





SOLAR ENERGY

			
Roof top Solar Panels (Department of Forestry) 22°07'36.2"N 82°08'21.4"E		Solar Street Lightings 22°07'19.3"N 82°08'31.0"E	
			
22°07'36.2"N 82°08'21.6"E Solar Roof Top Panels in Guru Ghasidas Vishwavidyalaya Buildings		22°07'36.2"N 82°08'21.4"E Roof Mounted Solar Panels (Department of Forestry)	
Ratio of renewable energy production divided by total energy usage per year			
S. No.	Conventional energy usage (Kwh)	Renewable energy production(Kwh)	Ratio
1	1429004	3010399.2	2.10

Renewable energy sources at GGV Bilaspur campus						
S. No	Items	Location	Capacity	Nos	Total watt	Production Capacity (Kwh per year)
1.	Solar street light	Various Department, Parking, Street lights	12W	70	840 W	3679.2
2.	Roof top On-grid solar panel installed	Various Building	2.00 MW	1	2.00 MW	Roof top on-grid solar power plant (1.74MW AC) =3006720 Kwh*

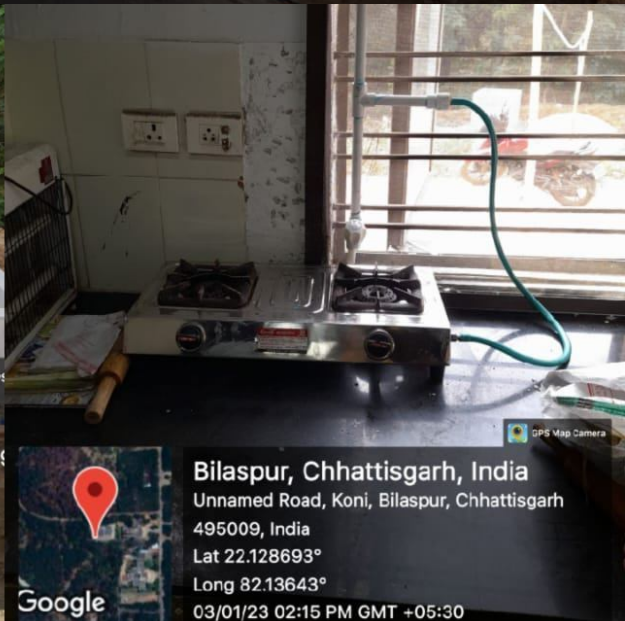
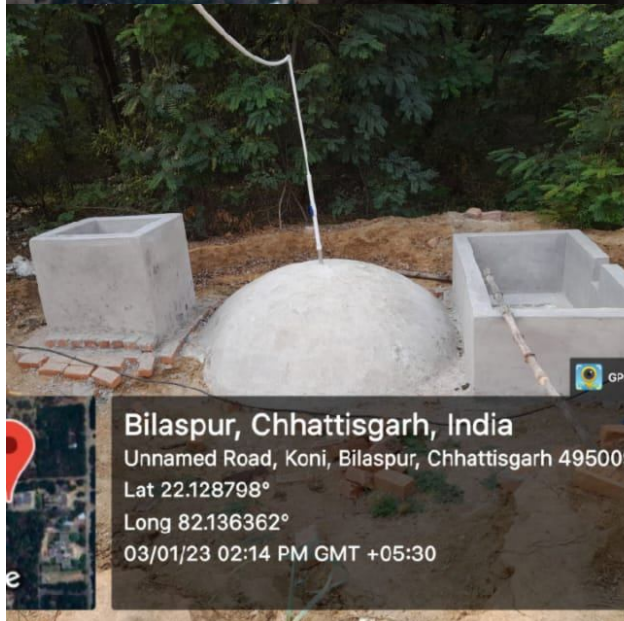
* 1.74 MW*1000*0.6 (60% generation capacity)*8 (hours)*30 Days*12
(Months)= Kwh/year

Roof top on-grid solar panel 3006720+ Solar street light 3679.2=**3010399.2**
Kwh/year

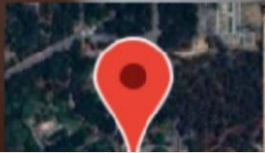
BIOGAS PLANT

BIOGAS PLANT IN CAMPUS

New Cafeteria

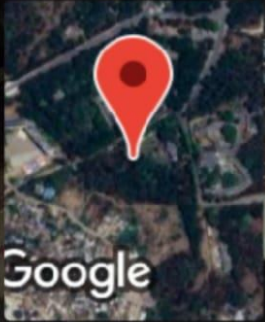


Rajmohni Girl's Hostel



Bilaspur, Chhattisgarh, India

GG vishwavidyalya Girls Hostel, KPS Rd, Koni, Bilaspur,
Chhattisgarh 495009, India



Bilaspur, Chhattisgarh, India

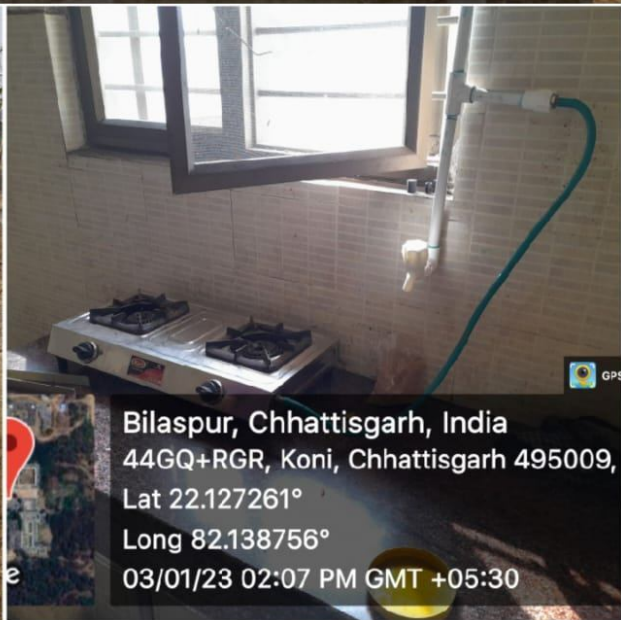
GG vishwavidyalya Girls Hostel, KPS Rd, Koni, Bilaspur,
Chhattisgarh 495009, India

Lat 22.124359°

Long 82.136919°

03/01/23 02:34 PM GMT +05:30

Sahid Veer Narayan Singh hostel



Wheeling to the Grid

(Letter to electricity board for connecting to the grid)



गुरु घासीदास विश्वविद्यालय, कोनी, बिलासपुर (छ.ग.) 495009
GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G.) 495009
(A Central University Established by the Central Universities Act, 2009 No.25 of 2009)
Ph-07752 260207, Fax- 07752-260154 Website:- www.ggu.ac.in

Ref. 47...../Engg./2022

Bilaspur, Date: 14.02.2022

To,
The Superintending Engineer (City)
Chhattisgarh State Power Generation Company Limited,
Circle Bilaspur.

Sub: Application for Synchronizing the Output of 2 MW Grid Tied Rooftop Solar Panels in the existing 11 KV Line of CSEB inside Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G)

Sir,

With reference to the subject, Guru Ghasidas Vishwavidyalaya (GGV), Bilaspur (C.G) is installing 2 MW Grid Tied Rooftop Solar Panels on the buildings inside its campus with following building wise generation details:

Connection -1:

B.P. Number-1000104, Cont.Demand-500KVA

Sl No.	Building Name	Inverter Rating as per drawing (kWac)
1	Administrative Block	120
2	UTD (Wing A)	70
3	UTD-(Wing B)	70
4	Department of Rural Technology New Building	40
5	Central Library building	140
6	Institute of Technology building (School of Engg& Tech.)	100
7	Department of Forestry (New Building)	70
8	Pharmacy Dept.	70
9	Department Of Biotech building	80
10	Education Dept. Building (New)	50
11	Education Dept. Building (Old)	30
12	Auditorium Building	80
13	Law Dept. Building	50
14	Arts & Science Building	80
15	CSIT New Building	50
16	Commerce Building	70
17	Cafeteria Building	60
Total Capacity		1230

Received original Copy.

Sugandh
24/02/22. (APE Civil)

[Signature]

[Signature]

[Signature]

[Signature]

Connection -2:

B.P. Number-1002325, Cont.Demand-300KVA

SI No.	Building Name	Inverter Rating as per drawing (kWac)
1	New Boys Hostel Building (A)	70
2	New Boys Hostel Building (B)	70
3	Old Girls Hostel building	70
4	New Girls Hostel	60
5	JawaharSadan (Old Guest House)	30
6	MECON Boys Hostel*	70
7	Civil Engineering Department Building*	140
Total Capacity		510

*Under Construction

The Single Line Diagram for building wise Solar system connection (proposed grid connection) has been enclosed for your ready reference.

GGV requests CSPGCL to kindly allow synchronization of the output of installed 2 MW grid tied solar panels with the existing 11 KV Lines inside GGV premises for import / export of power under prosumer category.

Any tariff benefits, if applicable may kindly be extended to GGV as per Renewable Energy Policy of CSPGCL.

Looking forward for a prompt and positive response,

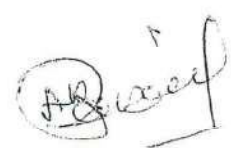
Thanking You,

By Order,

Registrar (I/C)

copy to :

1. Secretary to VC for information on HVC.
2. ED (RA&PM) CSPDCL Daganiya Raipur for kind information and necessary action please
3. Assistant Registrar, Audit.
4. Sub Engineer (Civil) for necessary action
5. Office copy.

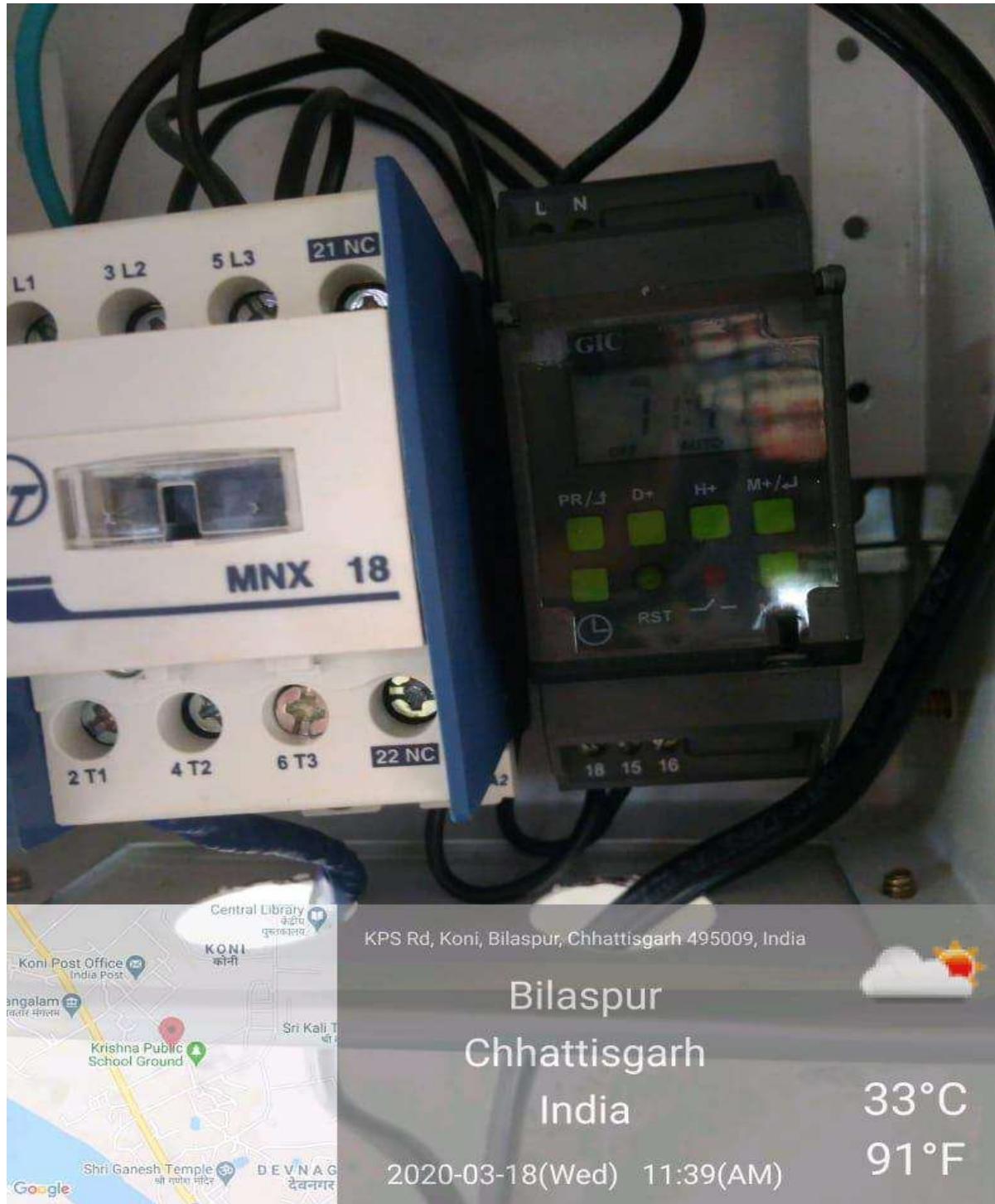

University Engineer (I/C)



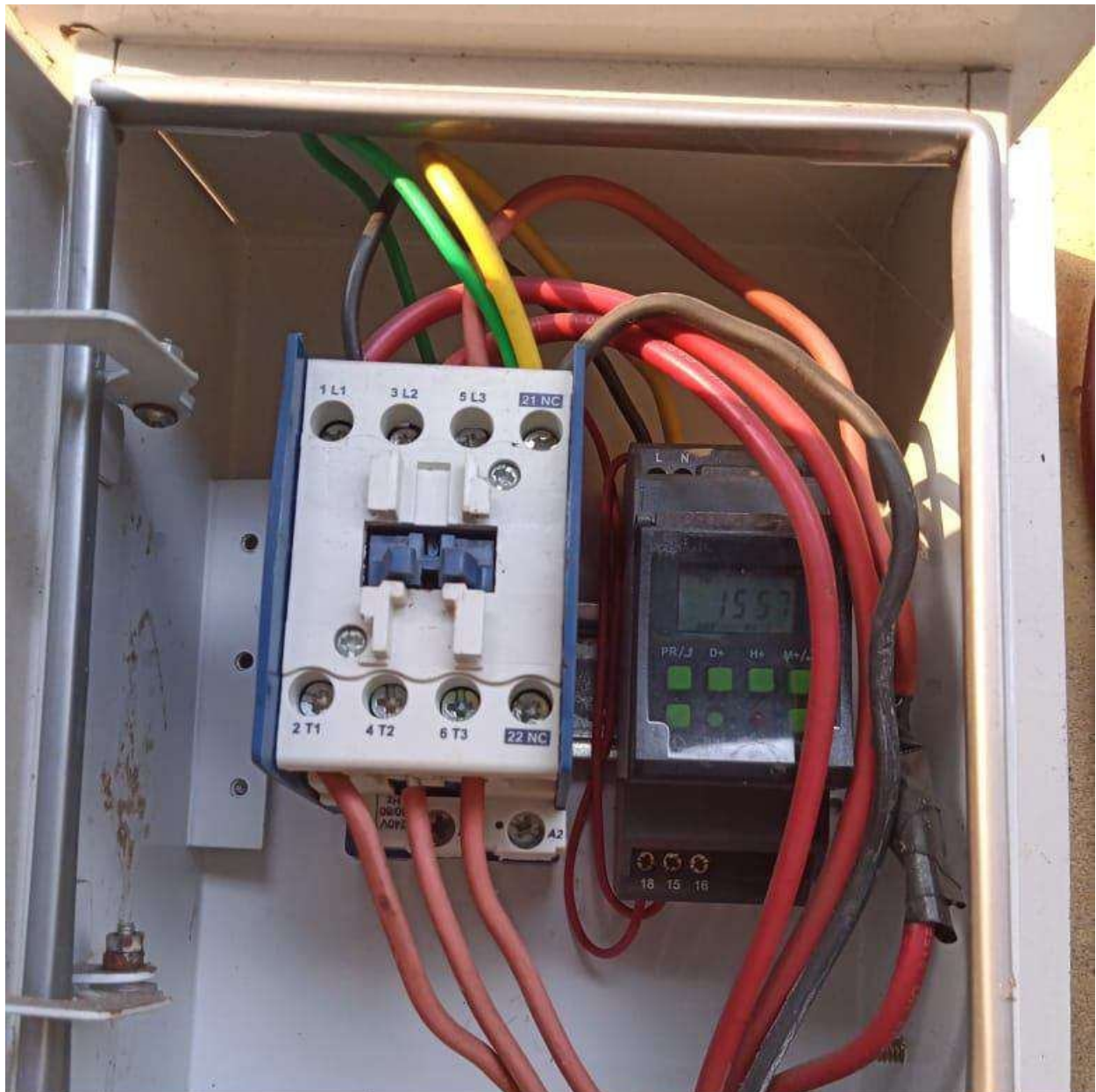
Sensor Based Energy Conservation

1. Sensor based timer circuit for street light
2. Sensor based street light

SENSOR-BASED ENERGY CONSERVATION



Sensor Based Timer Circuit – Main Gate



Unnamed Road, Koni, Bilaspur, Chhattisgarh 495009, India

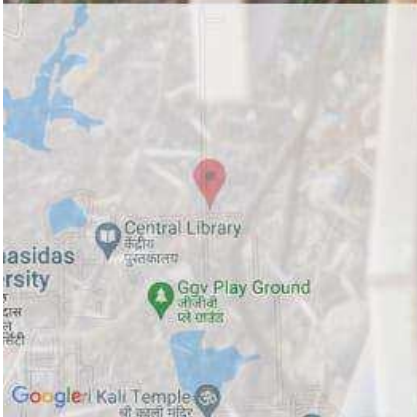
Bilaspur
Chhattisgarh
India



29°C
84°F

2021-12-07(Tue) 03:50(PM)

Sensor Based Timer Circuit – Naveen Awasiya Parisar



Department Of Pharmacy GGV Rd, Koni, Bilaspur, Chhattisgarh 495009, India

Bilaspur
Chhattisgarh
India



29°C
84°F

2021-12-07(Tue) 03:46(PM)

Sensor Based Timer Circuit – New IT Workshop



Guru Ghasidas Central University, Koni, Chhattisgarh 495009, India

Koni
Chhattisgarh
India



34°C
93°F

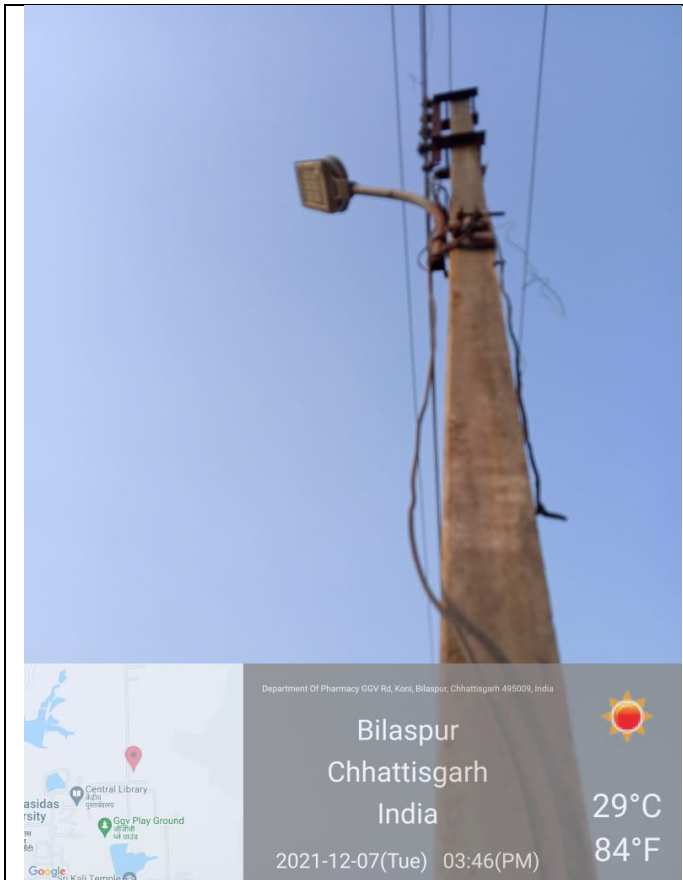
2020-03-18(Wed) 01:03(PM)

Sensor Based Timer Circuit – Near Auditorium

Sensor-based Energy Conservation

 <p>Lat 22.131° Long 82.1381° - Solar Street Light</p>	 <p>Lat 22.130237° Long 82.138277° - Canteen</p>
<p>Sensor based Solar Street Light – Near Pond</p>	<p>Sensor based Solar Street Light - Near Canteen</p>
 <p>Lat 22.130493° Long 82.139853° Location Central Library</p>	 <p>Lat 22.131582° Long 82.142101° Central Library Location Institute of Technologychnology</p>
<p>Sensor based Solar Street Light – Central Library</p>	<p>Sensor based Solar Street Light –Inst. Of Tech. Building</p>
 <p>Dharam Road, Koni, Chhattisgarh-496009, India Koni Chhattisgarh India 34°C 93°F 2020-03-18(Wed) 01:37(PM)</p>	

Use of LED Lights

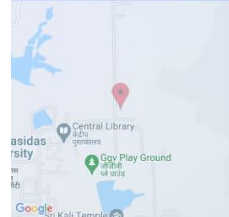


Latitude: 22.126645
Longitude: 82.139139
Altitude: 217.7±1 m
Accuracy: 14.5 m
Time: 27-05-2022 14:29

Powered by NoteCam

Latitude: 22.126589
Longitude: 82.139232
Altitude: 217.7±3 m
Accuracy: 17.0 m
Time: 27-05-2022 16:34
Note: LED Light

Powered by NoteCam



Department Of Pharmacy GGV Rd, Koni, Bilaspur, Chhattisgarh 495009, India

Bilaspur
Chhattisgarh
India

29°C
84°F

2021-12-07(Tue) 03:46(PM)

LED street light in campus

Use of LED lights in corridor and room



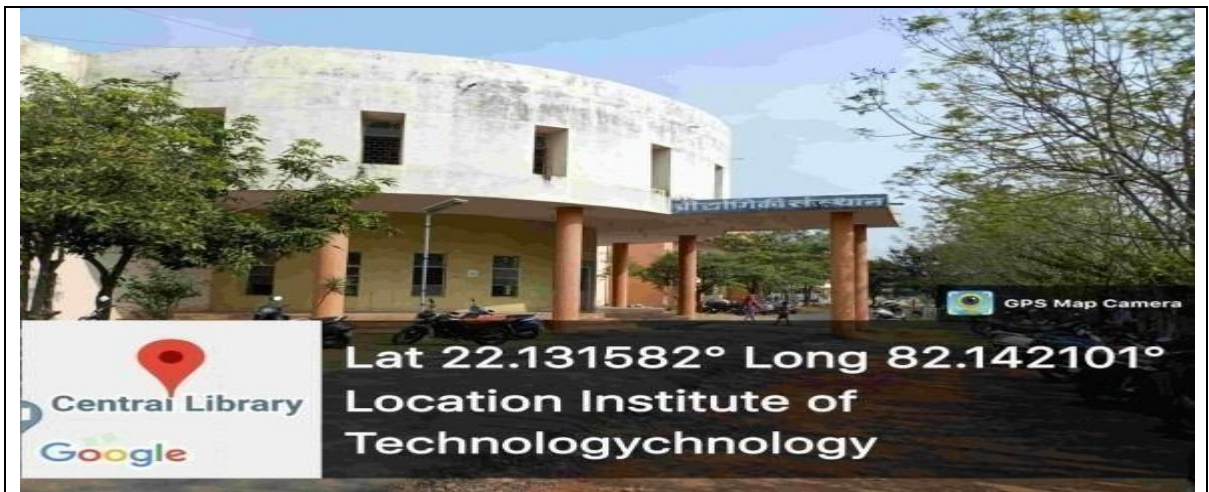
Sensor based Solar Street Light – Near Pond



Sensor based Solar Street Light - Near Canteen



Solar Street Light – Central Library



Solar Street Light – IT Building



Administrative Building



Residential area - Type -II Quarters

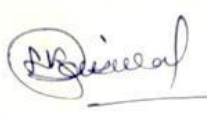
2MW Roof Top Solar Panel installations



Roof Top Solar Panel – Department of Pharmacy



Roof Top Solar Panel – Department of Pharmacy


University Engineer
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G.)


2MW Roof Top Solar Panel installations



Roof Top Solar Panel – Department of Law



Roof Top Solar Panel – Department of Law



University Engineer
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G.)

2MW Roof Top Solar Panel installations



Roof Top Solar Panel – Education Department



Roof Top Solar Panel – Education Department

University Engineer
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Bilaspur (C.G.)

2MW Roof Top Solar Panel installations



Roof Top Solar Panel – Girls Hostel



Roof Top Solar Panel – Girls Hostel

University Engineer
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Bilaspur (C.G.)

2MW Roof Top Solar Panel installations



Roof Top Solar Panel – Commerce and Management



Roof Top Solar Panel – Arts and Social Science



University Engineer
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G.)

2MW Roof Top Solar Panel installations



Roof Top Solar Panel – Boys Hostel



Roof Top Solar Panel – Boys Hostel



University Engineer
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Bilaspur (C.G.)

2MW Roof Top Solar Panel installations



Roof Top Solar Panel – Forestry Department



Roof Top Solar Panel – Bio-tech Department

University Engineer
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Bilaspur (C.G.)

2MW Roof Top Solar Panel installations



Roof Top Solar Panel – New IT building



Roof Top Solar Panel – New IT building

University Engineer
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G.)



Aerial view of Solar Power Panels installed in the University Campus




University Engineer
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G.)