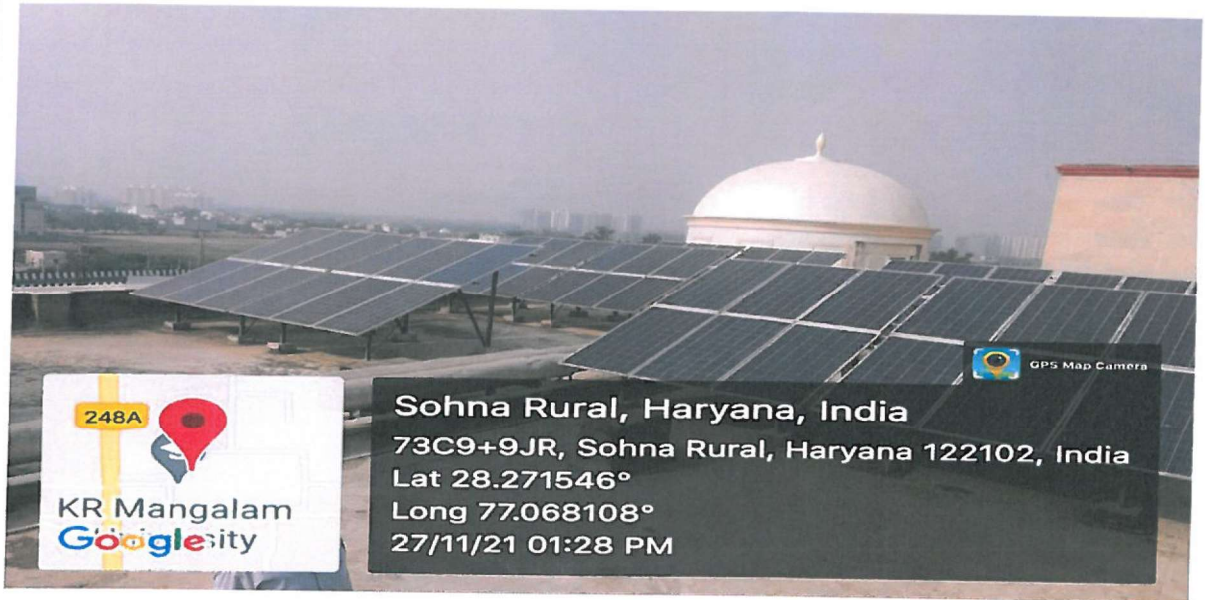
K R Mangalam University, Gurugram

Alternative resources of Energy Facilities

Solar Power Plant and Solar Water Heater

Location

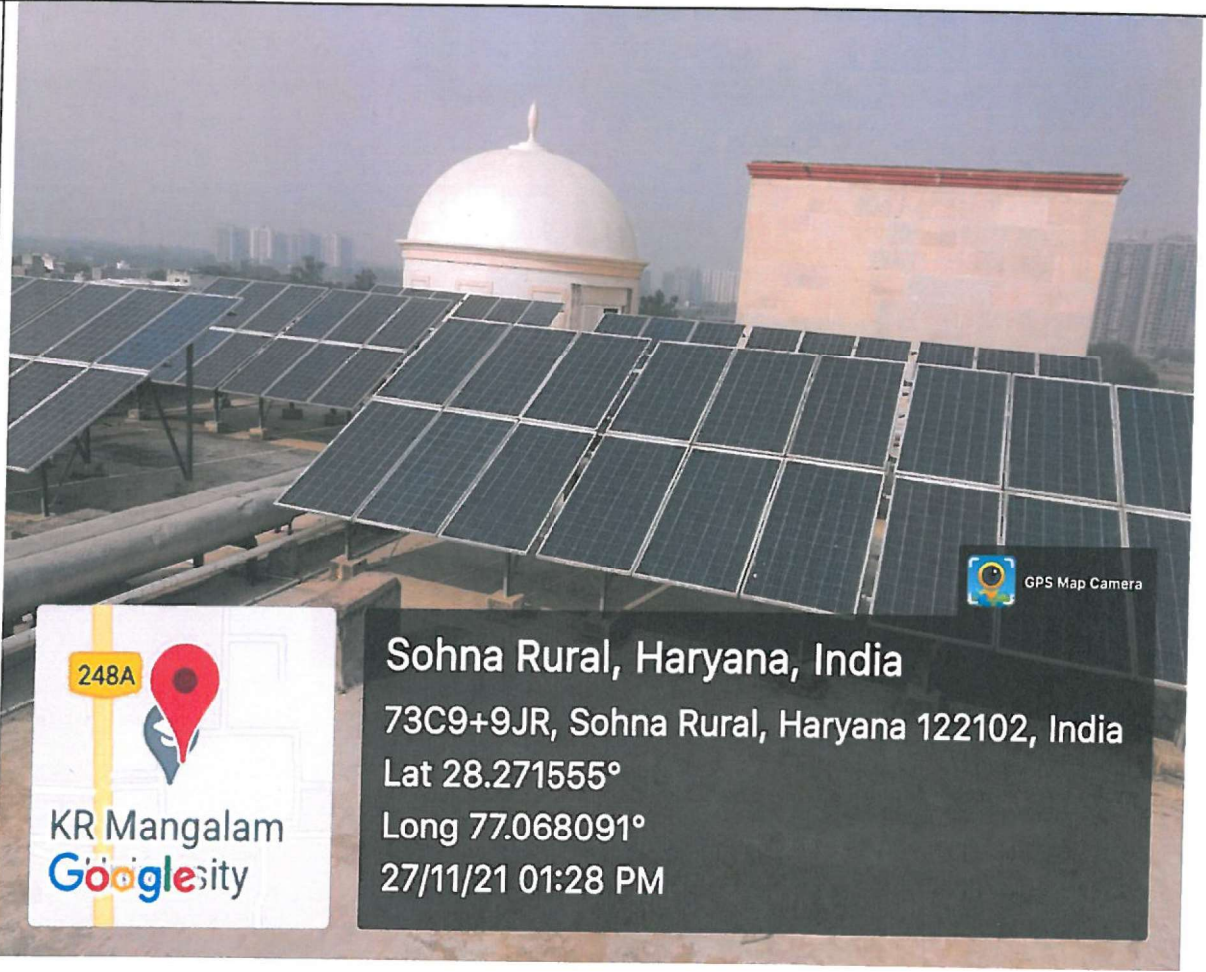
**A-Block
(Roof
top)**




Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Location

A-Block
(Roof
top)



Sohna Rural, Haryana, India

73C9+9JR, Sohna Rural, Haryana 122102, India

Lat 28.271555°

Long 77.068091°

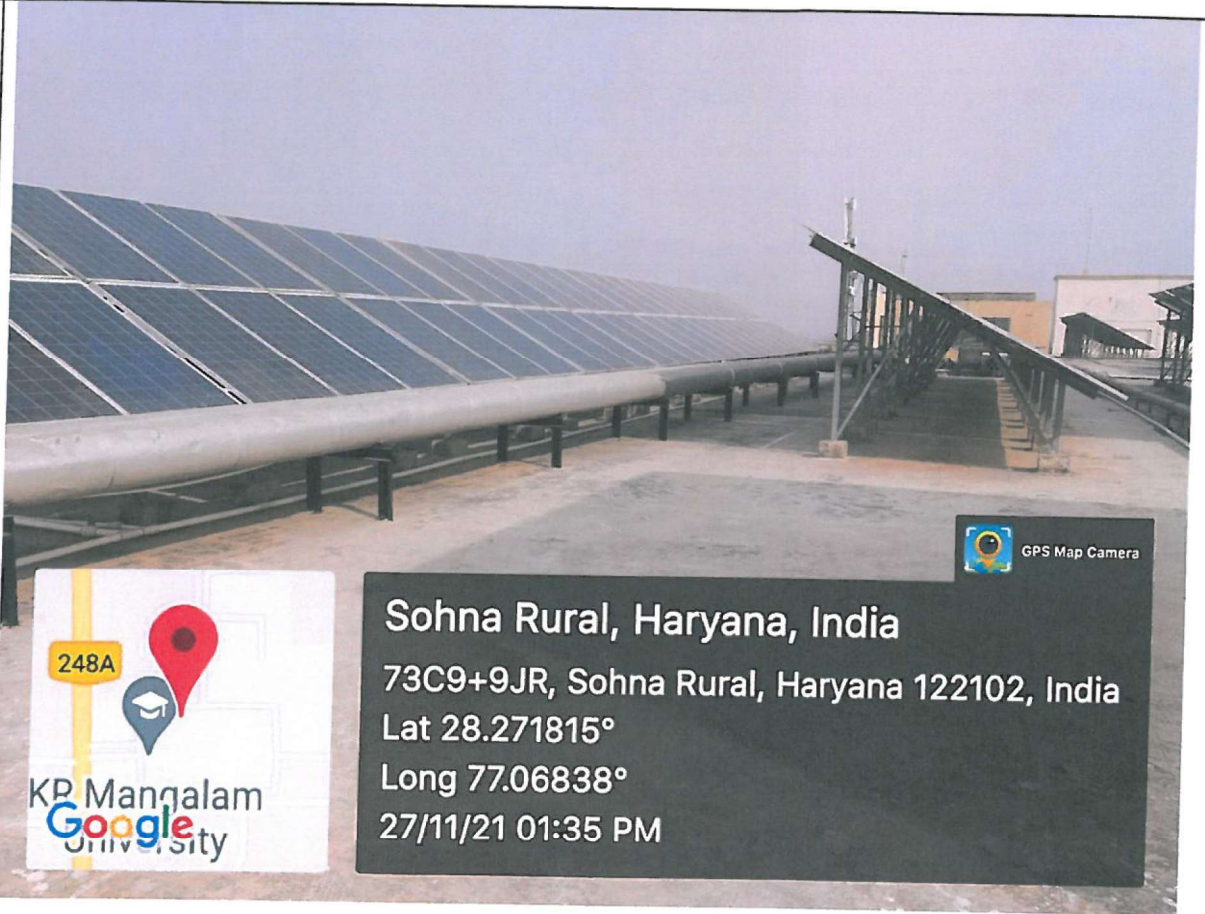
27/11/21 01:28 PM

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Hary 010)

Location

**B-Block
(Roof
top)**



Sohna Rural, Haryana, India

73C9+9JR, Sohna Rural, Haryana 122102, India

Lat 28.271815°

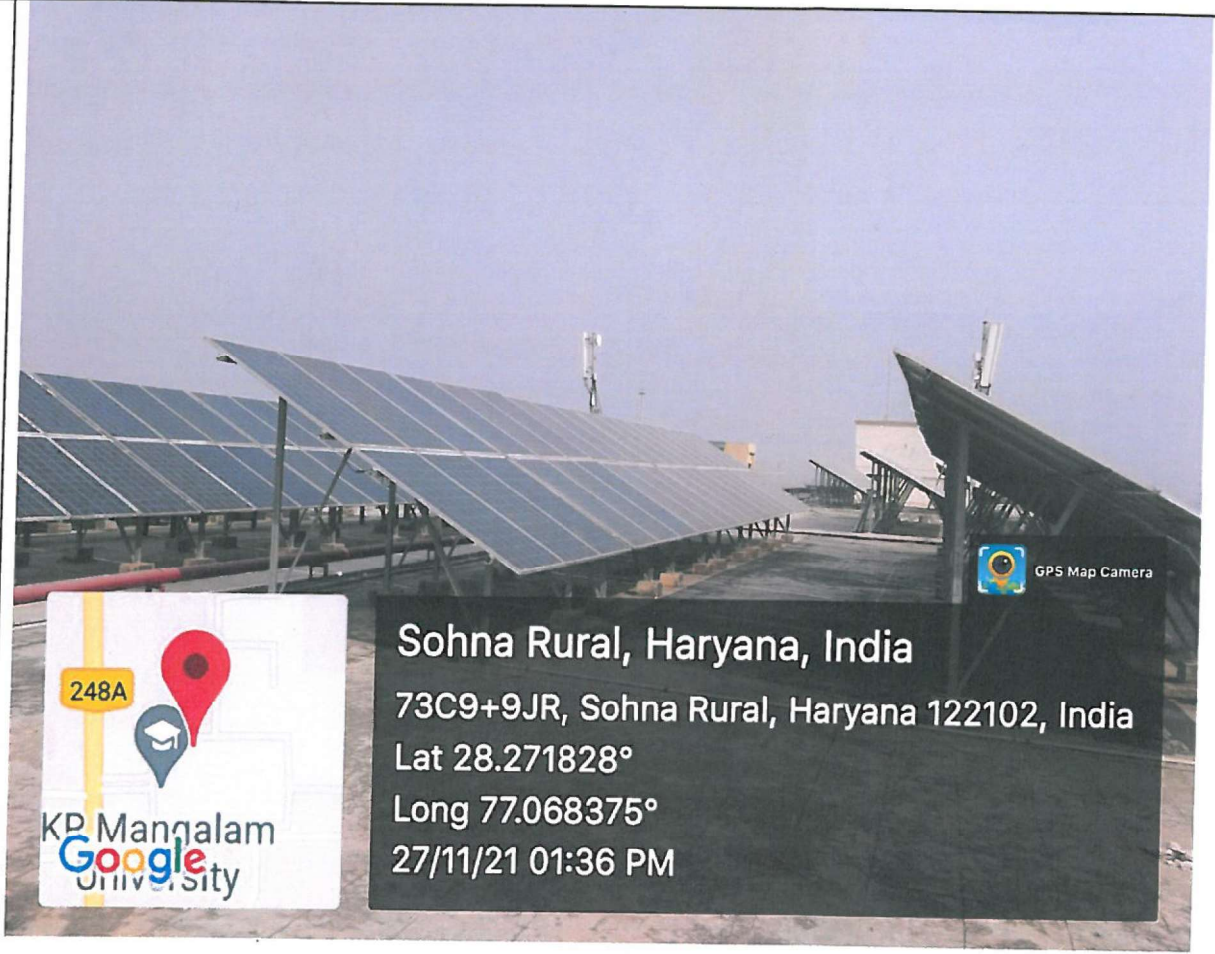
Long 77.06838°

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Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Location

**B-Block
(Roof
top)**



Sohna Rural, Haryana, India
73C9+9JR, Sohna Rural, Haryana 122102, India
Lat 28.271828°
Long 77.068375°
27/11/21 01:36 PM


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Location

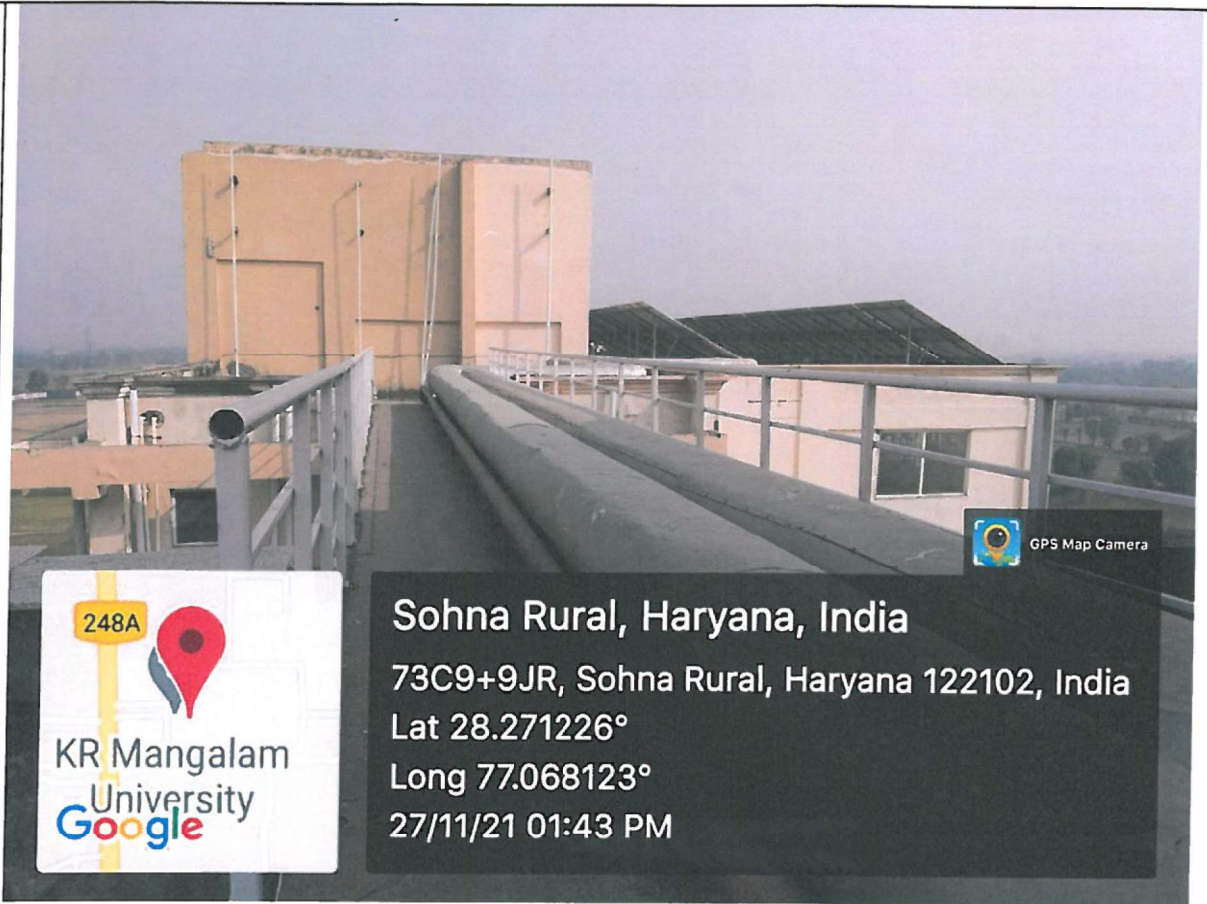
B-Block
(Roof
top)



Jmf
Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Location

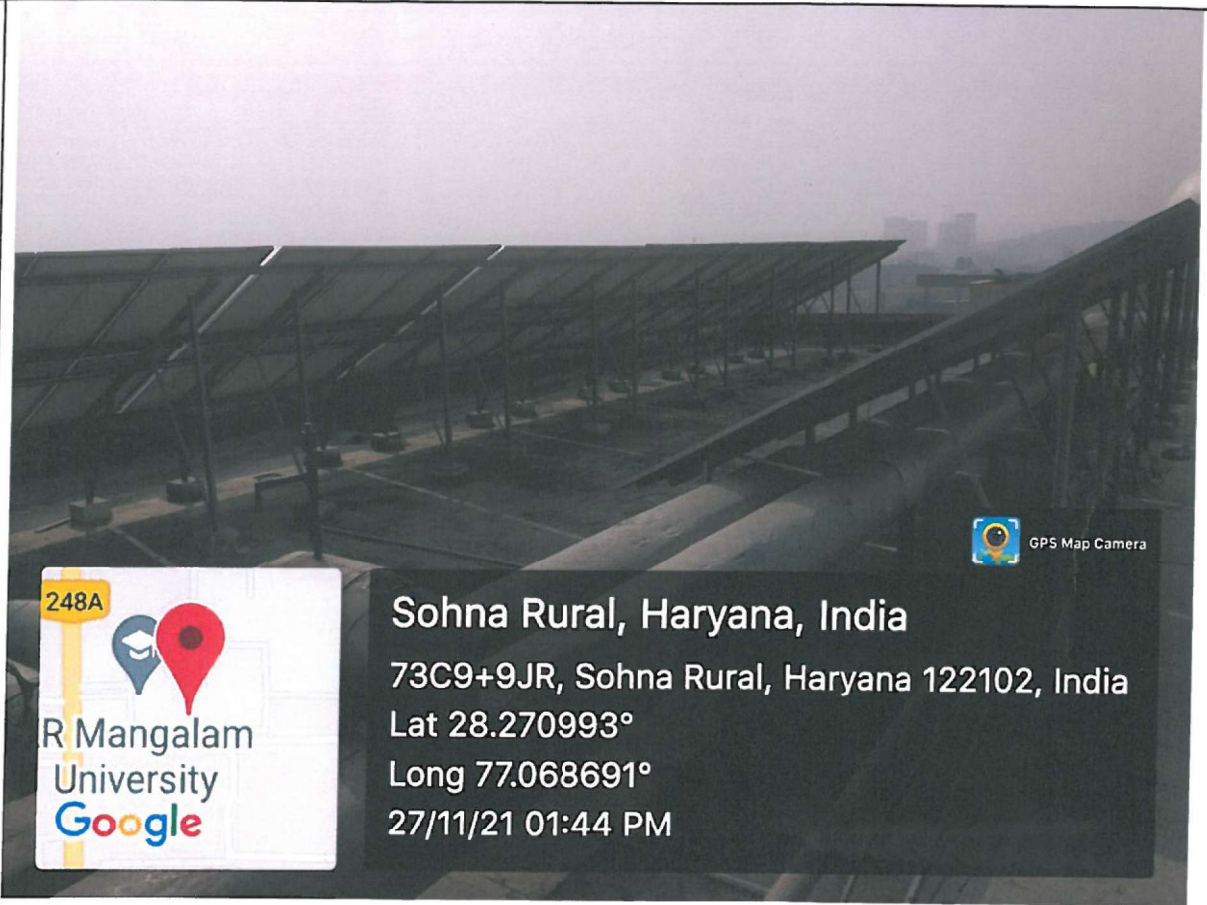
C-Block
(Roof
top)



Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Location

C-Block
(Roof
top)



Sohna Rural, Haryana, India

73C9+9JR, Sohnā Rural, Haryana 122102, India

Lat 28.270993°

Long 77.068691°

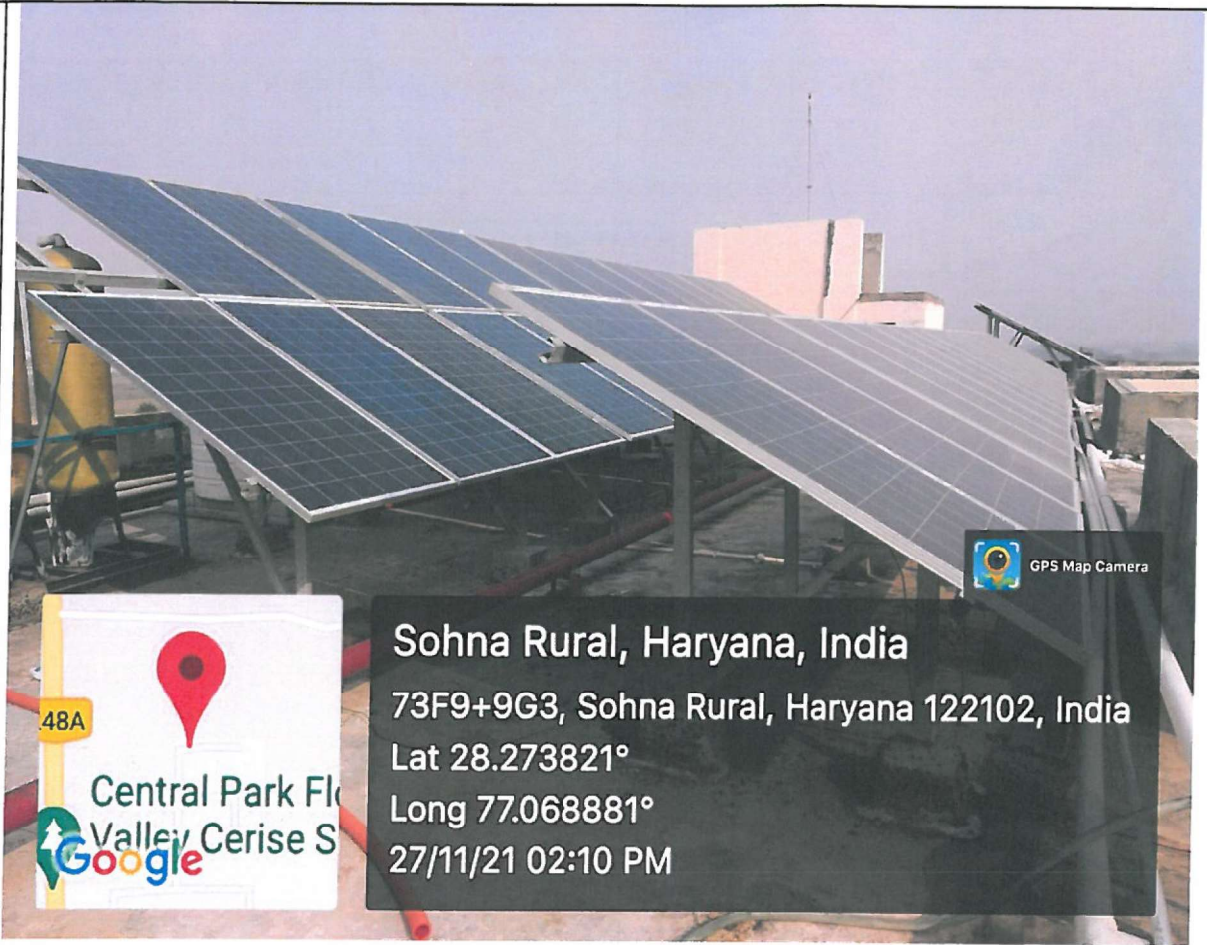
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Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Location:

Boys
Hostel
(Roof
top)



GPS Map Camera

Sohna Rural, Haryana, India

73F9+9G3, Sohnā Rural, Haryana 122102, India

Lat 28.273821°

Long 77.068881°

27/11/21 02:10 PM

48A

Central Park Fl
Valley Cerise S
Google


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Location:

Girls
Hostel
(Roof
top)




Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Solar
Water
Heater:

Girls and
Boys
Hostel

(Roof
top)

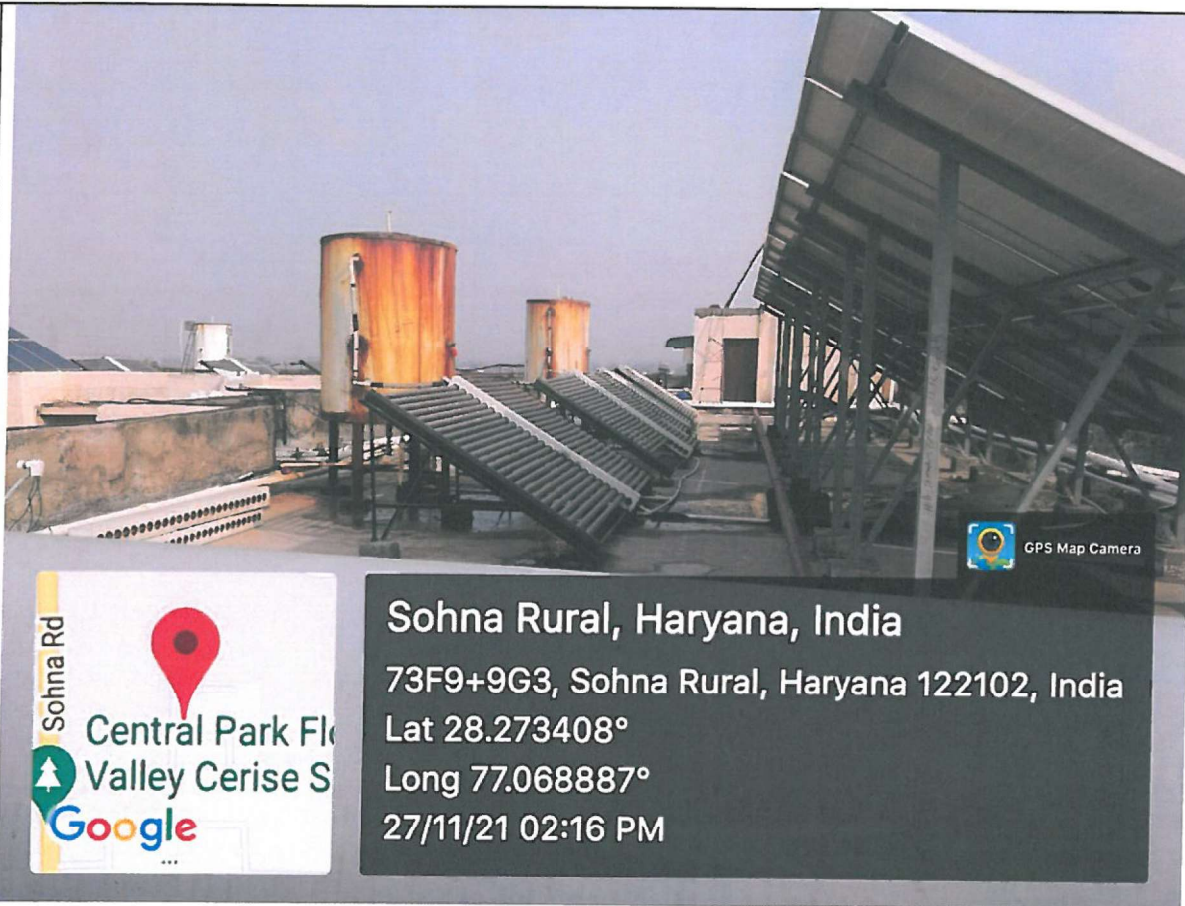



Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Solar
Water
Heater:

Girls and
Boys
Hostel

(Roof
top)



JMD
Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

From

Additional Deputy Commissioner-cum-Chief Project Officer,
New & Renewable Energy Department, HAREDA
Gurgaon

To

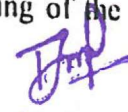
Name Yash Dev Gupta Director Mangalam Edu Gate Running KR Mangalam University
Address KR MANGALAM UNIVERSITY RUN BY MANGALAM EDU GATE GURUGRAM- SOHNA
ROAD
PIN 122103

Sanction No. DNRE/GGM/2017/5448-57 Dated 03-08-2017 Date: 03-Aug-2017

Subject: Sanction of the project for installation of grid connected rooftop SPV power plant.

Your project (Application No. GCRT/GGN/2017/06/0154) for installation of Institutional Sector (Type of system) of 310.00 kWp capacity at site (with address of site) KR MANGALAM UNIVERSITY GURUGRAM SOHNA ROAD SOHNA RUN BY MANGALAM EDU GATE has been sanctioned for grant of Finance Assistance (Subsidy) subject to the terms and condition given below:

- i. The user has to complete the installation the project in all respect by 30-Dec-2017 (date of completion of the project) i.e. within five months time (150 days) from date of sanction. However, if fails to install the plant within five months, this sanction will be treated as cancelled. No request for extension of time period shall be entertained.
- ii. The date of installation of the power plant, pending the installation of the net meter, will be treated as the date of installation for the purpose of calculation of subsidy. Net meter may be installed after this period as early as possible.
- iii. The grid connected rooftop SPV power plant is to be installed from the channel partner/ New Entrepreneurs empanelled by MNRE (List may be downloaded from website www.mnre.gov.in or www.hareda.gov.in) or from the firms approved by HAREDA. The system shall be installed by strictly meeting out the minimum technical specifications prescribed by HAREDA from time to time. The MNRE approved components shall be used in the plant. Minimum Technical Specifications are placed at Annexure II. The plant not installed from the MNRE empanelled Channel Partner/ New Entrepreneurs shall not be eligible for the subsidy.
- iv. Financial Assistance for the installation of Grid Connected Rooftop Solar Power Plants at rate of 30% of the cost/ benchmark cost or Rs. 20000/- per kWp, whichever is less shall be provided for the project.
- v. The applicant has to make the payment to the supplier on the mutual agreed terms and conditions between user and the supplier. HAREDA will not be responsible for any dispute between user & supplier. However, the subsidy part shall be released to the user only after the commissioning of the project in all respect.


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

- vi. Proper metering arrangement shall be incorporated so that the generation data from the SPV power plants may be available.
- vii. The system should be without battery bank and power generated would be synchronized with the electricity distribution network in the building with proper system design so that surplus power can be fed into the grid. However systems with small battery bank can be installed.
- viii. The benchmark cost of the system (of the SPV Grid Connected Power Plant without battery bank) finalized for Govt./PSU sector shall be taken for calculation of subsidy for individual/private users. The subsidy on the basis of this benchmark cost shall be released to users after the installation and commissioning of the system as per terms and conditions of the sanction of MNRE. Benchmark cost may change without any notice to the public.
- ix. The Solar Power Plants which have been installed prior to the site visit of Project Officer of concerned district are not eligible for availing subsidy. Respective district Project Officer shall certify that the system has not been installed at the site prior to his visit of the site.
- x. After the commissioning of the system the user has to fill up the Project Completion Report online and to upload all the relevant documents listed below for claiming the subsidy (all the documents must be signed by the user):
 - a. Invoice of the System
 - b. List of Sr. Nos. of Modules
 - c. Warranty/Guarantee & declaration certificate from the supplier as per format
 - d. Commissioning Report (Provisional) as per format (without signature of PO),
 - e. Joint Commissioning Report (Final) as per format (without signature of PO),
 - f. Photograph of the installed system
 - g. MNRE approved channel partners certificate.
 - h. Cancelled Cheque.
- xi. The Applicant must see the guidelines from the web site of HAREDA before installation of the system.
- xii. The applicant has to apply for net meter facility immediately, if not applied earlier.
- xiii. For any other information/clarification the user shall contact to Project officer in the office of the Addl. Deputy Commissioner of their district.

(This is system generated letter needs no signature)

Additional Deputy Commissioner-cum-Chief Project Officer.
New & Renewable Energy Department, HAERDA
Gurgaon



Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

21/02/2018

Motivation@KRMangalam.edu

COMMISSIONING REPORT (PROVISIONAL)
FOR GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT

Commissioning report for the solar power plant installed at the site of K.R. Mangalam University, Gurugram, Haryana. The system consists of a 10 kWp solar PV array connected to a grid-tied inverter. The system was checked and found to be working satisfactorily. The system is suitable for installation and operation as per the design specifications.

[Faint signature and stamp]
Signature of the beneficiary
Date: 21.02.2017

System checked &
found installed
as per MNRE/HAREDA
Norms
Kuldip Singh
A.O., DPER

[Signature]
Project Officer
New & Renewable Energy Deptt,
Gurugram

[Signature]
Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Haryana Bijli Vitran Nigam

Store Challan Book

Book No. 116

Date 30/3/18

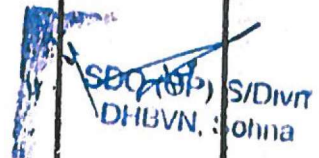
Serial No. 16

From SDEPI Anvishn Sohna To SDO MHT Lab Gurugram

Lorry No. Name of Driver.....

Through Rohit Jha

Sr. No.	Srl. No. of Motor	Block Number	Make	Capacity	Reading	Remarks
		M/s Manglam Educade Gurugram Road, Sohna. STo No. - 13/851. dt- 13/03/2018. A/c No. - QNHT-0090.	L.T.C-7 models			Cash deposit circle for No- 32299004 dt- 13/03/18.


 SDO (SP) S/Divr
 DHBVN, Sohna


 Registrar
 K.R. Mangalam University
 Sohna Road, Gurugram, (Haryana)

Issuing Officers Store Issued..... Date.....



NON ENERGY RECEIPT
(PAYMENT MADE THROUGH CASH COLLECTION COUNTER)

REFERENCE NO 25750062

SUB DIVISION REFERENCE NO G41564325

REFERENCE DATE 04/08/2017 13:30:37

Particulars of Non Energy Receipt

Original

Account No	Depositor Name	Sub Division
G41INH0090	M/S MANGALAM EDUGATE, ADDRESS: GURGAON SOHNA ROAD	Sub-Divn. Sohna

S No	Group Head Code	Remarks	Application No	Payable Amount Rs
1	62	ON A/C OF PROCESSING FEES FOR NET METERING EQUIPMENTS	NA	1000.00
Total				1000.00

Particulars of Payment

S No	Mode	Instrument No	Instrument Date	Bank	Branch	Amount
1	Cash					1000.00
Total Amount Paid (In Figures)						1000.00

Total Amount Paid (In Words): ONE THOUSAND ONLY

Amount Paid TO DHBVN Through Counter (PREM PAL Having ID 6886)

This is computer generated receipt and requires no signature
Save Energy Help Nation

Registrar

K.R. Mangalam University
Sohna Road, Gurgaon, (Haryana)

15
25

Back



NON ENERGY RECEIPT
(PAYMENT MADE THROUGH CASH COLLECTION COUNTER)

REFERENCE NO 33326510

SUB DIVISION REFERENCE NO G41628849

REFERENCE DATE 13/04/2018 12:37:52

Particulars of Non Energy Receipt

Duplicate

Account No	Depositor Name	Sub Division
G41INH0090	M/S MANGALAM EDUGATE, ADDRESS: GURGAON SOHNA ROAD	Sub-Divn. Sohna

S No	Group Head Code	Remarks	Application No	Payable Amount Rs
1	62	ON A/C OF HT NET METER SUB STATION END	NA	23000.00
Total				23000.00

Particulars of Payment

S No	Mode	Instrument No	Instrument Date	Bank	Branch	Amount
1	Cash					23000.00
Total Amount Paid (In Figures)						23000.00

Total Amount Paid (In Words): TWENTY THREE THOUSAND ONLY

Amount Paid TO DHBVN Through Counter (PREM PAL Having ID 6886)

This is computer generated receipt and requires no signature
Save Energy Help Nation



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Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Warranty/Guarantee and Declaration Certificate

It is Certified that the Solar Power Plant having capacity 310 kWp installed by us at K.R. MANGLAM UNIVERSITY Gurugram, Sohna Road Gurugram Haryana-122103 is Warranted / Guaranteed for five years from the date of commissioning with five year AMC of complete system and with the warranty of modules for their output peak watt capacity, which would not be less than 90% at the end of 10 years and 80% at the end of 25 years.

It is also certified that the SPV Power Plant installed is in compliance with the latest minimum technical specifications of MNRE/HAREDA.

The details of major components and their test reports are as under:

S.No	Item	Make	Capacity of Item tested	Test Laboratory	Tes Report No. & Date
1	Modules	Saatvik green energy pvt ltd	315 Wp	TUV Rheinland	Enclosed
2	Inverter/PCU	Delta	50 kWp	BUREAU VERITAS / INTERTEK	Enclosed

MNRE Channel Partner Certificate No: MNRE/CP/GCRT/C/2967


Valid up to: 14-05-2018


PAN of the Supplier:-AAFNC0155P

GSTIN of the Supplier:-07AAFNC0155P1Z7

Dated:- 18.12.2017


For ZOKKO Energy Pvt. Ltd.



Auth. Signatory
Signature with Seal


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Annual Maintenance Contract

We, ZOKKO Energy Private Limited Khasra No-53/12/2 & 53/13/2 Near Ashok Leyland Service Station Village- Nangli Poona, Delhi-110036 India, hereby confirm that we have installed and commissioned 310 KW ON GRID Solar Power System to K.R. MANGLAM UNIVERSITY, Gurugram Sohna Road, Gurugram, Haryana-122103 are covered under warranty from us for complete system for any defect for 5 years from the date of Installation of 18/12/2017 and will warranted till 17/12/2022

FOR ZOKKO ENERGY PVT. LTD.
For ZOKKO Energy Pvt. Ltd.

(AUTHORISED SIGNATORY)


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

INSTALLATION & COMMISSIONING REPORT

NAME OF CUSTOMER: M/s KR MANGLAM UNIVERSITY
ADDRESS : Gurugram Sohna Road, Gurugram, Haryana-122103
PROJECT DETAILS : 310kW ON GRID CONNECTED SOLAR POWER PLANT

We have completed the installation and commissioning of 310 Kw ON GRID SOLAR POWER PLANT For K R MANGLAM UNIVERSITY Gurugram Sohna Road Gurugram, Haryana-122103 INDIA on 18/12/2017 with the following items:

Particulars of Equipment	S.No.	WARRANTY
GRID TIE SOLAR INVERTER MAKE: DELTA CAPACITY 310 Kw Modle No RPI – M-50A	S.No. O3617707615WM O3617707602WM O3617707631WM O3617707628WM O3617707140WM O3617707141WM	5 YEARS FROM THE DATE OF INSTALLATION (FROM 18/12/2017 TO 17/12/2022)
SOLAR PANELS MAKE: SAATVIK CAPACITY : 315wp each x 984 nos	SGE3151710040935,SGE3151710040934,SGE3151710040607 SGE3151710040737,SGE3151710040521,SGE3151710040739 SGE3151710040734,SGE3151710040740,SGE3151710040525 SGE3151710040526,SGE3151710040606,SGE3151710040605 SGE3151710040604,SGE3151710040602,SGE3151710040603 SGE3151710040380,SGE3151710040601,SGE3151710040527 SGE3151710040378,SGE3151710040529,SGE3151710040377, SGE3151710040528,SGE3151710040742,SGE3151710040744 SGE3151710040608,SGE3151710040524,SGE72FP1708140039 SGE72FP1708140040,SGE72FP1708140041,SGE72FP1708140042 SGE72FP1708140543,SGE72FP1708140544,SGE72FP1708140545 SGE72FP1708140502,SGE71FP1708140501,SGE72FP1708140500 SGE72FP1708140497,SGE72FP1708140578,SGE72FP1708140576	(Warranty for 10 years against any manufacturing defect) (Efficiency Warranty 90% up to 10 years, 80% up to 25 years)

For ZOKKO Energy Pvt. Ltd.

Auth. Signatory
[Signature]

Regd. Office : Flat No. 342, C-8, Sec-8, Rohini, Delhi-110085
Corporate Office : Khasra no 53/12/2 & 53/13/2, Near Ashok Leyland Service, Station, Village Nangli Poona Delhi-110036
Mob : 9313359147 • Tel : 011-27732787 • Email : contact@zokkoenergy.com
CIN : U74999DL2015PTC284576

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Form1
Renewable Energy Department, Haryana & HAREDA

APPLICATION FORM
(Solar Power Plant)



117

PART- I : Project Details
[A] General Details

Application No: GCRT/GGN/2017/06/0154

Category of the Applicant	INSTITUTIONAL SECTOR
Upload Photo of the beneficiary	ATTACHED
Name & Designation	YASH DEV DIRECTOR
Father/Husband/Director/Partner	HEM CHAND
Address	K R Mangalam Univeristy Sohna Road
District	GURGAON
Pin Code	122103
PAN/TAN No.	AAJCS3143G
Land Line Telephone No.(with STD Code)	
Email	ABHISHEK@KRMANGALAM.COM
Name of Contact Person	ABHISHEK GUPTA
Mobile No	9990666000
Objective for implementing the Plant	SELF-CONSUMPTION TOTAL OR PARTIAL GENERATION UNDER NET-METERING FACILITY

[B] Details of the Plant Site / Location

Site Name	K R MANGALAM UNIVERSITY
Site Address	K R MANGALAM UNIVERISTY SOHNA ROAD
Pin Code	122103
Land Line Telephone No.(with STD code)	
Email	ABHISHEK@KRMANGALAM.COM
Name of Contact Person	ABHISHEK GUPTA
Mobile No	9990666000
Proposed Capacity of the SPV Power plant (kWp)	325.00
Whether Single/Multiple Meter	Single
Avallability of shadow free south facing rooftop/land area for the power plant with photograph (Area in Sq. Mtr.)	4000
Upload Rooftop Photograph of site	ATTACHED
Upload Site Address Proof	ATTACHED

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

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Type of SPV Power Plant (With or Without Battery Bank)	GRID CONNECTED WITH NET METERING FACILITY WITHOUT BATTERY BANK
Total Connected/Sanctioned electrical Load (in kW), (as per electricity bill)	2000
Applicable Consumer Category	NON-DOMESTIC
Upload Electricity Bill Copy	ATTACHED
Electric Connection/Consumer No. (As per electricity Bill)	G41-INHT-0090

[B] Details of Grid Connectivity of the Project

Grid Connectivity Level	CONNECTED AT 11KV LEVEL
Name of DISCOM	DHBVN
Metering Arrangement for the Project	BI-DIRECTIONAL METER , SOLAR GENERATION METER
Upload Registration Certificate (in case other than domestic sector)	ATTACHED
Upload Proof of being Institute/Social Organization	ATTACHED
Upload Any Other Document (in case, if address differ from Aadhaar Card)	NOT ATTACHED

Certificate from DISCOM

(Regarding installation of Bi-Directional Meter)

It is certified that the **Bi-Directional Meter** has been installed on 14/4/18 (date) with the

Grid Connected Solar Power Plant system installed at
K.R. Mangalam University Sohna
..... (Site name with complete address).

The anti-islanding facility of the system is working in properly.

Date of issue of certificate: 23/4/18


Signature
JE/SDO

of concerned Sub-Division of DISCOM
SDO (OP) S/Divn
with seal: K.R. Mangalam University Sohna


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)